LAYING THE FOUNDATION FOR SUCCESSFUL NON-ACADEMIC WRITING:
PROFESSIONAL COMMUNICATION PRINCIPLES IN THE K-5 CURRICULA OF
THE MCKINNEY INDEPENDENT SCHOOL DISTRICT

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Traditionally, K-5 students’ writing has had a primarily academic aim—to help students master concepts and express themselves. Even if students take a professional writing course later, they typically do not have the opportunity to practice—over the long period of time mastery requires—the non-academic writing skills they will be required to use as part of their jobs and in their civic life. Based on a limited K-5 study, Texas’ McKinney Independent School District is doing

- A good job of preparing students at the elementary-school level in the areas of collaboration and presentation
- A fair job of helping elementary-school students understand the communication situation, define audience, clarify purpose, gather and evaluate resources, and test usability
- A poor job of helping elementary-school students with analysis and organization

With their teachers’ help, K-5 students eventually grasp the communication situation and can broadly identify their audience and purpose, but they do not appear to select words, format, communication style, or design based on that audience and purpose. Their writer-based focus affects their presentations as well, although they do present frequently. If teachers routinely incorporated audience and purpose
considerations into every aspect of communication assignments (format, communication style, design), students would be better prepared for non-academic communication.

Texas pre-service teachers practice the types of documents they will write on the job but do not receive training in design or style. Likewise, they practice researching, collaborating, and presenting but receive little training in those skills. If Texas K-5 teachers are to supplement the curriculum with professional writing principles, as trends suggest they should, education programs need to focus on these principles in their pre-service teacher curriculum.

Professional writing principles need to become part of ingrained writing patterns because these are the skills that will best serve students after they graduate, both in their careers and civic lives. Understanding how to tailor communication for audience and purpose; how to effectively collaborate; how to select, evaluate, analyze, and organize information efficiently and productively; and how to format presentations effectively requires practice over a long period of time.
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TABLE OF CONTENTS

LIST OF TABLES..............................................................................................................................................iv

LIST OF ILLUSTRATIONS..................................................................................................................................viii

CHAPTER 1: INTRODUCTION: ARE TEXAS HIGH SCHOOL GRADUATES READY TO WRITE SUCCESSFUL NON-ACADEMIC DOCUMENTS? .............. 1

CHAPTER 2: LITERATURE REVIEW: LITERACY DEVELOPMENT IN K-5 .......... 23

CHAPTER 3: STUDY FOCUS AND METHODOLOGY................................................................. 43

CHAPTER 4: KINDERGARTEN CURRICULUM EMPHASIS ON PROFESSIONAL WRITING PRINCIPLES........................................................................ 62

CHAPTER 5: FIRST GRADE CURRICULUM EMPHASIS ON PROFESSIONAL WRITING PRINCIPLES........................................................................ 91

CHAPTER 6: SECOND GRADE CURRICULUM EMPHASIS ON PROFESSIONAL WRITING PRINCIPLES........................................................................ 135

CHAPTER 7: THIRD GRADE CURRICULUM EMPHASIS ON PROFESSIONAL WRITING PRINCIPLES........................................................................ 171

CHAPTER 8: FOURTH GRADE CURRICULUM EMPHASIS ON PROFESSIONAL WRITING PRINCIPLES........................................................................ 205

CHAPTER 9: FIFTH GRADE CURRICULUM EMPHASIS ON PROFESSIONAL WRITING PRINCIPLES........................................................................ 248

CHAPTER 10: ANALYSIS OF STUDY RESULTS: EXTENT TO WHICH TEXAS K-5 CURRICULA PREPARE STUDENTS TO WRITE SUCCESSFUL NON-ACADEMIC DOCUMENTS UPON GRADUATION......................... 304

CHAPTER 11: CONCLUSIONS/RECOMMENDATIONS..................................................... 326

APPENDIX ...................................................................................................................................................... 341

REFERENCES................................................................................................................................................. 414
**LIST OF TABLES**

Table 4-1: Analysis of K curriculum emphasis on understanding the communication situation ........................................................................................................ 78

Table 4-2: Analysis of K curriculum emphasis on defining audience and clarifying purpose ........................................................................................................ 79

Table 4-3: Analysis of K curriculum emphasis on collaborating ........................................................................................................ 80

Table 4-4: Analysis of K curriculum emphasis on gathering and evaluating needed resources ........................................................................................................ 81

Table 4-5: Analysis of K curriculum emphasis on analyzing and organizing information .......................................................................................................... 84

Table 4-6: Analysis of K curriculum emphasis on determining best format ........................................................................................................ 86

Table 4-7: Analysis of K curriculum emphasis on selecting communication style .......................................................................................................... 87

Table 4-8: Analysis of K curriculum emphasis on selecting design elements ........................................................................................................ 88

Table 4-9: Analysis of K curriculum emphasis on usability testing ........................................................................................................ 89

Table 4-10: Analysis of K curriculum emphasis on presenting ........................................................................................................ 90

Table 5-1: Analysis of 1st grade curriculum emphasis on understanding the communication situation ........................................................................... 120

Table 5-2: Analysis of 1st grade curriculum emphasis on defining audience and clarifying purpose .......................................................................................... 121

Table 5-3: Analysis of 1st grade curriculum emphasis on collaborating ........................................................................................................ 123

Table 5-4: Analysis of 1st grade curriculum emphasis on gathering and evaluating needed resources .......................................................................................................... 124

Table 5-5: Analysis of 1st grade curriculum emphasis on analyzing and organizing information .......................................................................................................... 127

Table 5-6: Analysis of 1st grade curriculum emphasis on determining best format ........................................................................................................ 130

Table 5-7: Analysis of 1st grade curriculum emphasis on selecting communication style .......................................................................................................... 131
Table 5-8: Analysis of 1st grade curriculum emphasis on selecting design elements .......................................................... 32
Table 5-9: Analysis of 1st grade curriculum emphasis on usability testing .................................................. 133
Table 5-10: Analysis of 1st grade curriculum emphasis on presenting .................................................. 134
Table 6-1: Analysis of 2nd grade curriculum emphasis on understanding the communication situation ........................................................................... 154
Table 6-2: Analysis of 2nd grade curriculum emphasis on defining audience and clarifying purpose .................................................................................................................. 156
Table 6-3: Analysis of 2nd grade curriculum emphasis on collaborating ........................................... 158
Table 6-4: Analysis of 2nd grade curriculum emphasis on gathering and evaluating needed resources .................................................................................................................. 159
Table 6-5: Analysis of 2nd grade curriculum emphasis on analyzing and organizing information .................................................................................................................. 162
Table 6-6: Analysis of 2nd grade curriculum emphasis on determining best format ........................................ 165
Table 6-7: Analysis of 2nd grade curriculum emphasis on selecting communication style .................................................................................................................. 166
Table 6-8: Analysis of 2nd grade curriculum emphasis on selecting design elements .......................................................... 167
Table 6-9: Analysis of 2nd grade curriculum emphasis on usability testing .................................................. 169
Table 6-10: Analysis of 2nd grade curriculum emphasis on presenting .................................................. 170
Table 7-1: Analysis of 3rd grade curriculum emphasis on understanding the communication situation .................................................................................................................. 189
Table 7-2: Analysis of 3rd grade curriculum emphasis on defining audience and clarifying purpose .................................................................................................................. 190
Table 7-3: Analysis of 3rd grade curriculum emphasis on collaborating ........................................... 191
Table 7-4: Analysis of 3rd grade curriculum emphasis on gathering and evaluating needed resources .................................................................................................................. 192
Table 7-5: Analysis of 3rd grade curriculum emphasis on analyzing and organizing information .................................................................................................................. 195
Table 7-6: Analysis of 3rd grade curriculum emphasis on determining best format .... 199
Table 7-7: Analysis of 3rd grade curriculum emphasis on selecting communication style ................................................................. 201
Table 7-8: Analysis of 3rd grade curriculum emphasis on selecting design elements ........................................................................ 202
Table 7-9: Analysis of 3rd grade curriculum emphasis on usability testing ........ 203
Table 7-10: Analysis of 3rd grade curriculum emphasis on presenting ............... 204
Table 8-1: Analysis of 4th grade curriculum emphasis on understanding the communication situation .................................................. 202
Table 8-2: Analysis of 4th grade curriculum emphasis on defining audience and clarifying purpose ................................................................. 231
Table 8-3: Analysis of 4th grade curriculum emphasis on collaborating ............. 232
Table 8-4: Analysis of 4th grade curriculum emphasis on gathering and evaluating needed resources ........................................................................ 233
Table 8-5: Analysis of 4th grade curriculum emphasis on analyzing and organizing information ........................................................................ 236
Table 8-6: Analysis of 4th grade curriculum emphasis on determining best format .... 241
Table 8-7: Analysis of 4th grade curriculum emphasis on selecting communication style ................................................................................. 243
Table 8-8: Analysis of 4th grade curriculum emphasis on selecting design elements .............................................................................................. 244
Table 8-9: Analysis of 4th grade curriculum emphasis on usability testing ........ 245
Table 8-10: Analysis of 4th grade curriculum emphasis on presenting ............... 247
Table 9-1: Analysis of 5th grade curriculum emphasis on understanding the communication situation ................................................................. 285
Table 9-2: Analysis of 5th grade curriculum emphasis on defining audience and clarifying purpose ........................................................................ 287
Table 9-3: Analysis of 5th grade curriculum emphasis on collaborating ............. 288
Table 9-4: *Analysis of 5th grade curriculum emphasis on gathering and evaluating needed resources* ............................................................... 289

Table 9-5: *Analysis of 5th grade curriculum emphasis on analyzing and organizing information* ........................................................................................................ 292

Table 9-6: *Analysis of 5th grade curriculum emphasis on determining best format* ................................................................. 297

Table 9-7: *Analysis of 5th grade curriculum emphasis on selecting communication style* ........................................................................................................ 299

Table 9-8: *Analysis of 5th grade curriculum emphasis on selecting design elements* ........................................................................................................ 300

Table 9-9: *Analysis of 5th grade curriculum emphasis on usability testing* ................................................................. 301

Table 9-10: *Analysis of 5th grade curriculum emphasis on presenting* ................................................................. 303
LIST OF ILLUSTRATIONS

Figure 1-1. Teachers build curriculum from TEKs like this one. The numbers in parentheses reflect grades to which the TEK applies ............................... 10

Figure 3-1. Key components of non-academic writing.................................................. 51

Figure 5-1. If students cannot fill out all the “petals” of the graphic organizer, they may need to switch topics ............................................................................... 105

Figure 5-2. Students use labeled folder pockets to help them organize information .. 107

Figure 5-3. Color-coded charts help students understand how design choices can promote reader understanding ................................................................. 114

Figure 6-1. Students explore word alternatives by creating a “sizzling word garden” .. 149

Figure 9-1. Jackson deconstructs TEKS for her students ........................................... 252

Figure 9-2. Mitchell added the “.com” to prompt students to “mak[e] connections” and “communicat[e]” ........................................................................................................ 256

Figure 9-3. Jackson asks students’ permission to share their work ......................... 258

Figure 9-4. Mitchell’s students use a 4-Square plan to analyze math ....................... 268

Figure 9-5. Eisenberg and Berkowitz’s “Big 6” introduce students to research .......... 282

Figure 9-6. Third graders learn a basic citation format............................................. 284
INTRODUCTION: ARE TEXAS HIGH SCHOOL GRADUATES READY TO WRITE SUCCESSFUL NON-ACADEMIC DOCUMENTS?

In their article summarizing a survey of National Council of Teachers of English members, Dudley-Marling et al. (2006) observe that the efforts of many English/language arts teachers are focused on preparing their students to write well in school rather than to be effective communicators in their jobs and civic lives:

NCTE members define success by how their students perform in the academy rather than the workplace. This has significance in terms of how the public views the role of English language arts and how English teachers view the role of English language arts knowledge. This is a finding that should spur more conversation and debate about the values of NCTE members regarding the relationship between school literacies and the literacies students will need for their lives as adults, including their work lives.

If students graduate having been prepared with only “school literacies,” though, how will they fare if they have to write a proposal, design a brochure, organize a manual, or even dash off an email? Such are the skills many 21st century employers require of even high school graduates, according to recent studies by the American Diploma Project Network (2004), the New Commission on the Skills of the American Workforce (2006), and the Partnership for 21st Century Skills (2003, 2005,2006). Would graduates be more likely to communicate successfully if key professional communication principles were ingrained in the students’ writing repertoire from having been introduced in the early grades and then practiced throughout the academic career?
Many students do not take a technical communications course in college or do not finish or even attend college. Unless they are gifted communicators naturally, then, these graduates may have to struggle through communication tasks on the job, handicapped by their knowledge of possibly only essay and research paper writing and the occasional literary analysis. As companies respond ruthlessly to an unsympathetic economy, such unprepared employees may find themselves the first to be fired.

Traditionally, the writing that students do throughout their grade-school education has had a primarily academic aim—to help students master concepts and express themselves. With some exceptions, this writing instruction and experience are designed to enable them to write successfully in their next academic environment, typically a college or university. Even if students take a “career”-focused course in high school or a single professional writing course in college, they typically do not have the opportunity to practice—over the long period of time mastery requires—the non-academic writing they will be required to do as part of their jobs and in their civic life. Small business owners, for example, often cannot afford to outsource specialized writing tasks, so they “do it all.” How successful they are with communication may depend on how well they can adapt what they learned about writing in school to the demands of their work environment. They cannot rely on technical writing training if they did not take the course as part of a college degree or if they did not complete college.

Not only are professional writing principles critical for on-the-job success, but they can also strengthen non-professional communication—informative communication students do outside their work environment—to ensure that students can effectively express themselves to the rest of the citizenry and that their ideas and opinions will be
respectfully considered. Volunteers (in sports, religious, social services, political, school organizations) often write documents that parallel those written in the paid business/corporate world such as email; grant proposals/other proposals; reports; feasibility studies; marketing literature including brochures, scripts, speeches; letters; and operations/employee manuals.

National Studies that Prove the Value of Applied Skills

A number of recent national studies reinforce the importance the global community places on applied skills—skills that enable people to use knowledge they gained in school to do their jobs— as opposed to purely core content. The studies described below emphasize the value of critical thinking, collaboration, and problem solving and urge education communities to update curricula and teaching methods to focus on these skills with real-world applications.

*The American Diploma Project Network (www.achieve.org).* The American Diploma Project Network is a group of education and business leaders striving to ensure that students are prepared for college and careers by raising high school standards. ADP specifically points to professional writing skills as being essential to high school graduates in its 2004 report *Ready or Not: Creating a High School Diploma that Counts*:

High-growth, highly skilled jobs demand that employees can communicate essential information effectively via e-mail, write proposals to obtain new business, communicate key instructions to colleagues or convey policies to customers. . . . High school graduates today are increasingly expected to judge the credibility of sources, evaluate arguments, and understand and convey
complex information in the college classroom, in the workplace and as they exercise their rights as citizens. (p. 36)

The New Commission on the Skills of the American Workforce (www.skillscommission.org). The leaders in education, government, and business who comprise the New Commission on the Skills of the American Workforce (part of the National Center on Education and the Economy) focus on “rethinking American education pre-K-12 to prepare students to thrive in a global economy.” According to the Commission, to succeed in such an economy, students need to

- Know more about the world
- Think across disciplines (interdisciplinary combinations)
- Rapidly process information and distinguish reliable from unreliable
- Manage, interpret, validate, and act on information

The Commission enumerates the qualities a successful graduate will have as a candidate on the global job market in its December 2006 report Tough Choices or Tough Times: The Report of the New Commission on the Skills of the American Workforce:

Strong skills in English, mathematics, technology, and science, as well as literature, history, and the arts will be essential for many; beyond this, candidates will have to be comfortable with ideas and abstractions, good at both analysis and synthesis, creative and innovative, self-disciplined and well organized, able to learn very quickly and work well as a member of a team and have the flexibility to adapt quickly to frequent changes in the labor market as the shifts in the economy become ever faster and more dramatic. (p. 8)
The Partnership for 21st Century Skills (www.21stcenturyskills.org). In 2006, the Partnership for 21st Century Skills—whose membership includes leaders in education, business, and technology—collaborated with the Conference Board, Corporate Voices for Working Families, and the Society for Human Resource Management to publish a study titled Are They Really Ready to Work? Employers’ Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce. Among other findings, researchers learned that more than half of high school graduates lack proficiency in oral and written communications, skills considered by employers to be “the most important” (p. 13). Across the U.S., we are failing to prepare students to be competitive in a global marketplace (p. 7).

According to the study, employers emphasize the importance of “applied skills” for high school and college graduates as opposed to simply a focus on subject knowledge: “The education and business communities must agree that applied skills integrated with [emphasis added] core academic subjects are the ‘design specs’ for creating an educational system that will prepare our high school and college graduates to succeed in the modern workplace and community life” (p. 7). Especially important to employers are communication skills and the ability to work in a multi-cultural team.

This emphasis on applied skills runs throughout another Partnership study, Assessment of 21st Century Skills: The Current Landscape (2005). No Child Left Behind (January 2002) fueled routine testing, especially in core content areas, often “high stakes” in the sense that education and school quality are judged based on results and student advancement (p.12). This study found that educators focus too much on “measuring students’ ability to recall discrete facts using multiple choice tests” vs.
“measuring a student’s ability to engage in and complete complex thinking and problem-solving tasks” (p. 12). The result of such a focus “is a widening gap between the knowledge and skills students are acquiring in schools and the knowledge and skills needed to succeed in the increasingly global, technology-infused 21st century workplace” (p. 13).

In their 2003 report *Learning in the 21st Century*, the Partnership lists the types of applied skills graduates need: “thinking critically, applying knowledge to new situations, analyzing information, comprehending new ideas, communicating, collaborating, solving problems, making decisions” (p. 9). The Partnership considers the following among essential knowledge for the 21st century (selections relevant to professional writing principles):

- **Global awareness**: learning from and working collaboratively with individuals representing diverse cultures, religions, lifestyles in a spirit of mutual respect and open dialogue on personal, work, and community contexts
- **Financial, economic, and business literacy**: applying appropriate 21st century skills to function as a productive contributor within an organizational setting
- **Civic literacy**: exercising the rights and obligations of citizenship at local, state, national, and global levels
- **Thinking, problem-solving, interpersonal and self-directed learning skills**:  
  - **Critical thinking and system thinking**—exercising sound reasoning in understanding and making complex choices, understanding the interconnections among systems
- Problem identification, formulation, and solution—ability to frame, analyze and solve problems
- Creativity and intellectual curiosity—developing, implementing, and communicating new ideas to others, staying open and responsive to new and diverse perspectives
- Interpersonal and collaborative skills—demonstrating teamwork and leadership; adapting to varied roles and responsibilities; working productively with others; exercising empathy; respecting diverse perspectives
- Self-directing—monitoring one’s own understanding and learning needs; locating appropriate resources, transferring learning from one domain to another

- Information and communication technology (ICT) learning skills
  - Information and media literacy skills—analyzing, accessing, managing, integrating, evaluating, and creating information in a variety of forms and media. Understanding the role of media in society.
  - Communication skills—understanding and managing and creating effective oral, written, and multimedia communication in a variety of forms and contexts
  - Interpersonal and self-directional skills—becoming more productive in accomplishing tasks and developing interests in improving [one’s] own skills (2005, pp. 15-16)
As citizens of not just their local community but also the global community, students must be able to actively participate, which requires that they can both understand and analyze those communities (p. 18). Because the global community is ever changing, students must acquire the “flexibility” that comes with self-education to “enable them to acquire new knowledge and skills, connect new information to existing knowledge, analyze, develop habits of learning, and work with others to use information . . . ” (p.18). Proficiency with technology is key to success in this community “for communication and information sharing” (p.18). Likewise, students need to be able to understand what drives other cultures and “successful[ly] communicat[e]” with them despite sometimes extreme “differences” (p. 20).

Texas’ Efforts to Bridge Skills Gaps

According to a report issued near the end of 2007 by the Commission for a College-Ready Texas, less than half of high school graduates are prepared to do college-level reading and writing (“Behind,” 2007). To address this deficit, the Texas Legislature is scrutinizing the current curriculum standards known as Texas Essential Knowledge and Skills (TEKS), discussed below, creating various programs that enroll students in college earlier with the goal of encouraging preparation and creating stronger “career centers” for high school students who do not plan to attend college but enter the workforce following graduation.

Early College High Schools are located on several area community college campuses (Unmuth 2008, p. B2). Aimed at “at-risk, low-income and minority students whose parents did not attend college,” these programs encourage students to “graduate with a high school diploma and associate’s degree in four years.”
According to a recent *Dallas Morning News* article, school districts in Texas are making greater efforts to prepare students for careers straight out of high school if they choose not to go to college, even creating “stand alone” facilities. “‘They’re finally realizing that not all kids go to college, but all kids go to work,’” observes the principal of one of these centers (Parsons, 2007). Unlike traditional “vo-tech” programs, however, these programs incorporate rigorous math, reading, and writing skills that would enable students to choose either path. Findings listed in a May 2008 report by the Southern Regional Education Board affirm the value of such an approach (“Districts,” 2008).

**Role of the Texas Essential Knowledge and Skills (TEKS) in curriculum development.** Any changes in the K-12 curriculum would have to begin with The Texas Essential Knowledge and Skills (or TEKS, typically pronounced with a long “e”) (www.tea.state.tx.us/teks), which is a compilation by grade level and content area of what students should be learning in the public school system. This core forms the foundation upon which curriculum directors and teachers can build the curriculum. It also serves as the basis for the Texas Assessment of Knowledge and Skills (TAKS), the set of exams the state uses to assess students’ academic performance. The figure below is an example of a TEK for fifth-grade English/language arts:
Figure 1-1. Teachers build curriculum from TEKs like this one. The numbers in parentheses reflect grades to which the TEK applies.

The TEKS were first implemented in the 1998-1999 school year, having been adopted by the State Board of Education the previous year.

In 2007, in an effort to overhaul the TEKS to better bridge skills gaps from high school to college, the Texas Legislature required the Texas Education Agency to create vertical “college readiness” teams comprised of public school educators and faculty.

110.7. English/language arts and Reading, Grade 5.

§ (b) Knowledge and skills.

(15) Writing/purposes. The student writes for a variety of audiences and purposes, and in a variety of forms. The student is expected to:

(A) write to express, discover, record, develop, reflect on ideas, and to problem solve (4-8);

(B) write to influence such as to persuade, argue, and request (4-8);

(C) write to inform such as to explain, describe, report, and narrate (4-8);

(D) write to entertain such as to compose humorous poems or short stories (4-8);

(E) exhibit an identifiable voice in personal narratives and in stories (4-5);

(F) choose the appropriate form for his/her own purpose for writing, including journals, letters, reviews, poems, narratives, and instructions (4-5); and

(G) use literary devices effectively such as suspense, dialogue, and figurative language (5-8).
from institutions of higher education. According to Joseph Kulhanek, Manager of the College Readiness Program, these English/language arts, math, science, and social studies teams were tasked with a two-year assignment to

- Recommend college readiness standards and expectations
- Evaluate the effectiveness of the TEKS in preparing students for college
- Recommend strategies for aligning curricula
- Develop instructional strategies, professional development, and online support materials (personal communication, September 10, 2007)

University of Texas English professor Linda Ferreira-Buckley, whose specialty is rhetoric and writing, co-chaired the state's English/language arts college readiness team. In listening to citizen testimony from around the state, she learned that parents want educational accountability, but not more testing. Leaders in business and industry, science and technology emphasized the need for students to enter college or the work force knowing how to speak and write effectively, collaborate productively and understand diverse cultures. They stressed that genuine knowledge stems from the ability to evaluate information, not simply from the memorization of facts. The consensus, though, was that public schools in Texas are not providing students with a first-rate education.

(2008)

Unfortunately, the State Board of Education ignored the recommendations of the English Language arts college readiness team (www.thecb.state.tx.us/collegereadiness/TCRS.cfm)--recommendations that were supported by seventeen teacher groups--and instead adopted a curriculum proposal
written by a consulting firm based in Washington, D.C. The firm’s plan includes teaching grammar separately from writing and dropping teacher-preferred reading comprehension methods—approaches not at all aligned with what most teachers consider Best Practices (Stutz, 2008). Ferreira-Buckley feels the SBOE is “play[ing] politics” and short-changing students with a curriculum that fails to prepare them.

*Impact of Texas Assessment of Knowledge and Skills (TAKS) on curriculum.*

Educators determine the degree to which students have mastered the TEKS through the Texas Assessment of Knowledge and Skills—high-stakes tests that often determine the emphasis teachers place on TEKS components. The first Texas Assessments of Knowledge and Skills were administered during the 2002-2003 school year to measure student achievement in reading, writing, English/language arts, math, science, and social studies:

- **Reading** Grades 3-9
- **Writing** Grades 4 and 7
- **English Language arts** Grades 10 and 11
- **Math** Grades 3-11
- **Science** Grades 5, 10, and 11
- **Social Studies** Grades 8, 10, and 11.

Students must pass the eleventh-grade TAKS exams to graduate.

Some area teachers have estimated that “test-related activities” cost students as much as a month of instruction time during the school year (Heath, 2008). Third grade teacher Mary Garcia has to spend 30 minutes per day tutoring a student who did not pass TAKS, and this tutoring has to be done during regular school hours (personal
Linda Blivens notes sadly that because she has to pull her third-grade students into small groups 20 minutes per day for reading and math tutoring for TAKS, “some fun things have to be cut” (personal communication, March 22, 2008). “There are so many things we’re held to” that there is just not time for anything else, but Blivens adds that after April 29 (the last TAKS test), she “can delve into” some subject matter and activities she has been putting on hold.

Special populations of students bring their own challenges regarding TAKS preparation. Regarding her fourth-grade English as a Second Language students, Alicia Ayala comments, “I can adjust anything I need to meet their needs” (personal communication, April 11, 2008). However, these students are ultimately held to the same TEKS as non-ESL students are. She feels her ESL students “would thrive if they were taught in a different way with different objectives.” “Why can’t they have fun? Why do they always have to be in tutoring?” she laments.

Blevins notes that the district assessments and TAKS show how well the teacher taught the TEKS to the class; they are a “teacher’s report card.” Fifth-grade teacher Sue Mitchell feels this TAKS emphasis definitely adds to her “stress” but does not feel “restricted” by it (personal communication, April 16, 2008). She does not like the fact that the test is a “snapshot they’ll [curriculum directors] use to determine whether I’m doing my job” and emphasizes it is a haphazard assessment of students’ abilities as well: “It’s one day in the life of a kid.”

Professor of Education Andrew Milson sees no problem with the TEKS themselves; rather “the problem is that some objectives can’t be easily assessed on a multiple-choice test.” In Milson’s opinion, “only a narrow band of TEKS can really be
tested” (personal communication, November 13, 2007)—not the problem-solving and critical-thinking skills that employers cited in recent national studies say matter most. Very little writing is required on the Writing TAKS. Secondary schools’ emphasis on the personal narrative to ensure students do well on the Writing TAKS, which tests only that style, is a disservice to students who will need to use the expository and persuasive styles in college and at work, warns Don McLeroy, chair of the State Board of Education, in a *Dallas Morning News* letter to the editor (2008).

A TAKS “pass” doesn’t necessarily guarantee college success, observes education reporter Kit Lively in a May 2007 *Dallas Morning News* article. Hacker and Fischer (2009) reveal a number of problems with the TAKS that call into question its reliability as an accountability system, among them the significant discrepancy between the “college ready” TAKS standard and the “passing” standard. Another TAKS deficiency is that its passing standards are far below passing standards of national proficiency averages.

However, significant changes are in store for the TAKS, including possibly replacing the elementary and middle school tests with state achievement tests and phasing TAKS out of high school altogether (Stutz, March 3, 2009). In March 2009, House and Senate education committees began considering legislation to free school districts to add other measures, such as “course grades and teacher recommendations,” to TAKS results to assess promotion readiness in third, fifth, and eighth grades. In high school, students would have to pass exit exams in English, math, science, and social studies to graduate instead of the current TAKS exit exams (Stutz, March 18, 2009).
In addition, school performance ratings would be determined by an average of three years’ scores rather than the current annual evaluation. Standards would increase as well “so that within 10 years Texas will perform among the top 10 states in college and workplace readiness” (Stutz, March 3, 2009).

Because, currently at least, desired TAKS success drives the emphasis teachers place on certain TEKS elements, teachers need to understand the merit of emphasizing TEKS elements relating to professional communication skills to ensure that students are exposed to and begin to grow their proficiency in those areas. Such understanding would have to begin, though, with the curriculum directors.

*Role of curriculum directors/teachers in determining curriculum emphasis.*

Curriculum directors keep up with the current Texas Essential Knowledge and Skills, especially as the passing mark on the TAKS increases. They analyze under which objectives the testers are most likely to test which skills to ensure teachers do not skip teaching those skills. In McKinney ISD, curriculum directors provide ideas teachers can use to implement the curriculum through a shared computer drive but do not prescribe certain methods. Curriculum developers also constantly train new faculty.

McKinney ISD K-5 teachers themselves meet regularly in various groups including vertical teams, which include a subject-area representative from every grade level. During these meetings they discuss the materials they want and need, new approaches to subject matter, and new websites available for certain students. Teachers from each grade level meet three times a week or so for fifty minutes at a time to plan. Additionally, teachers meet regularly in “cadre” meetings—grade and subject-area meetings of teachers across McKinney ISD.
Use of curriculum maps to ensure TEKS coverage

According to second-grade teacher Janet Peters, the district determines what curriculum the teachers need to cover to be sure all TEKS are addressed (personal communication, February 6, 2008). The teachers then do a curriculum map of how they plan to cover that material. This map is not necessarily linear since “a lot of writing is ongoing.” As a grade level, Peters and her colleagues do all their planning together, she notes although some schools plan by subject. She feels their collaboration produces a better end result. Teachers do not usually compare curriculum maps across schools.

Kindergarten teacher Tracy McCormack details her school’s yearly efforts to enhance their curriculum map (personal communication, March 18, 2008). Members of her school’s curriculum team have traveled to a Utah conference on curriculum mapping for the last four years. She notes that at first, each grade wrote a single-page document (for the whole nine weeks in each subject area) stating the TEK and generally showing how to implement it. Since then teachers at each grade level have developed what works best for them (she likes hers “nice and charty”). For her grade level (K), each document has to have:

- The TEK
- Student Expectations
- Assessment (the verbs are very important in regard to vertical mapping)
- Essential Questions (not just general questions but questions that go back to the TEK and cannot be answered “yes” or “no” but are general statements that she revisits when teaching that TEK)
Diary Mapping (how the implementation worked or did not; notes for change)

When it is finished, the document will make teaching much easier, she believes.

*Teachers’ perceived flexibility in implementing curriculum*

Were K-5 teachers inclined to emphasize TEKS related to professional communication principles, what degree of flexibility would they be permitted in implementing the curriculum? Many interviewed MISD teachers feel they have a moderate degree of flexibility in implementing the curriculum. Garcia notes that “everything is by TEKS.” When she first started teaching, she had a lot more leeway. For example, in science, she liked to study frogs, but now the TEKS says “crayfish,” which were really unappealing to her students. She feels she does have “some say-so” in how she does what she does, though.

Ayala thinks the current somewhat prescriptive curriculum is a result of past teachers not planning effectively: “I feel like some people ruined it for everyone else, so they [local and state curriculum directors] laid it out in such a specific guide.” However, she feels that at her school she has plenty of flexibility to implement the curriculum “as long as it works.” She is pleased that her administration’s philosophy is “I would rather the child have fun and do OK [on the TAKS] than have them leave hating reading and writing.”

“There’s so much more control of teaching than there was in the past,” states fourth-grade teacher Carie Smith (personal communication, January 3, 2008). She points to the high turnover rate due to teacher burnout that brings new teachers in at an “upper level” that requires defining curriculum and therefore stifles creativeness. Smith notes that “the bigger the system gets,” the less creative teachers can be.
Some interviewed MISD teachers view the district curriculum primarily as a starting point that includes some “non-negotiables.” This perspective differs significantly from that of teachers in Plano, third grade teacher Anna Guirguis observes (personal communication, April 18, 2008). She has also taught there, where “even what you said was in the curriculum.” Mitchell does not “feel restricted by TEKS” because she “believe[s] that they’re the minimum we need to teach—the bottom of the bar . . . . We need to do so much more; we can take it as far as we can go with the kids,” she says. As one of the district’s math curriculum writers, Mitchell plans lessons and activities “with the intent for lots of writing and communication.” She feels math teachers are “making baby steps” in that direction but feels the curriculum ideas are “not used as much as they should be.”

Teresa Gahan observes that teaching the five-step writing process is one of the “non-negotiable[s]” in first grade (personal communication, March 4, 2008). However, by way of enhancing the flexibility she enjoys, the district is currently moving toward using literature passages more (to exemplify humor, description, and dialogue) as a “springboard” to get students moving away from “I went to the beach, and then I built a sand castle, and then, and then, etc.,” which tends to be a problem through fourth grade, she notes. Teachers are told to use “rich literature” as a model for good writing, but the choice of literature is the teacher’s.

Although she is required to teach her fifth graders the concepts set by the district every nine weeks, Ella Frist feels she has “complete control over how” (personal communication, April 9, 2008). In relation to other fifth grades in MISD, which she assesses during “cadre” meetings, Frist notes, “We [teachers in fifth grade at her
campus] do as much or more projects and fewer worksheets.” She feels she and her colleagues “have the freedom from the administration to do what’s best for our kids . . . . My kids like to get up and learn, so that’s how I teach,” she says. Amanda Jackson, who writes fifth-grade reading and social studies curriculum in the summer for the district, feels she also has an administration that allows her flexibility in implementing curriculum with creative assignments (personal communication, March 26, 2008). Nora Schroeder also emphasizes this support she receives from the district for teaching first grade: “we have flexibility, but not an abundance because we have so much we’re expected to teach . . . . There are some non-negotiables, but our district is good about giving us what we need,” she adds (personal communication, April 23, 2008). As a Title I. school, her campus receives “tons of materials.” “It’s all about the kids,” she says. “Their [curriculum directors’] expectations are good . . . and do-able.”

Other interviewed teachers view the district curriculum more loosely—as resources and suggestions (with the exception of the “non-negotiables”). Chase Young and his second-grade team, as well as his curriculum director, refer to the “curriculum” as the “IPG”—Instructional Planning Guide (personal communication, May 7, 2008). “That means you can use all of it, some of it, or none of it,” he explains. This freedom allows for a lot of flexibility, which throws off some teachers new to MISD who are used to a set, pre-scripted curriculum. “There are wonderful things happening across the district because we have that flexibility,” he adds. The district does provide “Best Practices,” though, which are determined by the curriculum director and selected K-2 instructors who provide input about what they have seen that is working the best. They
create staff development based on what the district needs and is not seeing. “It’s pretty research based,” Young comments.

Janalee Hales also views the curriculum as a “resource,” a curriculum she helps write for the fifth grade during the summers (personal communication, April 25, 2008). She interprets “non-negotiable” as meaning “all of the campuses have the resources for these listed activities; it doesn’t have anything to do with teaching methods but has everything to do with materials available.” “It’s [the non-negotiables are] not necessarily the most effective way of teaching”—Hales would put textbooks in this category—but “it’s a like resource.” The district “encourages teachers to look through those resources and find out what’s best for the classes in front of them.” Some lessons work well for some of Hales’ classes and do not for others—“it’s time for something different for that class”-- so she concludes that “there’s an immense amount of flexibility.” The campus-level administration affects that flexibility: “There’s a certain amount of trust that goes into the administrators of creativity and lesson planning,” notes Hales.

Most interviewed teachers view the district’s “Frameworks” shared computer drive as a significant tool in helping them implement the curriculum. On this drive each subject area has a framework for each topic (TEK, information and activities, vocabulary), and teachers update them in coordination with the curriculum director. Schroeder gets lots of ideas and support from the shared drive. Mitchell also feels that the district encourages innovation. Besides the “non-negotiables and suggested activities” that all teachers are expected to include, “we’re told if you have something that will work well, let us know and we’ll put it on the shared drive.” She finds that there are ideas on the district shared drive that can “fit any style and any kids’ style.” Guirguis
does find that some of the lessons on the district shared drive are not “hands-on” or “fun,” which she feels is especially important. She wants her students “talking to each other, interacting.” But that is the good thing about the shared drive—“you can use what’s there or not.”

Conclusion

In light of recent national studies that prove the value of applied skills such as those comprising professional communication, many education and business groups have determined that students would benefit from a greater emphasis in this area to better prepare them for advanced education, their careers, and their civic lives. Texas educators are striving to enhance students’ college and work readiness as evidenced by recent efforts to improve the current K-12 curriculum components (the Texas Essential Knowledge and Skills) and the assessment of how well students have mastered them. In evaluating the current curriculum, then, Texas educators may wish to examine whether the TEKS incorporate an early (K-5) emphasis on applied skills--specifically professional communication skills—early enough to lay the foundation for students’ success in communication tasks upon graduation.

Understanding how to tailor communication for audience and purpose; how to effectively collaborate; how to select, evaluate, analyze, and organize information efficiently and productively; and how to format presentations effectively requires practice over a long period of time. In this study, I investigate the extent to which Texas’ K-5 curricula—specifically McKinney Independent School District’s K-5 curricula--currently address these professional communication principles. Further, I investigate whether Texas pre-service teachers receive training in professional communication. If Texas K-
5 teachers are to supplement the curriculum with professional writing principles, as national studies suggest they should, education programs need to focus on these principles in their pre-service teacher curriculum.
CHAPTER 2

LITERATURE REVIEW: LITERACY DEVELOPMENT IN K-5

Much has been written on literacy development in K-5, especially on some of the areas that lay the foundation for non-academic writing: audience and purpose; collaboration; information selection, evaluation, analysis, and organization; and presentation format. Central to this development is the idea of a “continuum”—that literacy instruction must be scaffolded, that it cannot be taught or learned in units but must be revisited through each successive grade level with ever-broader strokes.

Pritchard and Honeycutt (2007) emphasize this importance of circling back with ever-increasing depth in the writing process through the grades. Alber-Morgan, Hessler, and Konrad (2007) note how important it is that younger students master the basics of writing so older students can use those skills as a springboard. Pinnell and Fountas (2007) devote an entire book to this continuum: The Continuum of Literacy Learning, Grades K-8: Behaviors and Understandings to Notice, Teach, and Support, detailing grade by grade the literacy skills students should be acquiring, with specific attention to the foundational professional writing concepts noted above. McGee and Richgels (2008) also describe literacy as a continuum. They call children five to seven years old “experimenters”—“transition[ing]” from “novice” to “conventional” reading and writing (p. 88). Six- to eight-year-olds are conventional readers and writers in “early,” “transitional” (write in several different genres), and “self-generative” (can revise for different purposes and audiences) phases (p.119). Pressley, Mohan, Fingeret, Reffitt, and Raphael-Bogaert (2007) emphasize the value of this continuity in the language arts
program and argue that writing should be integrated with reading, science, social studies, and math.

A number of trends emerge in recent literature on literacy that are useful in preparing K-5 students for non-academic writing:

- Emphasizing early on how to read for audience and purpose and then transitioning these skills into writing
- Communicating to an “authentic” audience for an “authentic” purpose within an “authentic” writing situation
- Fostering literacy of every type—print, visual, information, digital, general
- Promoting inquiry-based education (not just for science)
- Facilitating and guiding students in “discovering,” rather than lecturing to impart information
- Collaborating, especially as part of inquiry-based approaches, emphasizing coordination rather than competition
- Reading, writing, and working with more nonfiction, especially learning strategies for comprehension
- Modeling by teachers with “think alouds”
- Using digital resources, not just as an end but as a tool to get information to use
- Evaluating sources, especially those located on the Internet
- Considering audience when presenting findings—in organization, format, word choice, etc.
- Revising as part of peer editing and the writing process steps
• Self-evaluating

The following studies from 2000 through 2008 examine these trends.

Focus on Audience and Purpose

Alber-Morgan, Hessler, and Konrad (2007) write about the importance of incorporating particular teaching strategies into each stage of the writing process, from prewriting to publishing, in order to ensure students can “generalize” the writing skills they learn. By adapting skills and attitudes necessary for real-world writing—such as writing competently for various scenarios and revising and editing one’s own work—teachers can use approaches that approximate for the students a real-world writing setting. The communication experience is more “authentic” for the students when the audiences and purposes are real and when students are involved in selecting the genres in which to convey their topic discussion. Through “integrated multisource instruction,” teachers can “engage students in the kinds of authentic tasks they will encounter in the world beyond the classroom” (p. 302), affirm Kucan, Lapp, Flood, and Fisher (2007) and McKenna, Labbo, Reinking, and Zucker (2007). Toussant (2007), a fifth-grade teacher, also touts the importance of students getting lots of practice writing for specific audiences and real purposes.

Even pre-school-aged children respond best when their writing has some kind of purpose within a social context, for instance within dramatic play, note Love, Burns, and Buell (2007). McGee and Richgels (2008) write that younger students have a “keen awareness of audience” and understand they are “creating meaning with someone else in mind” (p.136). The authors advocate giving children practice with literacy in “simulate[d] real-world settings” through “dramatic-play-with-print centers” and projects
creating such centers, often involving communication with community members relevant to the center theme (p. 238).

Graham, MacArthur, and Fitzgerald (2007) comment on the importance of being able to write well to participate in a community. For them, audience “impact” is at the “core” of writing (p. 4). When students practice in a community, they learn to write best, note Pritchard and Honeycutt (2007). Coker (2007) stresses how important it is for students to learn how writing is used “to communicate in society.” He therefore encourages “authentic literary activities” such as playing post office (letters), restaurant (menus, notepads), and veterinarian’s office (treatment notes) (p. 104). More specifically, in the area of science, Freeman and Taylor (2006) note that students must learn to “read, write, and speak as scientists” (“authentic purposes” and “authentic reading”) because “reading and writing are the tools through which scientists accomplish the task of science” (p. 3). They emphasize the importance of “real-life situations” for learning activities (p. 63).

Graham and Harris (2007) find that students will work harder on “planning” activities for authentic assignments; they will work harder at tailoring format and word choices to audience and purpose.

Need for balancing “authentic” and “instructional.” However, some educators feel that “authentic” assignments should not be the only tasks assigned in school. Pearson, Raphael, Benson, and Madda (2007) emphasize that “authentic” learning activities are realistic and “useful for engaging in real-world literacy activities; that is, instead of teaching kids how to ‘do school,’ we should be teaching them how to ‘do life’” (writing for real audiences and purposes). However, they point to a need for “balance” between
these types of activities and those that ensure language conventions and mechanics are covered (p. 36). They emphasize the need to balance “authentic and instructional texts” (p. 42). Balance between the writing process and “intentional writing instruction” is important because students need a “common vocabulary for discussing and improving their writing” (p. 251), observes Bromley (2007). Boscolo and Gelati (2007) further define the purpose of “authentic writing” as doing more than “achieving a practical goal” but simply for communicating (“share, discuss, and comment on [a subject] with others”). Students should understand writing as “a flexible tool through which many functions can be realized and goals achieved” (p. 207). Students are motivated when they perceive writing as “useful”—“having informative, practical, or aesthetic value”—so writing that helps them learn should be perceived as “useful” too (p. 209). All problem-solving activities should involve students “communicating [their solution] to an audience” (p. 211), note Boscolo and Gelati.

Benefit of incorporating ICT. Bromley (2007) supports the argument that when working with information and communication technology, students are more attuned to audience. Students’ motivation improves when they know their work will appear on the Web because they will be reaching a “large,” real audience, observes Abdullah (2003), but the hypertext medium demands that the writer anticipate all possible ways the audience might navigate through the text. Karchmer-Klein (2007) also emphasizes the importance of audience analysis, especially the audience’s “skills and expectations,” in producing a document to appear on the Web since there are so many formatting options. He affirms that such an experience makes an abstract audience real to students because Web audiences may be interacting with them.
Importance of evaluation. MacArthur (2007) stresses the importance of teaching students to evaluate writing to determine whether they accomplished their purposes while considering audience, especially looking at organization, format, and word choices. He also emphasizes teaching students how to evaluate by having teachers model the process rather than just providing a list of things to look for. “Revision begins with evaluation,” but students need to be taught how to evaluate, he observes (p. 160). Bromley (2007) notes that self-evaluation “encourages [students] to take responsibility for their own writing process” (p. 249). She observes that the NCTE recommends “teaching standard conventions and correctness by having students editing writing they do for real purposes” and real audiences (p. 251).

Focus on Collaboration

Bromley (2007) concurs with Freeman and Taylor (2006) in stressing the importance of collaboration in learning new information. The inquiry approach involves collaboration by definition. It makes use of “small group discussion, group projects and presentations, and debating argumentatively and with support from the text or other resources” (p. 81). Freeman and Taylor suggest that students spend 60 percent of science time discussing work while collaborating, a practice that has optimal results when they are using the “5E inquiry method”: engagement, exploration, explanation, elaboration, evaluation (p. 173).

Need for instruction in collaboration skills. However, Mercer, Fernandez, Dawes, Wegerif, and Sams (2003) caution that collaboration works well only if students understand how to speak in a group and how to listen. Often they do not clearly understand the purpose for their collaborative activity or how to collaborate (“sharing
ideas and solving problems”) effectively; therefore, they create a product that falls short of the learning objective. To help students understand how to collaborate, teachers need to model “exploratory talk” and set up “ground rules” for group discussions. Freeman and Taylor (2006) even suggest teachers assign group members particular jobs (p. 174).

Teachers should expect consensus in a collaborative activity because each child will thus be more likely to contribute to it, and it will be more “educational[ly] benef[cial]” (Mercer et al.) Gambrell, Malloy, and Mazzoni (2007) agree that teachers need to help students learn interpersonal skills for successful collaboration. Duvall (2001) observes that by emphasizing respectful cooperation rather than competition, teachers help students work together to solve curriculum-based problems. Teachers share the role of “instructor” with other students, who collaborate in initiating inquiry through asking questions and then seeking solutions, which they then share through speaking or through writing.

**Value of digital technology in collaboration.** Boscolo and Gelati (2007) emphasize the importance of considering writing as a “collaborative activity” (p. 213). Computers can be useful in promoting collaboration if students understand how to collaborate, note Mercer et al. Boling, Zawilinski, Barton, and Nierlich (2008) observe that blogs and Internet projects allow students to dialogue and collaborate safely with real audiences from around the globe. Using websites designed for collaboration, like wikis, students can collaboratively work through an entire problem-solving process: “identifying problems, locating online resources, critically evaluating information, and sharing ideas. . . .” McKenna, Labbo, Reinking, and Zucker (2007) agree with Abdullah
(2003) that electronic communication may free some students to participate in collaborative activities because they no longer feel “threaten[ed]” by their peers’ critiques. As part of such collaboration, students can critique each other “synchronously or asynchronously” and “reference each other’s texts.”

Focus on Information Selection, Evaluation, Analysis, and Organization

Schmidt, Gillen, Zollo, and Stone (2002) draw parallels between “inquiry learning” and “literacy learning” in that in both, “information is shared in the classroom community through reading, writing, listening, and speaking,” most often collaboratively. In inquiry learning the teacher/facilitator orchestrates the learning experience, based on guided exploration, which is enhanced by incorporating various literacy activities. Students develop literacy through inquiry learning when they do research and report that research orally or in writing. Boscolo and Gelati (2007) emphasize that students should be writing at all stages of a “learning activity,” from taking notes or reflections to producing the final report (p. 213).

Value of inquiry approach. Duvall (2001) also touts the value of inquiry-based learning with the teacher acting not as lecturer but as orchestrator of learning, setting up discovery experiences and facilitating as needed (“questioning, observing, raising counter-arguments, suggesting alternative sources of information, and offering productive feedback”) to give students the skills they need to solve real problems, skills they need in the non-academic world. Teachers design learning situations, then help students “uncove[r] the curriculum,” creating independent decision makers and problem solvers, rather than expect students to memorize unconnected information from lectures, which makes students “dependent” on others. Freeman and Taylor
(2006) affirm that when science and literacy skills are integrated with collaborative activities in an inquiry approach, “students’ planning and problem-solving skills” improve (p. 5). They too advocate an inquiry approach that “shifts thinking from teacher-directed lessons to student-designed discoveries” (p. 25). Such an approach requires that students truly comprehend the material in order to apply it to solve problems, as well as analyze, synthesize, and evaluate (p. 26).

One type of inquiry activity, Webquests (webquest.sdsu.edu), which point students “to a sequenced series of specific websites to solve a structured inquiry problem,” effectively hones students’ research skills because the students spend more time working with information than searching for it, note Turner and Broemmel (2006). Karchmer-Klein (2007) concurs, citing the value of collaborative Internet projects as well (“two or more classrooms study similar topics and share their findings through writing and visual arts over the Internet”) (p. 230). Even classrooms that have only a few computers can still participate in technology-focused, inquiry-based projects since much of the groundwork of information collection, organization, and analysis can be done without them, observes Wilhelm (2004).

Importance of instruction in using electronic search tools and analyzing information. Wilhelm (2004) argues that students are illiterate if they are not comfortable using electronic technology (“multimedia tools that use video, graphics, sound, and traditional text in a hypermedia format”). Even though teachers become more of a facilitator when students are using technology in inquiry-based pursuits, their guidance and modeling are even more necessary because simply using the technology is different from using the technology to develop literacy. With the addition of “videos,
pictures, [and] graphs,” critically analyzing text and the complementary graphics becomes more complicated. Students need strategies for searching, reading, note-taking, and analysis.

These analysis strategies are especially important when students doing research are “bombard[ed]” by commercial ads and requests for marketing information, especially those sanctioned by administrators as a trade-off for materials access, notes Dickinson (2001). She points to a need for visual literacy education about interpreting such ads. Composition texts are starting to cover visual design but do not help students understand the impact of such ads, she notes.

Haycock (2004) suggests that the teacher-librarian not only assist the student in productively searching for information through print and software tools but also teach “technical troubleshooting (disk, printing, Internet access) and problem-solving skills.” Even though some students may be more technically proficient than their teachers on the Web, note Kuiper, Volman, and Terwel (2005), they still need lots of guidance on search techniques as well as evaluating resources—and then using that information to support their ideas—“information literacy.”

McPherson (2005) suggests that teachers introduce these researching skills on the Web by focusing on those that are similar to skills used to research print sources (“like identifying headers and keywords or skimming and scanning”). In addition to familiar navigation and information tools like tables of contents and indexes, “keywords, graphs, headers and titles, timelines, glossaries, photographs, family trees, classification graphics,” there are those navigation tools unique to digital sources like “fly-out menus, pull-down menus, textual and pictorial hyperlinks, audio and video
demonstrations, search engines, [and the] chat-with-an-expert option.” Safford (2005) touts the value of encyclopedia databases like *Britannica Online Student Edition* because “information that students need is in a Web-based subscription database that can be read online, printed, e-mailed, and accessed from home or school; used by teachers for demonstration purposes; has built-in activities, videos, photos, and maps; is linked to teaching standards; and is inherently interactive and browsable for individual student interest and appropriate for various age groups.”

**Importance of expanding use of nonfiction resources.** Freeman and Taylor (2006) suggest nonfiction should comprise 50 percent of students’ reading. And this reading should start young. Bromley (2007) believes that first and second graders are fully able to “rea[d] and writ[e] informational texts” (p. 252). Primary students are usually more intrigued by informational books, which help them acquire “vocabulary and concepts” necessary to a progressive understanding of content areas as well as an understanding of navigational and support devices (like “table of contents, index, glossary, boldface headings and captions”), finds Granowsky (2004). But elementary school teachers aren’t generally using informational books as often or effectively as they could because they perceive the necessary preparation as especially burdensome; however, there are now numerous ready-made materials especially designed for such use, Granowsky notes.

Yopp and Yopp (2000) argue that emphasizing narratives and marginalizing nonfiction does students a disservice because children enjoy nonfiction, contrary to what some teachers believe, and it lays the foundation for the content-area reading they will be doing heavily from fourth grade on. Students need frequent exposure to
informational texts because narrative strategies do not “transfer” to nonfiction strategies. Unlike narratives, “informational text . . . makes use of compare/contrast, problem/solution, or other text structures . . . [and] the following features: timeless verb constructions, generic noun constructions, relational/existential verbs, general statements at the opening and closing, use of technical vocabulary, and repetition of the topical theme,” all of which require that the student use higher-level comprehension strategies and practice them frequently. Freeman and Taylor (2006) note that science reading, especially, helps students learn key skills: “skimming the text for important facts or details; using an index or table of contents to locate specific information; or using headings, subheadings, captions, and pictures to establish the main idea” (p.17). Learning to interpret nonfiction conventions like “labels, photographs, captions, comparisons, use of various prints, table of contents, [and] index” transfers into “real-world” reading (p.17).

Importance of making nonfiction available. Yopp and Yopp (2000) suggest tying nonfiction into a fiction activity to provide deeper background and making plenty of nonfiction books available to students via the classroom library. Many of these documents should be “authentic materials,” stress McGee and Richgels (2008) that “serve real-world purposes outside of school,” for example, reference books, telephone books, catalogs, nonfiction books, storybooks, newspapers, magazines, maps, calendars, videos, and DVDs (p.159). They distinguish between “functional texts,” which “serve authentic purposes . . . to help people get things done in their everyday lives” (telephone books, grocery lists, graphs), and merely “instructional texts,” finding
that functional texts are a superior teaching tool since “children, like adults, learn best when instruction is relevant to their lives” (p. 217).

The universal access to technology necessitates “multiple literacies” (p.108), argue McGee and Richgels (2008). Freeman and Taylor (2006) believe that students need “exposure” to many types of expository texts like “textbooks, trade books, newspapers, magazines, encyclopedias, and the Internet” (p.18). Kucan, Lapp, Flood and Fisher (2007) suggest that texts be “diverse” in “genre, format, and presentation” because when students have the opportunity to engage diverse texts, they “engage in processing that involves evaluating the importance, credibility, and relevance of individual texts” and can therefore “construct more elaborated representations of people, events, and concepts” (p. 286). Integrated multisource instruction “makes the most of limited instruction time,” “supports students in exploring concepts and themes in more depth,” and “creates a context in which multiple texts and multiple media can be used” (p. 302). They note that more electronic resources teachers can use for such instruction are being developed as are more informational texts.

*Importance of teaching nonfiction comprehension strategies.* Students need to learn strategies for actually “gaining meaning from the reading,” not just “decoding words,” (p. 68) note Freeman and Taylor (2006). They need training in how to “understand and synthesize” nonfiction texts and how to extract information (Freeman and Taylor, p. 15), specifically training in understanding nonfiction’s “content-specific vocabulary”; glossaries, indexes, and diagrams; and how to use reference sources to help them understand concepts, point out McGee and Richgels (2008, p. 299). Block and Pressley (2007) identify some sources of comprehension difficulty as: “depth of
vocabulary,” “lack of background experience with topic,” and “greater likelihood of misconceptions.”

Duvall (2001) emphasizes that teachers need to teach students how to read nonfiction and use information gained from it. All content-area teachers should be teaching reading skills since learning how to read literature does not translate to understanding how to interpret nonfiction, note Freeman and Taylor. To support nonfiction comprehension, Freeman and Taylor suggest that teachers model a “think-aloud” process rather than simply explain a comprehension strategy. Block and Pressley concur. Freeman and Taylor suggest teachers explain the strategy, model the strategy, have students practice the strategy and then apply the strategy in an assignment (p.11).

As for specific comprehension strategies, Block and Pressley suggest “reading two nonfiction texts on the same topic back to back,” “teaching nonfiction text features,” “teach[ing] students to ask themselves ‘why’ questions as they read,” and “tak[ing] notes” or doing semantic mapping (p. 234). Students need to learn to “size up a text in advance by looking at titles, text features, sections, pictures, and captions, continuously updating and making predictions about what will be in a text” (p. 225). They should also “wat[ch] for textual features, access features, unique types of information that appear in a specific genre, important points, sequence of details, and conclusion” (p. 226). McGee and Richgels suggest something similar in mini-lessons during which students can focus on particular non-fiction features (for example, labeled drawings, cutaway drawings, cross-sectioned drawings); nonfiction structures (“put information into sets or groups, write about one part at a time, lead with questions”); navigation and text
features (captions, headings, table of contents, headings); and other types of informational writing (for example, want ads) (p. 273).

When reading nonfiction, students can also use “guided reading” (learning reading strategies, which they then practice with their teacher) to help learn comprehension skills, note McGee and Richgels. And summarizing is especially important when trying to decipher nonfiction, observe Block and Pressley.

Teachers can also help students with nonfiction comprehension with “anticipation guides, research, note-taking, graphic organizers, semantic mapping, feature analysis, and questioning techniques, as well as using text features such as photographs, captions, graphs, food labels, and diagrams” (p.15), note Freeman and Taylor. The following graphic organizers are especially useful: “flowcharts, Venn diagrams, webs, compare/contrast charts, concept maps, time lines, life cycles, fishbone diagrams, continuums. . .” (p. 85). Bromley (2007) concurs, adding t-charts. Block and Pressley support these strategies by emphasizing that writing “after reading a text” does not help comprehension as much as writing while reading (p. 235).

Finally, McGee and Richgels note that students can also approach informational texts from the perspective of analyzing how an author engages the audience and then practicing those techniques in their own writing, especially with tools in word processing and graphics programs (p. 307).

Importance of organizing and evaluating. McGee and Richgels (2008) stress the importance of inquiry activities requiring students to “search for specific information,” evaluate information relevance (with teacher’s help), “integrate and summarize information across several texts,” and communicate information (“reports, group-
authored books, charts, and informational stories”) (p. 310). McKenna, Labbo, Reinking, and Zucker (2007) emphasize the importance of students “mov[ing] beyond the simple skills of technological proficiency to higher-level skills such as synthesizing information” (p. 348) and suggest “students evaluate and take a critical stance toward digital material, including considerations related to the credibility of the source and potential bias” (p. 360).

When students are using word processing, they spend more time on the writing process, especially organization, note McKenna et al. And when their work will be put on the Web, they have special organization challenges in having to anticipate all possible ways the audience might navigate through the text, cautions Abdullah (2003).

Need for visual literacy. Lowe (2000) stresses that visual literacy is equal in importance to learning science and math language. He emphasizes that because graphics used in science and technology (“ranging from realistic drawings and photographs to highly abstract diagrams and graphs”) are so different from those used in other fields, students need to begin early learning how to interpret and produce them. These graphics involve certain conventions that may “distort literal reality,” requiring that the audience understand the conventions in order to interpret the graphic. Therefore, teachers should have students practice these conventions (cross-sectional view, simplified line drawings, shading and color coding key parts, showing object function through arrows, dotted lines, and sequential pictures) by scaffolding at first while drawing subjects they are familiar with, he suggests.
Focus on Presentation Format

Pinnell and Fountas (2007) clarify that students need to understand that format and organization as well as word choice depend on purpose and audience and that format should complement meaning. Culham (2006) emphasizes these presentation issues as part of her “six traits” (ideas, organization, voice, word choice, sentence fluency, conventions, and presentation) that give teachers and students a vocabulary to effectively discuss writing. She stresses that the traits should be tied into content-level activities, not just language arts. Wilhelm (2004) notes that format becomes important because students must present their results or product in the way best suited to their audience.

Importance of students choosing formats. McGee and Richgels (2008) find that early on in their education, students learn to distinguish different text formats by their components. Bromley (2007) relates that “when students write in a variety of forms in the content areas to explain or share information, they construct new meaning and demonstrate their science and social studies knowledge” (p. 252). She encourages students to choose formats, including electronic ones. Boscolo and Gelati (2007) encourage format choice as well, emphasizing that all problem-solving activities should involve students “play[ing]” with genres (p. 211). Freeman and Taylor (2006) observe that as part of an inquiry approach, “students communicate through journal writing, oral presentations, drawing, graphing, charting, etc.” (p. 25). The authors also emphasize that students should select the format in which to communicate (“multimedia presentations, dioramas, written reports, plays, oral reports, models, posters, and pamphlets”) (p. 42). Coker (2007) finds that teachers rely on personal narrative so
heavily because students have such differing backgrounds, but if teachers introduce students to many different types of texts, students will practice creating them. Students need to be reading types of texts besides fiction to help even out their background knowledge; they need to learn nonfiction conventions.

*Types of functional writing to practice.* Pinnell and Fountas (2007) distinguish “functional writing”—“to get a job done”—from “informational writing,” which “organizes facts into a coherent whole” (p. 72). They cite examples of functional writing as being notes and sketches, “short-writes,” graphic organizers, letters, diary entries; and of informational writing: author study, illustrator study, interview, how-to book, all-about book (p. 72). They also consider functional writing to be friendly and formal letters, lists and procedures, test writing, [and] writing about reading (p.104).

Freeman and Taylor (2006) distinguish between “presentational writing” (for audience) and “exploratory writing” (for self). They note the importance of having students use text features with presentational writing: “headings, subheadings, graphics, color, visual representations . . .” (p.131). They suggest the following writing styles for science students: descriptive reports, expository writing, experimental reports, lab reports, argumentative writing, and persuasive writing. Turner and Broemmel (2006) suggest that since scientific writing is so different from the writing students do for other academic areas, assignments need to be specially designed. Writing activities like the following approximate “real science” writing, provide a purpose, and suggest an “organizational structure” to students: writing hypothetical letters, chain of evidence, accident reports, technical directions, scientific directions, scientific reports, proposals, porquois stories, and newsclip observations; analyzing process steps and labels;
identifying critical attributes; collaboratively writing scientific stories; and preparing descriptive research through webquests.

Need for studying print and multimedia formats. Pearson, Raphael, Benson, and Madda (2007) point to a need to balance genre study to include not just print but multimedia formats that combine “text, sound, color, images, and layout to convey meaning,” as well as other literacies, blogs, and other technologies (p. 41). McKenna, Labbo, Reinking, and Zucker (2007) also emphasize that “visual” and “digital” literacies are just as important as print literacy because the workplace requires these. It is important for teachers to model digital literacy. McKenna et al. observe that tools like desktop publishing help students focus on the value of formatting, including graphics and fonts, and suggest the Digital Language Experience Approach in which students “enhanc[e a story] by [using] digital photography and creativity software” (drawing tools, imported video animations, sounds, speech-synthesized writing) (p. 357). Karchmer-Klein (2007) finds that with classroom websites, students learn about word processing and graphics programs, digital cameras, scanners, video, audio, and hyperlinks and about conveying meaning through electronic text so that “multimedia components support meaning” (p. 239). Such integrated multisource education, note Kucan, Lapp, Flood, and Fisher (2007), “encourages diverse products and performances” (p. 302). However, McKenna et al. caution that teachers should “aim for applications in which the technology becomes transparent” (p. 361), or not the user’s focus.

Digital media are changing traditional format options, sometimes in ways that seem to conflict with mainstream practice. Abdullah (2003) comments on the frequent
“playfulness” of email regarding word choices, syntax, and fonts, as well as emoticons, and notes how this “informality” conflicts with formal document structures.

**Value of oral presentation practice.** In looking at oral presentation, Freeman and Taylor (2006) emphasize the need for teachers to model oral reporting with role-playing, prompts, visual representations, and practice followed by suggestions (p.174). Moran (2006) notes how readers' theater (“staged reading of a play or dramatic piece of work designed to entertain, inform or influence”) is valuable in that it requires the audience and the audience to “shar[e] meaning making” (p. 318), and it shows significant transfer to other literacy tasks. Like readers' theater, “performance literacy” involves students orally delivering a story to other students and/or community members but also involves their writing it, observes Dillingham (2005). Pinnell and Fountas (2007) discuss the value of shared and performance reading in helping students learn about the “writer’s craft, such as use of language, characterization, organization, and structure” as well as how to reflect meaning (p. 51).
CHAPTER 3

STUDY FOCUS AND METHODOLOGY

I relied on the second edition of Miles and Huberman’s *Qualitative Data Analysis: An Expanded Sourcebook* to help me set up my study, conduct the study, analyze the data, and structure the report:

- Define problem
  - Define research question and design conceptual framework
- Do sampling
  - Plan sampling and design instruments
  - Collect data
  - Use data management system
  - Use documentation scheme
- Reduce, analyze, and interpret information
  - Use initial coding scheme
  - Complete interim analyses
  - Create descriptive displays
  - Create explanatory displays
- Create final report, including implications for theory, policy, and action (p. 262, pp. 307-309)

To carry out my study, I followed these steps, each of which I discuss fully below:

1. Selected which professional writing principles to focus on, defined each, and analyzed their relationship to each other
2. Defined study parameters

3. Created questionnaire and solicitation instruments

4. Sought and gained Institutional Review Board approval for the project

5. Studied K-5 texts to see if and how professional writing principles are addressed

6. Contacted K-5 instructors via email and arranged interviews; interviewed instructors (taking notes and tape recording); transcribed tapes to prepare data for content analysis

7. Analyzed Texas Essential Knowledge and Skills (TEKS) to determine if and how professional writing principles are addressed; identified relevant TEKS and placed them in charts by grade level and by principle

8. Analyzed transcribed tapes of K-5 teacher interviews to determine if and how the teachers address professional writing principles in lessons, activities, and assignments (content analysis); added instruction approaches to TEKS charts on principles coverage

9. Analyzed trends in coverage of professional writing principles by grade level and by principle (content analysis)

Selecting the Professional Writing Principles on Which to Focus

To decide which professional writing principles to focus on for this study, I considered the following documents and writing scenarios:

- Recent national and state studies I’ve cited in the Introduction on the most pressing skills for high school graduates entering a global economy—*Ready or Not: Creating a High School Diploma that Counts* (American Diploma Project

44

- Recent literature that I have cited in the Literature Review on literacy development in K-5 in areas that lay the foundation for non-academic writing
- Frequently adopted college-level technical writing textbooks
- Recent articles in journals representing a variety of technical fields that discuss technical writing principles
- Recent journal articles on technical writing theory
- The everyday writing tasks high school graduates will encounter as adults interacting with teachers, government agency administrators, ministers, as well as business staff, employers, customers, clients, colleagues, etc.

To a greater extent than essay writing and literary analysis, which form the bulk of academic writing, *non-academic writing* requires the writer to

- Thoroughly analyze the writing situation to determine an audience and purpose (goal to accomplish)
- Gather and evaluate appropriate information
- Analyze and organize that information
• Format that information in the most suitable way for communicating to that audience for that purpose
• Verify that the document produced communicates the way it is intended—that it accomplishes the purpose (usability testing)

Professional communication typically involves collaborating, revising, and re-purposing information for different audiences and contexts.

*Key topics covered in technical writing texts.* Sims’ *Technical Communication in the Information Age* devotes an entire chapter to each of the communication areas listed above. Similar coverage appears in the following frequently adopted college textbooks for foundation technical writing courses: Lannon’s *Technical Communication* (11th ed.), Markel’s *Technical Communication* (9th ed.), and Gerson & Gerson’s *Technical Writing: Process & Product* (6th ed.)

*Key writing principles covered in articles in technical writing journals.* Recent articles in technical writing journals also emphasize these communication areas. Faber (2006) details how important explaining nanotechnology to stakeholders from non-technical backgrounds was in the development of that new science. Paretti (2006) advocates a problem-based approach to teaching so that students can grasp the concept that considering audience needs is primary and that audience needs govern design. This audience analysis should be multidimensional, especially when one is creating customizable documents, writes Albers (2003). Audience consideration is critical in the design of websites and online documentation, write Baehr and Logie (2005), who note especially how audience perceptions—both visual and spatial—affect organization and design. Hammerick and Harrison (2002) also emphasize audience

Collaboration as the preferred scientific writing method is Hutto's (2003) focus, and she argues that we do our students a disservice if we do not provide them opportunities to practice this skill. Hammerick and Harrison (2002) also discuss collaboration with a content management team when students are designing websites and online documentation.

Usability is always a popular communication topic for technical writers. Zimmerman and Schultz (2000) show through usability testing how using design principles improves questionnaires. Yeats (2008) also addresses the importance of usability testing in the design of software.

*Key topics covered in articles on writing appearing in journals and trade magazines from diverse technical fields.* Recent journal articles in a variety of technical fields also emphasize the importance of these communication areas. “Telling the Investment Story: A Narrative Analysis of Shareholder Reports” (Journal of Business Communication) focuses on the need to use style, design, and word choice to engage readers of varying audience types when writing shareholder reports (Jameson 2000). In
“7 Essential Tips for Writing Reports” (Medeconomics, 2005), Bovey advises general medical practitioners who are writing reports to determine the audience and purpose, understand the communication situation, gather needed resources, organize information, and pay attention to communication style and format to improve efficiency to ultimately improve practitioners’ income. Usability is Ambler’s (2001) theme in stressing the importance to software developers of identifying customers and their needs, letting use dictate format, and letting usability determine adequacy (“Place Tab A in Slot B—The Key to Writing Sufficient and Successful Documentation Is to Work with Your User,” Software Development).

Style, and specifically Joseph Williams’ style principles, is the focus of Karney and Filion’s (2000) “Technical Writing Purpose and Principles” (Journal of Hydraulic Engineering). In “Abstracts for Scientific Articles” (Journal of Environmental Health), Goldbort (2002) notes that word choice is critical in scientific abstracts because scientists rely on these summaries so heavily to stay current in their fields. Etgen (2002) emphasizes the importance of word choice in writing procedures in “Healthy Water, Healthy People” (Science Scope). And Eyres (2003) urges business readers to consider audience when documenting business records, especially regarding tone and word choices, to protect against lawsuits in “Every Word Counts: Business Communications Can Come Back to Haunt You” (Supply House Times). Miller and Bloustein (2007) stress the importance of considering content and layout when designing research posters and supplemental documents to best engage professional conference audiences in the health sciences (Health Services Research). Malvar (2008) also emphasizes the importance of ensuring reader impact by attending to
presentation as well as content in “Effective Communication: Tips on Technical Writing” (IEEE Signal Processing Magazine).

Regarding an understanding of the communication situation, Paretti (2008) examines in the Journal of Engineering Education how “situated learning” can better help engineering students grasp the concept of writing for a particular situation to a specific audience for a specific purpose. Griggs (2005) also discusses the benefits of role playing in helping business students understand audience and purpose and the communication situation in “A Role Play for Revising Style and Applying Management Theories” (Business Communication Quarterly). Additionally, Alzamil (2007) illuminates the benefits to computer engineering students of working for real clients in “An Approach for an Efficient Software Engineering Course Project” (International Review on Computers and Software). Regarding a specific type of real-world writing, Fredrick (2008) discusses in “Practicing Professional Communication Principles by Creating Public Service Announcements” how writing PSAs can help business students understand the communication situation and learn about gathering resources, organizing information, determining format, and selecting style (Business Communication Quarterly).

Professional communication principles for study focus. Based on this understanding, then, of key professional communication principles, I selected these concepts to focus on:

- Audience
- Purpose
- Collaboration
• Information selection, evaluation, analysis, and organization
• Presentation format
• Usability

The graphic representation below shows the way I am defining these concepts and the way in which I am considering their relationships to each other for this study.
Figure 3-1. Key components of non-academic writing.

Understand situation and define audience/clarify purpose are at the center since all components revolve around them and are controlled by them. Collaboration is involved in all elements.

The arrows point both ways to indicate that this is a recursive process: there is no specific order, and every component affects the other components and is determined by the other components.
Defining Study Parameters

I selected McKinney Independent School District for my study because of the following factors that provided me ready access to determine students’ preparation in professional writing principles:

- I live in the district and have children attending schools in the district.
- McKinney residents are one of the student populations that attend the University of North Texas, so I see McKinney graduates in my technical writing classes (determined through their introductions at the beginning of the semester) and can informally assess their academic preparation.
- I taught for twelve years at Collin College, which draws heavily from McKinney. Some of these classes were dual-credit, so I was able to get an even closer look at McKinney students’ preparation in professional writing principles.

Initially, I planned to focus on the extent to which teachers are covering professional writing principles in core classes from K-12. But after preliminary findings revealed that even at the kindergarten level, students are learning professional writing rudiments, I narrowed my study parameters to K-5. This focus allowed me to study whether the foundations of professional writing (foundations in applied skills required for successful communication post graduation) were being laid early in a student’s academic career.

I interviewed two to four teachers from each grade level (excepting kindergarten, for which I received only one response), representing nine of the nineteen MISD elementary schools. Even though MISD teachers are not required to follow a common
curriculum to the letter, as teachers in some nearby districts such as Plano are, there is enough overlap in content and presentation that I found holding two interviews per grade level was sufficient. When I did interview a third or even fourth teacher, I typically found their approaches were similar to those of the first two, even though all taught at different schools. This similarity stems primarily from monthly “cadre meetings” at which teachers at the same grade level in different MISD schools are able to learn about their counterparts’ activities and especially about new approaches gleaned from a professional development activity, for example. Teachers can also access the district’s “shared drive” for best practices for teaching the curriculum, resulting in similar teaching approaches and practices across the district. Every teacher I interviewed confirmed the effect of the cadre meetings on aligning teaching approaches and referenced the shared drive as creating similar practices within grade level and subject area across the district.

Creating Questionnaire and Solicitation Instruments

I used personal interviews guided by a structured questionnaire to gather data. In designing the questionnaire, I consulted Czaja and Blair’s Designing Surveys: A Guide to Decisions and Procedures (2005), Fowler’s Survey Research Methods (2002), and Rea and Parker’s Designing and Conducting Survey Research: A Comprehensive Guide (2005). To make initial contact with a teacher, I created a “form” email identifying myself and briefly explaining my study, as well as explaining how the potential participant could benefit from participating. (See Appendix B.)

When the teachers agreed to an interview, I sent them a questionnaire via email so they could see what I would be asking (not for them to complete). I used the
questionnaire during the interview to guide our discussion and ensure I covered the same questions during each session. (See Appendix A.)

I divided this survey into three sections:

- “Your background”—covers teaching experience and training in professional writing
- “Your professional writing experience”—covers the types of writing the teacher does on the job and attitude toward completing those writing tasks
- “Your use of professional writing principles in student assignments”—covers the extent to which the teacher addresses
  - Understanding situation requiring communication
  - Defining audience
  - Clarifying purpose
  - Collaborating
  - Gathering and evaluating needed resources
  - Analyzing and organizing information
  - Determining best format
  - Selecting communication style
  - Selecting design elements
  - Doing usability testing
  - Presenting
- “Applicability of communication skills developed in your courses”—covers teacher’s perspective of long-term value of skills taught as well as his/her flexibility in delivering curriculum
I was certainly interested in the extent to which a teacher incorporated professional writing principles into student assignments but also in the teacher’s understanding of what professional writing (technical writing, practical writing, non-academic writing) principles are.

I also created a participant agreement form, per Institutional Review Board guidelines, outlining the study and detailing how I would use the data and explaining the participants’ rights. (See Appendix C.)

Gaining Institutional Review Board Approval

Per University of North Texas requirements, I completed an Institutional Review Board application for my project, including obtaining Human Participant Protections Education for Research Teams certification that was approved on November 19, 2007. Part of the application process included obtaining permission from the principals whose teachers I intended to interview.

Analyzing K-5 Textbooks for Professional Writing Principle Coverage

To determine whether K-5 textbooks covered professional writing principles, I examined the required texts from each grade level and each core subject area (English language arts, math, social studies) for examples of relevant discussions and assignments.

Interviewing K-5 Instructors

Using the form email, I contacted random K-5 instructors from across the district, selecting team leaders when possible, and requested interviews. If the instructors were interested, we arranged a time to meet, and I sent them the questionnaire to review.
After having the teachers sign the participant agreement form, I tape-recorded the interview as well as took notes on a copy of the questionnaire.

I noticed a few problems with terminology during the interviews. If I used the term “technical writing,” teachers needed explanation. I defined “technical writing” for them as writing typically used in career-related activities that has as a primary purpose to inform or persuade. This definition, which I formulated after consulting 50 different sources, best fit the professional writing tasks the teachers performed while remaining accurate for professional writing tasks in other fields. The teachers were familiar with most of the other questionnaire terms except “checking usability,” which I defined as verifying that the writing has accomplished its purpose.

Analyzing Texas Essential Knowledge and Skills for Coverage of Professional Writing Principles

For each of the following professional writing principles on which my study is focusing, I examined the Texas Essential Knowledge and Skills (TEKS) (http://www.tea.state.tx.us/teks) for K-5 to assess how the state’s current learning expectations align with it:

- Understanding situation requiring communication
- Defining audience
- Clarifying purpose
- Collaborating
- Gathering and evaluating needed resources
- Analyzing and organizing information
- Determining best format
• Selecting communication style
• Selecting design elements
• Doing usability testing
• Presenting

I placed relevant TEKS in charts by grade level and by principle. (See Table 3-3 for an example of a TEK for third grade collaboration below.)

Table 3-1

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 3rd grade TEKS</th>
</tr>
</thead>
</table>
| **Collaborate** (students work in groups to accomplish a task or assignment) | §110.5. **English Language arts and Reading, Grade 3.**
(3) **Listening/speaking/audiences/oral grammar.** The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to:
(C) ask and answer relevant questions and make contributions in small or large group discussions (K-3);

(19) **Writing/evaluation.** The student evaluates his/her own writing and the writing of others. The student is expected to:
(B) respond constructively to others' writing (1-3);

§113.5. **Social Studies, Grade 3.**
(18) **Social studies skills.** The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:
(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and
(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.

§126.3. **Technology Applications, Grades 3-5.**
(8) **Solving problems.** The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:
(A) use communication tools to participate in group projects;
(C) participate with electronic communities as a learner, initiator, contributor, or mentor.
Analyzing K-5 Teacher Interviews for Coverage of Professional Writing Principles in Instruction Approaches

To manage my data, I used formatting and coding as well as data displays and chronological logs of data collection. I followed what Miles and Huberman call a “social anthropology” approach to data analysis (p. 8):

- Affixing codes to transcriptions of interviews
- Noting reflections or other remarks in categorized field notes made during the interviews

Although the participants did not complete the interview questionnaire beforehand, I did email it to them so they could be considering their responses (Appendix A). I formatted the questionnaire so that it would match the principles I was examining, and during the interview, I made notes on it—summaries of the participant’s responses as well as my thoughts about what he or she was saying. (These summaries were not nearly as complete as the transcriptions were, but they helped me process what I was hearing at the time and focus my comments. And later during coding, they also helped me highlight relevant areas of the transcripts.) As soon as possible after completing an interview, I transcribed the interview.

For each professional writing principle I studied, I analyzed K-5 instructor interview data to determine if and how the instructor addresses the principle. I examined to what extent the instructor addresses the relevant TEK as well as the principle. To begin my analysis, I coded sections of each transcript to correspond to study principles (“audience,” “purpose,” “collaborate,” etc.) For example, on the transcript, when third grade teacher Anna Guirguis described how her students work
together a lot on reading, math, grammar, spelling, and vocabulary centers, I coded “collaborate.” Similarly, when she commented that when her students are writing, they do peer editing with a partner, I coded “collaborate,” as I did when she noted that they also work together on readers’ theaters with a group of three or four other students.

Analyzing Trends in Coverage of Professional Writing Principles by Grade Level and by Principle

After transcribing and coding each interview, I followed these analytical methods recommended by Miles and Huberman:

- Sorting and sifting through these materials to identify similar phrase, relationships between variables, patterns, themes, distinguishing differences between subgroups, and common sequences
- Isolating these patterns and processes, commonalities, and differences and taking them out to the field in the next wave of data collection
- Gradually elaborating a small set of generalizations that cover the consistencies discerned in the database
- Confronting those generalizations with a formalized body of knowledge in the form of constructs or theories (in this case, the study principles and the related TEKS) (p. 9)

After completing all the interviewing, transcribing, and coding for all participants in a grade level, I used the coded transcripts to summarize and compare the participants’ approaches to each particular study principle through lessons, activities, and assignments. I noted the extent to which the participants address the relevant TEKS as
well as the principle. (I also added their instruction approaches to the TEKS charts on principles coverage I had previously created.)

For example, after coding my transcriptions of other third grade teachers’ interviews, I noticed all their students participate in a variety of collaborative activities, the frequency of which depends on the students’ ability to cooperate. Due to equipment and training limitations, however, they don't participate in the online collaboration the TEKS suggest.

In considering the extent to which these teachers were laying the foundation for non-academic writing, I observed that since cooperation is critical to collaborative success, students must be able to work together to justify using class time for collaborative activities. By modeling and role playing productive collaborative behavior and possibly creating collaboration “rules” (with students’ input), Guirguis and her colleagues can guide their students toward positive collaborative outcomes.

Upon completing my grade-by-grade and principle-by-principle analyses, I examined the results to discover any trends in principle coverage for K-5 by both the TEKS and the teachers’ activities. I compared how the trends I had identified in each grade level related to each other. Typically, I grouped grades K-2 and 3-5 together because this grouping was consistent with that followed by the TEKS and because I noticed a consistent significant increase in expectations and difficulty level beginning with the third grade TEKS.

For example, in analyzing trends covering collaboration, I found that the amount of collaboration students engage in increases from K-2 as teachers introduce students to such activities and accommodate differing maturity levels. Collaboration continues to
be an increasing part of learning activities in third through fifth grades. Maturity, however, continues to affect the frequency of group work, and the classrooms’ limited computer access can affect collaboration options.

Organization of Chapters 4-9

I have organized each of the following chapters 4-9 detailing the data I received as follows:

- Introduction to teachers interviewed
- Summary of how their teaching experiences correspond to the study professional writing principles and the TEKS
- Examination of how the grade covers each of the study professional writing principles, including a
  - Summary of the TEKS that relate to the particular principle
  - Discussion of how the interviewed teachers incorporate that principle into their class activities
  - Brief analysis of how the teachers’ coverage of the principle could lay the foundations for non-academic writing
  - Chart of all the related TEKS as well as representative approaches to including the principle in class activities

At the end of chapter 5, I’ve included a discussion of how the library media specialist covers the skills of gathering and evaluating resources in presentations to K-5. Chapter 10 analyzes the K-5 coverage of each principle for trends.
CHAPTER 4

KINDERGARTEN CURRICULUM EMPHASIS ON PROFESSIONAL WRITING PRINCIPLES

Kindergarten has changed dramatically over the last five years, observes Tracy McCormack, a 14-year kindergarten veteran who holds a bachelor’s degree. “It used to be painting, learning numbers, and playing,” she notes (personal communication, March 18, 2008). Her students enter school at a “wide gamut” of beginning stages, some scribbling or putting down a letter or two while others are writing words.

One reason McCormack could not imagine teaching another grade is that she loves seeing the change in her students’ writing ability from the beginning to the end of the year. She showed me some examples of her students’ progression from a complex colorful illustration under which was written an often-hard-to-decipher word or two to a “quick sketch” in black and white and several sentences, the best of which told a story with a “beginning, middle, and end”—quite a transformation! And in kindergarten!

Over the course of a week, McCormack will give ten fifteen-minute lessons on writing, and her students write for half an hour, four times a week. The mantra she teaches her students early on is “When I’m done, I’ve just begun” since they are quick to announce they are finished and have a difficult time understanding the editing process. To their insistent “I’ve done the best I can,” she responds, “Writers do the best they can and keep on going.”

McCormack also reminds her students that “real authors” are often working on several stories at a time, so her students divide their writing folder into a “red dot spot”
for the projects they have finished and a “green dot spot” for the projects they are still working on.

Summary of How Teaching Experiences Correspond to the Study Professional Writing Principles and the TEKS

Because kindergarten students are learning the rudiments of physical writing, they spend much writing time on shaping letters and learning punctuation and mechanics, as well as learning word composition principles. However, they also spend a significant amount of time working on development with details sufficient for someone besides themselves to follow their typically personal narrative. Thus, they understand their topic well but have only a vague understanding of a “communication situation.” Kindergarten writing organization progresses through the year from primarily descriptive drawing to predominantly descriptive writing.

While the kindergarten TEKS regarding audience and purpose deal with speaking and reading/listening, teachers are also introducing these concepts in writing. With their teacher’s prompting, kindergarteners are able to include details that might clarify their topic for their audience (usually non-specified) and to determine another author’s audience, but choosing words and delivery style based on audience or purpose is generally not their concern. Their primary communication purpose seems to be simply to share their experience.

Kindergarteners receive bi-monthly exposure to working in groups to accomplish a goal.

As part of their research activities, kindergarten students interview and search for sources using the Internet, but they do not evaluate the sources they gather, although
source evaluation is one of the kindergarten TEKS. Teacher-made research templates provide students a plan to help them analyze whether information they have located is what they need. Students get to try out different genres requiring small amounts of writing but format digitally in only a limited way, although the TEKS specify they should publish information electronically.

While the TEKS require that students *intentionally* choose words appropriate for their rhetorical situation, McCormack’s classes do not focus on this requirement. Although McCormack’s students explore in a limited way how graphics support text, they do not *intentionally* use design elements, as the TEKS require.

Usability tests are not generally part of the curriculum. McCormack’s students do not usually follow through on whether their solutions related to math or social studies are effective, although the TEKS require this step.

McCormack’s students’ experience with presenting is centered on becoming comfortable sharing their work with others. It does not extend yet to *intentionally* modifying speech and style for different audiences, purposes, and rhetorical situations, as the TEKS suggest.

**Emphasis on Understanding Situation Requiring Communication**

Because kindergarten students are learning the rudiments of physical writing, they spend much writing time on shaping letters and learning punctuation and mechanics, as well as learning word composition principles. However, they also spend a significant amount of time working on development with details sufficient for someone besides themselves to follow their typically personal narrative. Thus, they understand their *topic* well but have only a vague understanding of a “communication situation.”
Relevant TEKS standards. According to the kindergarten TEKS, students should be gaining a complete understanding of communication situations pertaining to assignments in many of the areas they study—language arts, social studies, and science. (See Table 4-1.) In language arts, they should understand the communication situation sufficiently to effectively communicate with their audience through language, tone, discussions, and dramatic interpretations. Through planning and conducting a science experiment, they should understand the concept well enough to explain it clearly. And in social studies they should have the opportunity to work through a problem to its solution and even evaluate the effectiveness of that solution.

McCormack’s experience with understanding the communication situation. McCormack relies heavily on the Small Moments: Personal Narrative Writing series by Lucy Calkins and Abby Oxenhorn for focusing her approach to writing assignments. She tries to move her students away from “inventing” a story and toward focusing on something that actually happened to them—not on “everything about my trip to DisneyWorld but on the ladybug that crawled up my arm.” She has used the story “A Chair for My Mother” to demonstrate how to focus on details. By forcing students to focus on a “small moment,” she finds that they “bring out more detail.” “You can write a whole story on just ‘my dog’s tail,’” McCormack emphasizes. Most of the students’ writing is not directed toward a specified audience but to someone who might pick up their work and read it “like a library book.”

McCormack’s emphasis on focus and development does help her kindergarteners begin to understand communication situations. They start to appreciate that the anonymous audiences they are envisioning will be better informed by and
interested in specific information that thoroughly covers a single aspect of a topic than by generalizations that touch on multiple aspects of a topic. Most communication situations kindergarteners might find themselves in outside of academics would also benefit from focused, thoroughly developed responses, presenting for teachers, then, an opportunity to impress upon their students the value of writing skills.

Emphasis on Defining Audience and Clarifying Purpose

While the kindergarten TEKS regarding audience and purpose deal with speaking and reading/listening, teachers are also introducing these concepts in writing. With their teacher’s prompting, kindergarteners are able to include *details* that might clarify their topic for their audience (usually non-specified) and determine another author’s audience, but choosing words and delivery style based on audience or purpose is generally not their concern. Their primary communication purpose seems to be simply to share their experience.

*Relevant TEKS standards.* According to the kindergarten TEKS, students should be able to tailor speaking to various audiences’ needs through word choices and even delivery style in communicating in language arts. They should also be able to determine the purpose for which they are reading or listening to a particular document as well as tailor their speaking for different purposes through word choices and delivery style. (See Table 4-2.)

*McCormack’s experience with defining audience.* McCormack’s students struggle a bit with thinking about an audience’s needs because “kids are focused on themselves and what’s happened to them,” she says. Certain writing situations, however, do provide an opportunity to discuss audience in a way students can relate to.
Around Christmastime when they are writing lists of presents they want, McCormack will say, “Santa doesn’t want to just hear, ‘This is what I want. . . ,’” forcing them to shift momentarily from their writer-focused perspective.

McCormack does have her students always think of “an” audience, even if it is just the typically non-specified one, beginning when drawing pictures (their typical graphic organizer). “Who’s going to read this?” she reminds them as they begin adding relevant details to their picture. She urges her students to treat their writing as they would a library book—anyone could pick it up, so they have to be certain that anyone could understand it. “They’re not going to know what your bedroom looks like if you say, ‘my bedroom.’ If you say, ‘We sang our favorite song,’ they’re not going to know what that is, so you need to tell them,” McCormack reminds her students.

McCormack will often use literature to help her students think about an audience, asking them, “Who is the author writing this for?” McCormack will ask her students to think too about what attracts them as audiences. She will ask them to consider the scenario of being in the library, choosing a book. “Would you pick one that began, ‘My dog is white’?” she asks them. They will study how the author sets up the situation in order to understand how to capture the audience’s attention as well.

McCormack’s students also have a partner in writing, someone who is assigned for a month at a time so they can develop a rapport. The partner helps them realize when they need to make different word choices or explain themselves further. So her students share their writing with their teacher, their writing partner, and a parent, and the finished products go in the “reading corner.”
By asking her kindergarteners to write to someone like an anonymous library patron, McCormack forces them to move beyond an audience that knows them and with whom they can rely on mutually understood “short-hand” to one that requires them to examine their writing closely for sufficient explanations. In addition, having all had the experience of selecting a library book from a roomful of possibilities, her students can readily understand the importance of captivating the audience with their title and introduction.

McCormack’s experience with clarifying purpose. McCormack emphasizes to her students that their main purpose is to share their experience, even if it is writing about “small moments” they experienced with other people since what they have to say (“even though they’re five and six years old”) is important. Another purpose of their writing, she emphasizes, is to become better writers because “writers have a neat job because they can share with hundreds, even thousands of people their story.” She wants her students to know that “small things that happen to you are important.” But this concept is hard for them. Since they think so “big,” they cannot accept that even those “small” things can be a story.

Accustomed as they may be to listening quietly—or not so quietly--while their older siblings and/or parents share their “more important” experiences, kindergarteners may find it difficult to value their own communication. Encouragement like McCormack provides her students, then, is critical to their formulating a “purpose” for writing. And as communicators, they will return to the purpose of simply expressing themselves throughout our academic and professional careers.
Emphasis on Collaborating

Kindergarteners receive bi-monthly exposure to working in groups to accomplish a goal.

*Relevant TEKS standards.* According to the kindergarten TEKS, students should be able to participate in problem-solving projects. (See Table 4-3.)

*McCormack’s experience with collaborating.* McCormack has her students work collaboratively two to three times monthly. For example, for one of their “100 Day” projects, they had to work with a group to build a structure with marshmallows and toothpicks and present it to the class. They also work together when they present “readers’ theaters.”

McCormack feels cooperative learning is a good way to broaden understanding. She will occasionally divide students into initial groups to work on a problem, then re-group with a different set of students to further discuss the problem, and then have students return to their initial group to share ideas brought up during the “re-grouping.”

Even the limited experience McCormack’s kindergarteners receive working with a group, especially on a “fun” project that will not be evaluated, allows them to practice basic collaboration skills of taking turns and listening quietly while someone else speaks and even working with people they do not necessarily like—skills that will lay the foundation for successful later collaborative experiences. Her re-grouping activity requires that the students not just work together but analyze possible problem solutions, summarize those they have heard in previous groups, and evaluate which are most feasible—a process that could be seen, albeit at a more sophisticated level, in many workplaces.
Emphasis on Gathering and Evaluating Needed Resources

As part of their research activities, kindergarten students interview and search for sources using the Internet, but they do not evaluate the sources they gather although source evaluation is one of the kindergarten TEKS.

Relevant TEKS standards. According to the kindergarten TEKS, students should be able to gather information in the areas of language arts, math, science, and social studies from a variety of sources including texts, graphics, people, and scientific observations. They should be able to do this using both traditional and electronic research navigation tools and scientific equipment. Finally, they should be able to determine the usefulness and appropriateness of the information they have located. (See Table 4-4.)

McCormack’s experience with gathering and evaluating needed resources. McCormack’s students do a variety of research activities. For social studies, they work on interviewing when they do a “past and present” project. They interview a grandparent to learn how he or she used to cook, etc. (“Did they have a microwave?” “What did they do without email?”) When the class talks about jobs in the community, the students talk to their parents about their careers and talk about their own jobs as children in the classroom and at home.

Kindergarteners also research animals—their habitats, survival needs, etc. When they study temperature—hot and cold—they research polar bears and desert animals and their habitats. They also learn about worms and goldfish they have in the classroom, and they study these creatures’ habitats in the wild. The school’s Library Media Specialist provides a list of Internet sites parents might refer to to help their child
find the information they require. However, McCormack’s students don’t spend much
time evaluating sources. (See the Library Media Specialist’s contributions to this area
at the end of chapter 9.)

By selecting topics to research that her kindergarteners are sure to find
interesting, McCormack makes one of their first research projects more of an adventure
than a chore. Having them use interviewing as an information-gathering tool reminds
her students of the variety of resources, besides the Internet, available to them and
introduces them to some of the strengths and weaknesses of each tool. They probably
enjoyed being able to ask their interview sources follow-up questions, for example,
although they may not have thought about these differences unless their teacher
discussed them.

Emphasis on Analyzing and Organizing Information

Kindergarten writing organization progresses through the year from primarily
descriptive drawing to predominantly descriptive writing. Teacher-made research
templates provide students a plan to help them analyze whether information they have
located is what they need.

Relevant TEKS standards. According to the kindergarten TEKS, students should
be able to solve problems using prose or graphic information that they have gathered.
They should also be able to manipulate gathered information graphically in various
ways to convey relationships. And they should practice these skills in all subject
areas—language arts, math, science, and social studies. (See Table 4-5.)

McCormack’s experience with analyzing and organizing information. McCormack
starts each writing session with a “mini-lesson” and then has her students begin their
writing with an idea. They think first and then complete some sort of graphic organization, usually a detailed drawing that they label and color; by the end of the year, it is a quick sketch because “now words are taking over the story.” As they progress, McCormack adds a “hand” stamp, reminding them to use the “5 W’s.”

As far as work on analysis is concerned, McCormack provides a template for research projects. For example, for their project on animals, she tells them the six topics they must cover (habitat, food, appearance, etc.) and then encourages them to go beyond those. She does not assign a lot of at-home projects because some students do not get as much help at home as others.

By closely connecting writing with another communication form many of her kindergarteners are already comfortable with—drawing—McCormack eases their transition into the new experience and enables them, at their own pace, to discover how words can function similarly in helping them express themselves. Having relied up until kindergarten on detailed pictures to convey their stories, beginning writers may be understandably frustrated by the cumbersome letters they must now manipulate in order to communicate. However, as they become better audiences and are able to see the value of words in providing information they need, they should become more invested in improving their own writing ability.

Emphasis on Determining Best Format

Students get to try out different genres requiring small amounts of writing but format digitally in only a limited way, although the TEKS specify they should publish information electronically.
Relevant TEKS standards. According to the kindergarten TEKS, students should learn about different formats for documents such as lists, newsletters, and signs and practice writing labels, notes, and captions as well as publish information electronically to display on a computer monitor or in print or to store in files or video. (See Table 4-6.)

McCormack’s experience with determining best format. As they move toward the end of the year, McCormack encourages her students to try out different genres. “You don’t always have to write a story,” she explains to them; “You can write a note, list, journal entry. . . .”

When working on the interview project described above, students can choose how to present their findings—in a booklet, poster, or videotape. McCormack notes that parents “appreciate the guidance” of provided requirements for organization and format and that by providing such requirements, teachers can be sure students “get what we want them to learn.”

In the spring her students do spring journals and a bird outline. McCormack likes to “slip those things in” so that “when we have to go back to ‘small moment’ writing, it’s not so mundane.”

When she has her students practice writing different genres, McCormack is introducing them to how useful writing can be to them—what a handy tool it can prove. When she allows them to choose their presentation format, they experience the power of physically representing their unique vision of the information. They begin to see how writing is expanding their ability to communicate.
Emphasis on Selecting Communication Style

While the TEKS require that students intentionally choose words appropriate for their rhetorical situation, McCormack’s classes do not focus on this skill.

*Relevant TEKS standards.* According to the kindergarten TEKS, students should be able to choose vocabulary that most clearly expresses their ideas and meets the needs of the audience, purpose, and communication situation. When communicating about math and science, they should be able to do so in layperson’s terms rather than in only “math” or “science” language. They should be able to use graphics as well as words to communicate about math and use appropriate chronological and location terms in communicating about history and geography (social sciences). (See Table 4-7.)

*McCormack’s experience with selecting communication style.* McCormack does not really focus much on varying communication style, which should not be surprising when her students are not much further along in their writing careers than writing their own names. However, focusing on the communication styles of the authors they read could at least make her students conscious of this aspect of writing.

Emphasis on Selecting Design Elements

Although McCormack’s students explore in a limited way how graphics support text, they do not intentionally use design elements, as the TEKS require.

*Relevant TEKS standards.* According to the kindergarten TEKS, students should be able to use visual props to support their speeches. They should be able to understand how illustrations contribute to the text. The TEKS also specify that students should be able to use font attributes, color, white space, and graphics that are tailored
to an audience and appropriate for the particular medium, be it digital or print. (See Table 4-8.)

McCormack’s experience with selecting design elements. Toward the end of the year, McCormack’s students create an “information book,” for which they come up with an idea, for example, how to build a derby race car or how to bathe a dog. Their purpose is to teach someone else something he or she doesn’t know about.

In creating the book, the students need

- A title page
- Headings
- A first-page introduction to their topic
- A page with pictures and captions describing equipment/materials needed
- A page listing steps of how to build or do the process

The books are then bound. McCormack comments that students learn through writing the captions for the books that not every writing situation requires complete sentences. “Kids that don’t write as much as others enjoyed the project because they felt like they accomplished something real; they provided helpful information,” she notes.

Through using design elements in their information books, McCormack’s kindergarteners begin to understand how design relates to content, how it can enhance content. Although they are told which design elements to use—which must provide a degree of comfort—the students are the ones choosing the topic, writing the content, and determining how to fit the content into the specified structure. Later in their academic and professional careers, they may be using templates in a similar way.
Emphasis on Doing Usability Testing

McCormack’s students do not usually follow through on whether their solutions related to math or social studies are effective, although the TEKS require this step.

_Relevant TEKS standards._ According to the kindergarten TEKS, students should be able to evaluate whether their math solutions are reasonable and whether the solutions they develop to social studies problems are effective. (See Table 4-9.)

_McCormack’s experience with usability testing._ McCormack doesn’t really focus on usability testing, which should not be surprising when her students are still learning the rudiments of math and social studies.

Emphasis on Presenting

McCormack’s students’ experience with presenting is centered on becoming comfortable sharing their work with others. It does not extend yet to intentionally modifying speech and style for different audiences, purposes, and rhetorical situations, as the TEKS suggest.

_Relevant TEKS standards._ According to the kindergarten TEKS, students should be able to communicate orally to different audiences for different purposes, including informal/practical situations, as well as share ideas in a discussion and summarize. They should be able to express themselves clearly and use visual props to support their verbal expression. And they should be able to present dramatic interpretations based on experiences or literature. (See Table 4-10.)

_McCormack’s approach to presenting._ McCormack typically reads her students’ past/present interview projects to the class since they may not be written understandably. However, the students share their work frequently during conferences
with her as well as read constantly to their writing buddy and occasionally share with the class in the “author’s chair.”

McCormack is providing her students with numerous occasions to present their work to others and thereby begin to think of their writing as not “ending” with them, but reaching others who may be interested in and may even benefit from hearing about their insights or experiences. By sharing their writing in progress, her kindergarteners are learning to appreciate the value of someone else’s perspectives in helping them revise their work as well as the fact that we are not always actually writing what we think we are writing or what we intend to write.
### Table 4-1

**Analysis of K curriculum emphasis on understanding the communication situation**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
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</thead>
<tbody>
<tr>
<td>Understand situation requiring communication</td>
<td>§110.2. English Language arts and Reading, Kindergarten. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways when making announcements, giving directions, or making introductions (K-3); (C) ask and answer relevant questions and make contributions in small or large group discussions (K-3); (D) present dramatic interpretations of experiences, stories, poems, or plays (K-3); and</td>
<td>• Work on including detail sufficient for audience to follow that may pick up their writing and read it “like a library book”</td>
</tr>
<tr>
<td></td>
<td>§112.2. Science, Kindergarten. (2) Scientific processes. The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to: (A) ask questions about organisms, objects, and events; (B) plan and conduct simple descriptive investigations; (C) gather information using simple equipment and tools to extend the senses; (D) construct reasonable explanations using information; and (E) communicate findings about simple investigations. (3) Scientific processes. The student knows that information and critical thinking are used in making decisions. The student is expected to: (A) make decisions using information; (B) discuss and justify the merits of decisions; and (C) explain a problem in his/her own words and propose a solution.</td>
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<td></td>
<td>§113.2. Social Studies, Kindergarten (17) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision</td>
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</table>
### Table 4-2

Analysis of K curriculum emphasis on defining audience and clarifying purpose

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
</table>
| **Define audience**           | §110.2. *English Language arts* and *Reading, Kindergarten.* (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); | • Include details, with teacher’s prompting, that allow audience to see narrative as writer sees it  
• Discuss author’s intended audience in literature they read  
• Discuss how author captures audience’s attention  
• Share writing with partner who questions them about unclear words/sentences/pasages |
| **Clarify purpose**           | §110.2. *English Language arts* and *Reading, Kindergarten.* (1) Listening/speaking/purposes. The student listens attentively and engages actively in a variety of oral language experiences. The student is expected to: (A) determine the purpose(s) for listening such as to get information, to solve problems, and to enjoy and appreciate (K-3)  
(9) *Reading/comprehension*. The student uses a variety of strategies to comprehend selections read aloud. The student is expected to: (B) establish purposes for reading or listening such as to be informed, to follow directions, and to be entertained (K-3); | • Write to communicate an event that was important to them and to become better writers |
|                               | §112.2. *Science, Kindergarten.* (2) *Scientific processes*. The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to: (E) communicate findings about simple investigations. |                                                                                       |
Table 4-3

Analysis of K curriculum emphasis on collaborating

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
</table>
| Collaborate        | §113.2. Social Studies, Kindergarten. (17) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and §126.2. Technology Applications, Kindergarten-Grade 2. (8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to: (A) use communication tools to participate in group projects; and | • Work in groups bi-monthly  
• Problem-solve in groups  
• Perform readers’ theaters  
• Work to accomplish goal in groups |
## Table 4-4

### Analysis of K curriculum emphasis on gathering and evaluating needed resources

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
</table>
| Gather and evaluate needed resources (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not) | §110.2. English Language arts and Reading, Kindergarten (12) Reading/inquiry/research. The student generates questions and conducts research about topics introduced through selections read aloud and from a variety of other sources. The student is expected to:  
  (A) identify relevant questions for inquiry such as "Why did knights wear armor?" (K-3);  
  (B) use pictures, print, and people to gather information and answer questions (K-1);  
  (C) draw conclusions from information gathered (K-3); and  
  (D) locate important areas of the library/media center (K-1).  
§111.12. Mathematics, Kindergarten. (K.13) Underlying processes and mathematical tools. The student applies Kindergarten mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:  
  (B) solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;  
§112.2. Science, Kindergarten. (2) Scientific processes. The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to:  
  (A) ask questions about organisms, objects, and events;  
  (B) plan and conduct simple descriptive investigations;  
  (C) gather information using simple equipment and tools to extend the senses;  
(4) Scientific processes. The student uses age-appropriate tools and models to verify that organisms and objects and parts of organisms and objects can be observed, described, and measured. The student is expected to:  
  (A) identify and use senses as tools of observation; and  
  (B) make observations using tools including hand lenses, balances, cups, bowls, and computers. | • Learn “Big 6” approach to research (through librarian): task definition, information seeking strategies, location and access, use of information, synthesis, evaluation  
• Use online subscription references in limited way  
• Interview people for social studies research projects  
• Search using the Internet for animal research project |

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<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
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</table>
| **Gather and evaluate needed resources** (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not) | (6) **Science concepts.** The student knows that systems have parts and are composed of organisms and objects. The student is expected to:  
- **B** record observations about parts of plants including leaves, roots, stems, and flowers;  
- **C** record observations about parts of animals including wings, feet, heads, and tails;  
(7) **Science concepts.** The student knows that many types of change occur. The student is expected to:  
- **A** observe, describe, and record changes in size, mass, color, position, quantity, time, temperature, sound, and movement;  
- **C** observe and record weather changes from day to day and over seasons; and  
- **D** observe and record stages in the life cycle of organisms in their natural environment. | |
| **§113.2. Social Studies, Kindergarten.**  
(15) **Social studies skills.** The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:  
- **A** obtain information about a topic using a variety of oral sources such as conversations, interviews, and music;  
- **B** obtain information about a topic using a variety of visual sources such as pictures, symbols, television, maps, computer images, print material, and artifacts;  
(17) **Social studies skills.** The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
- **A** use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and  
- **B** use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. | |
| **§126.2. Technology Applications, Kindergarten-Grade 2.**  
(4) **Information acquisition.** The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to:  
- **A** apply keyword searches to acquire information; and  
- **B** select appropriate strategies to navigate and access information for research and resource sharing. | |

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Table 4-4 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gather and evaluate needed resources</strong></td>
<td>(5) Information acquisition. The student acquires electronic information in a variety of formats, with appropriate supervision. The student is expected to: (A) acquire information including text, audio, video, and graphics; and (B) use on-line help.</td>
<td></td>
</tr>
<tr>
<td>(6) Information acquisition. The student evaluates the acquired electronic information. The student is expected to: (A) determine the success of strategies used to acquire electronic information; and (B) determine the usefulness and appropriateness of digital information.</td>
<td>(8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to: (B) use electronic tools and research skills to build a knowledge base regarding a topic, task, or assignment.</td>
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Table 4-5

**Analysis of K curriculum emphasis on analyzing and organizing information**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
</table>
| **Analyze and organize information** (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | §110.2. English Language arts and Reading, Kindergarten.  
(1) Listening/speaking/purposes. The student listens attentively and engages actively in a variety of oral language experiences. The student is expected to:  
(D) listen critically to interpret and evaluate (K-3);  
(4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to:  
(C) clarify and support spoken messages using appropriate props such as objects, pictures, or charts (K-3);  
(16) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to:  
(A) record or dictate questions for investigating (K-1); and  
(B) record or dictate his/her own knowledge of a topic in various ways such as by drawing pictures, making lists, and showing connections among ideas (K-3). | • Use graphic organizer of detailed drawing/little prose  
• Progress to brief sketch/more prose  
• Use templates to organize research |

(K.12) Probability and statistics. The student constructs and uses graphs of real objects or pictures to answer questions.  
The student is expected to:  
(A) construct graphs using real objects or pictures in order to answer questions; and  
(B) use information from a graph of real objects or pictures in order to answer questions.  
(K.13) Underlying processes and mathematical tools. The student applies Kindergarten mathematics to solve problems connected to everyday experiences and activities in and outside of school.  
The student is expected to:  
(C) select or develop an appropriate problem-solving strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem; and  
(K.15) Underlying processes and mathematical tools. The student uses logical reasoning.  
The student is expected to justify his or her thinking using objects, words, pictures, numbers, and technology |

*(table continues)*
### Table 4-5 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
</table>
| Analyze and organize information (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | §112.2. Science, Kindergarten.  
(2) Scientific processes. The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to:  
(D) construct reasonable explanations using information;  
(3) Scientific processes. The student knows that information and critical thinking are used in making decisions. The student is expected to:  
(A) make decisions using information;  
(B) discuss and justify the merits of decisions; and  
(C) explain a problem in his/her own words and propose a solution. | |
| | (5) Science concepts. The student knows that organisms, objects, and events have properties and patterns. The student is expected to:  
(C) recognize and copy patterns seen in charts and graphs. | |
| | (6) Science concepts. The student knows that systems have parts and are composed of organisms and objects. The student is expected to:  
(A) sort organisms and objects into groups according to their parts and describe how the groups are formed; | |
| | §113.2. Social Studies, Kindergarten.  
(15) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:  
(C) sequence and categorize information; and | |
| | (16) Social studies skills. The student communicates in oral and visual forms. The student is expected to:  
(B) create and interpret visuals including pictures and maps | |
| | (17) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and  
(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. | |
# Analysis of K curriculum emphasis on determining best format

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
</table>
| **Determine best format**  
(with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, PowerPoint, report, manual, brochure, proposal, or procedure, etc.) | §110.2. English Language arts and Reading, Kindergarten.  
(11) Reading/text structures/literary concepts. The student recognizes characteristics of various types of texts. The student is expected to:  
(A) distinguish different forms of texts such as lists, newsletters, and signs and the functions they serve (K-3)  
(15) Writing/composition. The student composes original texts. The student is expected to:  
(B) write labels, notes, and captions for illustrations, possessions, charts, centers (K-1); | • Experiment with different genres like note, list, journal entry, booklet, poster, video tape  
§126.2. Technology Applications, Kindergarten-Grade 2.  
(11) Communication. The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to:  
(A) publish information in a variety of media including, but not limited to, printed copy or monitor display; and  
(B) publish information in a variety of media including, but not limited to, stored files or video. |
Table 4-7

Analysis of K curriculum emphasis on selecting communication style

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select communication style</td>
<td>§110.2. English Language arts and Reading, Kindergarten. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways when making announcements, giving directions, or making introductions (K-3);</td>
<td>• Not focused on</td>
</tr>
<tr>
<td>(with audience and purpose in mind, students decide level of formality; use style principles: active voice, conciseness, action in verb rather than noun, actor as subject, etc.)</td>
<td>§111.12. Mathematics, Kindergarten. (K.14) Underlying processes and mathematical tools. The student communicates about Kindergarten mathematics using informal language. The student is expected to: (A) communicate mathematical ideas using objects, words, pictures, numbers, and technology; and (B) relate everyday language to mathematical language and symbols.</td>
<td></td>
</tr>
<tr>
<td>§112.2. Science, Kindergarten. (3) Scientific processes. The student knows that information and critical thinking are used in making decisions. The student is expected to: (C) explain a problem in his/her own words and propose a solution.</td>
<td>§113.2. Social Studies, Kindergarten. (3) History. The student understands the concept of chronology. The student is expected to: (B) use vocabulary related to time and chronology, including before, after, next, first, and last.</td>
<td></td>
</tr>
<tr>
<td>(4) Geography. The student understands the concept of location. The student is expected to: (A) use terms, including over, under, near, far, left, and right, to describe relative location; and</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

87
Table 4-8

Analysis of K curriculum emphasis on selecting design elements

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
</table>
| **Select design elements**    | **§110.2. English Language arts and Reading, Kindergarten**  
(4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to:  
(C) clarify and support spoken messages using appropriate props such as objects, pictures, or charts (K-3);  
(10) Reading/literary response. The student responds to various texts. The student is expected to:  
(D) describe how illustrations contribute to the text (K-1).  

**§126.2. Technology Applications, Kindergarten-Grade 2.**  
(10) Communication. The student formats digital information for appropriate and effective communication. The student is expected to:  
(A) use font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience; and  
(B) use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays and printed materials.  
• Create “how-to” booklet involving graphics and structured design |
Table 4-9

**Analysis of K curriculum emphasis on usability testing**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do usability testing (students “test drive” what they wrote to see if it does what they want it to—that they connect with the audience and accomplish their purpose)</td>
<td>§111.12. Mathematics, Kindergarten. (K.13) Underlying processes and mathematical tools. The student applies Kindergarten mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to: (B) solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;</td>
<td>• Not focused on</td>
</tr>
<tr>
<td></td>
<td>§113.2. Social Studies, Kindergarten. (17) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and</td>
<td></td>
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</tbody>
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89
Table 4-10

Analysis of K curriculum emphasis on presenting

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in K TEKS</th>
<th>Samples of approaches to coverage in K activities</th>
</tr>
</thead>
</table>
| Present (students orally deliver what they produced to a group) | §110.2. English Language arts and Reading, Kindergarten.  
(3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to:  
(A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3);  
(B) use verbal and nonverbal communication in effective ways when making announcements, giving directions, or making introductions (K-3);  
(C) ask and answer relevant questions and make contributions in small or large group discussions (K-3);  
(D) present dramatic interpretations of experiences, stories, poems, or plays (K-3); and  
(4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to:  
(B) use vocabulary to describe clearly ideas, feelings, and experiences (K-3);  
(C) clarify and support spoken messages using appropriate props such as objects, pictures, or charts (K-3); and  
(D) retell a spoken message by summarizing or clarifying (K-3). | • Teacher reads students' work to class  
• Students share work with teacher, peer writing partner, and occasionally, class as whole |
|                    | §113.2. Social Studies, Kindergarten.  
(16) Social studies skills. The student communicates in oral and visual forms. The student is expected to:  
(A) express ideas orally based on knowledge and experiences; and |
CHAPTER 5

FIRST GRADE CURRICULUM EMPHASIS ON PROFESSIONAL WRITING PRINCIPLES

Even in the first grade, students are exposed to all of the professional writing principles to some degree, especially defining audience, usability testing, and presenting. Veteran teacher Teresa Gahan (20 years’ experience) considers language development—both through writing and reading—to be biggest area of emphasis for first grade (personal communication, March 4, 2008). “Writing is a significant emphasis in first grade, especially the five areas of prewriting, drafting, revising, editing, and publishing,” she says. Nora Schroeder* (18 years’ experience) emphasizes to her students that “everything we do has to do with writing” (personal communication, April 23, 2008).

Gahan has a master’s degree in Elementary Education; Schroeder has a bachelor’s.

Summary of How Teaching Experiences Correspond to the Study Professional Writing Principles and the TEKS

The first grade TEKS lay out lofty goals of first graders grasping their communication situation, but Gahan and Schroeder find this to be something their students struggle with due to immaturity. While the TEKS do not explicitly state that students should be able to define an audience and purpose, they do state that students should be able to tailor their communication toward a

*denotes pseudonym
particular audience for a particular purpose. Gahan and Schroeder find that their
students make limited, but important, inroads toward that goal. These teachers work on
defining audience primarily through discussing audiences students already know
(parents, peers, teacher, students in another grade level) and then adding detail
sufficient for that audience to understand their point. Their students’ understanding of
purpose is tied to types of assignments they write (letters, lists, narratives, “how-to”s),
but it is also tied up in their obligation to their teacher to produce the assignment.

The first grade TEKS specify participation in group projects without qualifying the
type of participation. Gahan and Schroeder see a variety of levels of participation in
collaborative projects, in keeping with the maturity level of their students. Both teachers
allow their students a lot of leeway in participating in groups, accommodating those who
are not “ready” yet.

Although both Gahan and Schroeder work with their students to gather
information for projects from a variety of types of sources (books, magazines, people,
the Internet), neither addresses source evaluation in any significant way (though it is a
TEKS requirement) since what their students can use is determined by what they can
actually read. Whereas the TEKS specify that students should be drawing conclusions
from information they have gathered, Gahan and Schroeder’s students are doing well to
analyze the information in simple ways (“Is what I’m looking for there?”) and organize
that information using teacher-created forms or outlines. The students have a purpose
in mind and possibly an audience because they usually present their projects to the
class, but this audience and purpose do not necessarily inform their information
gathering or analysis and organization process.
The TEKS do not specify that students choose a format based on audience, purpose, and communication situation but instead indicate that students should simply learn about and practice different simple forms of writing, which they do in Gahan and Schroeder’s classes. When the students do choose a format (genre or media), it is usually the one in which they prefer to communicate.

Although the TEKS specify that first graders should consciously consider their audience in choosing words to express their ideas, Gahan and Schroeder find that their students are primarily still trying to master writing in “standard” English—complete sentences beginning with a capital and ending in a period. When Gahan and Schroeder do discuss how to select design elements, it is on more of an individual basis and with the goal of making things easier for the audience to read since design is not a major focus. They frequently use bullets with class listing activities like brainstorming, but having only four computers for a class of eighteen or nineteen students limits the amount of tinkering students can do with other elements. Even though TEKS requirements specify teaching students about font attributes, color, and white space and about tailoring graphics to an audience, Gahan and Schroeder do not really address these. The graphics students create help them express themselves but are not necessarily created with an audience’s needs in mind.

Both Gahan and Schroeder have their students “test out” written assignments involving sequencing, whether it be for language arts, social sciences, or math. This process adds a sense of completion to the assignment. Their students have multiple opportunities throughout the week to present their work to the class. They typically receive feedback on their presentation as well, from both their teacher and their peers.
However, they are not necessarily presenting “to different audiences for different purposes and occasions,” as the TEKS require. Given the limitations of their school environment (teachers, peers, administrators), achieving that goal on a large scale would be difficult.

Emphasis on Understanding Situation Requiring Communication

The first grade TEKS lay out lofty goals of first graders grasping their communication situation, but Gahan and Schroeder find this ability to be something their students struggle with due to immaturity.

Relevant TEKS standards. According to the first grade TEKS, students should be gaining a complete understanding of communication situations pertaining to assignments in all the areas they study--language arts, math, social studies, and science. (See Table 5-1.) In language arts, they should understand the communication situation sufficiently to effectively communicate with their audience through language, tone, discussions, and dramatic interpretations. They should be able to readily identify how math plays a role in their lives outside school. Through planning and conducting a science experiment, they should understand the concept well enough to explain it clearly. And in social studies they should have the opportunity to work through a problem to its solution and even evaluate the effectiveness of that solution.

Gahan and Schroeder’s experience with understanding the communication situation. According to both Gahan and Schroeder, first graders need a lot of help understanding the writing situation. This seems easier with “content area writing,” of which they do a lot. For example, students listen to a story about President Lincoln’s
hat and then must summarize it (social studies). Or using bullets, they may list different uses of rocks or different attributes of animals (science).

Gahan spends “a lot of time” on explaining the writing situation because it “needs to be valid for them to buy in.” Just as with adult writers, Schroeder believes, the assignment has to “mean something to them.” She “spends time setting the stage and modeling by thinking out loud.” For example, with a thank-you-note assignment to Kohl’s Department Store for a book, she talked through what they might be thinking: “Wow! They gave me that book, and they gave all the first graders that book!” She will continue to model until “they start getting restless”; then they will “get to work” on the assignment. “You have to read the kids,” she notes, to know when it is time to move on.

Because these particular teachers have significant experience teaching this age group (Gahan, 20 years; Schroeder, 18)—and so can thoroughly define their own audiences, the students themselves—Gahan and Schroeder can successfully anticipate first graders’ limitations and provide the context their students need to adequately understand the writing situation. However, a teacher with less experience working with first graders might not have gained these insights yet and so might simply assume the students understand the writing situation. Thus a valuable communication foundation would not be laid since failing to completely understand the writing situation lies at the heart of many of the communication problems that diminish the effectiveness of students’ writing throughout their academic and professional careers.

Emphasis on Defining Audience and Clarifying Purpose

While the first grade TEKS do not explicitly state that students should be able to define an audience and purpose, they do state that students should be able to tailor
their communication toward a particular audience for a particular purpose. Gahan and Schroeder find their students make limited, but important, inroads toward that goal. These two work on defining audience primarily through discussing audiences students already know (parents, peers, teacher, students in another grade level) and then adding detail sufficient for that audience to understand the student’s point. Students’ understanding of purpose is tied to types of assignments they write (letters, lists, narratives, “how-to”s), but it is also tied up in their obligation to their teacher to produce the assignment.

Relevant TEKS standards. According to the first grade TEKS, students should be able to tailor both writing and speaking to various audiences’ needs through word choices and even delivery style in communicating in language arts as well as math. They should also be able to determine the purpose for which they are reading a particular document as well as tailor both their speaking and writing for different purposes through word choices and delivery style. (See Table 5-2.)

Gahan and Schroeder’s experience with defining audience. Although Gahan says she works with her students on defining an audience “a little bit,” her first graders “always think everyone’s experience is their experience.” During the first part of the year, when the students are working on narratives based on their personal experiences, they focus on developing a sense of audience--how “the person listening to your story has got to have an understanding of what you’re talking about, so you need to add enough detail.” She notes that they will often begin their first writing assignment of the year with “He went there.” She then has to explain that even if the teacher is their audience, they need to explain in more detail. When she has a conference with a
student, she might say, “I’m not sure who you’re talking about. I don’t know where this is taking place—help me out here and explain.” Gahan notes that this is “a very common conversation with a child at this age.” Her students love to talk about their movies, toys, and music, so she will sometimes use herself as an audience example for them, telling them that her own children are grown and asking her students to explain their interests to her.

Gahan’s students also have to consider the audience during “buddy reading,” when their buddies hold them to clear explanations (at a 7-year-old level) and even ask questions to help the writer be more explicit (“buddy conferencing”). She encourages the role of the audience in asking “appropriate questions to help the writer add more detail.” Gahan uses the example of a student writing about going to the beach, where some children in the class have never been. She emphasizes the value of this “reciprocal relationship.”

Gahan’s students think a lot about the audience through letter writing as well, specifically in writing letters to their parents, for example, to bring in quarters since they are studying money or to remember to come to open house. They work on mechanics in conjunction with letter writing—proper capitalization, punctuation, “book” print—because the audience will expect proper form. “Mechanics are secondary, though,” Gahan stresses. “Right now we’re trying to get ideas down on paper.”

Schroder uses reading audience analysis as a bridge to writing audience analysis. When reading books as a class, Schroeder’s students talk about who the authors are writing for, which “they then bring into our lesson,” she says. Once the students realize that an author had a particular audience in mind and maybe even
adjusted the way he or she wrote to fit that audience, the students understand that they can exercise a similar control over their own writing.

Like Gahan, Schroeder focuses quite a bit on defining audiences her students are familiar with. For an upcoming math/science night, Schroeder’s school provided prewritten parent notes, but Schroeder had her students turn them over and write on the back whatever they felt their parents needed to know—the date of the event as well as why their parents should come. (“Because we’re having hotdogs!” exclaimed one student.) She reminded her students that “they’re the only one that’s going to be there to tell Mom, so they have to write so she can read it.” Schroeder says that when her students are writing for their parents, she does not “have to set the stage quite as much” because parents are “their number-one communicator.”

Her class will be participating in a writing workshop with the fourth grade (after TAKS), so they have talked about what it is like in a fourth grade classroom and what the fourth graders are writing compared to their own assignments. “They’ve talked about how long [the fourth graders] have been writing and the big words they use,” Schroeder adds. During the two-week workshop, the fourth graders will help the first graders edit and “publish” some writing (because it is so hard for first graders to type), which they will then place in the library area set aside for student publications. “The kids are excited to do something different because they’ve been working so hard,” says Schroeder.

When Mrs. Cobb, Schroeder’s principal, stops by the classroom while they are writing, she “makes it valid for them” because she reads some of what they are writing. Thus the students find more value in their communication.
Gahan and Schroeder recognize the value of students’ following through their communication by reading their writing to their intended audiences. They also realize the value of students’ soliciting feedback in a learning environment because it is through such an experience that the students can better define their audience. Beginning such a focus with an audience students know fairly well—their peers or their parents—aids learning in that it increases chances they have successfully defined their audience and therefore successfully communicated, creating a positive, reinforcement experience. It also creates a comfortable, supportive environment in which students can receive criticism—an experience writers naturally try to avoid but which effective communicators must embrace. Becoming accustomed to receiving constructive criticism from peers and learning to keep it in perspective and use it from a young age can make peer review and revision more positive and productive throughout students’ writing careers.

_Gahan and Schroeder’s experience with clarifying purpose._ Gahan notes that even from the very first assignment, “at the get-go, [her students] have to understand audience and that that audience will look different depending on the purpose.” “That is something that is addressed immediately,” she adds. First graders struggle a bit with “writing purpose” since it is hard for them to move beyond “because the teacher said so,” she finds. “They think, ‘OK, you tell me what to do; I’ve got to do it.’”

When writing letters, though, her students do typically have a purpose in mind, for example, to remind their parents to send in quarters (since they are studying money) or to come to open house, notes Gahan. They focus on purpose “some,” but more on audience; “purpose is not there yet,” she concludes.
Schroeder’s class focuses on a variety of purposes through the types of documents they write, for example thank-yous, inquiry, “how to,” and “all about.” At the beginning of the year, they focus on Lucy Caulkins’ “small moments”—describing in great detail a focused event they experienced. They also write a how-to book (how to put on a jacket, brush your teeth, etc.) Then they work on “all about”—something they know a lot about without having to research it. Last, they focus on research, specifically of an animal, which culminates in a field trip to the zoo.

Schroeder feels her students’ focus on purpose is “on-going.” They address purpose in setting up a friendly letter and in discussing the purpose of making a list or writing notes. She gives her students the example of leaving for school while her daughter is still asleep and needing to tell her something, necessitating a “note” that she leaves next to her daughter’s sack lunch.

While for a first grader, the purpose of writing a letter may be easy to grasp, the purpose of other writing assignments may be vague, especially in the sense of what the student wants to accomplish with his or her writing in relation to an audience. Gahan and Schroeder’s first graders may understand the generic purpose of a “how to” (explain how to do something you know how to do well) or “all about” (explain a topic you know a lot about), as opposed to the more sophisticated purpose of explaining the process so that the audience can actually perform it or explaining the topic so that the audience could gain sufficient understanding to enlighten his/her work. However, even understanding a generic purpose lays the foundation for viewing writing as having meaning to more than just the writer.
Emphasis on Collaborating

The first grade TEKS specify participation in group projects without qualifying the type or degree of participation. Gahan and Schroeder see a variety of levels of participation in collaborative projects, in keeping with the maturity level of their students. Both teachers allow their students a lot of leeway in participating in groups, accommodating those who are not “ready” for collaboration yet.

Relevant TEKS standards. According to the first grade TEKS, students should be able to contribute relevant comments to group discussions as well as participate in group problem-solving and decision-making projects. (See Table 5-3.)

Gahan and Schroeder’s experience with collaborating. Gahan notes that collaborating is “a dependent kind of thing”—depending on the students; she will have some students who want to and some who do not. Often when collaborating, they will use a “sharing pencil,” making the current holder of the pencil the group recorder. Gahan notes that some first graders “balk” because some children want to “control” the whole process and not share, while others are self-conscious about their abilities and do not want the responsibility when they know few people will be able to read what they write. As the year progresses, though, Gahan finds more children are comfortable with taking their turn holding the pencil.

Gahan uses collaboration for preliminary brainstorming and for sharing what her students have written but prefers that the actual drafting be done individually because first graders need to struggle through the process of conveying thoughts in writing and she can more accurately gauge each student’s individual progress in developing this skill.
Regarding students’ ability to collaborate, Schroeder has “the whole gamut.” She agrees with Gahan that “first graders aren’t good yet” at collaborating because they “can’t listen to each other.” She has several high-performing students who also always insist on doing the activity “their way,” so she does some collaborating so those students will “learn that others’ ideas are OK, and you can do some of those and some of this.” She always has some who want to collaborate because “they’re not reading yet,” and that is a good way to slide by. “There’s a fine line there because this person sits while the other person does all the work, which isn’t exactly learning,” she notes. Therefore, she uses collaboration selectively rather than relying on it as a primary learning medium.

Schroeder will do guided reading in groups as well as readers’ theaters, but primarily her group work is limited to 2-person editing. When she does try some peer editing, as part of the writing process, they discuss what a “peer” is, but she finds her students “usually just read the paper and say, ‘This is great!’”

When her students work on their research projects, Schroeder will have them work in groups, and here she finds interesting involvement combinations. This year she had one group where one member did all the work and one did none; another in which all members worked equally, and they really “got into” clip art as part of their presentation; and another in which they worked on the same topic but each did his or her own entirely separate project.

Because of their significant teaching experience, Gahan and Schroeder can quickly assess the personality types in their classes each year and select the types of collaborative activities at which those students would be most successful. The flexibility
these teachers provide ensures that their first graders will not feel “forced” into a situation they are uncomfortable in and simultaneously introduces them to the give and take of a group task. Teacher intervention in and modeling of effective collaborative behavior can be especially useful in promoting positive outcomes. As their communication skills grow throughout the year, students become more confident collaborative participants. Because collaboration is often a challenge for adults, the earlier students begin learning how to thoughtfully consider others’ perspectives as well as to clearly convey their own and then use the synergy of the group, the better their later professional collaboration will be.

Emphasis on Gathering and Evaluating Needed Resources

Although both Gahan and Schroeder work with their students to gather information for projects from a variety of types of sources (books, magazines, people, the Internet), neither addresses source evaluation in any substantial way (though it is a TEKS requirement) since what their students can use is determined by what they can actually read. The students have a purpose in mind and possibly an audience because they usually present their projects to the class, but this audience and purpose do not necessarily inform their information gathering.

Relevant TEKS standards. According to the first grade TEKS, students should be able to gather information in the areas of language arts, math, science, and social studies from a variety of sources including texts, graphics, people, and scientific observations. They should be able to do this using both traditional and electronic research navigation tools and scientific equipment. Finally, they should be able to
determine the usefulness and appropriateness of the information they have located.

(See Table 5-4.)

**Gahan and Schroeder’s experience with gathering and evaluating needed resources.** Toward the end of the year, Gahan’s class focuses on research (animals, “the subject they’re most interested in” typically), bringing in information from library books, magazines, encyclopedias, and the Internet. However, they do not devote much time to evaluating the sources’ credibility. “The distinguishing factor” between what they will be using and what they will not is “not so much the value of the research” but usually “what they can actually read and understand.” If Gahan’s students access an Internet source that is “over their heads,” they cannot use it.

Gahan notes that most of the information is scientific and non-biased, factual. However, they do discuss the difference between fiction and non-fiction and, for example, how one of their favorite stories, *Tacky the Penguin*, would not work for their research project.

Schroeder does not spend time discussing a resource’s credibility either. As part of her class’s research, though, they discuss the term “resource” and have to cite at least one book from the library (some just come up with their information “out of their heads”), but they also talk about magazines and the Internet as sources.

Schroeder also works with her students on gathering information for non-researched assignments as well. When Schroeder’s class is writing the “all about” paper, they begin with the graphic organizer of a web and write the topic that they should personally know “all about” without needing to do research. They discover that if
they can fill out only three of the off-shooting “petals” (as in the “baseball” example below) that “maybe I don’t know as much as I thought about this,” she notes.

Figure 5-1. If students cannot fill out all the “petals” of the graphic organizer, they may need to switch topics.

(See the Library Media Specialist’s contributions to this area at the end of chapter 9.)

Gahan and Schroeder recognize that simply helping students assess what they already know about a topic and then learn about resources they can use to “fill in the gaps” or provide other perspectives is laying the foundation for proficiency in information gathering. Along with learning about types of resources, learning that not all resources are equal--even if students do not yet have the insight to evaluate a resource’s credibility--is a helpful first step. Encouraging first graders to seek out sources beyond what is immediately available introduces them to both the challenge and reward of locating relevant data. Although their research efforts don’t include the sometimes-
tedious hunts that their advanced education and profession may require, these students are learning the skills that will make their later efforts fruitful.

Emphasis on Analyzing and Organizing Information

Whereas the TEKS specify that students should be drawing conclusions from information they have gathered, Gahan and Schroeder’s students are doing well to analyze the information in simple ways (“Is what I’m looking for there?”) and organize that information using teacher-created forms or outlines. The students have a purpose in mind and possibly an audience because they usually present their projects to the class, but this audience and purpose do not necessarily inform their analysis and organization process.

Relevant TEKS standards. According to the first grade TEKS, students should be able to draw conclusions from prose or graphic information they have gathered. They should also be able to manipulate gathered information graphically in various ways to convey relationships. And they should practice these skills in all subject areas—language arts, math, science, and social studies. (See Table 5-5.)

Gahan and Schroeder’s experience with analyzing and organizing information. Gahan provides her students significant help in prewriting designed to help them analyze and organize their ideas as well. Beginning with having them draw pictures to begin thinking about the stories they will relate in their narratives, she then helps them with story sequence. Then as the year continues, they work on prewriting with the traditional reporting questions (Who? What? Where? Why? When? How?) and ultimately with an outline for the research projects they do at the end of the year. This
The outline contains the major topic areas that the students then complete (name of animal, mammal or reptile, habitat, environment, etc.) From the outline, they draft their report.

To help her students organize information, Schroeder gives them each a folder with six pockets, each with an index card in it. On the outside of each pocket, they write a question they want to answer about their animal. Then they read their library book and see if they can answer the questions from their book. They write their answer in a complete sentence on the card.

Figure 5-2. Students use labeled folder pockets to help them organize information.

Schroeder emphasizes the importance of the complete sentence because “it [the card] might fall out, and the students wouldn’t know where it went if it was just a phrase.” Also, having the information in a complete sentence already makes it easier to put into their paper. If they can’t answer their question from that book (might just be about six pages long), they pick a different resource until they can get their question answered.
Once the students have answered all their questions, they write a “sloppy copy” from their sentences written on the index cards and edit this with Schroeder (checking for complete sentences, punctuation, capitalization, spelling so she understands).

Students can choose to “publish” their writing on the computer or rewrite the documents in neat handwriting, which is considered a “published” work too. Schroeder has four computers and nineteen children in her classroom, which is definitely not ideal. Some of her students have never typed before, so they’re learning about the functions of Word—“How do I make it uppercase?” “How do I make a capital ‘t’?” “What’s that squiggly line?” Their final copy has a title page, an information page, and a resources page with a simplified citation form (for example, *Frogs* by Helen Frost). Schroeder emphasizes to her students that they have to give credit to the person from whom they got the information. This process usually requires three weeks.

Schroeder will also help her students understand how to analyze and organize information by “writ[ing] for them as she’s thinking and talking.” “Oops, I made a mistake there,” she’ll say when she actually does make a mistake, so her students see that writing is not a linear process. Later when they are writing, she will “watch them mimic [her] words and touch their fingers [as she did]; they’re going though what they saw [her] do.”

Schroeder’s students work on creating “webs” to organize their ideas, especially when writing their “all about” papers, and quickly discover that if they cannot branch more than a few circles off of the central web, they probably don’t know as much as they thought about the topic, as discussed above.
Gahan also has her students use analysis and organization techniques to create learning tools. For example, they work on PowerPoints to reinforce concepts, for instance, a PowerPoint of vocabulary words from a book they have been reading.

Knowing that analysis and organization can be overwhelming tasks for a beginning writer, Gahan and Schroeder wisely provide structures that students can use to help them succeed in making sense of what they have read as well as see relationships between discrete items of information. Even though their teachers are providing this structure, however, the actual job of analysis is the students’. The students are the ones wrestling with the information they have located to seek out answers to their own questions. And the students are the ones deciding where those answers best fit in the structure their teacher has provided. In later grades, when their research is more complex, these students will be able to rely on the crutch of these structures, even if they become only a mental image rather than a physical exercise.

Emphasis on Determining Best Format

The TEKS do not specify that students choose a format based on audience, purpose, and communication situation but indicate only that students should learn about and practice different simple formats of writing, which they do in Gahan and Schroeder’s classes. When the students do choose a format, it is usually the one they prefer communicating in.

Relevant TEKS standards. According to the first grade TEKS, students should learn about different formats for documents such as lists, newsletters, and signs and practice writing labels, notes, and captions as well as publish information electronically to display on a computer monitor or in print or to store in files or video. (See Table 5-6).
Gahan and Schroeder’s experience with determining best format. Gahan and Schroeder’s classes practice a variety of formats of writing. At the beginning of the year in Gahan’s class, the students’ format is “assigned,” but as the year progresses, they learn about different presentation formats like the research report, readers’ theater, songs, poems, or story (with which they are most comfortable), and they then have choices.

Especially in content-area writing, as mentioned before, the students have opportunities to practice different formats of writing, for example when summarizing the story about Abraham Lincoln or listing the different types of rocks or attributes of an animal. “We do a lot of that; the kids are writing all the time,” states Gahan.

Schroeder’s class practices making lists in response to questions like “What books do I need to pack in my backpack?” or “What do I need to get at the library?” She asks them to think of how lists are used every day, such as their mom’s making a list of groceries or “things she needs to do on Monday.” When Kohl’s Department Store gave every child in first grade a book and a stuffed animal, the students practiced the “almost lost art” of writing thank-you notes. They will also write notes about upcoming events and stick them on the classroom calendar.

By introducing a wide variety of writing formats to their students, Gahan and Schroeder are beginning to build the repertoire of formats those students can rely on throughout their academic and professional careers. Giving students some control over which formats to use for particular writing tasks instills the empowering perspective that writing is a tool for them to manipulate as they wish rather than an always-frustrating roadblock to expressing their ideas. These teachers are also reinforcing the important
concept that writing is everywhere in our lives and therefore, the ability to do it well is vital to both personal and professional success.

Emphasis on Selecting Communication Style

Although the TEKS specify that first graders should consciously consider their audience in choosing words to express their ideas, Gahan and Schroeder find that their students are primarily still trying to master writing in "standard" English—complete sentences beginning with a capital and ending in a period.

Relevant TEKS standards. According to the first grade TEKS, students should be able to make vocabulary choices, refined during revision, that most clearly express their ideas and meet the needs of the audience, purpose, and communication situation. When communicating about math and science, they should be able to do so in layperson’s terms rather than in only “math” or “science” language. (See Table 5-7.)

Gahan and Schroeder’s experience with selecting communication style. Gahan and Schroeder work on communication style in a limited way. Gahan’s class works on recognizing different communication styles in the literature they read. For example, in the poem “Smart," by Shel Silverstein, he uses the abbreviated “'cause,” and they discuss his purpose for doing this rather than writing out “because.” However, Gahan notes, this insight transfers to their writing “to [only] some degree.”

Gahan does emphasize to her students how important it is to write in complete sentences even though they do not necessarily “think” in complete sentences. However, some of her students have the “sophistication” to understand when “it’s appropriate not to write in complete sentences” (for example, conversational replies). She works with these students on an “individual basis,” though.
Schroeder does not spend much time discussing varying communication styles because her students are too focused on simply learning a “standard” communication style. “It’s important to show them examples of writing and help them assume they can be good writers,” comments Schroeder. “Mostly they want to be teachers and singers. . . but some want to be writers,” she adds. “In my classroom, we do our best to keep it perfect,” she says. They do talk about the difference between a “sloppy copy” and a “published piece,” though. She does encourage them to write especially well for their nine-week assessment for their portfolio by saying, “I’ll show them to Mrs. Cobb [principal], and she’ll see them all. So it’s important for you to do your best because Mrs. Cobb wants you all to be wonderful.” Schroeder then tries to make sure Mrs. Cobb stops by the classroom to read their work “because it makes it valid for them”; they have a reason for making their best attempt at producing “standard” English.

As is the case with the way they teach most other writing principles, Gahan and Schroeder begin discussing communication style by exploring this aspect of the literature their classes are reading. Even if first graders are not yet ready or able themselves to vary their communication style to best suit a particular audience’s needs, they are keen observers and can recognize different communication styles in what they read and hear. If their teachers take the literature study a bit further and query them about why an author selected a particular style, the students will begin to realize that communication style, like format, is a deliberate choice the writer makes to serve a purpose. Through this approach, teachers are reinforcing the control even a beginning writer can exert over his or her topic.
Emphasis on Selecting Design Elements

Although it is not a major focus, when Gahan and Schroeder do discuss how to select design elements, it is on more of an individual basis and with the goal of making things easier for the audience to read. They frequently use bullets with class listing activities like brainstorming, but having only four computers for a class of eighteen or nineteen students limits the amount of tinkering students can do with other elements. Even though TEKS requirements specify teaching students about font attributes, color, and white space, and tailoring graphics to an audience, Gahan and Schroeder do not really address these. The graphics students create help them express themselves but are not necessarily created with an audience’s needs in mind.

Relevant TEKS standards. According to the first grade TEKS, students should be able to use visual props to support their speeches as well as use pictures (along with numbers, objects, and words) to explain their math thinking. They should be able to understand how illustrations contribute to the text. And particularly in social studies, they should be able to create graphics like pictures, maps, timelines, and graphs. The TEKS also specify that students should be able to use font attributes, color, white space, and graphics that are tailored to an audience and appropriate for the particular medium, be it digital or print. (See Table 5-8.)

Gahan and Schroeder’s experience with selecting design elements. Gahan observes that this is one of the first grade TEKS, so her class does focus on using bulleted or numbered lists. As a class, they use bullets when brainstorming on the board. In the literature they read, they discuss why certain words are bold, why certain headings are used, why the title is bigger, why a certain font is used. They focus on
design elements individually, some more than others, when they use the computer to type their writing (“it’s a hunt-and-peck process right now, but they love doing it”). Gahan will talk individually about the font they are using and point out that the title needs to be bigger, for example. “It’s not a huge focus, but it’s there,” especially on an individual basis, Gahan adds.

Schroeder encourages her students to use design elements by telling them, “It’s easier for me to see” if they underline or put a box around that heading—something to set it off. She will add that if they are changing topics (like what would be a “chapter 2” but still on the same page), to add another underlined or boxed heading.

Schroeder also models color coding when she makes a “t-chart,” for example of animals with two legs (green) vs. four legs (brown).

<table>
<thead>
<tr>
<th>2 Legs (green)</th>
<th>4 Legs (brown)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds</td>
<td>Dogs</td>
</tr>
<tr>
<td></td>
<td>Alligators</td>
</tr>
<tr>
<td></td>
<td>Cats</td>
</tr>
</tbody>
</table>

_Figure 5-3._ Color-coded charts help students understand how design choices can promote reader understanding.

But she feels she does this unconsciously because it is easier for her to see and to show her students. “I think it’s so innate—we do it so much,” comments Schroeder.
However, since many of Schroeder’s students are still getting periods down, she feels that when she introduces other elements, they are sometimes confused. Schroeder gives the example of one of her students who wrote an entire essay with a period at the *beginning* as well as at the end of each sentence. Later, Schroeder realized the student had misunderstood the way she was demonstrating how to use bullets: “two different kinds of dots—the one in the air [bullet] and the one on the ground [period].”

Having to deal with the challenges of sentence punctuation as well as spelling and grammar could easily overwhelm a beginning writer. So Gahan and Schroeder are wise to model various design elements rather than add these variables to the writing-rules mix students must grapple with. However, when these teachers suggest changes in design elements to individual students and explain the way they—the audiences—will then benefit, they are introducing the concept that deliberate choices about visual elements of writing can enhance audience understanding.

**Emphasis on Doing Usability Testing**

Both Gahan and Schroeder have their students “test out” written assignments involving sequencing, whether it be for language arts, social sciences, or math. This process adds a sense of completion to the assignment.

**Relevant TEKS standards.** According to the first grade TEKS, students should be able to evaluate whether their own writing achieves their intended purpose, whether their math solution is reasonable, whether the maps they create to nearby locations actually work, and whether the solutions they develop to social studies problems are effective. (See Table 5-9.)
Gahan and Schroeder’s experience with usability testing. In their “goods and services” unit in social studies Gahan’s class lists the sequence involved in getting a job: “do this first, then this, then this,” etc. Gahan illustrates how they “test out” their sequence with the first step in the process: answering the phone (the caller being a prospective employer). She asks her students to tell her what they would do first if the phone rang. “Start talking,” they typically reply, but she reminds them that they would need to pick the phone up first!

Like Gahan, Schroeder does usability testing as part of their “how to” paper assignment. She picks a volunteer, who acts out the description exactly as written. She introduces the assignment by reading a paper she wrote on something simple like putting on a jacket or brushing her teeth and leaving out a step so that everyone laughs. She finds it is “hard for them to remember” every single step, but the activity “makes it real.”

In math, when they are explaining their solution to a story problem, Gahan’s students also have a chance to review whether their explanation “works”: “Did you draw a picture first or write the number sentence first?” she asks them. “We probably do it [usability testing] more in math than in any place else,” Gahan adds.

Schroeder’s students also had a chance to see if they achieved their purpose when they wrote biographies of someone in the building, beginning with creating a list of interview questions and interviewing the subject. Then they created a wax museum (the subject being the figure) and invited the fourth and fifth graders. The author stood near the wax “figure,” reading the biography. “That was very much about did we meet our purpose,” Schroeder emphasizes. The first graders ask the older students, “When
you came in to read my biography I’d written about LuLu, did it make sense?” “The kids were very responsive,” she adds.

In a broad sense, Gahan and Schroeder’s first graders do practice usability testing when they follow through on an assignment and verify that what they have produced accomplishes its purpose. This is an important “finishing” step that should actually lead to revision and reinforces the value of writing and of doing it well. When they test out their communication, students are able to verify whether they have successfully communicated by whether their peer audience is confused. They can see the practical side of writing as a tool for explaining and not just expressing.

**Emphasis on Presenting**

Both Gahan and Schroeder’s students have multiple opportunities throughout the school week to present their work to the class. The students typically receive feedback on their presentation as well, from both their teacher and their peers. However, these first graders are not necessarily presenting “to different audiences for different purposes and occasions,” as the TEKS require. Given the limitations of their school environment (teachers, peers, administrators), achieving that goal on a large scale would be difficult.

**Relevant TEKS standards.** According to the first grade TEKS, students should be able to communicate orally to different audiences for different purposes, including informal/practical situations, as well as share ideas in a discussion and summarize. They should be able to express themselves clearly and use visual props to support their verbal expression. And they should be able to present dramatic interpretations based on experiences or literature. (See Table 5-10.)
Gahan and Schroeder’s experience with presenting. Gahan’s students share their work frequently. During the writing process, which they work on to some extent every day, everyone stops periodically to listen to a student read a “powerful beginning” or a particularly apt example that Gahan has noticed when working with the student. When her students “publish” their work (make a clean copy or type it out on the computer), they sit in the “author’s chair” if they like and read their work to the class, who respond with “happy claps” and one compliment and one suggestion or a question—“We make sure there’s some feedback,” Gahan notes. So students share throughout their writing, they share with a buddy when they have finished the piece, they share with their teacher, and they share their finished product. “That’s a huge, huge, part of first grade writing,” notes Gahan.

Schroeder’s students post their research projects in the hallway and then march around and tell other students to come see their work. They also have a section in the library set aside for “published” books so that anyone can read them.

Schroeder also plans a special celebration with food after every unit (usually every six to eight weeks) and invites someone (parents, counselors, or the office staff). The children have dressed up and take turns standing on a table with a plastic microphone and reading their latest “book”—“It’s a big deal,” Schroeder adds. “They love that; I do that a lot.” (She notes that some teachers are not as enthusiastic about putting on such a production because they feel their classroom management is being critiqued by the parent guests.)
Both Gahan and Schroeder’s students participate in “readers’ theater” productions that give them an opportunity to present not necessarily their own work but dramatically interpret a role as part of a group in front of their classmates.

The kinds of impromptu as well as more formal presentation occasions Gahan and Schroeder create allow students many “safe” opportunities to expose their writing to the view of others, “safe” because students know before they open their mouths that they will receive a largely positive response. Thus, these occasions add value for the student to their writing and build self-confidence in their writing and speaking ability. With so many positive presentation experiences behind them, these students can more confidently approach presentation situations in the years to come that may involve less-friendly and less-accepting audiences.
Table 5-1

Analysis of 1st grade curriculum emphasis on understanding communication situation

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Sample of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand situation requiring communication</td>
<td>§110.3. English Language arts and Reading, Grade 1. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways such as in making announcements, giving directions, or making introductions (K-3); (C) ask and answer relevant questions and make contributions in small or large group discussions (K-3); (D) present dramatic interpretations of experiences, stories, poems, or plays (K-3); and</td>
<td>• Do content-area writing involving summarizing (social studies) and listing (science) • Set the stage by teacher modeling thinking out loud</td>
</tr>
<tr>
<td></td>
<td>§111.13. Mathematics, Grade 1. (1.11) Underlying processes and mathematical tools. The student applies Grade 1 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to: (A) identify mathematics in everyday situations;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>§112.3. Science, Grade 1. (2) Scientific processes. The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to: (A) ask questions about organisms, objects, and events; (B) plan and conduct simple descriptive investigations; (C) gather information using simple equipment and tools to extend the senses; (D) construct reasonable explanations and draw conclusions; and (E) communicate explanations about investigations.</td>
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<td></td>
<td>§113.3. Social Studies, Grade 1. (19) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.</td>
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</table>
Table 5-2

Analysis of 1st grade curriculum emphasis on defining audience and clarifying purpose

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Define audience</strong></td>
<td>§110.3. English Language arts and Reading, Grade 1. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (18) Writing/purposes. The student writes for a variety of audiences and purposes and in a variety of forms. The student is expected to: (E) write to communicate with a variety of audiences (1-3); and §111.13. Mathematics, Grade 1. (1.12) Underlying processes and mathematical tools. The student communicates about Grade 1 mathematics using informal language. The student is expected to: (B) relate informal language to mathematical language and symbols.</td>
<td>• Analyze a particular author’s audience as bridge to creating their own • Write primarily for audiences they are familiar with (parents, peers, teacher, older students) • Discuss degree of audience’s understanding of topic • Work on adding detail sufficient for audience’s understanding • Use peer critiquing to help elicit more detail for audience</td>
</tr>
<tr>
<td><strong>Clarify purpose</strong></td>
<td>§110.3. English Language arts and Reading, Grade 1. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (12) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to: (B) establish purposes for reading and listening such as to be informed, to follow directions, and to be entertained (K-3);</td>
<td>• Discuss purpose as tied to different types of documents they write (letters, &quot;how-to”s, &quot;all-about”s, notes, lists)</td>
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*(table continues)*
Table 5-2 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarify purpose (students clarify what they want to accomplish with their writing in relation to an audience)</td>
<td>(18) <strong>Writing/purposes.</strong> The student writes for a variety of audiences and purposes and in a variety of forms. The student is expected to: (F) write in different forms for different purposes such as lists to record, letters to invite or thank, and stories or poems to entertain (1-3). (22) <strong>Writing/evaluation.</strong> The student evaluates his/her own writing and the writing of others. The student is expected to: (C) determine how his/her own writing achieves its purposes (1-3). <strong>§112.3. Science, Grade 1.</strong> (2) <strong>Scientific processes.</strong> The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to: (E) communicate explanations about investigations.</td>
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</table>

122
### Table 5-3

**Analysis of 1st grade curriculum emphasis on collaborating**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
</table>
| Collaborate (students work in groups to accomplish a task or assignment) | §110.3. English Language arts and Reading, Grade 1. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (C) ask and answer relevant questions and make contributions in small or large group discussions (K-3); | • Use a “sharing pencil” to record group thoughts  
• Use for brainstorming but draft individually  
• Use for guided reading, readers’ theater, research projects, and peer editing |
<p>| | §113.3. Social Studies, Grade 1. (19) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. | |
| | §126.2. Technology Applications, Kindergarten-Grade 2. (8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to: (A) use communication tools to participate in group projects; and | |</p>
<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gather and evaluate needed resources</strong> (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not)</td>
<td>§110.3. English Language arts and Reading, Grade 1. (10) Reading/variety of texts. The student reads widely for different purposes in varied sources. The student is expected to: (A) read fiction, nonfiction, and poetry, including classic and contemporary works, for pleasure and/or information (1); and (B) use graphs, charts, signs, captions, and other informational texts to acquire information (1). (15) Reading/inquiry/research. The student generates questions and conducts research about topics using information from a variety of sources, including selections read aloud. The student is expected to: (A) identify relevant questions for inquiry such as “What do pill bugs eat?” (K-3); (B) use pictures, print, and people to gather information and answer questions (K-1); (D) use alphabetical order to locate information (1-3); (E) recognize and use parts of a book to locate information, including table of contents, chapter titles, guide words, and indices (1-3); and (F) locate important areas of the library/media center (K-1).</td>
<td>• Learn “Big 6” approach to research (through librarian): task definition, information-seeking strategies, location and access, use of information, synthesis, evaluation • Use online subscription references in limited way • Use books, magazines, people, and the Internet to gather information • Discuss value of fiction vs. non-fiction work to research</td>
</tr>
<tr>
<td><strong>§111.13. Mathematics, Grade 1.</strong> (1.10) Probability and statistics. The student uses information from organized data. The student is expected to: (A) draw conclusions and answer questions using information organized in real-object graphs, picture graphs, and bar-type graphs; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>§112.3. Science, Grade 1.</strong> (2) Scientific processes. The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to: (A) ask questions about organisms, objects, and events; (B) plan and conduct simple descriptive investigations; (C) gather information using simple equipment and tools to extend the senses;</td>
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</tbody>
</table>

*(table continues)*
Table 5-4 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gather and evaluate needed resources</strong> (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not)</td>
<td>(4) <strong>Scientific processes.</strong> The student uses age-appropriate tools and models to verify that organisms and objects and parts of organisms and objects can be observed, described, and measured. The student is expected to: (A) collect information using tools including hand lenses, clocks, computers, thermometers, and balances; (B) record and compare collected information; and</td>
<td></td>
</tr>
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<td></td>
<td>(7) <strong>Science concepts.</strong> The student knows that many types of change occur. The student is expected to: (A) observe, measure, and record changes in size, mass, color, position, quantity, sound, and movement; (C) observe and record changes in weather from day to day and over seasons; and (D) observe and record changes in the life cycle of organisms.</td>
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</tbody>
</table>

§113.3. Social Studies, Grade 1.
(17) **Social studies skills.** The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to: (A) obtain information about a topic using a variety of oral sources such as conversations, interviews, and music; (B) obtain information about a topic using a variety of visual sources such as pictures, graphics, television, maps, computer images, literature, and artifacts; |

(19) **Social studies skills.** The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (B) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.

§126.2. Technology Applications, Kindergarten-Grade 2.
(4) **Information acquisition.** The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to: (A) apply keyword searches to acquire information; and (B) select appropriate strategies to navigate and access information for research and resource sharing. |                                                          |

*(table continues)*
### Table 5-4 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
</table>
| **Gather and evaluate needed resources**  
(with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not) | **(5) Information acquisition.** The student acquires electronic information in a variety of formats, with appropriate supervision. The student is expected to:  
(A) acquire information including text, audio, video, and graphics; and  
(B) use on-line help.  

**(6) Information acquisition.** The student evaluates the acquired electronic information. The student is expected to:  
(A) determine the success of strategies used to acquire electronic information; and  
(B) determine the usefulness and appropriateness of digital information.  

**(8) Solving problems.** The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:  
(B) use electronic tools and research skills to build a knowledge base regarding a topic, task, or assignment | |
Table 5-5

**Analysis of 1st grade curriculum emphasis on analyzing and organizing information**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analyze and organize information</strong></td>
<td>§110.3. English Language arts and Reading, Grade 1.</td>
<td>• Help with sequencing information</td>
</tr>
<tr>
<td>(students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships)</td>
<td>(4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to: (C) clarify and support spoken messages using appropriate props such as objects, pictures, and charts (K-3); and (D) retell a spoken message by summarizing or clarifying (K-3).</td>
<td>• Use “reporter” questions</td>
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<td></td>
<td>(12) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to: (E) draw and discuss visual images based on text descriptions (1-3);</td>
<td>• Use graphic organizers, including outlines and webs</td>
</tr>
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<td></td>
<td>(15) Reading/inquiry/research. The student generates questions and conducts research about topics using information from a variety of sources, including selections read aloud. The student is expected to: (C) draw conclusions from information gathered (K-3);</td>
<td>• Model organizing</td>
</tr>
<tr>
<td></td>
<td>(23) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to: (B) record or dictate his/her own knowledge of a topic in various ways such as by drawing pictures, making lists, and showing connections among ideas (K-3).</td>
<td></td>
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<tr>
<td></td>
<td>§111.13. Mathematics, Grade 1.</td>
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<tr>
<td></td>
<td>(1.10) Probability and statistics. The student uses information from organized data. The student is expected to: draw conclusions and answer questions using information organized in real-object graphs, picture graphs, and bar-type graphs; and</td>
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<td></td>
<td>(1.11) Underlying processes and mathematical tools. The student applies Grade 1 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to: (B) select or develop an appropriate problem-solving plan or strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem; and</td>
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*(table continues)*
### Table 5-5 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
</table>
| Analyze and organize information (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | §112.3. Science, Grade 1.  
(2) Scientific processes. The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to:  
(D) construct reasonable explanations and draw conclusions; and  
(3) Scientific processes. The student knows that information and critical thinking are used in making decisions. The student is expected to:  
(A) make decisions using information;  
(B) discuss and justify the merits of decisions; and  
(C) explain a problem in his/her own words and identify a task and solution related to the problem.  
(4) Scientific processes. The student uses age-appropriate tools and models to verify that organisms and objects and parts of organisms and objects can be observed, described, and measured. The student is expected to:  
(B) record and compare collected information; and  
(5) Science concepts. The student knows that organisms, objects, and events have properties and patterns. The student is expected to:  
(B) identify, predict, and create patterns including those seen in charts, graphs, and numbers. | |
| §113.3. Social Studies, Grade 1.  
(3) History. The student understands the concepts of time and chronology. The student is expected to:  
(B) create a calendar or timeline; and  
(5) Geography. The student understands the purpose of maps and globes. The student is expected to:  
(A) create and use simple maps to identify the location of places in the classroom, school, community, and beyond; and  
(17) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:  
(C) sequence and categorize information; and  
(D) identify main ideas from oral, visual, and print sources. | |

(table continues)
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<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
</table>
| Analyze and organize information | (18) **Social studies skills.** The student communicates in written, oral, and visual forms. The student is expected to:  
(B) create visual and written material including pictures, maps, timelines, and graphs.  
(19) **Social studies skills.** The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
(C) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and  
(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. | |
Table 5-6

### Analysis of 1st grade curriculum emphasis on determining best format

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Determine best format</strong></td>
<td>§110.3. English Language arts and Reading, Grade 1.</td>
<td>• Practice writing lists, research reports, readers’ theaters, songs, poems, stories, summaries, and notes</td>
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<td></td>
<td>(14) Reading/text structures/literary concepts. The student recognizes characteristics of various types of texts. The student is expected to:</td>
<td>• Assigned format at beginning of year; get to choose toward end</td>
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<td></td>
<td>(A) distinguish different forms of texts such as lists, newsletters, and signs and the functions they serve (K-3);</td>
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<td>(18) Writing/purposes. The student writes for a variety of audiences and purposes and in a variety of forms. The student is expected to:</td>
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<td></td>
<td>(B) write labels, notes, and captions for illustrations, possessions, charts, and centers (K-1);</td>
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<td></td>
<td>§126.2. Technology Applications, Kindergarten-Grade 2.</td>
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<td></td>
<td>(11) Communication. The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to:</td>
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<td></td>
<td>(A) publish information in a variety of media including, but not limited to, printed copy or monitor display; and</td>
<td></td>
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<tr>
<td></td>
<td>(B) publish information in a variety of media including, but not limited to, stored files or video.</td>
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</table>
Table 5-7

Analysis of 1st grade curriculum emphasis on selecting communication style

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Select communication style</strong> (with audience and purpose in mind, students decide level of formality; use style principles: active voice, conciseness, action in verb rather than noun, actor as subject, etc.)</td>
<td>§110.3. English Language arts and Reading, Grade 1. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways such as in making announcements, giving directions, or making introductions (K-3); (4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to: (B) use vocabulary to describe clearly ideas, feelings, and experiences (K-3); (19) Writing/writing processes. The student selects and uses writing processes to compose original text. The student is expected to: (D) revise selected drafts for varied purposes, including to achieve a sense of audience, precise word choices, and vivid images (1-3); and</td>
<td>• Discuss style choices in literature they read • Work on making writing close to “standard” English</td>
</tr>
<tr>
<td>§111.13. Mathematics, Grade 1. (1.12) Underlying processes and mathematical tools. The student communicates about Grade 1 mathematics using informal language. The student is expected to: (B) relate informal language to mathematical language and symbols.</td>
<td></td>
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<tr>
<td>§112.3. Science, Grade 1. (3) Scientific processes. The student knows that information and critical thinking are used in making decisions. The student is expected to: (C) explain a problem in his/her own words and identify a task and solution related to the problem.</td>
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</tbody>
</table>
Table 5-8

Analysis of 1st grade curriculum emphasis on selecting design elements

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Select design elements</strong> (with audience and purpose in mind, students decide how to strategically use color, informative headings, graphics, bulleted/numbered lists, fonts, white space; use design principles: single space, double space between paragraphs, no indentions; no all-capitals or centering)</td>
<td>§110.3. English Language arts and Reading, Grade 1. (4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to: (C) clarify and support spoken messages using appropriate props such as objects, pictures, and charts (K-3); and (13) Reading/literary response. The student responds to various texts. The student is expected to: (E) describe how illustrations contribute to the text (K-1).</td>
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<td></td>
<td>§111.13. Mathematics, Grade 1. (1.12) Underlying processes and mathematical tools. The student communicates about Grade 1 mathematics using informal language. The student is expected to: (A) explain and record observations using objects, words, pictures, numbers, and technology; and (1.13) Underlying processes and mathematical tools. The student uses logical reasoning. The student is expected to justify his or her thinking using objects, words, pictures, numbers, and technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>§113.3. Social Studies, Grade 1. (18) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to: (B) create visual and written material including pictures, maps, timelines, and graphs.</td>
<td></td>
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<tr>
<td></td>
<td>§126.2. Technology Applications, Kindergarten-Grade 2. (10) Communication. The student formats digital information for appropriate and effective communication. The student is expected to: (A) use font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience; and (B) use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays and printed materials.</td>
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</tbody>
</table>

- Use bullets in class listing activities
- Discuss font, type size, color, and headings primarily on an individual basis and with the goal of making document easier for audience to read
### Table 5-9

**Analysis of 1\textsuperscript{st} grade curriculum emphasis on usability testing**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1\textsuperscript{st} grade TEKS</th>
<th>Samples of approaches to coverage in 1\textsuperscript{st} grade activities</th>
</tr>
</thead>
</table>
| **Do usability testing**  
(students “test drive” what they wrote to see if it does what they want it to—that they connect with the audience and accomplish their purpose) | §110.3. English Language arts and Reading, Grade 1.  
(22) Writing/evaluation. The student evaluates his/her own writing and the writing of others. The student is expected to:  
(C) determine how his/her own writing achieves its purposes (1-3).  
§111.13. Mathematics, Grade 1.  
(1.11) Underlying processes and mathematical tools. The student applies Grade 1 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:  
(B) solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;  
§113.3. Social Studies, Grade 1.  
(5) Geography. The student understands the purpose of maps and globes. The student is expected to:  
(A) create and use simple maps to identify the location of places in the classroom, school, community, and beyond; and  
(19) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and | • Test out sequenced descriptions of tasks or activities  
• Verify sequence of math solution process  
• Verify accuracy of description of person |
Table 5-10

**Analysis of 1st grade curriculum emphasis on presenting**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 1st grade TEKS</th>
<th>Samples of approaches to coverage in 1st grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present (students orally deliver what they produced to a group)</td>
<td>§110.3. English Language arts and Reading, Grade 1. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways such as in making announcements, giving directions, or making introductions (K-3); (C) ask and answer relevant questions and make contributions in small or large group discussions (K-3); (D) present dramatic interpretations of experiences, stories, poems, or plays (K-3); and (4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to: (A) learn the vocabulary of school such as numbers, shapes, colors, directions, and categories (K-1); (B) use vocabulary to describe clearly ideas, feelings, and experiences (K-3); (C) clarify and support spoken messages using appropriate props such as objects, pictures, and charts (K-3); and (D) retell a spoken message by summarizing or clarifying (K-3). §113.3. Social Studies, Grade 1. (18) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to: (A) express ideas orally based on knowledge and experiences; and</td>
<td>• Share work in progress as well as finished pieces with classmates • Share finished pieces in “recital” for special guests • Participate in “readers’ theater” productions</td>
</tr>
</tbody>
</table>
Second grade teacher Chase Young has taught for only three years and recently earned his master’s degree in Reading and Literacy. Of all the teachers I interviewed for this study, he seems the most “tech savvy.” He explains that he uses technology so much with his students because it is “huge”:

They’re digital kids . . . . They sit at home and they watch TV and they play these ridiculously real-like video games, and then they come to school, and you’re working on an overhead? Are you kidding me? You lost them. You get them on a Smart Board—that’s something they don’t have at home. They can’t go up in a video game and move stuff around. You get them on the Internet . . . . They don’t even think they’re reading. Sometimes I don’t even give them something to fill out. I just say, “Hey get on this butterfly website, and go through and watch the videos. Go through and find out about the lifecycle . . . . Have a good time!” (personal communication, May 7, 2008)

They are learning, emphasizes Young, and they are working with technology.

Working at a school across town from Young’s, Janet Peters* teaches second grade as well, having taught a total of thirteen years (personal communication, February 6, 2008). She holds a bachelor’s degree in Elementary Education.
Summary of How Teaching Experiences Correspond to the Study Professional Writing Principles and the TEKS

To ensure that their students understand the communication situation, Peters and Young try to set up their assignments with adequate background information, and to some degree, their students keep that situation in mind as they write. This search for information, then, is typically teacher led, rather than student led—not the pro-active student effort the TEKS describe. To some extent, their students do think about their audience (usually someone they know or can identify closely with) when choosing content and words through which to convey that content. The purpose justifies the assignment and is something that has some relevance to the students as second graders.

Collaboration for social studies projects as well as other learning activities is a regular part of Peters and Young’s classes, aligning well with TEKS recommendations.

Because they are more familiar with and intrigued by electronic sources than print ones, Peters and Young’s students use the Web for most of their research. In conjunction with this reliance, though, they discuss electronic source credibility to some extent, which is consistent with TEKS standards. Because analysis and organization are difficult concepts for second graders to grasp, Peters and Young provide structured help to lead their students through these tasks. The TEKS standards, which call for students to more aggressively and competently approach analysis and organization, seem to expect competency instead of a more realistic “being familiar with.”

Both Peters and Young’s students often have the opportunity to choose the format in which to convey their work, including PowerPoints, but this choice is generally
tied to what the students prefer rather than what the audience needs. For Peters and Young’s students, communication style is more writer based than audience based, focused on choosing vocabulary that best expresses the student’s ideas. Because design is perhaps more apparent and easier to manipulate electronically, their classes focus on design elements most when creating PowerPoints, concentrating on the “larger issues” like headings, balance, focus, and structure as opposed to some of the more detailed items the TEKS suggest like font, color, and white space. Especially regarding animation, students are able to see where their own assessment of their work as “great!” is not necessarily shared by their audiences.

Both Peters and Young incorporate some limited usability elements in their classes, mainly in the areas of revision, although students check for cohesion rather than whether they accomplished their purpose. They do follow through on “how-to” assignments, checking for missing steps and scrutinizing arguments for validity.

Both teachers’ students have lots of opportunities to present their work, whether it be through sharing PowerPoints or projects, participating in a readers’ theater, or simply reading a paper they wrote.

Emphasis on Understanding Situation Requiring Communication

To ensure that their students understand the communication situation, Peters and Young try to set up their assignments with adequate background information, and to some degree, their students keep that situation in mind as they write. This search for information, then, is typically teacher led, rather than student led—not the pro-active student effort the TEKS describe.
Relevant TEKS standards. According to the second grade TEKS, students should be gaining a complete understanding of communication situations pertaining to assignments in all the areas they study--language arts, math, social studies, and science. (See Table 6-1.) In language arts, they should understand the communication situation sufficiently to effectively communicate with their audience through language and tone in discussions and dramatic interpretations. In all four subject areas they should be able to pro-actively initiate a learning activity and follow it through from planning and carrying out an appropriate investigation, to forming conclusions based on results and evaluating the effectiveness of a solution, to communicating their results.

Peters and Young’s experience with understanding the communication situation. Peters estimates her classes work on understanding the rhetorical situation for about 80 percent of their assignments. When they write letters to soldiers in Iraq, for example, they talk about why our soldiers are there and what their own parents have said about the war. She reminds them why they are writing the letter--not just to “make a pen pal” but to be “supportive”--and relates her experiences writing to her brother-in-law who is stationed there. Young actually has a close friend who went to Iraq who has been sending pictures back. His students look at the globe to see where the letters they write are going.

Young’s students also write letters to members of their own class and to other classes, recommending books, and they receive similar letters, so they are starting to learn what other students like to read.

Young also works on rhetorical situation as part of inferring an outcome. He models for his students a story with a cliffhanger; then he has his students infer what
would happen. He asks them to predict the tone of the ending based on the type of
author they know him to be. They all guess “funny!” Then they have the opportunity to
write their own stories with cliffhangers. “So they get to see what it is like on the other
end, so they can determine how and when to stop their story,” explains Young.

Young recommends Barry Lane, author of The Reviser’s Toolbox, who has an
approach called “What’s the goal; what’s the obstacle?” For example, students are
writers for a movie and they are coming up with a script. First they write down the goal,
then the obstacle. Role-playing is a good way to teach rhetorical situation, Young feels.

Peters and Young seem to be most successful in conveying the communication
situation when they rely on a scenario, either real or fiction, in which the students play
an active role. When their second graders are themselves part of the communication
situation, the young writers can “look around” their environment and better understand
the needs of their audience and then decide what their own communication role should
be. A communication situation that is abstract and perhaps hard to relate to becomes
real and even urgent as these students understand the impact their writing can have.

Emphasis on Defining Audience and Clarifying Purpose

To some extent, Peters and Young’s students do think about their audience
(usually someone they know or with whom they closely identify) when choosing content
and words through which to convey that content. The purpose justifies the assignment
and is something that has some relevance to them as second graders.

Relevant TEKS standards. According to the second grade TEKS, students
should be able to tailor both writing and speaking to various audiences’ needs through
word choices and even delivery style in communicating in language arts as well as
They should be able to determine the purpose for which they are listening to or reading a particular document as well as the primary purpose of that type of text. They should also be able to tailor both their speaking and writing for different purposes through format, word choices and delivery style. And they should be comfortable using writing during the research process. In social studies, they should be able to express their ideas through prose and graphics. (See Table 6-2.)

*Peters and Young’s experience with defining audience.* Peters talks with her students about how an audience will “sway your writing style.” She exemplifies this by talking about how the way they write to the principal would differ from the way they talk to their best friend. She holds “mini-lessons” frequently on topics like voice, audience, and organization and gives students examples of these in action.

Young helps his students define audience by suggesting they imagine an audience that knows nothing about his topic. The students choose obscure animals like the duck-billed platypus, then get online and look them up on National Geographic’s *Creature Feature*. As they’re choosing the information to include in their presentation, Young reminds them, “Would I give you a boring presentation? Would I tell you boring facts about an animal? What do you think would make them [audience] excited? What makes you excited?” Then they create a PowerPoint and list the facts they have discovered about the animal.

When Peters and Young “intervene” in their students’ writing process by reminding them about audience, they are helping their students re-envision the document they have written. By suggesting that the second graders think about an audience’s needs after the students have already begun their research or drafting,
these teachers keep audience definition from being a writing roadblock; instead it is a revising tool. When students insist on defining an audience before beginning to brainstorm, they may still the momentum of discovery, and they try to force writing into a linear rather than a recursive process. Directing students to reflect on what they themselves find interesting as audiences helps students further define that audience—someone like themselves in that they get bored or excited depending on how a document is written.

*Peters and Young’s experience with clarifying purpose.* Peters emphasizes that she must talk about “the ‘whys’ of why we’re [her class are] doing things; otherwise why bother?” Her students need to understand why instead of “doing for the sake of doing.” She also tries to clarify the benefit of the writing task for them, the writers.

Young focuses his students on purpose by holding a lot of debates in class on animals or historical citizens. The students choose a historical citizen, for example, and write a persuasive introduction to the debate. They try to persuade everyone else in the class that their historical citizen, animal, or interpretation of the story is the best. “And they want to win, badly,” Young comments. “I had one cry today—he didn’t win.”

As with the communication situation, when Peters and Young’s students see themselves in a role and thus understand why they are communicating, they are more successful writers. Even if their writing purpose is simply to help them learn a concept, if the students understand that that is the reason for their writing, they may work at it harder. Teachers often assume that students understand that each task they are asked to complete contributes to their learning and further assume that their students
understand exactly what aspect of their learning that tasks contributes to. That is obviously a lot to expect of a second grader.

Emphasis on Collaborating

Collaboration for social studies projects as well as other learning activities is a regular part of Peters and Young’s classes, aligning well with TEKS recommendations.

*Relevant TEKS standards.* According to the second grade TEKS, students should be able to contribute relevant comments to group discussions as well as participate in group problem-solving and decision-making projects. They should also be able to critique others’ writing. (See Table 6-3.)

*Peters and Young’s experience with collaborating.* Peters’ class does a major collaboration project for a social studies goods and services project involving producers, consumers, sellers, and advertisers. Students sell “heart-grams” (Valentines) during their lunch period. They persuade a “bank” in a letter to finance their enterprise with a loan, and then they graph their sales. They plan to use the proceeds to fund their monarch caterpillar project and perhaps give a portion to a charity they select as a class. A positive side effect of working collaboratively on this unit, notes Peters, has been a marked decrease in behavior problems because students are so excited about the project and about working on it together. Peters’ students are also in groups for math stations and literary stations twice during the day.

Young’s students spend at least 75 percent of their learning time collaborating because he believes “in learning through your peers.” “I just sit by and maybe guide them every now and then,” Young comments. “They have their goal, and then they’re off and running.” His student groups created their own countries after learning about
the United States through a webquest on why the United States chose our country’s flag. The groups also named their own countries, which usually consisted of all four of the members’ own names with “opolis” tacked on the end of it!

Young also has his students demonstrate in a group each of the eighteen most common comprehension styles, for example drawing conclusions, making predictions, and synthesis. They will take a big sheet of butcher paper and use it in a DRTA—Directed Reading, Thinking Activity—after he is done “exhaustive modeling.” Then they will be in a workstation group of two, which they do for thirty minutes every day. On Fridays they do Buddy Reading, where one student can read, and the partner draws mental images in a reading journal, or they read funny songs, poetry, or scary stories (when they will get under his desk).

For collaboration to be an effective learning tool, Peters and Young must devote a significant amount of time to planning and staging. By ensuring that these collaborative activities are complex and labor intensive, these teachers increase the likelihood that all group members will contribute; everyone has a role. This kind of active inquiry appeals to students through letting them lead their own discovery process and introduces them to the satisfaction that relying on creativity for problem solving can bring.

Emphasis on Gathering and Evaluating Needed Resources

Because they are more familiar with and intrigued by electronic sources than print ones, Peters and Young’s students use the Web for most of their research. In conjunction with this reliance, though, they discuss electronic source credibility to some extent, which is consistent with TEKS standards.
Relevant TEKS standards. According to the second grade TEKS, students should be able to gather information in the areas of language arts, math, science, and social studies from a variety of sources including texts, graphics, people, and scientific observations. They should be able to do this using both traditional and electronic research navigation tools and scientific equipment. Finally, they should be able to determine the usefulness and appropriateness of the information they have located. (See Table 6-4.)

Peters and Young’s experience with gathering and evaluating needed resources. Peters says they do not emphasize gathering and evaluating resources much in second grade. However they do spend a large amount of time working on brainstorming ideas because “it’s hard for a second grader to decide what to write about.” Her students have problems focusing on a “small special moment” when their inclination is to write about the whole day.

They will do occasional research projects, like researching the holidays, using a school website with resources like Grollier and Encyclopedia Britannica Online. Peters notes that her students have more difficulty using resources in print since second graders are “computer driven.”

Peters does talk about credibility with her students because they think “just because it’s on the computer, it must be true.” Young spends “a ton of time” evaluating resources. “Every one of my kids can tell you right now that they don’t use Wikipedia because people can put their own information up there without it being checked. They don’t use Yahoo Answers because we don’t know who these people [answering the questions] are,” he says.
Young will usually give his students a “jump off” place such as news sites to begin research. His class relies heavily on the Web as a resource. “We use it constantly, and I constantly have it up on the Smart Board. Books are almost secondary to what we do,” states Young. However, when they do begin a new unit, he checks out “tons” of books from the library for his students to consult as well. (See the Library Media Specialist’s contributions to this area at the end of chapter 9.)

To get their students excited about doing research, Peters and Young begin with a research tool they know their students already feel comfortable with—the Internet. Because they can navigate and perform basic Internet searches already, the students are more receptive to using school website databases and other technology-based research tools. Since Peters and Young are already helping their second graders evaluate the credibility of the sources the students locate electronically, they will be more likely to make such questioning a routine part of their research process.

Emphasis on Analyzing and Organizing Information

Because analysis and organization are difficult concepts for second graders to grasp, Peters and Young provide structured help to lead them through these tasks. The TEKS standards, which call for students to more aggressively and competently approach analysis and organization, seem to expect competency instead of a more realistic “being familiar with.”

Relevant TEKS standards. According to the second grade TEKS, students should be able to create a plan for solving a problem and follow it through, drawing conclusions from prose or graphic information that they have gathered. They should also be able to summarize information, compare and interpret data, and manipulate
gathered information graphically in various ways to convey relationships. And they should practice these skills in all subject areas—language arts, math, science, and social studies. (See Table 6-5.)

*Peters and Young’s experience with analyzing and organizing information.*

Peters’ second graders work on analysis more toward the end of the school year. She feels organizing is a hard thing to teach because it is so “abstract”: “You can’t say always put this first and that last.” When her students are just writing in general, it’s hard to get them to organize their thoughts; she has some students who are “doing well just to get some sentences down.”

Young guides his students quite a bit in organizing information through graphic organizers—for example, a series of labeled boxes that they fill in. He encourages them to use phrases rather than sentences to help prevent plagiarism, which they do discuss.

Because many of their second graders are still struggling to express their thoughts in writing, Peters and Young put off the difficult work of analyzing and organizing information until their students are ready for it and at that time provide the assistance that will help them succeed. When the students use information to complete a teacher-made graphic organizer, they are sure to see a logical way of organizing that information where they might not have before.

**Emphasis on Determining Best Format**

Both Peters and Young’s students often have the opportunity to choose the format in which to convey their work, including PowerPoints, but this choice is generally tied to what the *students prefer* rather than what the audience needs.
Relevant TEKS standards. According to the second grade TEKS, students should learn about different formats for documents and practice different presentation formats, both visual and written, as well as practice writing formats involved in research. They should also learn how to publish information electronically to display on a computer monitor or in print or to store in files or video. (See Table 6-6).

Peters and Young’s experience with determining best format. Peters usually leaves format choice to the students—poetry, letters, story—although she rarely has students pick poetry as a format. “They get stuck on writing that has to be a story,” she observes. Her students like the story format because in elementary school, students are read to a lot, and they often choose to read a lot of stories in their “A/R” (Accelerated Reader) program. In addition, they want to be authors themselves. However, Peters emphasizes that she definitely talks about the other genres as well. Peters’ students often make sketches or illustrations to help them with detail, using a visual to help get the words flowing. And they have made brochures for social studies.

Likewise, Young’s students often have a chance to determine the format in which they would like to present their work—PowerPoint, posters, readers’ theater, etc.—although they usually choose the format they like to work with best rather than consider what would best reach an audience. Young emphasizes that, for the most part, they work independently in formatting their work. “I’m the resource guy,” he says. “Whatever they need—construction paper, poster board—they see me.”

By choosing the format for their work, Peters and Young’s students are learning how to make writing work for them, how to use it to convey the vision of their work they have in their heads. They may select a particular format because they like it, but why
do they prefer *that one*? Perhaps it is because they can best see their ideas in that format; it is the best host for their expressions. Peters and Young are right, though, to introduce their second graders to as many different formats as possible since their students will not be able to choose from what they have not learned about.

**Emphasis on Selecting Communication Style**

For Peters and Young’s students, communication style is more writer based than audience based, focused on choosing vocabulary that best expresses *the student’s* ideas.

*Relevant TEKS standards.* According to the second grade TEKS, students should be able to make vocabulary choices, refining them during revision, that most clearly express their ideas and meet the needs of the audience, purpose, and communication situation. When communicating about math and science, they should be able to do so in layperson’s terms rather than in only “math” or “science” language. (See Table 6-7.)

*Peters and Young’s experience with selecting communication style.*

Peters’ students talk about word choice but not so much in regard to how it fits an audience as to how to “build voice” into writing—how to make the student’s personality come through. They put overused, tired words like “good” and “cool” into a “word hospital” and say, “It’s too tired to use.” Young’s students work on making more captivating word choices through “flower power.” They create a flower of “buzz words” placed in the center surrounded by petals naming alternatives, then hang the flower on the wall in the “sizzling word garden.” (See Figure 6-1.)
To demonstrate voice to her students, Peters will make comments like, “I’d like to read this fabulous piece” by one of their classmates. Then after reading the essay, she’ll say, “Now who does this sound like?” She usually picks the writing of someone readily identifiable, like one sassy girl who writes like she speaks, and the class often accurately guesses the author. Peters talks about how grammar and correct speech are important because they point writing in the same direction.

By focusing on word choices, Peters and Young emphasize to their students the importance of being deliberate when phrasing their ideas. Students begin to differentiate between speaking vocabulary and writing vocabulary, seeing speaking vocabulary as less specific because the writer and audience are close together and the writer can supplement speech with gestures and tone. They recognize that writing vocabulary relies on specificity and carefully selected vocabulary to convey meaning accurately.
Emphasis on Selecting Design Elements

Because design is perhaps more apparent and easier to manipulate electronically, Peters and Young’s classes focus on design elements most when creating PowerPoints, concentrating on the “larger issues” like headings, balance, focus, and structure as opposed to some of the more detailed items the TEKS suggest like font, color, and white space. Especially regarding animation, students are able to see where their assessment of their work as “great!” is not necessarily shared by their audiences.

Relevant TEKS standards. According to the second grade TEKS, students should be able to use visual props to support their speeches as well as express text information graphically. They should be able to convey and organize data graphically and textually to aid in math interpretation and justify explanations. In social studies and science they should be able to create graphics as well as text-based documents to convey information. The TEKS also specify that students should be able to use font attributes, color, white space, and graphics that are tailored to an audience and appropriate for the particular medium, be it digital or print. (See Table 6-8.)

Peters and Young’s experience with selecting design elements. Peters and Young’s classes talk about design elements when creating PowerPoints. Peters focuses on headings (centered), balancing (making sure clip art is not larger than the main idea of the slide), and the main focus. Her students often get caught up in the animation and do not use it effectively. Young’s students focus on choosing which slide format would be best for the information they wish to convey (the model with a title, with
His students also think about design a bit when they choose a PowerPoint theme that seems to match their topic.

When Peters and Young discuss basic design elements with their second graders, they are reminding their students that someone will be reading and probably learning from the PowerPoints the students create; the students are not just creating them “for fun.” By discussing design options, the teachers reinforce how design should complement content, that the choice of design should be deliberate.

**Emphasis on Doing Usability Testing**

Both Peters and Young incorporate some limited usability elements in their classes, mainly in the areas of revision, although they check for cohesion rather than whether they accomplished their purpose. Their students follow through on “how-to” assignments, checking for missing steps and scrutinizing arguments for validity.

*Relevant TEKS standards.* According to the second grade TEKS, students should be able to evaluate whether their own writing achieves their intended purpose, whether their math solution is reasonable, and whether the solutions they develop to social studies problems are effective. (See Table 6-9.)

*Peters and Young’s experience with usability testing.* Peters’ class focuses on usability through revising, using one-inch Writing Binders in which to keep their work and periodically revising and editing it to see if it “has the right flow.” They also work on “task analysis”—exactly what one would do to teach a child to do something, for example, brush his or her teeth. Peters notes that this assignment does show students what they are missing in their writing.
Young’s class focuses more on usability through assessing success in debate through bi-weekly “write arounds.” For example, in response to an article on landforms, each student in turn offers a written opinion based on facts to which the next student responds in writing, again citing facts as support. The last person synthesizes the entire writing. If everyone agrees, for example, the last person explains why. “They’ll debate it around . . . or they’ll all agree, which drives me crazy. I wished they’d play devil’s advocate, but I haven’t taught them that,” Young admits.

Even though their usability testing is elementary, both in production and analysis, Peters and Young’s students are discovering the importance of “testing out” one’s writing, ideally with the audience for which it was intended. They are learning that a piece of writing is probably not at its most effective even though they have written the last word and put a period. Beginning writers are often so relieved to be finished with a writing task that they resist taking another look at the document they have produced or having someone else evaluate it if that means having to work on it some more. They have an idea that because they are finished with a first draft, it is “complete.” So challenging these students to defend their work (or ideas) forces them to see those ideas as others see them and to think about those ideas in new ways.

Emphasis on Presenting

Both Peters and Young’s students have lots of opportunities to present their work, whether it be through sharing PowerPoints or projects, participating in a readers’ theater, or simply reading a paper they wrote.

*Relevant TEKS standards.* According to the second grade TEKS, students should be able to communicate orally to different audiences for different purposes,
including informal/practical situations, as well as share ideas in a discussion and summarize. They should be able to express themselves clearly and use visual props to support their verbal expression. And they should be able to present dramatic interpretations based on experiences or literature. (See Table 6-10.)

*Peters and Young’s experience with presenting.* Both Peters and Young’s students have lots of opportunities to present their work. Once a semester Peters works with her students on building PowerPoints, teaching them how to put text in and add clip art and slide transitions. Throughout the year, at the end of their writing process, they can choose to share in front of a group. Some will not, though, until the end of the semester.

Young’s students have “Fluency Friday.” Every time they do a project they have an opportunity to present it. They do a readers’ theater every Friday. “They’re always presenting to me,” says Young.

By setting aside time to focus on presentation by teaching their students how to create PowerPoints or by designating a particular day for presentations, Peters and Young are reinforcing with their students the value of sharing what they have written as well as the concept that what they have written has value. These students anticipate sharing their writing with an audience from the time they begin brainstorming on the assignment. They also become comfortable with speaking to a group because they can practice this skill frequently in a supportive, controlled setting, knowing that their audience will be tolerant and respectful (because they have to be).
Table 6-1

Analysis of 2nd grade curriculum emphasis on understanding communication situation

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
<th>Sample of approaches to coverage in 2nd grade activities</th>
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</thead>
</table>
| **Understand situation requiring communication** | §110.4. English Language arts and Reading, Grade 2. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3); (C) ask and answer relevant questions and make contributions in small or large group discussions (K-3); (D) present dramatic interpretations of experiences, stories, poems, or plays (K-3); and  
(12) Reading inquiry/research. The student generates questions and conducts research using information from various sources. The student is expected to: (A) identify relevant questions for inquiry such as "Why do birds build different kinds of nests?" (K-3); (B) use alphabetical order to locate information (1-3); (C) recognize and use parts of a book to locate information, including table of contents, chapter titles, guide words, and indices (1-3); (D) use multiple sources, including print such as an encyclopedia, technology, and experts, to locate information that addresses questions (2-3); (E) interpret and use graphic sources of information such as maps, charts, graphs, and diagrams (2-3); (F) locate and use important areas of the library media center (2-3); (G) demonstrate learning through productions and displays such as murals, written and oral reports, and dramatizations (2-3); and (H) draw conclusions from information gathered (K-3). | • Discuss destinations for letters they write and environment of recipients  
• Work through involved role-playing scenarios |

(2.12) Underlying processes and mathematical tools. The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to: (A) identify the mathematics in everyday situations; (B) solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness; |
<table>
<thead>
<tr>
<th>Principle</th>
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<th>Sample of approaches to coverage in 2\textsuperscript{nd} grade activities</th>
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</thead>
</table>
| **Understand situation requiring communication** | §112.4. Science, Grade 2.  
(2) Scientific processes. The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to: (A) ask questions about organisms, objects, and events; (B) plan and conduct simple descriptive investigations; (C) compare results of investigations with what students and scientists know about the world; (D) gather information using simple equipment and tools to extend the senses; (E) construct reasonable explanations and draw conclusions using information and prior knowledge; and (F) communicate explanations about investigations. | |
| | §113.4. Social Studies, Grade 2.  
(19) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. | |
<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
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<tbody>
<tr>
<td><strong>Define audience</strong></td>
<td>§110.4. English Language arts and Reading, Grade 2.</td>
<td>• Discuss examples of audiences students can relate to like other students and generally how to tailor work for them</td>
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<td>(students carefully consider the background and attitude of the person they are communicating with to ensure that they connect with that person)</td>
<td>(3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3);</td>
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<td></td>
<td>(14) Writing/purposes. The student writes for a variety of audiences and purposes, and in various forms. The student is expected to: (C) write to communicate with a variety of audiences (1-3); and</td>
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<td></td>
<td>(2.13) Underlying processes and mathematical tools. The student communicates about Grade 2 mathematics using informal language. The student is expected to: (B) relate informal language to mathematical language and symbols</td>
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<tr>
<td><strong>Clarify purpose</strong></td>
<td>§110.4. English Language arts and Reading, Grade 2.</td>
<td>• Provide concrete purposes that students can relate to so students immediately see benefit</td>
</tr>
<tr>
<td>(students clarify what they want to accomplish with their writing in relation to an audience)</td>
<td>(1) Listening/speaking/purposes. The student listens attentively and engages actively in a variety of oral language experiences. The student is expected to: (A) determine the purpose(s) for listening such as to get information, to solve problems, and to enjoy and appreciate (K-3);</td>
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<td></td>
<td>(3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3);</td>
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(table continues)
Clarify purpose
(students clarify what they want to accomplish with their writing in relation to an audience)

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<tr>
<th>Principle</th>
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<th>Samples of approaches to coverage in 2&lt;sup&gt;nd&lt;/sup&gt; grade activities</th>
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<tr>
<td>9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to: (B) establish purposes for reading and listening such as to be informed, to follow directions, and to be entertained (K-3);</td>
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<tr>
<td>11) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts. The student is expected to: (A) distinguish different forms of texts, including lists, newsletters, and signs and the functions they serve (K-3); (B) identify text as written for entertainment (narrative) or for information (expository) (2);</td>
<td></td>
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<tr>
<td>14) Writing/purposes. The student writes for a variety of audiences and purposes, and in various forms. The student is expected to: (D) write in different forms for different purposes such as lists to record, letters to invite or thank, and stories or poems to entertain (1-3).</td>
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<tr>
<td>19) Writing/evaluation. The student evaluates his/her own writing and the writing of others. The student is expected to: (C) determine how his/her own writing achieves its purposes (1-3);</td>
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<tr>
<td>20) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to: (D) compile notes into outlines, reports, summaries, or other written efforts using available technology (2-3).</td>
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§113.4. Social Studies, Grade 2.

(18) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to: (B) create written and visual material such as stories, poems, maps, and graphic organizers to express ideas.
Table 6-3

Analysis of 2\textsuperscript{nd} grade curriculum emphasis on collaborating

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2\textsuperscript{nd} grade TEKS</th>
<th>Samples of approaches to coverage in 2\textsuperscript{nd} grade activities</th>
</tr>
</thead>
</table>
| Collaborate (students work in groups to accomplish a task or assignment) | §110.4. English Language arts and Reading, Grade 2.  
(3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to:  
(C) ask and answer relevant questions and make contributions in small or large group discussions (K-3);  
(19) Writing/evaluation. The student evaluates his/her own writing and the writing of others. The student is expected to:  
(A) identify the most effective features of a piece of writing using criteria generated by the teacher and class (1-3);  
(B) respond constructively to others’ writing (1-3); | • Carry out elaborate social studies projects involving collaboration  
• Collaborate regularly for math, writing, and other learning activities  
• Peer critique writing |
| | §113.4. Social Studies, Grade 2.  
(19) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and  
(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. | |
| | §126.2. Technology Applications, Kindergarten-Grade 2.  
(8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:  
(A) use communication tools to participate in group projects; and | |
**Table 6-4**

**Analysis of 2nd grade curriculum emphasis on gathering and evaluating needed resources**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
</tr>
</thead>
</table>
| **Gather and evaluate needed resources** (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not) | §110.4. English Language arts and Reading, Grade 2.  
(7) **Reading/variety of texts.** The student reads widely for different purposes in varied sources. The student is expected to:  
(B) read from a variety of genres for pleasure and to acquire information from both print and electronic sources (2-3); and  
(9) **Reading/comprehension.** The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to:  
(B) establish purposes for reading and listening such as to be informed, to follow directions, and to be entertained (K-3);  
(11) **Reading/text structures/literary concepts.** The student analyzes the characteristics of various types of texts. The student is expected to:  
(A) distinguish different forms of texts, including lists, newsletters, and signs and the functions they serve (K-3);  
(B) identify text as written for entertainment (narrative) or for information (expository) (2);  
(12) **Reading inquiry/research.** The student generates questions and conducts research using information from various sources. The student is expected to:  
(A) identify relevant questions for inquiry such as "Why do birds build different kinds of nests?" (K-3);  
(B) use alphabetical order to locate information (1-3);  
(C) recognize and use parts of a book to locate information, including table of contents, chapter titles, guide words, and indices (1-3);  
(D) use multiple sources, including print such as an encyclopedia, technology, and experts, to locate information that addresses questions (2-3);  
(E) interpret and use graphic sources of information such as maps, charts, graphs, and diagrams (2-3);  
(F) locate and use important areas of the library media center (2-3); | • Learn “Big 6” approach to research (through librarian): task definition, information-seeking strategies, location and access, use of information, synthesis, evaluation  
• Use online subscription references in limited way  
• Use online encyclopedias for research  
• Use the Web for research in preference to print  
• Discuss credibility regarding websites more than specific articles |

*(table continues)*
Table 6-4 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gather and evaluate needed resources (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not)</td>
<td>(20) <strong>Writing/inquiry/research.</strong> The student uses writing as a tool for learning and research. The student is expected to: (A) write or dictate questions for investigating (2-3); (B) record his/her own knowledge of a topic in various ways such as by drawing pictures, making lists, and showing connections among ideas (K-3); (C) take simple notes from relevant sources such as classroom guests, information books, and media sources (2-3); and</td>
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§111.14. **Mathematics, Grade 2.**
(2.11) **Probability and statistics.** The student organizes data to make it useful for interpreting information. The student is expected to: (B) draw conclusions and answer questions based on picture graphs and bar-type graphs; and

§112.4. **Science, Grade 2.**
(2) **Scientific processes.** The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to: (A) ask questions about organisms, objects, and events; (B) plan and conduct simple descriptive investigations; (D) gather information using simple equipment and tools to extend the senses;

(6) **Science concepts.** The student knows that systems have parts and are composed of organisms and objects. The student is expected to: (C) observe and record the functions of plant parts; and (D) observe and record the functions of animal parts.

(7) **Science concepts.** The student knows that many types of change occur. The student is expected to: (A) observe, measure, record, analyze, predict, and illustrate changes in size, mass, temperature, color, position, quantity, sound, and movement; (D) observe, measure, and record changes in weather, the night sky, and seasons.

§113.4. **Social Studies, Grade 2.**
(2) **History.** The student understands the concepts of time and chronology. The student is expected to: (C) create and interpret timelines; and

(table continues)
Table 6-4 (continued).

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<tbody>
<tr>
<td>Gather and evaluate needed resources</td>
<td>(17) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to: (A) obtain information about a topic using a variety of oral sources such as conversations, interviews, and music; (B) obtain information about a topic using a variety of visual sources such as pictures, graphics, television, maps, computer software, literature, reference sources, and artifacts; (C) use various parts of a source, including the table of contents, glossary, and index, as well as keyword computer searches, to locate information; (19) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision</td>
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<td>§126.2. Technology Applications, Kindergarten-Grade 2. (4) Information acquisition. The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to: (A) apply keyword searches to acquire information; and (B) select appropriate strategies to navigate and access information for research and resource sharing. (5) Information acquisition. The student acquires electronic information in a variety of formats, with appropriate supervision. The student is expected to: (A) acquire information including text, audio, video, and graphics; and (B) use on-line help. (6) Information acquisition. The student evaluates the acquired electronic information. The student is expected to: (A) determine the success of strategies used to acquire electronic information; and (B) determine the usefulness and appropriateness of digital information. (8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to: (B) use electronic tools and research skills to build a knowledge base regarding a topic, task, or assignment</td>
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Table 6-5

Analysis of 2nd grade curriculum emphasis on analyzing and organizing information

<table>
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<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze and organize information</td>
<td>§110.4. English Language arts and Reading, Grade 2.</td>
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<td>(4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to: (B) clarify and support spoken messages using appropriate props such as objects, pictures, or charts (K-3); and © retell a spoken message by summarizing or clarifying (K-3).</td>
<td>• Provide graphic organizers to lead students through process</td>
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<tr>
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<td>(9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to: (E) draw and discuss visual images based on text descriptions (1-3); (H) produce summaries of text selections (2-3); and (I) represent text information in different ways, including story maps, graphs, and charts (2-3).</td>
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<td>(10) Reading/literary response. The student responds to various texts. The student is expected to: (B) demonstrate understanding of informational text in various ways such as through writing, illustrating, developing demonstrations, and using available technology (2-3);</td>
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<td>12) Reading inquiry/research. The student generates questions and conducts research using information from various sources. The student is expected to: (G) demonstrate learning through productions and displays such as murals, written and oral reports, and dramatizations (2-3); and (H) draw conclusions from information gathered (K-3).</td>
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<td></td>
<td>(2.11) Probability and statistics. The student organizes data to make it useful for interpreting information. The student is expected to: (A) construct picture graphs and bar-type graphs;</td>
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<td></td>
<td>(2.12) Underlying processes and mathematical tools. The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:</td>
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(table continues)
Table 6-5 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
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</thead>
<tbody>
<tr>
<td><strong>Analyze and organize information</strong> (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships)</td>
<td>(B) solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness; (C) select or develop an appropriate problem-solving plan or strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem; and (2.13) <strong>Underlying processes and mathematical tools.</strong> The student communicates about Grade 2 mathematics using informal language. The student is expected to: (A) explain and record observations using objects, words, pictures, numbers, and technology; and (2.14) <strong>Underlying processes and mathematical tools.</strong> The student uses logical reasoning. The student is expected to justify his or her thinking using objects, words, pictures, numbers, and technology.</td>
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<tr>
<td><strong>§112.4. Science, Grade 2.</strong> (2) <strong>Scientific processes.</strong> The student develops abilities necessary to do scientific inquiry in the field and the classroom. The student is expected to: (C) compare results of investigations with what students and scientists know about the world; (E) construct reasonable explanations and draw conclusions using information and prior knowledge; and (F) communicate explanations about investigations. (3) <strong>Scientific processes.</strong> The student knows that information and critical thinking are used in making decisions. The student is expected to: (A) make decisions using information; (B) discuss and justify the merits of decisions; and (C) explain a problem in his/her own words and identify a task and solution related to the problem. (5) <strong>Science concepts.</strong> The student knows that organisms, objects, and events have properties and patterns. The student is expected to: (A) classify and sequence organisms, objects, and events based on properties and patterns; and (B) identify, predict, replicate, and create patterns including those seen in charts, graphs, and numbers.</td>
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<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
</tr>
</thead>
</table>
| **Analyze and organize information**  
(students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | (10) **Science concepts.** The student knows that the natural world includes rocks, soil, water, and gases of the atmosphere. The student is expected to:  
(A) describe and illustrate the water cycle; and  

§113.4. **Social Studies, Grade 2.**  
(2) **History.** The student understands the concepts of time and chronology. The student is expected to:  
(C) create and interpret timelines; and  

(3) **History.** The student understands how various sources provide information about the past. The student is expected to:  
(B) compare various interpretations of the same time period using evidence such as photographs and interviews.  

5) **Geography.** The student uses simple geographic tools such as maps, globes, and photographs. The student is expected to:  
(B) draw maps to show places and routes.  

(17) **Social studies skills.** The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:  
(D) sequence and categorize information; and  
(E) interpret oral, visual, and print material by identifying the main idea, predicting, and comparing and contrasting.  

(19) **Social studies skills.** The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and  
(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. |
### Table 6-6

**Analysis of 2nd grade curriculum emphasis on determining best format**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
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<tbody>
<tr>
<td><strong>Determine best format</strong></td>
<td>(with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, PowerPoint, report, manual, brochure, proposal, or procedure, etc.) §110.4. English Language arts and Reading, Grade 2. (11) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts. The student is expected to: (A) distinguish different forms of texts, including lists, newsletters, and signs and the functions they serve (K-3); 12) Reading inquiry/research. The student generates questions and conducts research using information from various sources. The student is expected to: (G) demonstrate learning through productions and displays such as murals, written and oral reports, and dramatizations (2-3); and (20) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to: (B) record his/her own knowledge of a topic in various ways such as by drawing pictures, making lists, and showing connections among ideas (K-3); (20) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to: (D) compile notes into outlines, reports, summaries, or other written efforts using available technology (2-3). §113.4. Social Studies, Grade 2. (18) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to: (B) create written and visual material such as stories, poems, maps, and graphic organizers to express ideas. §126.2. Technology Applications, Kindergarten-Grade 2. (11) Communication. The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to: (A) publish information in a variety of media including, but not limited to, printed copy or monitor display; and (B) publish information in a variety of media including, but not limited to, stored files or video.</td>
<td>• Often choose formats—poetry, letter, story, brochure, PowerPoint, poster, readers’ theater</td>
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<tr>
<td>Principle</td>
<td>Coverage in 2nd grade TEKS</td>
<td>Samples of approaches to coverage in 2nd grade activities</td>
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<td><strong>Select communication style</strong>&lt;br&gt; (with audience and purpose in mind, students decide level of formality; use style principles: active voice, conciseness, action in verb rather than noun, actor as subject, etc.)</td>
<td>§110.4. English Language arts and Reading, Grade 2.&lt;br&gt;(3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to:&lt;br&gt;(A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3);&lt;br&gt;(B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3);&lt;br&gt;(18) Writing/writing processes. The student selects and uses writing processes for self-initiated and assigned writing. The student is expected to:&lt;br&gt;(C) revise selected drafts for varied purposes, including to achieve a sense of audience, precise word choices, and vivid images (1-3);</td>
<td>• Strive to choose words that best convey the student’s perspective</td>
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<td>§111.14. Mathematics, Grade 2.&lt;br&gt;(2.13) Underlying processes and mathematical tools. The student communicates about Grade 2 mathematics using informal language. The student is expected to:&lt;br&gt;(B) relate informal language to mathematical language and symbols</td>
<td></td>
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<td>§112.4. Science, Grade 2.&lt;br&gt;(3) Scientific processes. The student knows that information and critical thinking are used in making decisions. The student is expected to:&lt;br&gt;(C) explain a problem in his/her own words and identify a task and solution related to the problem</td>
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### Table 6-8

**Analysis of 2\textsuperscript{nd} grade curriculum emphasis on selecting design elements**

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<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2\textsuperscript{nd} grade TEKS</th>
<th>Samples of approaches to coverage in 2\textsuperscript{nd} grade activities</th>
</tr>
</thead>
</table>
| **Select design elements** (with audience and purpose in mind, students decide how to strategically use color, informative headings, graphics, bulleted/numbered lists, fonts, white space; use design principles: single space, double space between paragraphs, no indentions, ; no all-capitals or centering) | §110.4. English Language arts and Reading, Grade 2. 
(4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to:
(B) clarify and support spoken messages using appropriate props such as objects, pictures, or charts (K-3); and  
(9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to:
(E) draw and discuss visual images based on text descriptions (1-3);  
(I) represent text information in different ways, including story maps, graphs, and charts (2-3).  

(2.11) Probability and statistics. The student organizes data to make it useful for interpreting information. The student is expected to:
(A) construct picture graphs and bar-type graphs;  

(2.13) Underlying processes and mathematical tools. The student communicates about Grade 2 mathematics using informal language. The student is expected to:
(A) explain and record observations using objects, words, pictures, numbers, and technology; and  

(2.14) Underlying processes and mathematical tools. The student uses logical reasoning. The student is expected to justify his or her thinking using objects, words, pictures, numbers, and technology.  

§112.4. Science, Grade 2.  
(10) Science concepts. The student knows that the natural world includes rocks, soil, water, and gases of the atmosphere. The student is expected to:
(A) describe and illustrate the water cycle; and  |

* (table continues)
Table 6-8 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
</tr>
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<tbody>
<tr>
<td>Select design elements (with audience and purpose in mind, students decide how to strategically use color, informative headings, graphics, bulleted/numbered lists, fonts, white space; use design principles: single space, double space between paragraphs, no indentions; no all-caps or centering)</td>
<td>§113.4. Social Studies, Grade 2.  (2) History. The student understands the concepts of time and chronology. The student is expected to: (C) create and interpret timelines; and 5) Geography. The student uses simple geographic tools such as maps, globes, and photographs. The student is expected to: (B) draw maps to show places and routes.  (18) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to: (B) create written and visual material such as stories, poems, maps, and graphic organizers to express ideas</td>
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<td>§126.2. Technology Applications, Kindergarten-Grade 2.  (10) Communication. The student formats digital information for appropriate and effective communication. The student is expected to: (A) use font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience; and (B) use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays and printed materials.</td>
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### Table 6-9

**Analysis of 2nd grade curriculum emphasis on usability testing**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
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</table>
| **Do usability testing** (students “test drive” what they wrote to see if it does what they want it to—that they connect with the audience and accomplish their purpose) | §110.4. English Language arts and Reading, Grade 2. (a) (19) **Writing/evaluation**. The student evaluates his/her own writing and the writing of others. The student is expected to: (C) determine how his/her own writing achieves its purposes (1-3); | • Periodically return to documents to assess whether own writing is cohesive  
• Verify completeness of “how-to” documents  
• Analyze validity of arguments |
|  | §111.14. Mathematics, Grade 2. (2.12) **Underlying processes and mathematical tools**. The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to: (B) solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness; |  |
|  | §113.4. Social Studies, Grade 2. (19) **Social studies skills**. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and |  |
Table 6-10

**Analysis of 2nd grade curriculum emphasis on presenting**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 2nd grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
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</table>
| **Present** (students orally deliver what they produced to a group) | §110.4. English Language arts and Reading, Grade 2. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3); (C) ask and answer relevant questions and make contributions in small or large group discussions (K-3); (D) present dramatic interpretations of experiences, stories, poems, or plays (K-3); and (4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to: (B) clarify and support spoken messages using appropriate props such as objects, pictures, or charts (K-3); and (C) retell a spoken message by summarizing or clarifying (K-3). | - Share PowerPoints and other projects they’ve created  
- Read documents they have written to the class  
- Present readers’ theaters |
| **12) Reading inquiry/research** The student generates questions and conducts research using information from various sources. The student is expected to: (G) demonstrate learning through productions and displays such as murals, written and oral reports, and dramatizations (2-3); and | §113.4. Social Studies, Grade 2. (18) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to: (A) express ideas orally based on knowledge and experiences; and |
CHAPTER 7

THIRD GRADE CURRICULUM EMPHASIS ON PROFESSIONAL WRITING PRINCIPLES

TAKS: Reading (Mar. 3) and Math (Apr. 28)

In third grade, reading and math dominate the curriculum because students take their first TAKS in these areas, so it is “hard to find balance when trying to fit in everything,” says Kelly White* (personal communication, February 6, 2008). Since in fourth grade, students will be writing primarily personal narratives in preparation for the Writing TAKS, the emphasis in third grade is on getting stories “focused” and “add[ing] detail” through reading models. Teachers emphasize “show, not tell.” White has been teaching nine years and holds a bachelor’s degree in Elementary Education.

Mary Garcia* and Linda Blevins* both teach third grade at a school in the same neighborhood as White’s school. Garcia is a veteran, having taught seventeen years, and holds a bachelor’s degree in Health Education (personal communication, March 22, 2008). Blevins entered the teaching field three years ago after working in marketing. She earned a bachelor’s degree in Art Education and another one in Marketing (personal communication, March 22, 2008). Like Blevins, Anna Guirguis entered teaching three years ago after working as an accountant, having earned bachelor’s degrees in Accounting and Education (personal communication, April 18, 2008).
Summary of How Teaching Experiences Correspond to the Study Professional Writing Principles and the TEKS

By designing assignments that are “interconnected,” White and her colleagues ensure their students understand the communication situation for most assignments. But while the TEKS indicate students should be routinely tailoring their communication to particular audiences for particular purposes, these four teachers focus somewhat sporadically on understanding their audience and then modifying content as required, as opposed to more in-depth sentence elements. They focus broadly but more consistently on purpose.

Their students participate in a variety of oral and written collaborative activities, the frequency of which depends on the students’ ability to cooperate. Due to equipment and training limitations, however, they don’t participate in the online collaboration the TEKS suggest.

While their students spend time learning how to gather resources, primarily as part of several year-end projects, they do not spend time evaluating these resources. The students learn about how to use print and online indexes to locate resources in library and resource books and on the Internet, how to use a basic citation format, and how to paraphrase. Although the TEKS indicate students should be analyzing information they gather from research as well as manipulating it in various ways, third graders are doing well to determine which information is important and then attempt to paraphrase it. White and her colleagues help their students with organization by providing structured, often individual assistance.
Third graders do have the opportunity to choose the format for their work, usually within a prescribed range, including limited technological options. However, students do not usually have the audience in mind when selecting a format although they may consider their communication purpose. They do study textual features of different genres to become more familiar with them. They examine communication style in a limited way through literary models they study; however, this is far from the intentional audience-directed language and delivery the TEKS require students to produce. While these teachers do have their students create graphics at different stages of a learning activity, they do not focus on tailoring design for an audience through font, color, or white space. Since they lack enough computers and a color printer in their classrooms, their students cannot easily work on these design elements.

The follow-through evaluation the TEKS suggest to monitor writing and problem solutions is not typically part of these teachers’ curriculum.

White and her three fellow teachers’ students have frequent opportunities to present their work, although their sharing is more writer focused than audience focused, more to give them an opportunity to speak in front of a group as well as develop skills as an audience.

Emphasis on Understanding Situation Requiring Communication

By designing assignments that are “interconnected,” these four teachers ensure their students understand the communication situation for most assignments.

*Relevant TEKS standards.* According to the third grade TEKS, students should be gaining a complete understanding of communication situations pertaining to assignments in all the areas they study--language arts, math, social studies, and
science. (See Table 7-1.) In language arts, they should understand the communication situation sufficiently to effectively communicate with their audience through language and tone in discussions. In science, they should be able to plan and implement an investigation. And in math and social studies they should have the opportunity to work through a problem to its solution and even evaluate the effectiveness or reasonableness of that solution.

White, Garcia, Blevins, and Guirguis’ experiences with understanding communication situation. The writing assignments Garcia and Blevins tend to make are “very interconnected” with subject areas they have already taught, so “there’s nothing ‘out of left field.’” Therefore, their students typically understand the communication situation since it flows naturally from their learning environment. Students do write letters several times a year. One this year was a thank-you to the Make a Wish Foundation during social sciences and the other was a goodbye letter to a fellow student who was moving. Again, since their students are familiar with the circumstances, Garcia and Blevins typically just remind students to include a “heading, body, and close.”

Guirguis takes a group approach to helping students understand the rhetorical situation. She begins every week with a new topic about which her students will write. They begin by brainstorming on the white board as a class. “Everyone contributes something they know about it or think is cool about it,” she explains. This way she reinforces that writing is a process—“they don’t just start writing.”

By consistently drawing writing assignments from their students’ current learning environment, these instructors can create a communication situation that the students
can easily relate to—a comfortable situation the students can interpret themselves and for which the variables are readily apparent, thus minimizing the frantic “I don't know what to do” and setting up even hesitant writers for success. When Guirguis solicits the entire class’s input in brainstorming, she is also enabling all students to become aware of variables in the writing situation that they might not have thought of on their own. She is creating a non-threatening environment conducive to asking questions and thus further fleshing out the communication situation.

Emphasis on Defining Audience and Clarifying Purpose

While the TEKS indicate students should be routinely tailoring their communication to particular audiences for particular purposes, White and her colleagues focus somewhat sporadically on understanding their audience and then modifying content as required, as opposed to more in-depth sentence elements. They focus broadly but more consistently on purpose.

Relevant TEKS standards. According to the third grade TEKS, students should be able to communicate orally and in writing to different audiences for different purposes (e.g., to record, to invite or thank, to entertain), revising word choices and delivery as needed to better reach their audience. (See Table 7-2.)

White, Garcia, Blevins, and Guirguis’ experiences defining audience. These teachers do not address audience for every assignment and do not define the audience in detail, although when they do address audience, they spend time trying to help their students understand the communication situation from that audience’s perspective. Guirguis wants her students to “first focus on how they feel about the topic and write from the heart.” She notes that at the beginning of the school year, many of
her students will write two or three sentences and then stop, which is why she emphasizes brainstorming as a class and then understanding what a rough draft is. After they have exhausted their own feelings, then she addresses whether she “underst[ood] what they meant, felt what they felt.”

Guirguis tells her students who the audience is but does not go into “that much depth.” “Sometimes it’s me; sometimes it’s their classmates,” she comments. One project for which they really focused on audience was a project called Kid Council for which they had to elect a third grade mayor. They all had to tell the candidates which changes they wanted (cleaner bathrooms, stop bullying) and why they wanted those changes.

When writing to the soldiers in the Middle East, White’s students discuss what kinds of things the soldiers would expect to read and what would be appropriate or inappropriate. Blevins has worked on audience when she had her students write from the perspective of a once-favorite gift that is now neglected. She got the idea from an advertisement for a shower. The “lonely loofa” was bewailing its neglected state. She gave them another example of the “lonely Christmas stamp” that was never used except once a year.

Blevins attended a Dallas/Fort Worth Literary Workshop at which she was introduced to Ruth Culham’s “6 + 1 traits” (ideas, organization, voice, word choice, sentence fluency, conventions + presentation). She really likes Culham’s RAFTS acronym (Role, Audience, Format, Topic, Strong Verb), but she has not been able to “invest” in it because of TAKS and her reading and math curriculum requirements. Blevins likes RAFTS because it sets up audience and purpose so clearly for many
subject areas. She notes one of the math examples given at the workshop: “You’re a 3-D solid in a fight with other solids. Explain why you’re better.”

When these teachers spend time helping their third graders understand the audience’s perspective, the students are defining the audience. Even if that audience is someone they do not know personally (another third grader running for “mayor,” a soldier) or even an inanimate object (a loofa, a stamp, a 3-D solid), the students, with some coaching, can look at the communication situation from that audience’s perspective. However being able and then actually willing to consider the audience’s view requires a degree of maturity that even some adults do not have.

*White, Garcia, Blevins, and Guirguis’ experiences clarifying purpose.*

In discussing purpose, White focuses on the traditional “to inform, express, entertain, or persuade” and especially examines purpose when discussing models that they read, as does Blevins. Guirguis makes sure her students understand their purpose for each writing assignment—whether it be informative (what they did over Spring Break) or persuasive (why they should get more recess).

Garcia does not spend too much time on purpose or audience; their job in third grade (the first year they’re tested for TAKS) is to make the students literate, she emphasizes.

By placing communication purposes in categories, these four teachers help their students understand their purpose in a broader sense. These teachers provide their students with a common vocabulary with which to discuss their writing and compare their communication goals to their classmates’ goals as well as assess whether they are
actually accomplishing their goal. White and her colleagues are also reinforcing to their students the idea that all communication has a purpose.

Emphasis on Collaborating

These four teachers’ students participate in a variety of oral and written collaborative activities, the frequency of which depends on the students’ ability to cooperate. Due to equipment and training limitations, however, they don’t participate in the online collaboration the TEKS suggest.

*Relevant TEKS standards.* According to the third grade TEKS, students should be able to participate constructively in group projects through oral, written, and online discussions. (See Table 7-3.)

*White, Garcia, Blevins, and Guirguis’ experiences with collaborating.* These teachers’ students participate in a variety of collaborative activities, the frequency of which depends on the students’ ability to cooperate. During the week, Guirguis’ students work together a lot on reading, math, grammar, spelling, and vocabulary centers. When they are writing, they do peer editing with a partner. They also work together on readers’ theaters with a group of three or four other students. Garcia does a “write around the room” activity in response to a text they are reading. Each person writes a comment and passes it around for others to respond to. Blevins’ students collaborate in a limited way in science when working on non-fiction in “read/pair/share.”

Both Blevins and Garcia agree that the amount of time they spend on collaborative activities depends on the students they have that year. This year, Garcia’s students work well together, so they do a lot of collaboration, especially with math to “think it through or talk it through.” Blevins, however, has a group of students this year
who are “harsh to each other” with “too many leaders and not enough followers,” so they do not work well together.

Since cooperation is critical to collaborative success, students must be able to work together to justify using class time for collaborative activities. By modeling and role playing productive collaborative behavior and possibly creating collaboration “rules” (with students’ input), White and her colleagues can guide their students toward positive collaborative outcomes.

Emphasis on Gathering and Evaluating Needed Resources

While these teachers’ students spend time learning how to gather resources, primarily as part of some year-end projects, they do not spend time evaluating those resources. The students do learn how to use print and online indexes to locate resources in library and resource books and on the Internet, how to use a basic citation format, and how to paraphrase.

Relevant TEKS standards. According to the third grade TEKS, students should be able to intentionally listen to and read from a variety of print and electronic genres to gain information. In language arts and social sciences, they should practice research skills including structuring an inquiry and locating, navigating through, and evaluating text and graphics in print or electronic form as well as human resources. In math and science, they should also collect information by observing and measuring. (See Table 7-4.)

White, Garcia, Blevins, and Guirguis’ experiences gathering and evaluating needed resources. While all of the teachers spend time teaching how to gather resources, none spends time teaching how to evaluate them. This omission does not
concern Garcia, however, who notes that the firewall in place on the school’s computers allows the students to “only see what we let them see.”

White’s students do an animal research project for which they must visit the library for their sources and cite them. Garcia’s and Blevins’ students research Kawanza, Hanukkah, the rain forest, inventors, and their science project. Before Guirguis’ students begin their research project, they have a week-long lesson on how to identify different types of available resources (encyclopedia, Internet, library books) and how to use them, including how to paraphrase and document. She has created a form for them to use for taking notes that begins by having them write down the Internet address. (See the Library Media Specialist’s contributions to this area at the end of chapter 9.)

Spending a concentrated amount of time teaching third graders about research genres and their use and documentation provides students a foundation they can build on throughout their academic careers. After the demanding work of teaching paraphrasing and documentation and closely monitoring their students as they practice these skills, teachers are likely exhausted and possibly leery of introducing techniques for evaluating sources.

But if third graders are presented with only “acceptable” sources to research, how will they learn to assess source credibility? How will the important step of questioning what they see in print and what is presented as “fact” become ingrained? Even if teachers briefly pointed out major credibility indicators like the author’s credentials, the site’s level of bias, and the sponsoring organization’s influence, beginning researchers could begin to develop these essential evaluation skills.
Students at this age love to use clues to solve puzzles (the site’s credibility) and especially enjoy discrediting something through their “detective work.”

**Emphasis on Analyzing and Organizing Information**

Although the TEKS indicate students should be *analyzing* information they gather from research as well as manipulating it in various ways, third graders are doing well to determine which information is important and then attempt to paraphrase it. White and her fellow teachers help their students with organization by providing structured, often individual assistance.

**Relevant TEKS standards.** According to the third grade TEKS, in all their subject areas (language arts, math, science, and social studies), students should be able to critique documents and theories, generalize from and summarize information, as well as draw conclusions from information they have gathered. They should be able to determine and carry out appropriate problem-solving strategies, using software when required. They should also be able to organize information in textual and graphic forms to convey relationships as well as create and interpret graphics, using appropriate software when required, to complement text. (See Table 7-5.)

*White, Garcia, Blevins, and Guirguis’ experiences with analyzing and organizing information.* White and her colleagues help their students with organization by providing structured, often individual assistance. Garcia comments that she has to “hold their hands” through the organization process.

White generally leads her students through an organization activity like writing different paragraphs on different sheets of paper and then deciding in which order to place them. Blevins conferences with her students about the information they obtain
working on their solar system project, for example. “Some have got it [using research and paraphrasing],” she observes; however, many know only how to copy information, so she must discuss plagiarism and write with them, taking their bullet points and turning them into sentences.

Guirguis makes an outline for her students to follow. They discuss “taking out important details”—“something you’d put in a summary”—and putting those in notes in paraphrased form. They practice as a class by writing such details on colorful post-it notes and putting them on a poster. At first their information is “all over the place,” notes Guirguis. Then they work in conference with Guirguis on creating an order with a main idea, information, and a restating of the main idea.

Determining what is “important” when doing research can be a challenge for third graders, especially when what is interesting to them might not also be “important.” Their teachers can help by pointing out text clues like headings and topic sentences that direct the audience to what’s important. Paraphrasing that important information is often challenging for college students, so the earlier students can begin practicing this skill, the better. The paraphrasing and organization modeling and individualized monitoring these teachers do with their students curtail bad habits that might form.

Emphasis on Determining Best Format

Third graders do have the opportunity to choose the format for their work, usually within a prescribed range, including limited technological options. However, students do not usually have the audience in mind when selecting a format, although they may consider their communication purpose. They do study textual features of different genres to become more familiar with them.
Relevant TEKS standards. According to the third grade TEKS, students should be able to select or create different types of props to support speeches and math explanations. They should learn about the distinguishing features of different genres through reading and be able to create them for language arts and social sciences activities. And they should be able to represent text and concepts in different graphic forms, including technological forms. (See Table 7-6.)

White, Garcia, Blevins, and Guirguis’ experiences with determining best format. White, Garcia, and Blevins allow their students some choice in determining the format in which to present their work. White’s students can write assignments in different genres, for example, a song or narrative poem. They often talk about the features of the text in writing and reading. For example, when looking at a newspaper, they discuss the title and different parts of the pages and sections and determine what each is for.

Blevins’ students really like the RAFTS approach mentioned above because it provides a variety of writing scenarios with many format options so students can pick the format they like (e.g., speech, song, poem, play). She notes that when her students can pick the genre they want, “they’re buying into it more because they like it. The writing isn’t as much of a chore.” Garcia adds that allowing them to choose their format “helps them focus on writing, so when they get to fourth grade [and the writing TAKS test], they can do it.”

Guirguis does not give her students many options to choose their own format, although they do have the option to “publish” (by typing their writing on the computer, printing, and binding it) and allow others in the class to read it. The TEKS also require the students to create at least two PowerPoints during the year.
The more choices third graders have regarding their writing assignments, the more control they may feel over their writing. They are able to choose a format that complements their topic or one in which they simply like to create their projects. By providing these opportunities for positive interactions with writing, White and her colleagues are encouraging their students to write more and to write better—better-edited work but more importantly at this stage, more thoughtful work.

Emphasis on Selecting Communication Style

These four teachers’ students study communication style in a limited way through the literary models they study; however, this is far from the intentional audience-directed language and delivery the TEKS require students to produce.

Relevant TEKS standards. According to the third grade TEKS, students should be able to use spoken language and delivery that are appropriate to a particular audience, purpose, and occasion, including being able to explain math concepts to a layperson. They should also be able to tailor word choices in writing for a particular audience. (See Table 7-7.)

White, Garcia, Blevins, and Guirguis’ experiences with selecting communication style. None of the teachers discusses communication style at length. When writing their animal report, White’s students discuss the way the encyclopedia is written differently from the way a narrative story is written. They note that “the way you talk is not necessarily the way you write.”

Guirguis focuses more on correctness, emphasizing using “nice handwriting,” descriptive words, interesting details, and correctly spelled words. “Even when they’re writing a letter to a friend, I want it correct,” she says.
Even if third graders do not yet tailor their communication style to particular audiences, these beginning writers are learning to make a distinction between their writing and speech. By focusing on engaging word choices and grammatical and mechanical correctness, White and her fellow teachers convey to their students that their written communication style should reflect thought and revision and follow standard rules. Ideally their teachers would explain why their writing should differ from their speech in this way—to ensure that they can convey their ideas accurately without the benefit of inflection, oral expression, and body language and without the chance to “re-do” an explanation that they infer their audience did not understand.

Emphasis on Selecting Design Elements

While these teachers’ students do create graphics at different stages of a learning activity, they don’t focus on tailoring design for an audience through font, color, or white space. Since they lack enough computers and a color printer in their classrooms, students can’t easily work on these design elements.

*Relevant TEKS standards.* According to the third grade TEKS, students should be able to draw visuals based on text for language arts, create graphics to organize and evaluate information for science, and create timelines and maps for social studies. They should also be able to tailor digital communication for an audience through font, color, white space, and graphics and create graphics from spreadsheets and databases. (See Table 7-8.)

*White, Garcia, Blevins, and Guirguis’ experiences with selecting design elements.* These teachers typically let students lead regarding design elements. Blevins and Garcia do not usually focus on design elements although they have some
students who know how to use the technology and will show the others. And they do not have a color printer in their classroom, a deficiency that also inhibits some design discussions.

Guirguis notes that her students love to include “noises and action” in the PowerPoints they create and often know more than she does about the technology. She and her class use bullets when brainstorming and create “web” diagrams but do not focus on including subject headings or other design elements.

White, however, notes that her classes do look at headings and graphics in reading fiction and nonfiction on the same subject. They examine the features of the text, such as cartoons, charts, and graphics.

When all students do not have frequent access to computers at the same time, it is difficult for them to work on design elements as a class except through examining text features of literature they are studying. While discussing text features in published documents does make students more aware of these features, unless third graders actually practice using the features with their own writing, they may not understand how the features can complement their text content. Further, unless their teachers understand this relationship themselves, they will not be able to help students make appropriate design selections.

Emphasis on Doing Usability Testing

The follow-through evaluation the TEKS suggest to monitor writing and problem solutions is not typically part of these four teachers’ curriculum.

Relevant TEKS standards. According to the third grade TEKS, students should be able to evaluate outcomes of their work, specifically whether their writing achieves its
purpose, whether their math solution is reasonable, and whether their social studies solution is effective. They should also be able to use technology as part of their evaluation. (See Table 7-9.)

White, Garcia, Blevins, and Guirguis’ experiences with usability testing. These teachers’ students write “how to” essays as part of sequencing activities (“how to make a ‘pbj’”) but don’t consistently verify whether the audience could complete the task by following the activity. However, as part of their science unit, White’s students build simple machines and then have another group work them.

Blevins approximates usability in response writing—whether the students “believe” what the author is saying. Guirguis does follow-through with persuasive pieces (“Did you all convince me to add recess time?”)

If their teachers require third graders to periodically follow up on their communication by verifying that it accomplishes its purpose, the students will come to see “usability testing” as a natural and routine part of the writing process that will validate the writing experience for them. When their students “test out” whether the machines work, whether the author is convincing, and whether they were convincing, they realize that their writing experience does not end where they thought it did—that it really has to be tested (and not just “checked” by a teacher) to determine if it is successful.

Emphasis on Presenting

These teachers’ students have frequent opportunities to present their work although their sharing is more writer focused than audience focused, more to give them an opportunity to speak in front of a group as well as develop skills as an audience.
Relevant TEKS standards. According to the third grade TEKS, students should be able to tailor word choices and delivery to audience, purpose, and occasion and choose or create appropriate props and displays to support speech, using software as needed. (See Table 10-10.)

White, Garcia, Blevins, and Guirguis’ experiences with presenting.

White et al.’s students have frequent opportunities to present their work. Blevins and Garcia give students an opportunity daily to volunteer to present their work. How much they do this depends on the class. On Fridays, if Guirguis’ students “publish” (type up and print out their writing), they can read it to the class. Or if during the week she reads someone’s work that is exceptional, she might ask that student to share it. She always gives students the right to pass, though. She will also post some students’ work on the bulletin board outside the classroom so that students in other classes can read it.

By taking advantage of so many chances to present their work, these four teachers’ third graders can become increasingly comfortable sharing what they have written and begin to think of presentation as a routine part of writing. By insisting that her students first “publish” their writing before they present it, Guirguis is reinforcing to her students the need to “polish” writing for an audience.
Table 7-1

Analysis of 3rd grade curriculum emphasis on understanding communication situation

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 3rd grade TEKS</th>
<th>Samples of approaches to coverage in 3rd grade activities</th>
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<tr>
<td><strong>Understand situation requiring communication</strong></td>
<td>§110.5. English Language arts and Reading, Grade 3. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3); (C) ask and answer relevant questions and make contributions in small or large group discussions (K-3);</td>
<td>• Relate writing assignments to learning activities so that context is always clear  • Write letters occasionally where context is clear  • Use group discussion to initiate assignment to ensure communication situation is clear</td>
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<td>§111.15. Mathematics, Grade 3. (3.14) Underlying processes and mathematical tools. The student applies Grade 3 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to: (B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness; (C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem;</td>
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<td>§112.5. Science, Grade 3. (2) Scientific processes. The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to: (A) plan and implement descriptive investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology;</td>
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<td>§113.5. Social Studies, Grade 3. (18) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.</td>
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Table 7-2

Analysis of 3rd grade curriculum emphasis on defining audience and clarifying purpose

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<tr>
<th>Principle</th>
<th>Coverage in 3rd grade TEKS</th>
<th>Samples of approaches to coverage in 3rd grade activities</th>
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<tbody>
<tr>
<td>Define audience</td>
<td>§110.5. English Language arts and Reading, Grade 3. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (14) Writing/purposes. The student writes for a variety of audiences and purposes and in various forms. The student is expected to: (C) write to communicate with a variety of audiences (1-3); and (18) Writing/writing processes. The student selects and uses writing processes for self-initiated and assigned writing. The student is expected to: (C) revise selected drafts for varied purposes, including to achieve a sense of audience, precise word choices, and vivid images (1-3);</td>
<td>• Consider audience perspective and how it relates to content that should be included for some assignments but not all</td>
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<td>Clarify purpose</td>
<td>§110.5. English Language arts and Reading, Grade 3. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3); (14) Writing/purposes. The student writes for a variety of audiences and purposes and in various forms. The student is expected to: (D) write in different forms for different purposes such as lists to record, letters to invite or thank, and stories or poems to entertain (1-3).</td>
<td>• Consider purpose broadly in terms of “to inform, to persuade, to entertain” • Determine purpose of models they study as class</td>
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<td>Principle</td>
<td>Coverage in 3rd grade TEKS</td>
<td>Samples of approaches to coverage in 3rd grade activities</td>
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<td>Collaborate (students work in groups to accomplish a task or assignment)</td>
<td>§110.5. English Language arts and Reading, Grade 3. (3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (C) ask and answer relevant questions and make contributions in small or large group discussions (K-3); (19) Writing/evaluation. The student evaluates his/her own writing and the writing of others. The student is expected to: (B) respond constructively to others’ writing (1-3);</td>
<td>• Collaborate in reading, math, grammar, spelling, and vocabulary centers • Peer edit • Participate in readers’ theaters • Participate in “write arounds” • Participate in “read/pair/share”</td>
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<td>§113.5. Social Studies, Grade 3. (18) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.</td>
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<td>§126.3. Technology Applications, Grades 3-5. (8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to: (A) use communication tools to participate in group projects; (C) participate with electronic communities as a learner, initiator, contributor, or mentor.</td>
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Table 7-4

Analysis of 3rd grade curriculum emphasis on gathering and evaluating needed resources

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<th>Principle</th>
<th>Coverage in 3rd grade TEKS</th>
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</table>
| Gather and evaluate needed resources (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not) | §110.5. English Language arts and Reading, Grade 3.  
(1) Listening/speaking/purposes. The student listens attentively and engages actively in various oral language experiences. The student is expected to:  
(A) determine the purpose(s) for listening such as to get information, to solve problems, and to enjoy and appreciate (K-3);  
(7) Reading/variety of texts. The student reads widely for different purposes in varied sources. The student is expected to:  
(B) read from a variety of genres for pleasure and to acquire information from both print and electronic sources (2-3); and  
(9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to:  
(B) establish purposes for reading and listening such as to be informed, to follow directions, and to be entertained (K-3);  
(J) distinguish fact from opinion in various texts, including news stories and advertisements (3); and  
(12) Reading/inquiry/research. The student generates questions and conducts research using information from various sources. The student is expected to:  
(A) identify relevant questions for inquiry such as "What Native American tribes inhabit(ed) Texas?" (K-3);  
(B) use alphabetical order to locate information (1-3);  
(C) recognize and use parts of a book to locate information, including table of contents, chapter titles, guide words, and indices (1-3);  
(D) use multiple sources, including print such as an encyclopedia, technology, and experts, to locate information that addresses questions (2-3);  
(E) interpret and use graphic sources of information, including maps, charts, graphs, and diagrams (2-3);  
(F) locate and use important areas of the library media center (2-3);  | • Learn “Big 6” approach to research (through librarian): task definition, information seeking strategies, location and access, use of information, synthesis, evaluation  
• Begin with print resource’s index then move to online indexes and search indexes librarian recommends  
• Learn modified basic citation format  
• Use research skills in work on several year-end projects |

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<tbody>
<tr>
<td>Gather and evaluate needed resources (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not)</td>
<td>(20) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to: (A) write or dictate questions for investigating (2-3); (C) take simple notes from relevant sources such as classroom guests, books, and media sources (2-3); and</td>
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<td>§111.15. Mathematics, Grade 3. (3.13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to: (A) collect, organize, record, and display data in pictographs and bar graphs where each picture or cell might represent more than one piece of data; (B) interpret information from pictographs and bar graphs; and</td>
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<td>§112.5. Science, Grade 3. (2) Scientific processes. The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to: (B) collect information by observing and measuring;</td>
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<td>(4) Scientific processes. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to: (A) collect and analyze information using tools including calculators, microscopes, cameras, safety goggles, sound recorders, clocks, computers, thermometers, hand lenses, meter sticks, rulers, balances, magnets, and compasses; and</td>
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<td>(6) Science concepts. The student knows that forces cause change. The student is expected to: (A) measure and record changes in the position and direction of the motion of an object to which a force such as a push or pull has been applied; and</td>
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<td>(8) Science concepts. The student knows that living organisms need food, water, light, air, a way to dispose of waste, and an environment in which to live. The student is expected to: (A) observe and describe the habitats of organisms within an ecosystem;</td>
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<tr>
<td>Gather and evaluate needed resources (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not)</td>
<td>(11) Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to: (B) identify and record properties of soils such as color and texture, capacity to retain water, and ability to support the growth of plants; §113.5. Social Studies, Grade 3. (16) Social studies skills. The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to: (A) obtain information, including historical and geographic data about the community, using a variety of print, oral, visual, and computer sources; (D) use various parts of a source, including the table of contents, glossary, and index, as well as keyword computer searches, to locate information; (18) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. §126.3. Technology Applications, Grades 3-5. (4) Information acquisition. The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to: (A) apply appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies; and (B) select appropriate strategies to navigate and access information on local area networks (LANs) and wide area networks (WANs), including the Internet and intranet, for research and resource sharing. (5) Information acquisition. The student acquires electronic information in a variety of formats, with appropriate supervision. The student is expected to: (A) acquire information including text, audio, video, and graphics; and (B) use on-line help and documentation. (6) Information acquisition. The student evaluates the acquired electronic information. The student is expected to: (A) apply critical analysis to resolve information conflicts and validate information; (B) determine the success of strategies used to acquire electronic information; and (C) determine the usefulness and appropriateness of digital information.</td>
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<td><strong>Analyze and organize information</strong> (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships)</td>
<td>§110.5. English Language arts and Reading, Grade 3. (4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to: (B) clarify and support spoken messages using appropriate props, including objects, pictures, and charts (K-3); and (C) retell a spoken message by summarizing or clarifying (K-3).</td>
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<tr>
<td>(9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to: (E) draw and discuss visual images based on text descriptions (1-3); (H) produce summaries of text selections (2-3); (I) represent text information in different ways, including story maps, graphs, and charts (2-3); (10) Reading/literary response. The student responds to various texts. The student is expected to: (B) demonstrate understanding of informational text in a variety of ways through writing, illustrating, developing demonstrations, and using available technology (2-3); (12) Reading/inquiry/research. The student generates questions and conducts research using information from various sources. The student is expected to: (E) interpret and use graphic sources of information, including maps, charts, graphs, and diagrams (2-3); (G) organize information in systematic ways, including notes, charts, and labels (3); (H) demonstrate learning through productions and displays such as oral and written reports, murals, and dramatizations (2-3); (l) use compiled information and knowledge to raise additional, unanswered questions (3); and (J) draw conclusions from information gathered (K-3).</td>
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<td>(19) Writing/evaluation. The student evaluates his/her own writing and the writing of others. The student is expected to: (A) identify the most effective features of a piece of writing using criteria generated by the teacher and class (1-3);</td>
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<td>• Do guided sequencing exercises  • Do guided paraphrasing as class  • Complete outline template</td>
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<tr>
<td><strong>Analyze and organize information</strong> (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships)</td>
<td>(20) <strong>Writing/inquiry/research.</strong> The student uses writing as a tool for learning and research. The student is expected to: (B) record his/her own knowledge of a topic in a variety of ways such as by drawing pictures, making lists, and showing connections among ideas (K-3); (D) compile notes into outlines, reports, summaries, or other written efforts using available technology (2-3).</td>
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<td>§111.15. Mathematics, Grade 3. (3.13) <strong>Probability and statistics.</strong> The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to: (A) collect, organize, record, and display data in pictographs and bar graphs where each picture or cell might represent more than one piece of data; (B) interpret information from pictographs and bar graphs; and (C) use data to describe events as more likely than, less likely than, or equally likely as.</td>
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<td>(3.14) <strong>Underlying processes and mathematical tools.</strong> The student applies Grade 3 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to: (C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem;</td>
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<tr>
<td>(3.16) <strong>Underlying processes and mathematical tools.</strong> The student uses logical reasoning. The student is expected to: (A) make generalizations from patterns or sets of examples and nonexamples; and (B) justify why an answer is reasonable and explain the solution process.</td>
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<td>§112.5. Science, Grade 3. (2) <strong>Scientific processes.</strong> The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to: (C) analyze and interpret information to construct reasonable explanations from direct and indirect evidence; (D) communicate valid conclusions; and (E) construct simple graphs, tables, maps, and charts to organize, examine and evaluate information.</td>
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| **Analyze and organize information** (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | (3) **Scientific processes.** The student knows that information, critical thinking, and scientific problem solving are used in making decisions. The student is expected to:  
(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information;  
(B) draw inferences based on information related to promotional materials for products and services;  
(C) represent the natural world using models and identify their limitations  

(4) **Scientific processes.** The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:  
(A) collect and analyze information using tools including calculators, microscopes, cameras, safety goggles, sound recorders, clocks, computers, thermometers, hand lenses, meter sticks, rulers, balances, magnets, and compasses; and  

§113.5. Social Studies, Grade 3.  
(3) **History.** The student understands the concepts of time and chronology. The student is expected to:  
(B) create and interpret timelines; and  

(6) **Economics.** The student understands the purposes of spending and saving money. The student is expected to:  
(B) analyze a simple budget that allocates money for spending and saving.  

(16) **Social studies skills.** The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:  
(B) sequence and categorize information;  
(C) interpret oral, visual, and print material by identifying the main idea, identifying cause and effect, and comparing and contrasting;  
(E) interpret and create visuals including graphs, charts, tables, timelines, illustrations, and maps; and  
(F) use appropriate mathematical skills to interpret social studies information such as maps and graphs.  

(18) **Social studies skills.** The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and  
(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. |

(table continues)
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<thead>
<tr>
<th>Principle</th>
<th>Coverage in 3rd grade TEKS</th>
<th>Samples of approaches to coverage in 3rd grade activities</th>
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<tr>
<td><strong>Analyze and organize information</strong>&lt;br&gt;(students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships)**</td>
<td>§126.3. Technology Applications, Grades 3-5.&lt;br&gt;(7) Solving problems. The student uses appropriate computer-based productivity tools to create and modify solutions to problems. The student is expected to:&lt;br&gt;(B) use appropriate software to express ideas and solve problems including the use of word processing, graphics, databases, spreadsheets, simulations, and multimedia; and&lt;br&gt;(C) use a variety of data types including text, graphics, digital audio, and video.&lt;br&gt;&lt;br&gt;(8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:&lt;br&gt;(B) use interactive technology environments, such as simulations, electronic science or mathematics laboratories, virtual museum field trips, or on-line interactive lessons, to manipulate information; and&lt;br&gt;&lt;br&gt;(10) Communication. The student formats digital information for appropriate and effective communication. The student is expected to:&lt;br&gt;(C) use appropriate applications including, but not limited to, spreadsheets and databases to develop charts and graphs by using data from various sources.</td>
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### Table 7-6

**Analysis of 3rd grade curriculum emphasis on determining best format**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 3rd grade TEKS</th>
<th>Samples of approaches to coverage in 3rd grade activities</th>
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</table>
| **Determine best format**<br>(with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, PowerPoint, report, manual, brochure, proposal, or procedure, etc.) | §110.5. English Language arts and Reading, Grade 3.  
(4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to:  
(B) clarify and support spoken messages using appropriate props, including objects, pictures, and charts (K-3); and  
(7) Reading/variety of texts. The student reads widely for different purposes in varied sources. The student is expected to:  
(B) read from a variety of genres for pleasure and to acquire information from both print and electronic sources (2-3); and  
(9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to:  
(I) represent text information in different ways, including story maps, graphs, and charts (2-3);  
(10) Reading/literary response. The student responds to various texts. The student is expected to:  
(B) demonstrate understanding of informational text in a variety of ways through writing, illustrating, developing demonstrations, and using available technology (2-3);  
(11) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts. The student is expected to:  
(A) distinguish different forms of texts, including lists, newsletters, and signs and the functions they serve (K-3);  
(C) recognize the distinguishing features of familiar genres, including stories, poems, and informational texts (1-3);  
§111.15. Mathematics, Grade 3.  
(3.15) Underlying processes and mathematical tools. The student communicates about Grade 3 mathematics using informal language. The student is expected to:  
(A) explain and record observations using objects, words, pictures, numbers, and technology; and  
• Discuss features of model texts  
• Select formats from prescribed range (narrative poem, song, speech, play, etc.)  
• Occasionally format digitally | (table continues) |
Table 7-6 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 3rd grade TEKS</th>
<th>Samples of approaches to coverage in 3rd grade activities</th>
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<tbody>
<tr>
<td><strong>Determine best format</strong>&lt;br/&gt;(with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, PowerPoint, report, manual, brochure, proposal, or procedure, etc.)</td>
<td>§112.5. Science, Grade 3.&lt;br/&gt;(3) <strong>Scientific processes.</strong> The student knows that information, critical thinking, and scientific problem solving are used in making decisions. The student is expected to:&lt;br/&gt;(C) represent the natural world using models and identify their limitations</td>
<td>§113.5. Social Studies, Grade 3.&lt;br/&gt;(16) <strong>Social studies skills.</strong> The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:&lt;br/&gt;(E) interpret and create visuals including graphs, charts, tables, timelines, illustrations, and maps; and&lt;br/&gt;(17) <strong>Social studies skills.</strong> The student communicates effectively in written, oral, and visual forms. The student is expected to:&lt;br/&gt;(B) create written and visual material such as stories, poems, pictures, maps, and graphic organizers to express ideas; and</td>
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Table 7-7

Analysis of 3rd grade curriculum emphasis on selecting communication style

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<tr>
<th>Principle</th>
<th>Coverage in 3rd grade TEKS</th>
<th>Samples of approaches to coverage in 3rd grade activities</th>
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<tr>
<td><strong>Select communication style</strong>&lt;br&gt; (with audience and purpose in mind, students decide level of formality; use style principles: active voice, conciseness, action in verb rather than noun, actor as subject, etc.)</td>
<td>§110.5. English Language arts and Reading, Grade 3.&lt;br&gt;(3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to:&lt;br&gt;(A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3);&lt;br&gt;(B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3);&lt;br&gt;&lt;br&gt;(18) Writing/writing processes. The student selects and uses writing processes for self-initiated and assigned writing. The student is expected to:&lt;br&gt;(C) revise selected drafts for varied purposes, including to achieve a sense of audience, precise word choices, and vivid images (1-3);</td>
<td>• Occasionally study communication style in particular literary models&lt;br&gt;• Focus on grammatical and mechanical correctness</td>
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<td>§111.15. Mathematics, Grade 3.&lt;br&gt;(3.15) Underlying processes and mathematical tools. The student communicates about Grade 3 mathematics using informal language. The student is expected to:&lt;br&gt;(A) explain and record observations using objects, words, pictures, numbers, and technology; and&lt;br&gt;(B) relate informal language to mathematical language and symbols.</td>
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Table 7-8

Analysis of 3rd grade curriculum emphasis on selecting design elements

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<th>Principle</th>
<th>Coverage in 3rd grade TEKS</th>
<th>Samples of approaches to coverage in 3rd grade activities</th>
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<tr>
<td><strong>Select design elements</strong>&lt;br&gt;(with audience and purpose in mind, students decide how to strategically use color, informative headings, graphics, bulleted/numbered lists, fonts, white space; use design principles: single space, double space between paragraphs, no indentions; no all-caps or centering)</td>
<td>§110.5. English Language arts and Reading, Grade 3.&lt;br&gt;(9) Reading/comprehension. The student uses a variety of strategies to comprehend selections read aloud and selections read independently. The student is expected to:&lt;br&gt;(E) draw and discuss visual images based on text descriptions (1-3);&lt;br&gt;§112.5. Science, Grade 3.&lt;br&gt;(2) Scientific processes. The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to:&lt;br&gt;(E) construct simple graphs, tables, maps, and charts to organize, examine and evaluate information.&lt;br&gt;(3) Scientific processes. The student knows that information, critical thinking, and scientific problem solving are used in making decisions. The student is expected to:&lt;br&gt;(C) represent the natural world using models and identify their limitations</td>
<td>• Learn individually from other students how to change fonts and activate animation&lt;br&gt;• Occasionally focus on text features when studying a document as a class</td>
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<td>§113.5. Social Studies, Grade 3.&lt;br&gt;(3) History. The student understands the concepts of time and chronology. The student is expected to:&lt;br&gt;(B) create and interpret timelines; and&lt;br&gt;(5) Geography. The student understands the concepts of location, distance, and direction on maps and globes. The student is expected to:&lt;br&gt;(D) draw maps of places and regions that contain map elements including a title, compass rose, legend, scale, and grid system.</td>
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<td>§126.3. Technology Applications, Grades 3-5.&lt;br&gt;(10) Communication. The student formats digital information for appropriate and effective communication. The student is expected to:&lt;br&gt;(A) use font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience;&lt;br&gt;(B) use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays, Internet documents, and printed materials; and&lt;br&gt;(C) use appropriate applications including, but not limited to, spreadsheets and databases to develop charts and graphs by using data from various sources.</td>
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Table 7-9

Analysis of 3rd grade curriculum emphasis on usability testing

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<th>Principle</th>
<th>Coverage in 3rd grade TEKS</th>
<th>Samples of approaches to coverage in 3rd grade activities</th>
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<tr>
<td>Do usability testing (students “test drive” what they wrote to see if it does what they want it to—that they connect with the audience and accomplish their purpose)</td>
<td>§110.5. English Language arts and Reading, Grade 3. (19) Writing/evaluation. The student evaluates his/her own writing and the writing of others. The student is expected to: (C) determine how his/her own writing achieves its purposes (1-3);</td>
<td>• Write “how to” essays as part of sequencing activities</td>
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<td>§111.15. Mathematics, Grade 3. (3.14) Underlying processes and mathematical tools. The student applies Grade 3 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to: (B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;</td>
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<td>(3.16) Underlying processes and mathematical tools. The student uses logical reasoning. The student is expected to: (B) justify why an answer is reasonable and explain the solution process.</td>
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<td>§113.5. Social Studies, Grade 3. (18) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and</td>
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<td>§126.3. Technology Applications, Grades 3-5. (12) Communication. The student uses technology applications to facilitate evaluation of communication, both process and product. The student is expected to: (B) evaluate the product for relevance to the assignment or task; and (C) create technology assessment tools to monitor progress of project such as checklists, timelines, or rubrics.</td>
<td>• Build machines and have another group verify that they work</td>
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<td>• Determine whether author succeeded in convincing them as audiences</td>
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<td>• Verify whether they convinced audience with persuasive document</td>
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Table 7-10

Analysis of 3rd grade curriculum emphasis on presenting

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<th>Principle</th>
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<th>Samples of approaches to coverage in 3rd grade activities</th>
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<td>Present</td>
<td>§110.5. English Language arts and Reading, Grade 3.</td>
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<td>(students orally deliver what they produced to a group)</td>
<td>(3) Listening/speaking/audiences/oral grammar. The student speaks appropriately to different audiences for different purposes and occasions. The student is expected to: (A) choose and adapt spoken language appropriate to the audience, purpose, and occasion, including use of appropriate volume and rate (K-3); (B) use verbal and nonverbal communication in effective ways such as making announcements, giving directions, or making introductions (K-3);</td>
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<td>(4) Listening/speaking/communication. The student communicates clearly by putting thoughts and feelings into spoken words. The student is expected to: (B) clarify and support spoken messages using appropriate props, including objects, pictures, and charts (K-3); and</td>
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<td>(12) Reading/inquiry/research. The student generates questions and conducts research using information from various sources. The student is expected to: (H) demonstrate learning through productions and displays such as oral and written reports, murals, and dramatizations (2-3);</td>
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<td>§126.3. Technology Applications, Grades 3-5.</td>
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<td>(11) Communication. The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to: (B) use presentation software to communicate with specific audiences.</td>
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FOURTH GRADE CURRICULUM EMPHASIS ON PROFESSIONAL WRITING

PRINCIPLES

TAKS:  Writing (Mar. 3), Math (Apr. 28), Reading (Apr. 29)

As a fourth grade language arts and social sciences teacher, Alicia Ayala* feels the burden of the Writing TAKS heavily: “Although I do not ever wish to limit my author/writer [student] to writing that encompasses the test objectives only, I do have the responsibility to cover the mandated objectives from TEA [Texas Education Agency], therefore teaching with that goal in mind,” she states (personal communication, April 11, 2008). Ayala notes that “in fourth grade, it is a must that they [students] are able to write a composition from a prompt.” Her language arts students write in narrative format 75 percent of the time. However, in their other classes, they write in math or science journals. “You have a lot more freedom in other grade levels,” Ayala notes. Ayala holds bachelor’s degree in Elementary Education and Reading and has taught ten years.

As half of a “team,” fourth grade math and science teacher Carie Smith* feels she must “back up” May Johnson*, her language arts and social sciences “partner,” by requiring good grammar. Smith has taught elementary school for twenty-one years (personal communication, January 3, 2008) and holds a bachelor’s degree of Education, as does Johnson, who has taught eighteen years (personal communication, February 2, 2008).
Summary of How Teaching Experiences Correspond to the Study Professional Writing Principles and the TEKS

In order to ensure all their students understand the communication situation, Smith, Johnson, and Ayala supply background information from a variety of resources. This passive, “teacher-will-provide” approach differs from the student-led, independent research for background information the TEKS suggest. Smith, Johnson, and Ayala’s classes work on determining an audience and purpose for most of their writing but not necessarily on tailoring documents for that audience and purpose, as the TEKS suggest. The impetus for their focus seems to be making the activity more meaningful for the writer/student first and then making the document more captivating to the audience. They often study purpose by determining the author’s purpose in their readings and then work on the four traditional purposes (to inform, to persuade, to express, to entertain) in their writing.

At least weekly, Smith, Johnson, and Ayala’s students collaborate in groups for research projects, problem-solving, and discussion (written and oral) or performances/presentations. They do not use electronic communication, though, when collaborating, as the TEKS suggest.

Regarding research skills, these teachers’ students all learn something about compiling bibliographies and about determining a website’s credibility, but the students also struggle with using the Internet effectively for research and with the finding a role for books and other print resources. Although they discuss website credibility to some
degree, it’s not clear to what extent they work on evaluating the “usefulness and appropriateness of information,” as the TEKS specify.

Smith, Johnson, and Ayala’s students focus on organization and analysis to some degree in every subject area, but they still need assistance from their instructors in structuring their approaches to these tasks. It is not clear how much they use technology to analyze and organize information, skills the TEKS require.

These teachers’ students have limited opportunities to determine the formats in which they wish to convey their information, primarily for significant projects or reviews. Because students are still being introduced to various formats, especially those involving technology, teachers suggest possibilities more often than students initiate options. Students’ format choices do not appear to be tied to audience considerations but instead usually reflect writer preference, which may involve a choice best conveying their purpose.

Through analyzing word choices in literature, discussing word usage variations in relation to context, and honing their own written word choices, students in these teachers’ classes focus on communication style. When studying word choice, these students appear to be considering the audience, but not a particular audience, as the TEKS specify. Which design elements the students are introduced to vary from class to class, and design does not appear to be a major focus. Students may choose design based on general rather than particular audience considerations.

Smith, Johnson, and Ayala all include learning activities that emphasize audience perspective, but their students do not evaluate all their writing to ensure it achieves its purpose.
Students can frequently present their work in these teachers’ classes, sometimes formally to an entire class, possibly using technology, but often informally for a small group or just their teacher. They do not appear to focus on tailoring language for their specific audience; however, their audiences are typically similar to themselves.

Emphasis on Understanding Situation Requiring Communication

In order to ensure that all their students understand the communication situation, Smith, Johnson, and Ayala supply background information from a variety of resources. This passive, “teacher-will-provide” approach differs from the student-led, independent research for background information the TEKS suggest.

Relevant TEKS standards. According to the fourth grade TEKS, students should be able to frame research questions and then follow their investigation to its conclusion for all subject areas—language arts, math, science, and social sciences. (See Table 8-1.)

Smith, Johnson, and Ayala’s experiences with understanding the communication situation. Johnson and Ayala find that thoroughly explaining the communication situation helps even out any imbalance in their students’ background knowledge of the topic. Johnson ties the communication situation closely to audience and purpose, which is part of every writing assignment. She finds that spending time understanding the writing situation is especially important since her students “don’t all have the same background knowledge.” When they write letters to soldiers in the Middle East, for example, she pulls down the map, and they talk about what the soldiers’ lives are like. She also pulls in relevant literature and integrates it throughout their discussion.
Likewise, “very rarely” does Ayala give an assignment without ensuring that her students have adequate background knowledge to write on it—information from articles, personal accounts, the Internet, books, etc. She will always model the assignment as well, “not to restrict their creativity,” she notes, but to help her students begin their task. Half of Ayala’s classes are comprised of ESL students, some of whom arrived in the United States only two years ago, so they need lots of models. Although many of her students have no understanding of experiences many of their non-ESL classmates share, like “going to the donut store,” they have other experiences unique to their background that they can share.

Math/Science teacher Smith does not spend much time ensuring that her students understand the situation requiring communication; she says they get that more through language arts. Her work is application, and “time constraints inhibit [her] going further.”

Because Johnson and Ayala do not “assume” their students are familiar with the communication situation, they are reassuring their fourth graders that they are not being set up to fail. By being sensitive to some students’ lack of sophistication, Johnson and Ayala remove a barrier to learning and a potential self-esteem deflator. However, providing adequate background information to ensure that their students understand the communication situation could require significant amounts of time spent preparing for class. Therefore, involving their students in this information gathering might ease the teachers’ burden somewhat as well as contribute to a rich body of knowledge.
Emphasis on Defining Audience and Clarifying Purpose

Smith, Johnson, and Ayala’s classes work on determining an audience and purpose for most of their writing but not necessarily on tailoring documents for that audience and purpose, as the TEKS suggest. The impetus for their focus seems to be making the activity more meaningful for the writer/student first and then making the document more captivating for the audience. The students often study purpose by determining the author’s purpose in their readings and then work on the four traditional purposes (to inform, to persuade, to express, to entertain) in their writing.

Relevant TEKS standards. According to the fourth grade TEKS, students should be able to revise spoken and written language and delivery for particular audiences, purposes, and occasions. Some of these purposes include to express, discover, record, develop, reflect on ideas, problem solve, influence, and inform. (See Table 8-2.)

Smith, Johnson, and Ayala’s experiences with defining audience.

Smith, Johnson, and Ayala all focus to some extent on having their students consider how to appeal to particular audiences. Smith always works on defining audience for communication assignments in math and science. Her expectations for fourth graders are that they “participate as listeners.” One of her most interesting assignments in terms of captivating audience involved the topic of black holes. By having “Sponge Bob” become a black hole, one of her students used humor and succeeded in capturing the audience of his classmates better than any of the other students did, and “the kids saw it.” Smith says that “giving them choices [of how to present their work] made all the difference.” For those who did not get quite as positive a response, she asked them how they could improve.
Johnson works on defining audience daily in language arts and social sciences. She gets her best work when her students are “thinking it’s meaningful,” she notes, “when they know it’s going somewhere,” for example, the Grandparents’ Day letters they write and the letter to the soldiers. She even talks to her students about how important considering audience is for the TAKS test: “The testers in Austin don’t know you; they can’t call you and ask questions.” Johnson also uses audience to discuss the importance of grammar: “if the audience can’t read it, you’ve lost them,” she warns her students. She likes Lynne Truss’s book *Eat, Shoots, and Leaves* for its emphasis on the confusion created for the audience by misplacing punctuation marks.

Ayala’s students do not always focus on an audience. For example, when they freewrite, they can simply express themselves with no particular audience in mind. They do work on writing through different points of view, though. In an assignment about pets and their owners, for example, they may write from the animal’s point of view with the owner as audience. Ayala reminds her students that to get a “4” (highest) on the writing TAKS, they must “get out of the box” by perhaps taking a non-traditional point of view, for example, writing as if they are a football that has been in the SuperBowl. They talk about how that type of creativity and unexpectedness is “more entertaining to hear” or read.

In an effort to ensure that their students do well on TAKS, fourth grade teachers appear to pay more attention consistently to audience than do teachers of lower grades, or at least they seem to emphasize this aspect of writing to students more pointedly. Making use of the ever-available audience of their classmates ensures that students can easily gauge their document’s appeal to their peers and then quickly adjust their
writing to make it more effective. When the fourth grade math/science teacher requires his or her students to focus on audience, students benefit not just from “writing across the curriculum” but from more practice in having to explain technical topics and to make that explanation appealing.

**Smith, Johnson, and Ayala’s experiences with clarifying purpose.**

For Smith, purpose enters into the assignment discussions but is not the “center focus.” Her students talk a lot, though, about what the *author’s purpose* is regarding the science literature they read—“to entertain or teach you?” Ayala’s students also regularly discuss “why the person is writing this” during their reading period. She comments that examining the author’s purpose is one of the Reading TEKS.

Johnson focuses on the traditional four “purposes” of writing (to inform, to persuade, to express, and to entertain) when she teaches the various genres, for example writing for a prompt and writing a PowerPoint. “They have to understand writing isn’t all the same,” she emphasizes. Ayala feels that focusing more on purpose helps her students “stay on target and focused; it helps them understand why they’re writing.”

Ayala also attended the convention Blevins did and learned about the RAFTS (Role, Audience, Format, Topic, Strong Verb) approach to writing tasks. However, “fitting it in” is a problem for her as well.

When Smith, Johnson, and Ayala’s fourth graders discuss the author’s purpose for the literature they are studying, they are reminded that they *themselves* are that author’s audience, that that author had *them* in mind when planning and drafting the text. They can then become legitimate critics of the document’s effectiveness, and the
concept of "purpose" becomes concrete. Having to distinguish between different writing purposes forces students to examine their own writing more closely for whether it contains the defining characteristics of a particular purpose.

Emphasis on Collaborating

At least weekly, Smith, Johnson, and Ayala’s students collaborate in groups for research projects, problem-solving, and discussion (written and oral) or performances/presentations. They do not use electronic communication, though, when collaborating, as the TEKS suggest.

Relevant TEKS standards. According to the fourth grade TEKS, students should be able to collaborate through peer critiquing and by writing and revising with peers and by corresponding with peers. They should also be able to participate in collaborative problem solving, using electronic communication as required. (See Table 8-3.)

Smith, Johnson, and Ayala’s experiences with collaborating. Smith notes that one thing that has changed in her teaching style over the years is that she is using groups more frequently. She says that especially in science her students discuss experiments and outcomes in groups so that everyone is involved and focused. For example, “I want your group to discuss why this color sank rather than floated.” Or “I want to hear math language as you’re working on this problem.” She enjoys “just watching them develop that sense of ‘we’ve got the answer.’”

Johnson uses groups about once a week, especially when her students do “clocking,” a form of timed peer editing for specific skills. Twice every nine weeks, her students research as a group some aspect of “Texas Regions,” involving using primary and secondary sources and presenting their findings by making a poster.
Ayala also finds collaboration “really beneficial.” When she introduces a task, Ayala’s students work in groups “a lot,” but she assesses them individually. Ayala does offer her students a choice, though, to participate in a group or not, and some prefer to work individually. Formally, her students collaborate when working on a readers’ theater or a “write around” (agreeing or disagreeing in writing with the previous comment on the topic and adding to it).

Ayala finds that with her English as a Second Language students, it is “amazing to watch them interact” with her non-ESL students during collaborative projects. The experience “help[s] both sides.” The non-ESL students are forced to communicate clearly to ensure that their ESL group members follow the conversation or activity. “Yes, it’s loud,” comments Ayala, but “sometimes they’re [non-ESL students are] better teachers than us; the kids are on their level.”

Whereas during a class discussion, a few outspoken students may dominate while others are passive, these teachers find that collaboration allows more students to participate and draws out those students who might be sidelined otherwise. As elementary school students start maturing, they can accomplish more during collaborative activities. Having practiced collaboration since kindergarten, fourth graders are becoming more comfortable with the “give and take” that successful collaboration requires. Fourth grade teachers are also more at ease with this inquiry-based approach and more confident that their students will, collaboratively, grasp the lesson’s objectives.
Emphasis on Gathering and Evaluating Needed Resources

Regarding research skills, Smith, Johnson, and Ayala’s students all learn something about compiling bibliographies and about determining a website’s credibility and usefulness, but the teachers also struggle with showing their students how to use the Internet effectively for research in combination with books and other print resources.

Relevant TEKS standards. According to the fourth grade TEKS, students should be able to use locator and navigation tools, including electronic tools, to locate primary and secondary sources for language arts and social sciences. They should be able to gather information through listening to sources and interviewing as well as reading nonfiction, novels, textbooks, newspapers, and electronic texts, accessing audio and video, and interpreting graphics and then taking notes. They should be able to determine how an author’s point of view affects a text and determine the usefulness and appropriateness of information they have located. For math and science they should be able to use measurement tools to gather information. (See Table 8-4.)

Smith, Johnson, and Ayala’s experiences with gathering and evaluating needed resources. Smith, Johnson, and Ayala’s students all learn something about compiling bibliographies and about determining a website’s credibility, but the teachers also struggle with showing their students how to use the Internet effectively for research in combination with books and other print resources. Smith’s students are required to cite sources they use in research, both book and Internet. She notes that “it’s a challenge to get them not to go to Wikipedia because it is on the top of the Google list.” She feels there is a “big loss of time on the Internet,” so the school sometimes limits source
choices to the fourth grade “window” in the school website. Some sites are blocked, and teachers have to get special permission to access them.

Smith notes that her students’ research used to be completely textbook based. She considers it a problem that students now rely so heavily on the Internet for research that they “lose the depth they have from well-written books.” She adds that the Internet sites are “meant to be read quickly,” suggesting superficial topic coverage. She likes to use books to complement websites, and she requires her students to use a variety of sources and encourages trips to the library.

Johnson’s students also learn about bibliographies and documenting at the beginning of the school year, and they do research every nine weeks. Johnson struggles with her students’ thinking “everything they see is ‘real’ [legitimate], especially on the Internet.” They discuss the fact that the first site Google returns is generally paid for and therefore not reliable. They work on fact vs. opinion in newspaper articles. To put their studies into practice, they had to search through various articles and decide which to use in their science project on the solar system.

Unlike Smith and Johnson’s classes, Ayala’s class learns about compiling bibliographies at the end of the year. They do not focus much on working with gathered information until the Reading TAKS is over (early March). “Then they can do the fun stuff,” Ayala adds, the “technology” TEKS, which the site “Learning.com” helps them cover. To supplement her own discussions about research, Ayala relies on her school’s Library Media Specialist to present a PowerPoint and Smart Board presentation on how to gather information. The Smart Board is loaded with a PowerPoint and, in one of its
many uses, can be run like a Jeopardy! game which students click on with their hands and interact with.

As far as evaluating sources is concerned, Ayala’s students talk about “necessary vs. non-necessary resources.” They also discuss using reliable search engines such as those like “SearchAssaurus” that are especially created for young students, and they warn each other to stay away from Wikipedia because its information can be easily changed.

Ayala’s students had “one of their best weeks” when they were able to take the school set of laptops to their classroom and use kid-friendly search engines to research Rosa Parks. “It’s sad,” laments Ayala, that they have to wait until the end of the year to work with technology “because the most fun they had was when they were using the laptops” and using search engines to locate information. (See the Library Media Specialist’s contributions to this area at the end of chapter 9.)

Time spent gathering and evaluating resources really picks up in fourth grade, building on the introduction to these skills that students have received in earlier grades. And because students are spending so much more time on research, evaluating the credibility of resources is no longer “optional.” With the Internet as a resource, teachers lose a lot of the control they formerly exercised over their students’ source choices. But by requiring that their students use a variety of source types, teachers can ensure that students learn about the benefits as well as the deficiencies of each.

Emphasis on Analyzing and Organizing Information

Smith, Johnson, and Ayala’s students focus on organization and analysis to some degree in every subject area, but they still need assistance from their teachers in
structuring their approaches to these tasks. It’s not clear how much students use technology to analyze and organize information as the TEKS require.

_Relevant TEKS standards._ According to the fourth grade TEKS, students should be able to interpret messages and analyze content bias in oral and written texts as well as paraphrase and summarize texts and organize notes graphically—all for language arts. They should also be able to interpret graphics, using technology when required. Students should be able to organize information and draw conclusions from information in multiple sources and organize ideas into paragraphs and then longer documents. (See Table 8-5.)

For math, they should be able to use problem-solving strategies, describe the relationship between data, make generalizations, and interpret graphs as well as explain observations in a variety of formats. For science, they should be able to summarize texts and analyze gathered data and explanations as well as construct and interpret graphics and analyze information to draw conclusions.

For social sciences, they should be able to summarize and analyze causes and effects as well as use various organizing strategies to analyze information. They should be able to carry through a problem-solving process, using technology as required. And they should be able to apply geographic tools to create and interpret visuals, outlines, and reports, using technology as required.

_Smith, Johnson, and Ayala’s experiences with analyzing and organizing information._ Smith, Johnson, and Ayala’s students focus on organization and analysis to some degree in every subject area, but they still need assistance from their teachers in structuring their approaches to these tasks. Smith’s students keep a science journal,
a tool that she says has evolved significantly over the last three years to actually become a “book” with a table of contents and page numbers. Two or three times a week, her students complete a page for the day, giving that page a title and recording it in the table of contents. The journal follows the progression of a science experiment and includes technical drawings, tables, and analysis questions that would lead to the next experiment (“What would happen if I change this variable?”)

Smith finds that her students work hard on expressing ideas and seeing connections. However, she feels that analyzing information is a “weak spot” in the fourth grade curriculum since teachers do not have enough time to be sure students read and understand the information (especially that found on the Internet).

Johnson’s students research in different ways at different times of the year, but they do research at least four times a year (including for the science fair). However, she finds they need help organizing; they are still new to gathering information and don’t know what to do with their notes. Johnson talks with them about plagiarism and methods to avoid it. The TAKS testing helps students with analysis and organization because it makes them “think on their feet,” says Johnson.

Because Ayala’s students work on writing narratives so much until TAKS in March, they focus a lot on basic organization structure—having an “opening, beginning, and end”—and on paragraphing. They work on research and the accompanying analysis toward the end of the year.

With fourth grade emphasizing research more than in previous grades, students must expand their basic understanding of organization to include their paraphrases of other writers' work. Students have to make sense of other writers’ organization patterns
and then be able to replace information from that context into their own organization scheme. With so much of this process being internal, it is not always easy for teachers to assess whether students are "getting it"—whether they really understand what they have read. Smith's journaling activity presents a method teachers can use to monitor their students' analysis. Replicating this journaling in other subject areas involving research would provide teachers a tracking tool for analysis as well as organization.

**Emphasis on Determining Best Format**

Smith, Johnson, and Ayala's students have limited opportunities to determine the formats in which they wish to convey their information, primarily for significant projects or reviews. Because students are still being introduced to various formats, especially those involving technology, teachers suggest possibilities more often than students initiate options. Students' format choices do not appear to be tied to audience considerations but more often seem to reflect writer preference, which may involve a choice best conveying their purpose.

*Relevant TEKS standards.* According to the fourth grade TEKS, for language arts, students should be able to study the purpose and features of different genres and compare different media. They should be able to choose formats for project reports, including visuals that complement meaning and choose the best format for their purpose. And they should be able to convey text in various graphic forms, using technology if needed as well as using various media in producing communication.

For math, students should be able to use various techniques to explain and record observations. For science, they should be able to use models to represent the natural world. And for geography and social sciences, they should be able to convey
information (written and visual) in various formats (graphic and otherwise). (See Table 8-6.)

Smith, Johnson, and Ayala’s experiences with determining best format. Smith, Johnson, and Ayala’s students have limited opportunities to determine the formats in which they wish to convey their information, primarily for significant projects or reviews. Smith tries to give every child the experience of creating a PowerPoint. She has also asked the librarians to teach certain groups of children to use photography equipment to create presentations with voice-over equipment. Johnson notes that each science project group can decide on its presentation format (PowerPoint, tri-panel poster, home video) and they also create a teaching item to accompany their presentation (word search for class, brochure, handout, etc.)

The fourth grade economics fair, which integrates all curricula, also gives students an opportunity to try out different formats. Students learn how to advertise in different ways. They have a budget and must choose whether to use air time or print. They also have to design surveys and then survey classmates to determine which of three prototype products will be most profitable.

There is a significant push in the district, notes Ayala, to accommodate different learning styles by allowing students to present information “in the way they’re most comfortable.” This might be through a debate, with a poster and writing component, or a play in which they act out their understanding of the topic. Ayala plans to incorporate this approach every Thursday as a means of reviewing material they have already covered.
With teachers emphasizing activities that educate the individual in K-5, it makes sense that teachers would primarily assist students in best (and most comfortably) demonstrating that knowledge as opposed to formatting their work with their audience in mind. However, adding the requirement of the "teaching item" to the presentation, encourages students to think about what learning activities they themselves enjoy most, why they enjoy these activities, and by extension, what activities their peers would enjoy. Large-scale activities like the economics fair also force students to consider format in relation to audience in order to succeed.

**Emphasis on Selecting Communication Style**

Through analyzing word choices in literature, discussing word usage variations in relation to context, and honing their own written word choices, students in these teachers' classes focus on communication style. Students appear to be considering the audience when studying word choice but not a particular audience, as the TEKS specify.

*Relevant TEKS standards.* According to the fourth grade TEKS, students should be able to tailor their language, including word choices and delivery, to particular audiences for particular purposes. They should be able to convey math concepts in non-math language and use social studies terms correctly. (See Table 8-7.)

*Smith, Johnson, and Ayala’s experiences with selecting communication style.* Through analyzing word choices in literature, discussing word usage variations in relation to context, and honing their own written word choices, Smith, Johnson, and Ayala’s students focus on communication style. Smith stresses word choice throughout
the year, striving to match what her students want to say with the feelings they want to create. "‘Said’ is dead" is one of their favorite expressions.

Johnson’s students are physically writing every day because she says they need to be exposed to many different writing styles (both doing and seeing) that will eventually start to seep in “like drips” mid-year. Johnson asks students to study books as a writer would, looking for great leads, similes and metaphors and ways writing “connects” to the audiences. Especially with her ESL students, who often do not know the subtle difference between “Hey” and “Hello,” Ayala will have her students discuss the differences in the way they speak as a class and the way they speak for those outside the classroom (and for friends vs. for the teacher).

By encouraging their students to be “aware” of different communication styles, Smith, Johnson, and Ayala are reinforcing the concept that writers do not communicate with everyone the same way. When Ayala asks her students to examine their own communication styles, she is showing them that they already have the ability to differentiate for different audiences. Emulating effective writers' techniques is a useful exercise for deepening this awareness in that while practicing different writing styles, students are discovering how an audience’s response may vary based on particular styles.

Emphasis on Selecting Design Elements

Which design elements Smith, Johnson, and Ayala’s students are introduced to vary by class, and design does not appear to be a major focus. Students may choose design based on general rather than particular audience considerations.
Relevant TEKS standards. According to the fourth grade TEKS, students should be able to analyze how illustrators’ choices of style, elements, and media complement meaning. Students should be able to use font attributes, color, white space, and graphics to tailor communications for a particular audience and medium. They should be able to use technology to develop graphics from data. And they should be able to use geographic tools to construct and interpret maps. (See Table 8-8.)

Smith, Johnson, and Ayala’s experiences with selecting design elements. Which design elements Smith, Johnson, and Ayala’s students are introduced to vary by class, and design does not appear to be a major focus. When Smith’s class works on PowerPoint, she has to rein in their desire to use every “trick” they know. “Kids are such whizzes” regarding technology, says Smith. Unfortunately, the “bells and whistles” and the clip art often tend to take precedence over working on content. She has to constantly remind her students that she is grading the content of what they write.

Since knowledge of graphic sources is a TEKS requirement, Johnson’s class learns about text features such as fonts and the use of headings to find information. In their book publishing project, which results in individual hardcover books, they discuss how illustrations have to match text content. Ayala’s students use bullets when taking notes while doing research, bulleted the ideas they have found.

Ever since they listened to their kindergarten teacher read them story books and show them the pictures, fourth graders have connected illustrations and text and have seemed to understand that one complements the other. Learning to create those connections in their own work, though, with appropriate restraint, requires some maturity. As they become more aware of design elements and see how these elements
can enhance understanding, the students begin to grasp that text is comprised of more than just words.

Emphasis on Doing Usability Testing

Smith, Johnson, and Ayala all include learning activities that emphasize audience perspective, but their students do not evaluate all their writing to ensure that it achieves its purpose.

Relevant TEKS standards. According to the fourth grade TEKS, students should be able to verify that directions and instructions are precise and that their other writing achieves its purpose, using technology as needed. They should also be able to verify that math and social studies solutions are reasonable. (See Table 8-9.)

Smith, Johnson, and Ayala’s experiences with usability testing. Smith, Johnson, and Ayala all include learning activities that emphasize audience perspective. In one project about electricity, Smith uses batteries, a small motor, wires, and a light bulb to teach how a switch works. After doing the experiment as a group, the students have to individually write the steps to get the bulb to light up. Then Smith’s teaching partner, Johnson, attempts to put the project together by following the students’ directions. Johnson notes that students will often write four steps and think they’re done, so she reinforces the importance of detail: “You didn’t tell which wire—green or red.” They really “get it” from this exercise, she says. They start to understand that “If I don’t write it, you won’t know what I’m thinking.” Similarly to Johnson, Ayala emphasizes audience awareness when her students write “how-to’s” for a recipe. She will take a good and a bad example from a previous class and actually go through the steps to use as an introduction to the activity, “modeling what works and what doesn’t work.”
Ayala also plans other learning activities that force students to consider the audience’s (or listener’s) perspective. At the beginning of the year she will have one student turn his or her back to the screen. Then she will project a picture on the screen and have the class describe without using their hands what they see for the first student to draw. From this activity, her students quickly learn how important their descriptions are. She usually repeats this activity once a month because her students enjoy it so much.

Johnson tries to establish this understanding of audience awareness in the first nine weeks of the school year; “it’s essential,” she emphasizes. “Many students think if they’re thinking it, the other person automatically knows what they’re thinking,” she says. To combat this perspective, Johnson reiterates, “Whatever is in your head has to squirt out your hand,” a concept that she illustrates dramatically.

Nothing really shows students that their writing “works” like feedback from the intended audience. Through these activities, Smith, Johnson, and Ayala force their students to look at their communication from another person’s perspective, and more importantly, to realize that if they, the writers, have not considered their audience’s perspective, their writing is essentially worthless as far as being a communication tool is concerned. The pleasure the students receive from participating in these feedback activities is directly related to the authenticity of the project—these fourth graders know their communication is actually being used.

Emphasis on Presenting

Students can frequently present their work in Smith, Johnson, and Ayala’s classes, sometimes formally to an entire class, possibly using technology, but often
informally for a small group or just their teacher. They do not appear to focus on tailoring language for their specific audience; however, their audiences are typically similar to themselves.

Relevant TEKS standards. According to the fourth grade TEKS, students should be able to tailor language (word choices and delivery) for specific audiences and purposes, adequately supporting their ideas and using technology as needed. (See Table 8-10.)

Smith, Johnson, and Ayala’s experiences with presenting. Students can frequently present their work in Smith, Johnson, and Ayala’s classes, sometimes formally to an entire class but often informally for a small group or just their teacher. Smith’s students have the opportunity to choose a presentation format when they teach the rest of the class ten facts about outer space. They can make a poster, PowerPoint, book of pictures and information, or a movie to accompany their presentation. She also works a bit of public-speaking lessons into the curriculum, for example, stressing that “you can’t wave around while standing there” and that students must use a voice that carries. In their project on water cycles, they get practice sharing in this way as well. As part of a teaching team, Smith has a ready audience for her students in her partner’s class. She will often have her students share their work with or read what they have written to Johnson’s class.

Ayala’s students present 90 percent of the time, even if it is just “to me in conference.” She finds presenting effective because “they will do their best, and [a] second [reason], modeling—others get new ideas.”
In citing “modeling” as one of the benefits of presenting, Ayala is underlining the way presenting can actively engage the entire classroom, so that rather than be simply a passive education tool for most of the class, presenting becomes a dynamic one. When Smith calls her students’ attention to speaking technique, she is reminding them that just as with design elements, communication through speech involves more than just words.
Table 8-1

**Analysis of 4th grade curriculum emphasis on understanding the communication situation**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 4th grade TEKS</th>
<th>Samples of approaches to coverage in 4th grade activities</th>
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</thead>
<tbody>
<tr>
<td><strong>Understand situation requiring communication</strong></td>
<td>§110.6. English Language arts and Reading, Grade 4. (5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to: (A) adapt spoken language such as word choice, diction, and usage to the audience, purpose, and occasion (4-8); (13) Reading/inquiry/research. The student inquires and conducts research using a variety of sources. The student is expected to: (A) form and revise questions for investigations, including questions arising from interests and units of study (4-5); (21) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to: (A) frame questions to direct research (4-8);</td>
<td>• Gain background information from teacher-provided resources such as maps, literature, articles, the Internet, and books • Learn from teacher modeling assignment</td>
</tr>
<tr>
<td>§111.16. Mathematics, Grade 4. (4.14) Underlying processes and mathematical tools. The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to: (B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness; (C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and</td>
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<tr>
<td>§112.6. Science, Grade 4. (2) Scientific processes. The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to: (A) plan and implement descriptive investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology;</td>
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<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 4th grade TEKS</th>
<th>Samples of approaches to coverage in 4th grade activities</th>
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</table>
| Understand situation requiring communication | §113.6. Social Studies, Grade 4.  
(24) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and  
(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. |                                                          |
Table 8-2

Analysis of 4th grade curriculum emphasis on defining audience and clarifying purpose

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 4th grade TEKS</th>
<th>Samples of approaches to coverage in 4th grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define audience</td>
<td>§110.6. English Language arts and Reading, Grade 4. (5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to: (A) adapt spoken language such as word choice, diction, and usage to the audience, purpose, and occasion (4-8); (D) use effective rate, volume, pitch, and tone for the audience and setting (4-8); (19) Writing/writing processes. The student selects and uses writing processes for self-initiated and assigned writing. The student is expected to: (G) refine selected pieces frequently to “publish” for general and specific audiences (4-8);</td>
<td>• Define audience for math and science assignments and work on making assignment appeal to that audience • Define audience for almost all language arts and social sciences assignments • Experiment with point of view</td>
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<tr>
<td>Clarify purpose</td>
<td>§110.6. English Language arts and Reading, Grade 4. (5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to: (A) adapt spoken language such as word choice, diction, and usage to the audience, purpose, and occasion (4-8); (15) Writing/purposes. The student writes for a variety of audiences and purposes, and in a variety of forms. The student is expected to: (A) write to express, discover, record, develop, reflect on ideas, and to problem solve (4-8); (B) write to influence such as to persuade, argue, and request (4-8); (C) write to inform such as to explain, describe, report, and narrate (4-8);</td>
<td>• Determine author’s purpose in science and literature reading • Focus on purposes: to inform, to persuade, to express, to entertain</td>
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Table 8-3

Analysis of 4th grade curriculum emphasis on collaborating

<table>
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<th>Principle</th>
<th>Coverage in 4th grade TEKS</th>
<th>Samples of approaches to coverage in 4th grade activities</th>
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<tbody>
<tr>
<td>Collaborate (students work</td>
<td>§110.6. English Language arts and Reading, Grade 4. (20) Writing/evaluation. The student</td>
<td>• Discuss science experiments and outcomes in groups</td>
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<td>in groups to accomplish a</td>
<td>evaluates his/her own writing and the writings of others. The student is expected to:</td>
<td>• Peer edit in groups</td>
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<td>task or assignment)</td>
<td>(B) respond in constructive ways to others' writings (4-8);</td>
<td>• Research social science topics and present as group</td>
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<td>(22) Writing/connections. The student interacts with writers inside and outside the</td>
<td>• Participate in readers’ theater</td>
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<td>classroom in ways that reflect the practical uses of writing. The student is expected</td>
<td>• Participate in &quot;write arounds&quot;</td>
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<td>to: (A) collaborate with other writers to compose, organize, and revise various types of</td>
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<td>texts, including letters, news, records, and forms (4-8); and</td>
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<td></td>
<td>(23) Viewing/representing/interpretation. The student understands and interprets visual</td>
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<td>images, messages, and meanings. The student is expected to: (B) correspond with peers</td>
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<td>or others via e-mail or conventional mail (4-8).</td>
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<td>§113.6. Social Studies, Grade 4. (24) Social studies skills. The student uses problem-</td>
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<td>solving and decision-making skills, working independently and with others, in a variety</td>
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<td>of settings. The student is expected to: (A) use a problem-solving process to identify</td>
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<td>a problem, gather information, list and consider options, consider advantages and</td>
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<td></td>
<td>disadvantages, choose and implement a solution, and evaluate the effectiveness of the</td>
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<td>solution; and (B) use a decision-making process to identify a situation that requires</td>
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<td>a decision, gather information, identify options, predict consequences, and take action</td>
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<td>to implement a decision.</td>
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<td></td>
<td>§126.3. Technology Applications, Grades 3-5. (8) Solving problems. The student uses</td>
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<td>research skills and electronic communication, with appropriate supervision, to create</td>
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<td></td>
<td>new knowledge. The student is expected to: (A) use communication tools to participate</td>
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<td>in group projects; (C) participate with electronic communities as a learner, initiator,</td>
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<tr>
<td></td>
<td>contributor, or mentor.</td>
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### Table 8-4

**Analysis of 4th grade curriculum emphasis on gathering and evaluating needed resources**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 4th grade TEKS</th>
<th>Samples of approaches to coverage in 4th grade activities</th>
</tr>
</thead>
</table>
| Gather and evaluate needed resources (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not) | §110.6. English Language arts and Reading, Grade 4.  
(1) Listening/speaking/purposes. The student listens actively and purposefully in a variety of settings. The student is expected to:  
(A) determine the purposes for listening such as to gain information, to solve problems, or to enjoy and appreciate (4-8);  
(5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to:  
(B) demonstrate effective communications skills that reflect such demands as interviewing, reporting, requesting, and providing information (4-8);  
(8) Reading/variety of texts. The student reads widely for different purposes in varied sources. The student is expected to:  
(B) select varied sources such as nonfiction, novels, textbooks, newspapers, and magazines when reading for information or pleasure (4-5); and  
(10) Reading/comprehension. The student comprehends selections using a variety of strategies. The student is expected to:  
(B) establish and adjust purposes for reading such as reading to find out, to understand, to interpret, to enjoy, and to solve problems (4-8);  
(12) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts (genres). The student is expected to:  
(J) describe how the author's perspective or point of view affects the text (4-8).  
(13) Reading/inquiry/research. The student inquires and conducts research using a variety of sources. The student is expected to:  
(B) use text organizers, including headings, graphic features, and tables of contents, to locate and organize information (4-8);  
(C) use multiple sources, including electronic texts, experts, and print resources, to locate information relevant to research questions (4-8);  
(D) interpret and use graphic sources of information such as maps, graphs, timelines, tables, and diagrams to address research questions (4-5); | • Learn “Big 6” approach to research (through librarian):  
- task definition, information-seeking strategies, location and access, use of information, synthesis, evaluation  
• Learn about online indexes and search engines and which are best, through librarian  
• Learn and practice standard citation formats  
• Gather information from the internet and other texts  
• Discuss website credibility to some extent  
• Evaluate sources for usefulness to some extent |
### Table 8-4 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 4th grade TEKS</th>
<th>Samples of approaches to coverage in 4th grade activities</th>
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<tbody>
<tr>
<td><strong>Gather and evaluate needed resources</strong>&lt;br&gt;(with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not)</td>
<td>(21) <strong>Writing/inquiry/research.</strong> The student uses writing as a tool for learning and research. The student is expected to:&lt;br&gt;(B) organize prior knowledge about a topic in a variety of ways such as by producing a graphic organizer (4-8);&lt;br&gt;(C) take notes from relevant and authoritative sources such as guest speakers, periodicals, and on-line searches (4-8);</td>
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<td><strong>§111.16. Mathematics, Grade 4.</strong>&lt;br&gt;(4.11) <strong>Measurement.</strong> The student applies measurement concepts. The student is expected to estimate and measure to solve problems involving length (including perimeter) and area. The student uses measurement tools to measure capacity/volume and weight/mass. The student is expected to:&lt;br&gt;(A) estimate and use measurement tools to determine length (including perimeter), area, capacity and weight/mass using standard units SI (metric) and customary;&lt;br&gt;(B) perform simple conversions between different units of length, between different units of capacity, and between different units of weight within the customary measurement system;&lt;br&gt;(C) use concrete models of standard cubic units to measure volume;&lt;br&gt;(D) estimate volume in cubic units; and</td>
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<td><strong>§112.6. Science, Grade 4.</strong>&lt;br&gt;(2) <strong>Scientific processes.</strong> The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to:&lt;br&gt;(B) collect information by observing and measuring;</td>
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<td>(4) <strong>Scientific processes.</strong> The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:&lt;br&gt;(A) collect and analyze information using tools including calculators, safety goggles, microscopes, cameras, sound recorders, computers, hand lenses, rulers, thermometers, meter sticks, timing devices, balances, and compasses; and</td>
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<td>(7) <strong>Science concepts.</strong> The student knows that matter has physical properties. The student is expected to:&lt;br&gt;(A) observe and record changes in the states of matter caused by the addition or reduction of heat; and</td>
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### Table 8-4 (continued).

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<th>Principle</th>
<th>Coverage in 4th grade TEKS</th>
<th>Samples of approaches to coverage in 4th grade activities</th>
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</table>
| **Gather and evaluate needed resources** (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not) | **§113.6. Social Studies, Grade 4.**  
(22) **Social studies skills.** The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:  
(A) differentiate between, locate, and use primary and secondary sources such as computer software; interviews; biographies; oral, print, and visual material; and artifacts to acquire information about the United States and Texas;  
(B) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and  
(C) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. | |
| **§126.3. Technology Applications, Grades 3-5.**  
(4) **Information acquisition.** The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to:  
(A) apply appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies; and  
(B) select appropriate strategies to navigate and access information on local area networks (LANs) and wide area networks (WANs), including the Internet and intranet, for research and resource sharing.  
(5) **Information acquisition.** The student acquires electronic information in a variety of formats, with appropriate supervision. The student is expected to:  
(A) acquire information including text, audio, video, and graphics; and  
(B) use on-line help and documentation.  
(6) **Information acquisition.** The student evaluates the acquired electronic information. The student is expected to:  
(A) apply critical analysis to resolve information conflicts and validate information;  
(B) determine the success of strategies used to acquire electronic information; and  
(C) determine the usefulness and appropriateness of digital information. | |
Table 8-5

Analysis of 4th grade curriculum emphasis on analyzing and organizing information

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 4th grade TEKS</th>
<th>Samples of approaches to coverage in 4th grade activities</th>
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</table>
| Analyze and organize information | §110.6. English Language arts and Reading, Grade 4. (2) Listening/speaking/critical listening. The student listens critically to analyze and evaluate a speaker's message(s). The student is expected to: (A) interpret speakers' messages (both verbal and nonverbal), purposes, and perspectives (4-8); (B) identify and analyze a speaker's persuasive techniques such as promises, dares, and flattery (4-5); (C) distinguish between the speaker's opinion and verifiable fact (4-8); and (10) Reading/comprehension. The student comprehends selections using a variety of strategies. The student is expected to: (G) paraphrase and summarize text to recall, inform, and organize ideas (4-8); (J) distinguish fact and opinion in various texts (4-8); (L) represent text information in different ways such as in outline, timeline, or graphic organizer (4-8). (13) Reading/inquiry/research. The student inquires and conducts research using a variety of sources. The student is expected to: (E) summarize and organize information from multiple sources by taking notes, outlining ideas, or making charts (4-8); (G) draw conclusions from information gathered from multiple sources (4-8); and (H) use compiled information and knowledge to raise additional, unanswered questions (3-8). (19) Writing/writing processes. The student selects and uses writing processes for self-initiated and assigned writing. The student is expected to: (B) develop drafts by categorizing ideas, organizing them into paragraphs, and blending paragraphs within larger units of text (4-8); (21) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to: (D) summarize and organize ideas gained from multiple sources in useful ways such as outlines, conceptual maps, learning logs, and timelines (4-8); | - Keep science journal recording and analyzing the progression of a science experiment  
- Research at least four times per year  
- Work on organizing strategies for narratives and research reports  
- Discuss how to avoid plagiarism |

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Table 8-5 *(continued).*

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</table>
| **Analyze and organize information** (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships)** | (23) **Viewing/representing/interpretation.** The student understands and interprets visual images, messages, and meanings. The student is expected to:  
  (B) interpret important events and ideas gathered from maps, charts, graphics, video segments, or technology presentations (4-8); and  
  (C) use media to compare ideas and points of view (4-8).  
  
  §111.16. Mathematics, Grade 4.  
  (4.7) **Patterns, relationships, and algebraic thinking.** The student uses organizational structures to analyze and describe patterns and relationships. The student is expected to describe the relationship between two sets of related data such as ordered pairs in a table.  
  (4.13) **Probability and statistics.** The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to:  
  (A) use concrete objects or pictures to make generalizations about determining all possible combinations of a given set of data or of objects in a problem situation; and  
  (B) interpret bar graphs.  
  (4.14) **Underlying processes and mathematical tools.** The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:  
  (B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;  
  (C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and  
  (4.15) **Underlying processes and mathematical tools.** The student communicates about Grade 4 mathematics using informal language. The student is expected to:  
  (A) explain and record observations using objects, words, pictures, numbers, and technology; and  
  (4.16) **Underlying processes and mathematical tools.** The student uses logical reasoning. The student is expected to:  
  (A) make generalizations from patterns or sets of examples and nonexamples; and  
  |
Table 8-5 (continued).

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<tr>
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<tbody>
<tr>
<td><strong>Analyze and organize information</strong></td>
<td>§112.6. Science, Grade 4. (2) Scientific processes. The student uses scientific inquiry methods during field and laboratory investigations. The student is expected to: (C) analyze and interpret information to construct reasonable explanations from direct and indirect evidence; (D) communicate valid conclusions; and (E) construct simple graphs, tables, maps, and charts to organize, examine, and evaluate information. (3) Scientific processes. The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to: (A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information; (B) draw inferences based on information related to promotional materials for products and services; (4) Scientific processes. The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to: (A) collect and analyze information using tools including calculators, safety goggles, microscopes, cameras, sound recorders, computers, hand lenses, rulers, thermometers, meter sticks, timing devices, balances, and compasses; and (10) Science concepts. The student knows that certain past events affect present and future events. The student is expected to: (B) draw conclusions about &quot;what happened before&quot; using fossils or charts and tables (11) Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to: (B) summarize the effects of the oceans on land; and §113.6. Social Studies, Grade 4. (2) History. The student understands the causes and effects of European exploration and colonization of Texas and the Western Hemisphere. The student is expected to: (A) summarize reasons for European exploration and settlement of Texas and the Western Hemisphere;</td>
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<td><strong>Principle</strong></td>
<td><strong>Coverage in 4th grade TEKS</strong></td>
<td><strong>Samples of approaches to coverage in 4th grade activities</strong></td>
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| **Analyze and organize information**  
(students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | (3) **History.** The student understands the causes and effects of the Texas Revolution, the Republic of Texas, and the annexation of Texas to the United States. The student is expected to:  
(A) analyze the causes, major events, and effects of the Texas Revolution, including the battles of the Alamo and San Jacinto; |  |
| | (6) **Geography.** The student uses geographic tools to collect, analyze, and interpret data. The student is expected to:  
(A) apply geographic tools, including grid systems, legends, symbols, scales, and compass roses, to construct and interpret maps; and  
(B) translate geographic data into a variety of formats such as raw data to graphs and maps. |  |
| | (13) **Economics.** The student understands patterns of work and economic activities in Texas. The student is expected to:  
(C) analyze the effects of immigration, migration, and limited resources on the economic development and growth of Texas; |  |
| | (20) **Culture.** The student understands the contributions of people of various racial, ethnic, and religious groups to Texas. The student is expected to:  
(C) summarize the contributions of people of various racial, ethnic, and religious groups in the development of Texas. |  |
| | (22) **Social studies skills.** The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:  
(B) analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions;  
(C) organize and interpret information in outlines, reports, databases, and visuals including graphs, charts, timelines, and maps;  
(D) identify different points of view about an issue  
(F) use appropriate mathematical skills to interpret social studies information such as maps and graphs |  |
| | (24) **Social studies skills.** The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and |  |

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Table 8-5 (continued).

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<tbody>
<tr>
<td><strong>Analyze and organize information</strong></td>
<td>(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.</td>
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<td>(students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships)</td>
<td><strong>§126.3. Technology Applications, Grades 3-5.</strong></td>
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<td><strong>(7) Solving problems.</strong></td>
<td>The student uses appropriate computer-based productivity tools to create and modify solutions to problems. The student is expected to:</td>
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<td>(B) use appropriate software to express ideas and solve problems including the use of word processing, graphics, databases, spreadsheets, simulations, and multimedia; and</td>
<td>(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.</td>
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<td>(C) use a variety of data types including text, graphics, digital audio, and video.</td>
<td>(C) use a variety of data types including text, graphics, digital audio, and video.</td>
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<td><strong>(8) Solving problems.</strong></td>
<td>The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:</td>
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<td>(B) use interactive technology environments, such as simulations, electronic science or mathematics laboratories, virtual museum field trips, or on-line interactive lessons, to manipulate information; and</td>
<td>(B) use interactive technology environments, such as simulations, electronic science or mathematics laboratories, virtual museum field trips, or on-line interactive lessons, to manipulate information; and</td>
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<td>(C) use appropriate applications including, but not limited to, spreadsheets and databases to develop charts and graphs by using data from various sources.</td>
<td>(C) use appropriate applications including, but not limited to, spreadsheets and databases to develop charts and graphs by using data from various sources.</td>
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Table 8-6

Analysis of 4th grade curriculum emphasis on determining best format

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<th>Samples of approaches to coverage in 4th grade activities</th>
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<tr>
<td>Determine best format (with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, PowerPoint, report, manual, brochure, proposal, or procedure, etc.)</td>
<td>§110.6. English Language arts and Reading, Grade 4. (10) Reading/comprehension. The student comprehends selections using a variety of strategies. The student is expected to: (L) represent text information in different ways such as in outline, timeline, or graphic organizer (4-8). (12) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts (genres). The student is expected to: (B) recognize that authors organize information in specific ways (4-5); (C) identify the purposes of different types of texts such as to inform, influence, express, or entertain (4-8); (D) recognize the distinguishing features of genres, including biography, historical fiction, informational texts, and poetry (4-8); (13) Reading/inquiry/research. The student inquires and conducts research using a variety of sources. The student is expected to: (F) produce research projects and reports in effective formats using visuals to support meaning, as appropriate (4-5); (15) Writing/purposes. The student writes for a variety of audiences and purposes, and in a variety of forms. The student is expected to: (F) choose the appropriate form for his/her own purpose for writing, including journals, letters, reviews, poems, narratives, and instructions (4-5). (21) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to: (E) present information in various forms using available technology (4-8); and (22) Writing/connections. The student interacts with writers inside and outside the classroom in ways that reflect the practical uses of writing. The student is expected to: (A) collaborate with other writers to compose, organize, and revise various types of texts, including letters, news, records, and forms (4-8); and</td>
<td>• Create a PowerPoint • May use photography and voice-over equipment to create presentation (select groups) • Choose science project presentation format—PowerPoint, tri-panel poster, home video—and create a teaching item to accompany their presentation—word search for class, brochure, handout. • For economics fair, advertise in various formats and design surveys to determine “customer” preferences</td>
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Table 8-6 *(continued).*

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<th>Coverage in 4th grade TEKS</th>
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</table>
| **Determine best format**                                                | (24) **Viewing/representing/analysis.** The student analyzes and critiques the significance of visual images, messages, and meanings. The student is expected to:  
(A) compare and contrast print, visual, and electronic media such as film with written story (4-8).  
(25) **Viewing/representing/production.** The student produces visual images, messages, and meanings that communicate with others. The student is expected to:  
(A) select, organize, or produce visuals to complement and extend meanings (4-8); and  
(B) produce communications using technology or appropriate media such as developing a class newspaper, multimedia reports, or video reports (4-8). |                                                                                                         |
|                                                                         | §111.16. **Mathematics, Grade 4.**  
(4.15) **Underlying processes and mathematical tools.** The student communicates about Grade 4 mathematics using informal language. The student is expected to:  
(A) explain and record observations using objects, words, pictures, numbers, and technology; and |                                                                                                         |
|                                                                         | §112.6. **Science, Grade 4.**  
(3) **Scientific processes.** The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:  
(C) represent the natural world using models and identify their limitations; |                                                                                                         |
|                                                                         | §113.6. **Social Studies, Grade 4.**  
(6) **Geography.** The student uses geographic tools to collect, analyze, and interpret data. The student is expected to:  
(B) translate geographic data into a variety of formats such as raw data to graphs and maps. |                                                                                                         |
|                                                                         | (23) **Social studies skills.** The student communicates in written, oral, and visual forms. The student is expected to:  
(D) create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies; and |                                                                                                         |
|                                                                         | §126.3. **Technology Applications, Grades 3-5.**  
(11) **Communication.** The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to:  
(A) publish information in a variety of media including, but not limited to, printed copy, monitor display, Internet documents, and video; and |                                                                                                         |
Table 8-7

Analysis of 4th grade curriculum emphasis on selecting communication style

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<th>Principle</th>
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</table>
| Select communication style | §110.6. English Language arts and Reading, Grade 4. (3) Listening/speaking/appreciation. The student listens, enjoys, and appreciates spoken language. The student is expected to: (C) assess how language choice and delivery affect the tone of the message (4-5). (5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to: (A) adapt spoken language such as word choice, diction, and usage to the audience, purpose, and occasion (4-8); (B) demonstrate effective communications skills that reflect such demands as interviewing, reporting, requesting, and providing information (4-8); (D) use effective rate, volume, pitch, and tone for the audience and setting (4-8); | • Strive to match word choice with feelings want to create in audience  
• Study word choices in literature (lead, similes, metaphors, connections to audience)  
• Discuss word usage in relation to context (“Hey” vs. “Hello”) |
|          | §111.16. Mathematics, Grade 4. (4.15) Underlying processes and mathematical tools. The student communicates about Grade 4 mathematics using informal language. The student is expected to: (B) relate informal language to mathematical language and symbols. | |
|          | §113.6. Social Studies, Grade 4. (23) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to: (A) use social studies terminology correctly; | |
Table 8-8

Analysis of 4th grade curriculum emphasis on selecting design elements

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<tr>
<td>Select design elements (with audience and purpose in mind, students decide how to strategically use color, informative headings, graphics, bulleted/numbered lists, fonts, white space; use design principles: single space, double space between paragraphs, no indentions; no all-caps or centering)</td>
<td>§110.6. English Language arts and Reading, Grade 4. (23) Viewing/representing/interpretation. The student understands and interprets visual images, messages, and meanings. The student is expected to: (A) describe how illustrators' choice of style, elements, and media help to represent or extend the text's meanings (4-8); (24) Viewing/representing/analysis. The student analyzes and critiques the significance of visual images, messages, and meanings. The student is expected to: (A) interpret and evaluate the various ways visual image makers such as graphic artists, illustrators, and news photographers represent meanings (4-5); and</td>
<td>• May work on judiciously using clip art and animation • May discuss text features like fonts and headings • May discuss how illustrations complement text • May practice using bullets</td>
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<td>§113.6. Social Studies, Grade 4. (6) Geography. The student uses geographic tools to collect, analyze, and interpret data. The student is expected to: (A) apply geographic tools, including grid systems, legends, symbols, scales, and compass roses, to construct and interpret maps; and</td>
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<td>§126.3. Technology Applications, Grades 3-5. (10) Communication. The student formats digital information for appropriate and effective communication. The student is expected to: (A) use font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience; (B) use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays, Internet documents, and printed materials; and (C) use appropriate applications including, but not limited to, spreadsheets and databases to develop charts and graphs by using data from various sources.</td>
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Table 8-9

Analysis of 4th grade curriculum emphasis on usability testing

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</table>
| Do usability testing              | §110.6. English Language arts and Reading, Grade 4. (5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to:  
(E) give precise directions and instructions such as in games and tasks (4-5); and  
(20) Writing/evaluation. The student evaluates his/her own writing and the writings of others. The student is expected to:  
(A) apply criteria to evaluate writing (4-8);  
(C) evaluate how well his/her own writing achieves its purposes (4-8);  
(21) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to:  
(F) evaluate his/her own research and raise new questions for further investigation (4-8).  

§111.16. Mathematics, Grade 4.  
(4.14) Underlying processes and mathematical tools. The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:  
(B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;  
(4.16) Underlying processes and mathematical tools. The student uses logical reasoning. The student is expected to:  
(B) justify why an answer is reasonable and explain the solution process.  

§113.6. Social Studies, Grade 4.  
(24) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and  
• Verify science and language arts “how-to” descriptions  
• May participate in describing/blind drawing activity |

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Table 8-9 (continued).

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| Do usability testing (students “test drive” what they wrote to see if it does what they want it to—that they connect with the audience and accomplish their purpose) | §126.3. Technology Applications, Grades 3-5. (12) Communication. The student uses technology applications to facilitate evaluation of communication, both process and product. The student is expected to: (B) evaluate the product for relevance to the assignment or task; and (C) create technology assessment tools to monitor progress of project such as checklists, timelines, or rubrics. | }
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</table>
| Present                   | **§110.6. English Language arts and Reading, Grade 4.** (5) **Listening/speaking/audiences.** The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to: (A) adapt spoken language such as word choice, diction, and usage to the audience, purpose, and occasion (4-8); (B) demonstrate effective communications skills that reflect such demands as interviewing, reporting, requesting, and providing information (4-8); (D) use effective rate, volume, pitch, and tone for the audience and setting (4-8); (F) clarify and support spoken ideas with evidence, elaborations, and examples (4-8).  
(21) **Writing/inquiry/research.** The student uses writing as a tool for learning and research. The student is expected to: (E) present information in various forms using available technology (4-8); and  
**§126.3. Technology Applications, Grades 3-5.** (11) **Communication.** The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to: (B) use presentation software to communicate with specific audiences. | • Present formally with props of posterboards, PowerPoints, information books, even movies  
• May discuss effective public speaking behavior  
• Frequently present to teacher |
FIFTH GRADE CURRICULUM EMPHASIS ON PROFESSIONAL WRITING PRINCIPLES

TAKS: Reading (Mar. 3), Math (Apr. 7), and Science (Apr. 30)

Fifth grade language arts and social studies teacher Amanda Jackson* believes that the Writing TAKS in fourth grade is misplaced and misfocused: “By the time I get fifth graders, they loathe writing, and they really can’t write in a non-fiction/research way. They can write a personal narrative to a prompt,” she observes wryly. Jackson notes that because they are preparing for the Reading TAKS in fifth grade, they “work so hard on reading [that] they don’t write much until later” (after March 3). Jackson, who holds a master’s degree in Elementary Education and has taught for twenty years, does a lot of modeling so that her students can see that “their teacher writes too” and that writing “doesn’t just come out of the sky” (personal communication, March 26, 2008).

Ella Frist* also teaches fifth grade language arts and social studies and has been teaching for five years (personal communication, April 9, 2008). She holds a bachelor’s degree in Elementary Education.

Sue Mitchell (math) and Janalee Hales (science) teach at the same elementary school. Mitchell, who has been teaching ten years, holds a master’s degree in Education (personal communication, April 16, 2008), while Hales, who has been teaching five years, holds a bachelor’s degree in Elementary Education (personal communication, April 25, 2008).
Summary of How Teaching Experiences Correspond to the Study Professional Writing Principles and the TEKS

Helping their students understand the communication situation is very important to Jackson and her colleagues. In all subject areas—language arts, math, social studies, and science—these teachers provide sufficient background and ask leading questions that prompt the students to apply already-learned concepts to communicate appropriately in the given situation. These four teachers help students grasp audience definition through working with point of view. This focus extends to considering word choices but probably not delivery. The four do address communication purpose but note that fifth graders are becoming increasingly interested in grades, so achieving a certain score tends to overwhelm any other writing goal.

Jackson, Frist, Mitchell, and Hales all incorporate collaborative activities frequently in their classrooms although they are sensitive to the restrictions fifth graders' maturity places on such activities. Through collaboration these teachers find they can step into the role of facilitator, guiding rather than leading group discussions and allowing students to learn from each other. It does not appear, though, that fifth graders collaborate using technology.

Fifth graders appear to find the research process challenging and typically receive instruction in it only toward the end of the year. Most of their research practice takes place in language arts and social sciences, and they do not appear to spend much time assessing sources' credibility, although practice in this skill is a TEKS requirement. Through the Library Media Specialist, though, they learn how to take the
“Big 6” approach to research, use electronic search engines, evaluate websites, and avoid plagiarism.

Even though the TEKS heavily emphasize analysis and organization, Jackson and Frist do limited work in language arts and social sciences, respectively, on these skills, possibly because they are not a fifth grade TAKS focus, while Mitchell and Hales work much more on analysis and organization in math and science due to the nature of the subjects.

All four teachers give students some degree of choice in formatting their work. These teachers appear to balance requiring students try out recently introduced formats with allowing students to choose the format they wish, although that choice is probably based on appeal to student rather than appropriateness for audience.

Jackson and her fellow teachers do discuss communication style to some degree. Frist’s class works on selecting words that will make their audience most receptive to their message, while Jackson’s students work on finding their individual, authentic voices. Mitchell and Hales work on helping their math and science students be aware of an audience that is not as familiar with technical terminology as they are. It appears, though, that students do not actually work much on tailoring their own language and delivery for the audience, purpose, and occasion.

As with format, these teachers’ students select design elements based on what they, the students, like rather than what would appeal to an audience. Availability of technology is also an issue in the teachers’ adequately discussing design, certainly in the depth the TEKS require.
Jackson, Frist, Mitchell, and Hales all do usability testing whenever the teaching activity is appropriate. In addition to receiving feedback from the targeted audience on their document, students also revise based on that feedback. For language arts, usability testing takes the form of peer editing, while for social sciences, math, and science, audiences review procedures.

The students in these classes occasionally present formally but frequently present informally. They will sometimes present as the culmination of a project but will also present solutions as part of daily collaborative or other learning activities.

**Emphasis on Understanding Situation Requiring Communication**

Helping their students understand the communication situation is important to Jackson and her colleagues. In all subject areas—language arts, math, social studies, and science—these teachers provide sufficient background and ask leading questions that prompt the students to apply already-learned concepts to communicate appropriately in the given situation.

*Relevant TEKS standards.* According to the fifth grade TEKS, students should be able to tailor their speech for particular communication situations. They should also be able to frame research questions and form or select and carry out strategies to solve language arts, math, science, and social studies investigations and problems. (See Table 9-1.)

*Jackson, Frist, Mitchell, and Hales’ experiences with understanding the communication situation.* Jackson, Frist, Mitchell, and Hales all spend a significant amount of time in their respective subject areas ensuring that their students understand the communication situation. Jackson says her students work on this 100 percent of the
time. She begins each assignment by relating it to a particular TEK, which she deconstructs with her students using the overhead projector. (See Figure 9-1.) For example:

**SET (The Student is Expected To): Analyze characters, including their traits, motivations, conflicts, point-of-view, relationships and changes.**

- **Analyze**—to study, to take apart, make connections
- **Traits**—physical, personality pieces which describe
- **Motivations**—things or events which make someone do or not do
- **Conflicts**—opposition/battle
  - with another
  - within self

- **point of view**—how a character sees a situation
- **relationships**—the people who a character hangs with or doesn’t hang with

**SET: Paraphrase and summarize to recall, inform, or organize ideas.**

What do I do when I summarize?

- **Delete**—take away
  - Trivial (uninteresting)
  - Redundant

- **Substitute**
  Example: tulips, roses, lily= flowers

Beginning, Middle, End

*Figure 9-1. Jackson deconstructs TEKS for her students.*

Frist spends the entire first day (ninety minutes) of introducing new writing assignments in providing sufficient background information to enable her students to
sufficiently understand the writing situation. Only “very rarely” will she say, “This is what you’re doing; get started.”

For math teacher Mitchell, understanding the rhetorical situation is a “huge part of the way I teach.” She consistently asks her students of a math problem, “Where would you see this happening?” Hales also does “quite a bit of the setting up of the scenarios due to the inquiry nature” of science. Her class talks about a lot of hypothetical situations along the lines of “what would you do if this were you?” For example, in their study of birds’ beaks and the adaptations of birds, they talk about the scenario of a friend’s dropping off a pet bird and the students’ not paying attention when the friend told them how to take care of it. “So how do you find out how to take care of this bird?” asks Hales, a question that requires her students to go back to the adaptations of the bird’s beak and determine what the pet bird could eat based on its beak.

As their writing skills expand, fifth graders can respond to more variables in their communication situations. They can see themselves in authentic positions requiring writing or speaking and can grasp the circumstances sufficiently to accurately determine an effective approach. Applying this skill to the sciences makes mere concepts come alive. When students can understand math and science as part of their own life experiences—experiences that they must communicate about—their education becomes more relevant.

Emphasis on Defining Audience and Clarifying Purpose

These four teachers help students grasp audience definition through working with point of view. This focus extends to considering word choices but probably not to
delivery. The four do address communication purpose but note that fifth graders are becoming increasingly interested in grades, so achieving a certain score tends to overwhelm any other writing goal.

Relevant TEKS standards. According to the fifth grade TEKS, students should be able to tailor their speech and writing (word choices and delivery) to particular audiences for particular purposes. (See Table 9-2.)

Jackson, Frist, Mitchell, and Hales’ experiences with defining audience. These teachers help students grasp audience definition through working with point of view. Hales feels it is “best to spend a lot of time talking about audience” because it helps her when she has to grade her students’ science notebooks. She’ll have her students explain a science concept to a younger sibling, for instance, reminding them that they should not use a lot of big words or lots of science vocabulary “all in a row” because their sibling “won’t understand your meaning” and “they won’t be effectively communicating.” However, when they are writing to her, their science teacher, who has “lots of science knowledge and background,” she reminds them that she will expect lots of science vocabulary, as much as they can “pack into one sentence."

In another assignment, Hales’ students write to the postmaster general to convince him to create a stamp for their favorite scientist. In that case Hale reminds them that they are not writing to someone who has a science background but are instead communicating “in a convincing manner” to someone who runs a large business—“How does that sound different; how does that look different?” she prompts them.
Mitchell draws on audiences her students know to force students to practice explaining math in terms those audiences will understand. She suggests their principal, for example: “If Mrs. Hanks walked in, how would you explain this to her?” Then Mitchell will have her school’s principal, Paige Hanks, come into the classroom and pretend she does not understand the math problem the students are discussing, which they then have to explain to her, along with the solution. Or she might ask them how they would explain to their parents how to apply the math concept they are studying in “everyday life.”

Mitchell will also have her students get together with the first or second grade students and explain some math concepts. She says the “feedback from the first and second grade teachers” shows her this approach is “definitely designed well” because the younger students receive an explanation at a “level they can understand” and her own students experience “success in reaching an audience.”

Mitchell also experiments with having students write from different perspectives. In geometry, for example, she asks them to imagine they are a specific shape on vacation. They must send a postcard home to their parents and tell them how and where they fit in the new locale. They pick the vacation spot and create the postcards on the computer.

Two years ago, Mitchell added “.com” to the “UPS√” strategy MISD has used for a number of years. (See Figure 9-2.)
UPS√.COM
ARE YOU CONNECTED?

- Understand the problem. RESTATE it and what you have to do in your own words.
- Plan and TELL a strategy you can use to solve the problem.
- Solve the problem by SHOWING your strategy.
- √ Check by using ANOTHER STRATEGY to solve the problem.
- COMmunicate your reasoning and thinking in mathematical language. Connect this problem to something else you’ve learned, done in class, or heard about. Did you discover a pattern or rule? Does something else make sense now that you’ve solved this problem?

Figure 9-2. Mitchell added the “.com” to prompt students to “mak[e] connections” and “communicat[e].”
The “.com” adds the component of “making connections to other things that happen in real life and communicating their reasoning.” She first presented this addition at a cadre meeting, and it was later adopted by the district and became the focus for the fifth grade. Previously the district “didn’t build those communication skills.”

Jackson does not talk much about audience because her students’ writing is still “all about them.” “It’s hard to a fifth grader to look at the larger picture or even consider an audience past their peers,” observes Jackson. However, they do “huge” reading skills work on point of view, which Mitchell and Hales also emphasize. Jackson’s students study a story called “The Barn,” which is told from a nine-year-old’s point of view, and then have to re-tell it from the father’s point of view. She feels that through such studies, she is “starting to lay those foundations” of audience definition. For the most part, though, her students are “not ready to understand” how different the father’s feelings and thoughts are. Her students are “just now” starting to understand inferences. In fifth grade, “attitude consideration is not developmentally appropriate,” Jackson believes.

Frist does not typically elaborate on an assignment’s audience. She might say, “You’re writing for classmates. Think about what you and your friends enjoy” or “You’re writing for parents. Think about how they’ll react when they read what you’ve written.”

Jackson feels it is important for her students to know “it’s not just me reading their work.” She tells them others see her grading when she is off campus and may look at their work. She always asks permission to share it, though. (See Figure 9-3):
Congratulations!!!
Mrs. Jackson requests your permission to use your work!!!

Dear

Your work is “toadally awesome” and I would like to use your work while teaching outside of the classroom. I am asking your permission to use it.
If you agree, please sign your name and date below. I appreciate such great quality and the opportunity to share with others your awesome accomplishment.
Thanks again for you frog-tabulous work?
Un-frog-ettably yours,
Mrs. Jackson

I, __________________________
Print name
Give Mrs. Jackson permission to use my work.

Signature________________________
Date________________________

Figure 9-3. Jackson asks students’ permission to share their work.

Jackson says her students think it is “cool” that “their peers will look at it.”

Compared to students in earlier grades, fifth graders are starting to define their audiences more fully, in particular, examining their audience’s familiarity with the writing topic, limitations, and expectations and exploring how these characteristics might affect the communication format. Through the experience of explaining a challenging math or
science concept to a “lay” audience, students learn to select words, images, and formats from their audience’s frame of reference.

Mitchell’s “.com” addition to the “UPS√” reminds her students that “communicating” a solution is a last but necessary step in solving a problem because it completes the education process. If her fifth graders can explain their reasoning to someone else, they must understand how to solve the problem.

Jackson, Frist, Mitchell, and Hales’ experiences with clarifying purpose. Jackson and her colleagues do address communication purpose but note that fifth graders are becoming increasingly interested in grades, so achieving a certain score tends to overwhelm any other writing goal. Jackson’s students do talk about purpose to some extent, so they are not just writing because “the teacher said to.” For example, when they make pop-up books, they know they will be reading them to the “kindergarten kids down the hall” or sending them to a children’s hospital. But Jackson notes that she will tell them regarding certain mandatory assignments,” This is what we have to do.” “Fifth graders are just learning how to set goals for themselves. Many times at this age they do not set realistic goals, and it’s based upon what they think their parents want,” she notes.

Hales echoes this view of her students’ maturity. She says focusing on purpose is “tough with fifth graders because they think that the sole purpose of every assignment is to get a grade.” With the occasional exception of assignments like the letter to the postmaster general, Hale says they will “touch on it [purpose] briefly, but it’s almost a losing battle . . . convincing them that there’s more out there than the score they’re going to get on their paper.”
Frist covers purpose as part of building background knowledge. In addition, she notes that the assignment rubrics define the purpose. For example, in developing their Civil War game boards, her students work in groups of four, researching people from the Civil War era and finding a link to the present. They have to write a biography as if they are that person, providing clues about who they are and who they are not. Their purpose is to get people to understand how to play their game and to understand through their writing who they are.

In light of their fifth grade students’ focus on grades, teachers need to strive to make assignments authentic so that purpose will be organic. If students perceive that their communication activity is contrived, they may tend to revert to completing the assignment for a grade rather than creating a useful document—a document someone will use. Even if the purpose for writing is to learn, students can make the most of their efforts if they buy into the rationale.

**Emphasis on Collaborating**

Jackson, Frist, Mitchell, and Hales all incorporate collaborative activities frequently in their classrooms, although they are sensitive to the restrictions fifth graders’ maturity places on such activities. Through collaboration these teachers find they can step into the role of facilitator, guiding rather than leading group discussions and allowing students to learn from each other. It does not appear, though, that fifth graders collaborate using technology.

*Relevant TEKS standards.* According to the fifth grade TEKS, students should be able to peer critique their classmates’ writing. They should also be able to
collaborate in all stages of the writing process in producing a variety of text forms, using
technology when required. (See Table 9-3.)

Jackson, Frist, Mitchell, and Hales’ experiences with collaborating.

Jackson, Frist, Mitchell, and Hales all incorporate collaborative activities frequently in
their classrooms, although they are sensitive to the restrictions fifth graders’ maturity
places on such activities. Hales sees collaboration as a tremendous assist to her
teaching efforts. Her class does as much as 90 percent collaboration—everything
except quizzes and tests she does in a “neighborhood fashion” because “fifth graders
are going to talk all the time anyway.” “If I can capitalize on what they’re discussing and
communicating about, we have the best of both worlds,” Hales suggests. Discipline
problems are minimized because they’re talking either way. Hales feels that when she’s
able to “guide conversations,” she’s able to “get them where I need them to be” and
learning all happens “so much faster.” Hales notes that special-needs students also
benefit from collaboration because they can usually “communicate verbally, and [the
other students] can assist [them] . . . with the other tasks that they’re weaker in.”

Frist also sees this supportive benefit from collaboration. Her students work in
groups at least half the time. “It [collaboration] gives the kids struggling a chance to
work with a kid that ‘has it,’” she explains, seconding Hales’ assessment. “It gives them
a chance to learn from each other.” She feels they may even learn better from others.
Her room is definitely “not quiet,” she notes.

Although Mitchell also relies on collaboration as a teaching tool, she finds she
needs to carefully monitor partnerships. Mitchell’s class collaborates daily, sometimes
in small groups, other times with everyone. She says she does have to change her
approach “depending on the students”—some “don’t like to work with others.” She has to “monitor who the partners are—the weaker students might cling to the stronger ones.” However, she notes, like Hales, that as a group, her students enjoy collaborating “because they can be social while working and sharing ideas.”

Jackson also carefully monitors partnerships, letting students choose to collaborate but also allowing them to work independently because it “frustrates” her that “developing students don’t have the social skills to be able to say, ‘You’re not doing your job.’” For Jackson, “it’s not worth getting them that upset.” Her students do collaborate on several projects, like the “Hacker Trail” and Civil War game boards and directions.

Jackson feels strongly that sharing her own actual writing process with her students is very important so that they can see that “real writing is a collaboration of a lot of people.”

Collaboration is a good pairing with fifth graders’ natural socializing. Jackson and her colleagues are able to channel their students’ affinity for chatting and banter into an effective learning tool, which the teachers monitor carefully and guide to ensure that students meet learning objectives. The key here appears to be “monitoring carefully” since valuable learning time can be wasted if only some students are doing all the work for the group or if some students are not developmentally ready to collaborate. Collaboration is a perfect fit for inquiry-based teaching approaches.

**Emphasis on Gathering and Evaluating Needed Resources**

Fifth graders appear to find the research process challenging and typically receive instruction in it only toward the end of the year. Most of their research practice takes place in language arts and social sciences, and they don’t appear to spend
much time assessing sources’ credibility, although practice in this skill is a TEKS requirement. Through the Library Media Specialist, though, they learn how to take the “Big 6” approach to research, use electronic search engines, evaluate websites, and avoid plagiarism.

Relevant TEKS standards. According to the fifth grade TEKS, students should be able to gather information through listening and reading critically, noting a source’s bias, motivation, and persuasive technique. They should be able to use text organizers and electronic search strategies as well as oral techniques to gather information from a variety of text types, including graphic and electronic formats, and to take notes with a graphic organizer. They should also be able to evaluate the usefulness of located digital information.

For science, fifth graders should be able to gather information by observing and measuring, using a variety of tools. They should also be able to determine the strengths and weaknesses of scientific explanations and evaluate promotional material for products and services.

For social studies, they should be able to locate primary and secondary sources in different formats. They should also be able to determine different points of view on related topics and the rationale for those viewpoints. And they should be able to gather information to solve problems or make decisions. (See Table 9-4.)

Jackson, Frist, Mitchell, and Hales’ experiences with gathering and evaluating needed resources. Fifth graders appear to find the research process challenging and typically receive instruction in it only toward the end of the year. This is a skill Jackson has had to focus on with her students more over the last two or three years. Previously,
the only source for resources was the library, and she could direct them toward journals as a good source; “now so much is blasted at them [students].” Her students have a hard time with a standard assignment like coming up with a topic, finding three sources on that topic, and evaluating those sources. They just “can’t do it.” They want to use the “first one [source] that comes up” on a Google search. “Weeding through resources is hard for fifth graders; they need guidance and loads of instruction to choose resources,” notes Jackson.

Finding time to teach research is a struggle for all these teachers. It is not until the fourth nine weeks, toward the end of the year, that Jackson can work on this skill since she has to “get past TAKS and having to pull kids” to tutor them for TAKS. Frist’s class also does a research project at the end of the year, but she relies on the Library Media Specialist to cover the actual “research” process.

Hales and Mitchell do not spend much time on gathering resources in their respective science and math classes since language arts does that, although “if they ask questions, we’ll delve into it,” Mitchell says. For example, her students were studying Egyptian art in social studies, and one of her students asked about the shapes of the pyramids, so they investigated, using the Internet as a class.

Hales spends some time with her students at the beginning of the year on evaluating credibility during their “Marketing Strategies” unit, where they discuss whether they believe what they are reading about things they need in their lives. “Are these really fact-based statements on the bottle of shampoo, or are they telling you that it smells good, where good is very relative?” she asks her students. Her students examine claims based on “scientific writing and scientific speaking, what is factual, what
is research based, and what is ‘I made this up to fill up the spot on the back of the sunscreen.’” (See the Library Media Specialist’s contributions to this area at the end of this chapter.)

Responsible as they are for preparing their students for the reading, math, and science TAKS in the spring, fifth grade teachers may not be able to devote an ideal amount of time to teaching research skills. In particular, teaching students to evaluate source credibility to select the most appropriate ones does require time, so the school’s Library Media Specialist’s covering the basics of research and evaluation is a valuable contribution. The more students have learned about the time-saving benefits of databases in locating high-quality sources, the less they will be wasting their time in a frustrating search on the Internet.

Emphasis on Analyzing and Organizing Information

Even though the TEKS heavily emphasize analysis and organization, Jackson and Frist do limited work in language arts and social sciences respectively on these skills, possibly because they are not a fifth grade TAKS focus, while Mitchell and Hales work much more on analysis and organization in math and science due to the nature of the subjects.

*Relevant TEKS standards.* According to the fifth grade TEKS, students should be able to interpret, summarize, and organize information, including graphics, from many sources in different formats, using visuals as appropriate and using technology as needed. In math, they should be able to describe relationships between data sets and construct graphics from data as well as determine strategies for solving problems and then carrying out those strategies. In science, they should be able to interpret evidence
and determine explanations, analyze data with scientific tools, and construct graphics to convey meaning.

In social studies, students should be able to summarize and analyze historical events and build and interpret maps and other graphics using geographic tools and data. They should be able to analyze environmental factors related to people, evaluate economic factors, and analyze the role of citizenship and contributions of culture and the impact of science and technology. They should also be able to use a variety of analytical techniques to process gathered information and then organize and interpret it, determining the participants’ point of view. Finally, they should be able to analyze gathered information as part of problem-solving and decision-making processes, using technology as needed. (See Table 9-5.)

Jackson, Frist, Mitchell, and Hales’ experiences with analyzing and organizing information. Jackson and Frist do limited work in language arts and social sciences respectively on analyzing and organizing while Mitchell and Hales work much more on these skills in math and science. Jackson works on analysis and organization primarily during the last quarter of the school year (after the Reading TAKS in March). She observes that her students do not get much instruction in technical and non-fiction writing and the analysis that accompanies such a focus because they are not tested on it. “They tend to want to copy information,” she notes. As a result, they write “cheesy things because they’ve learned to write to prompts.” However, Jackson has noticed that the reading curriculum seems to be “headed in the right direction.” Her students have learned how to make charts and graphs but do not understand how to put them into context.
Frist does not emphasize analyzing and organizing information either. “The fourth grade team does a great job with writing [because their students take the Writing TAKS], so kids are well prepared. We skim and do reminders—how they need a hook, close it up; beginning, middle, and end; organize as a story or nonfiction,” she explains. Frist does work a lot on paragraphing and grouping like ideas. “They [her students] still want to write in one paragraph,” she notes.

Due in large part to the nature of the subjects they teach, Mitchell and Hales spend a significant amount of time working on analysis and organization. To help her students analyze math, Mitchell uses a 4-Square plan developed by MISD math curriculum director George Christ. (See Figure 9-4.)
Figure 9-4. Mitchell’s students use a 4-Square plan to analyze math.

Mitchell says that her students love the 4-Square format because they are “eager to communicate how they came up with” the explanation for “Show Another Way.”

In science Hales spends a lot of time analyzing and organizing information because when her students do an experiment, they have to “find a way to organize it so [their] audience will understand it so whoever is looking over our work isn’t very
confused.” Her students organize with charts and graphs as well as study charts and graphs and work backwards to “try to figure out what the experiment was to begin with.” “We look at it [a chart or graph] backwards, sideways, anyway we can to understand why we even chart or graph,” Hales explains.

Hales assigns weekly homework tasks of open-ended experiments requiring that her students bring in data from different scenarios, which the class then compiles “so they see the thought process happening.” “OK, I’ve got lots of numbers here on the board. What am I going to do with them? Why am I going to do that?” she prods them. Then they study the trends in the data, and they “see the process on a bigger scale,” she concludes.

Although fifth graders have been using various graphical organization aids since kindergarten for themselves to help them brainstorm or outline information, organizing information by creating graphics for their audiences opens up communication possibilities. As students begin to learn which information is best presented in a graphic, their understanding of audience grows. Just as letters and punctuation were meaningless symbols when they began their education, the traditional features of graphics may seem just as confusing. Therefore, ensuring that students understand the complementary relationship between graphics and text and recognize how the former can aid in analyzing the latter is critical.

**Emphasis on Determining Best Format**

Jackson, Frist, Mitchell, and Hales all give students some degree of choice in formatting their work. These teachers appear to balance requiring students to try out recently introduced formats with allowing students to choose the format they wish,
although that choice is probably based on appeal to student rather than appropriateness for audience.

*Relevant TEKS standards.* According to the fifth grade TEKS, students should learn about different forms on which to model their own writing. They should learn the organization, purposes, and distinguishing features of different formats and be able to select the most appropriate formats for their writing assignments, including projects and reports, using visuals as appropriate and technology as necessary. They should also be able to explain math concepts using the most appropriate format and use geographical tools to construct maps as well as be able to communicate geographical data in various formats. They should also be able to communicate social studies material in a variety of formats. (See Table 9-6.)

*Jackson, Frist, Mitchell, and Hales’ experiences with determining best format.* Jackson, Frist, Mitchell, and Hales all give students some degree of choice in formatting their work. Frist’s students have the opportunity to pick their format about 30 percent of the time—one in every four times. She points to the district’s push to recognize students’ differing learning styles and therefore “give them the format most comfortable to them—songs, modeling clay, speech, readers’ theater.” Jackson notes that the poetry unit “appeals to those angry about writing.” But she feels her students “need a menu [of formatting choices] fifty percent of the time.” Having options “opens their world up,” but they still need structure. Even so, her students are not exposed to many different formats, she feels. “Kiddos love to create PowerPoints--every time when given a chance,” observes Jackson.
Mitchell’s students have “lots of opportunities” to choose the format they wish to present math explanations in. They may “create a poster or PowerPoint or type out an answer, put it in the 4-Square template or use a graphing program, as long as they are meeting the criteria for audience and answering the question.” The graphing program Graph Club is on their classroom computer and allows them to put in the data and decide on the style of graph to print.

Like Mitchell, Hales describes herself as “open-ended” and “flexible” about format. “As long as you’ve got the information we’re looking for and it makes sense, I’d love to see it in as many ways as you want to write it,” she tells her students. Sometimes, though, she will be looking for a specific format: “I must see a chart on that paper.” But she encourages her students to be like real scientists “who have flexibility in thinking, so they have flexibility in formatting.” She acknowledges that “what looks organized to me may not look organized to you. . . the way you are.”

The flexibility fifth grade teachers project regarding format frees students to experiment with presenting information in different ways. Even when teachers suggest particular formats, they are assisting their students in matching content and audience to format. Through this experience, students can become aware of how audiences interpret the same information differently depending on the format in which it is presented, which is a step towards choosing a format based on a particular audience's needs.

Emphasis on Selecting Communication Style

Jackson and her fellow teachers do discuss communication style to some degree. Frist’s students work on selecting words that will make their audience most
receptive to their message, while Jackson’s students work on finding their individual, authentic voices. Mitchell and Hales work on helping their math and science students be aware of an audience that is not as familiar with technical terminology as they are. It appears, though, that students do not actually work much on tailoring their own language and delivery for the audience, purpose, and occasion.

**Relevant TEKS standards.** According to the fifth grade TEKS, students should be able to determine how language choice and delivery affect one’s audience and tailor their own language and delivery for the audience, purpose, and occasion. They should also be able to use non-math language to explain math concepts and use social studies terms correctly. (See Table 9-7.)

**Jackson, Frist, Mitchell, and Hales’ experiences with selecting communication style.** These four teachers do discuss communication style to some degree. At the beginning of the bigger assignments, Frist talks with her students about “what some of the phrases might look like if they [students] were addressing a particular audience: ‘They’ll [audience will] be most receptive by using these words.’” The class as a group will brainstorm ideas on a chart or on the board. “They [her students] understand that they might need to explain more if their audience doesn’t know as much as they do about a topic,” notes Frist.

Jackson’s students do not really work on different communication styles but instead concentrate on “just understanding their own voice.” When they are practicing oral reading, they will discuss communication style, but in writing, they still have a “cheesy prompt voice” that they “haven’t gotten past.” She explains that she has to “deprogra[m]” them.
Mitchell and Hales work on helping their students be aware of an audience that is not as familiar with technical terminology as they are. Mitchell talks about math terms with her students, and they practice using various ones in the 4-Square template and the “exemplars”—higher-level problems they solve. The rubric for the exemplars mentions “how well the students communicated with the audience.” They must use “math language” to explain everything but additionally have to explain what the math terminology itself means. Mitchell says her “focus is them being confident enough in whatever way they explain their answer to support and justify it.” Hales discusses communication style as it relates to writing for a scientific audience vs. writing for a non-scientific audience.

By focusing on the need to select words based on audience, these teachers reinforce the intentional nature of such choices, showing that particular words could make the difference between communicating effectively or ineffectively. When Jackson works with students on using an "authentic" voice, she is making them aware that the audience values communication that sounds like them—a person they could reach out and talk to—as opposed to someone "false" or "contrived" from whom they feel distant and to whom they could not relate.

Emphasis on Selecting Design Elements

As with format, these teachers’ students select design elements based on what they, the students, like rather than what would appeal to an audience. Availability of technology is also an issue in the teachers’ adequately covering design, certainly in the depth the TEKS require.
Relevant TEKS standards. According to the fifth grade TEKS, students should be able to evaluate how illustrations complement text meaning and then select or create visuals that complement the meaning of the texts they create. They should be able to use technology to create formats that rely on visuals. Specifically in geography, they should be able to use geographic data and tools to construct maps and graphics. And they should be able to use font attributes, color, white space, and graphics to tailor a product for an audience and medium. (See Table 9-8.)

Jackson, Frist, Mitchell, and Hales’ experiences with selecting design elements. As with format, these teachers’ students select design elements based on what they, the students, like rather than what would appeal to an audience. Jackson provides a menu of items for them to include, but they do not really include them with audience or purpose in mind. “It’s all about what looks ‘cool or neat’ to them or their friends,” notes Jackson. She does provide some broad design suggestions, though. She does not want to “squash them,” but if their choices are “really random,” she’ll ask, “Why did you choose that?” “Who would look at that?” “Why blue?” “Don’t you think that font’s hard to read?”

Mitchell says the types of design elements chosen in math “vary by student, whether they use bullets or draw out a solution and number step by step.” She makes the choice of design elements “kid-driven as long as they’re addressing the audience and question,” but they do not really talk about why they make the decisions they make; rather their choices are based more on what they themselves like best.

Because her science class is inquiry based, rather than text based, Hales does not talk much about design elements. “Unfortunately that’s what’s lost when there’s
such a small amount of textbook work in the way my classroom is formatted because I think that’s a discussion you’d naturally have if you were using a textbook on a regular basis: ‘this author starts this heading with bright red, bolded’—so that is really something that’s lost in an inquiry classroom,” she explains.

Availability of technology is also an issue in these teachers’ adequately covering design. Frist’s class does not really focus on design elements since they have only three computers in the classroom and they cannot print in color, even though her students want to.

When teachers have their fifth graders question their design choices, the students begin to become aware, as they do with format and communication style, that those choices should be intentional and that they affect the way an audience interprets their document. Even if their teachers require that students use particular design elements, the students still begin to understand how those elements affect the clarity with which they convey information.

Emphasis on Doing Usability Testing

Jackson, Frist, Mitchell, and Hales all do usability testing whenever the teaching activity is appropriate. In addition to receiving feedback from the targeted audience on their document, students also revise based on that feedback. For language arts, usability testing takes the form of peer editing, while for social sciences, math, and science, audiences review procedures.

Relevant TEKS standards. According to the fifth grade TEKS, students should be able to ensure that the directions they list are correct. They should be able to evaluate whether their research and writing achieve their purpose, using technology as
needed. And they should be able to evaluate whether their math and social studies solutions are reasonable, using technology as needed. (See Table 9-9.)

Jackson, Frist, Mitchell, and Hales’ experiences with usability testing. Jackson, Frist, Mitchell, and Hales all do usability testing whenever the teaching activity is appropriate. In addition to receiving feedback from the targeted audience on their document, students also revise based on that feedback. Jackson says they test out their work in some form about half the time. For example, with the Civil War board games her students create in groups, they have to read each group’s directions and follow them. They also have to write three “positives” and one “negative” about the directions and/or the game they are testing.

Frist’s classes also critique the Civil War board games they produce. And in peer editing, they sit in groups and use colored Post-Its to note what was done well and what needs work. She will switch one class’s work with that of another for peer editing as well, finding that as her students go through the year, most “get it [how to peer edit]” and give useful feedback.

Mitchell and Hales do usability tests in checking math and science procedures as well. Mitchell will have her school’s principal, Paige Hanks, come in and pretend she does not understand the math problem the students are discussing, which they then have to explain to her, along with the solution. Mitchell will also have her students get together with the first or second grade students and explain some math concepts. She says the “feedback from the first and second grade teachers” shows her this approach is “definitely designed well” because the younger students receive an explanation at a
“level they can understand” and her own students experience “success in reaching an audience.”

Hales does usability testing when students write experiments; then other students try to follow the procedures that the students have written. “Most of the time we erupt into various levels of chaos,” she observes, because “students forget to put in every step of things, and they think their audience can jump into their mind and guess, ‘Oh, well, what they meant to say was, “Don’t put the spoon in until after the water boils,” not to boil the water with the spoon in there.’”

Hales also does usability testing with her class through “Observations,” which they do at the beginning of the year. Every student gets a “like” object (for example, peanuts) and writes as much as he or she can about the object without looking at a neighbor’s object. Then when they all put their objects back at the front of the classroom, they realize they all had similar objects and are then forced to determine whether they included enough “unique” information (“brown, wrinkly, oval”) for their neighbor to pick out which similar object was theirs. “It really gets them to communicate with me about what they’re seeing in the labs that we do on a deeper level,” explains Hales, “a more descriptive level . . . because otherwise you get a lot of ‘thing-ys’ and ‘stuff.’”

The more fifth graders have a chance to “test out” their writing, the more this important step will seem as routine as brainstorming, outlining, revising, or proofreading. In their educational setting, they can make communication mistakes that “don’t hurt” the audience too badly; however, later, in their work environment, such mistakes could have catastrophic results for their business, clients, coworkers, or themselves. Fifth graders
are too young to envision such an outcome, but they are old enough to appreciate the advantages of usability testing and to ingrain this tool in their writing process.

Emphasis on Presenting

The students in these teachers’ classes occasionally present formally but frequently present informally. They will sometimes present as the culmination of a project but will also present solutions as part of daily collaborative or other learning activities.

Relevant TEKS standards. According to the fifth grade TEKS, students should study and practice using word choices and delivery to affect tone and should practice using the appropriate delivery for particular audiences and settings. They should also be able to adequately support the ideas they present as well as present information in various formats to different audiences, using technology as needed. (See Table 9-10.)

Jackson, Frist, Mitchell, and Hales’ experiences with presenting.

The students in these teachers’ classes occasionally present formally but frequently present informally. Frist “often” gives her students the opportunity to present their work because it “gives them a reason to do things.” Her students might share with her, a parent, or a group. She feels this is important in “building confidence in their writing.”

Mitchell says her math students present on a weekly basis, especially those projects they have been working on for a longer time. She will often have her students all work on the same problem in clusters; then each group will present its solution. She “want[s] them to see the different ways there are to a solution.” She will do a similar activity she calls “Placemat Math,” where she will divide a sheet of butcher paper into
four squares, and each student must work in his or her own section on the problem. Then all four will share their solution process with the others, and then with the class.

Sharing seems to be an integral part of fifth grade science classes. Hales’ classes do “a lot of presentation”—to other groups doing a different experiment as well as to groups doing the same experiment but who got different results. They talk about “the variables in ‘ours’ versus the variables in ‘theirs.’” Her students also meet with their “Science Buddies” in different grade levels to share favorite experiments. As they watch their much younger “Buddies” do the experiment, Hales’ students explain “what they’re doing, why they’re doing it, and how they’re doing it,” communicating on the level of a kindergartener.

With their inquiry-based weekly homework assignments (usually involving experiments), Hales’ students return on Monday and compare with classmates how they did their experiment and “how it could be that this experiment went so differently for them than it did for their next-door neighbor.”

Sometimes Hales’ students do an extension lab, for example, a “stream table,” and she will assign each group a sub-topic based on the lab. She begins by taking the whole class through the initial part of the experiment. For the stream table, she will begin with an empty Tupperware container with dirt on one side. Then they run water through it, which is meant to be a rain storm, and it will make a canyon and a delta, dirt that has been carried out by the water. She then assigns different groups sub-experiments. For instance, if she covered up the hole and made a flood, what would happen?; or if she had more than one rainstorm, what would happen?; if she had a plateau, what would happen? or if she had a house, what would happen? The groups
do the experiments and “then find a way to present to the rest of the class what their experiment was and how it looked different from what they did the first time.” “You get lots of interesting chart-making and posters,” Hales comments.

As helpful as presentation is in building students’ confidence and speaking abilities, Jackson points to the “time element” as prohibiting extensive presenting. With twenty-five students at ten minutes apiece, it would take four hours to get through the entire class’s presentations. “They [her students] don’t have the audience skills because our TVs have trained them—ten minutes and a commercial,” she comments. She notes that “even on the morning announcements, they don’t pay attention. Some shut down with read-out-louds” even. Her students’ attention is so poor at the beginning of the year that Jackson has to start lecturing in five-minute increments.

Through the many occasions on which they present and the various types of presenting fifth graders do, they begin to understand the role of presentation in enhancing everyone’s understanding of a topic. They begin to understand the value that their insights have in adding “a piece to the puzzle.” They start to see themselves as part of a community of researchers and educators and understand the benefit to that community of their sharing their knowledge.

Emphasis by Library Media Specialist on Gathering and Evaluating Needed Resources, K-5

Because each grade spends some time learning research skills with the Library Media Specialist, I provide an overview here of what students learn and when, to complement the respective discussions on gathering and evaluating needed resources in chapters K-5. At Glen Oaks Elementary School, the Library Media Specialist is Wendy Dickerson, who considers herself a “teacher/librarian.” Her goal is to send her
elementary students to middle school “equipped to know where to go and what to do” regarding library and research skills (personal communication, April 9, 2008).

Dickerson tries to meet with all the teachers at her school and ensure that they have at least one research session for their classes during the year in the computer lab or in the library with her. She finds that most teachers are “glad for her help.” She likes to meet with teachers during their team planning sessions, before they begin research skills, at least once every few weeks so she can be “proactive” in suggesting how she can help.

In introducing students to research, Dickerson follows the “Big 6,” a problem-solving strategy created by Michael Eisenberg and Robert Berkowitz, which she feels effectively lays out the research process for students (see Figure 9-5):
1. Task Definition
   • Define the problem
   • Identify the information needed

2. Information Seeking Strategies
   • Determine all possible sources
   • Select the best sources

3. Location and Access
   • Locate sources
   • Find information within sources

4. Use of Information
   • Engage (e.g., read, hear, view)
   • Extract relevant information

5. Synthesis
   • Organize information from multiple sources
   • Present the result

6. Evaluation
   • Judge the result (effectiveness)
   • Judge the process (efficiency)

Figure 9-5. Eisenberg and Berkowitz’s “Big 6” introduce students to research.

She is ordering posters to place around the library to reinforce these steps.

Dickerson prefers to meet with classes at “point of need.” During forty-five-minute sessions she typically explains how to use an index, how to use online
encycledias, and how to get “valid” websites. She likes students to get into the library for “even small projects.” For example, when the first graders were studying weather, she showed them how to use Grollier Online to get their “weather word.”

With the third graders, Dickerson explains using an index of a print encyclopedia to help students “get the big picture” and be sure they “get all they can get.” But since it is no longer “realistic” to use only print indexes for research since they are not current, she will go over online resources the district subscribes to, like Grollier Online, Britannica Online, and EBSCO, and encourage students to start their research there rather than with Google. She notes that all of these resources have weblinks—student-friendly, valid websites—attached to the articles. Other indexes she encourages are “Yahooligans” and “Kids Clicks,” which is a search engine created by librarians.

For fifth graders, she gives a lesson on evaluating websites and determining their validity (stick with university websites, “.gov,” or large organizations like NASA, but be careful if the site is simply attributed to “someone’s name.”) She also covers plagiarism, stressing the need to paraphrase and to include the website address, even if they just took a picture from the site.

Dickerson “builds up” these concepts through the grades, beginning with first graders, with whom she “doesn’t worry about copying.” With third through fifth graders, she gradually adds more to her research sessions. For example, she has third graders cite sources by filling in a very basic form (see Figure 9-6):
Figure 9-6. Third graders learn a basic citation format.

For fourth graders she moves to the correct format with blanks and descriptions of what to put in them below. She reminds them that sources like Grollier Online provide the citation for their articles. Since the students who attend her school are 90 percent college bound, they “need to know” citations, she notes.

Students can also access the online resources the district subscribes to from home—Dickerson provides parents with usernames and passwords. She also posts relevant, student-friendly websites students might want to reference for particular projects (“Energy,” for example) on the school website. When working with a particular class on a project, she will create “Resource Tools” to give them notes to refer to as well.
### Table 9-1

**Analysis of 5th grade curriculum emphasis on understanding the communication situation**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 5th grade activities</th>
</tr>
</thead>
</table>
| **Understand situation requiring communication** | §110.7. English Language arts and Reading, Grade 5.  
(5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to:  
(A) adapt spoken language such as word choice, diction, and usage to the audience, purpose, and occasion (4-8);  
(13) Reading/inquiry/research. The student inquires and conducts research using a variety of sources. The student is expected to:  
(A) form and revise questions for investigations, including questions arising from interest and units of study (4-5);  
(21) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to:  
(A) frame questions to direct research (4-8); | • Gain sufficient background on communication situation, possibly including explanation of relevant TEK  
• Ponder everyday applications of math and science concepts |
| | §111.17. Mathematics, Grade 5.  
(5.14) Underlying processes and mathematical tools. The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:  
(B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;  
(C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; | |
| | §112.7. Science, Grade 5.  
(2) Scientific processes. The student uses scientific methods during field and laboratory investigations. The student is expected to:  
(A) plan and implement descriptive and simple experimental investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology; | |

*(table continues)*
Table 9-1 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 5th grade activities</th>
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<tbody>
<tr>
<td><strong>Understand situation requiring communication</strong></td>
<td>§113.7. Social Studies, Grade 5. (27) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to: (A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and (B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.</td>
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</table>
Table 9-2

Analysis of 5th grade curriculum emphasis on defining audience and clarifying purpose

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<tr>
<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 5th grade activities</th>
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</table>
| Define audience      | §110.7. English Language arts and Reading, Grade 5. (5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to: (A) adapt spoken language such as word choice, diction, and usage to the audience, purpose, and occasion (4-8); (D) use effective rate, volume, pitch, and tone for the audience and setting (4-8); (15) Writing/purposes. The student writes for a variety of audiences and purposes, and in a variety of forms. The student is expected to: (A) write to express, discover, record, develop, reflect on ideas, and to problem solve (4-8); (B) write to influence such as to persuade, argue, and request (4-8); (C) write to inform such as to explain, describe, report, and narrate (4-8); | • Practice explaining science concept to younger sibling as opposed to teacher  
• Use persuasive speech to ask postmaster general to create new stamp for scientist  
• Explain math concepts to parents or principal  
• Explain how to apply math concepts to everyday life  
• Write from perspective of geometric shape  
• Re-tell story from another character’s point of view  
• Consider audience’s reaction to document |
| Clarify purpose      | §110.7. English Language arts and Reading, Grade 5. (5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to: (A) adapt spoken language such as word choice, diction, and usage to the audience, purpose, and occasion (4-8); | • Create pop-up books to read to kindergarten students or send to a children’s hospital  
• Persuade postmaster general to create a new stamp for a scientist  
• Create Civil War board game that requires clearly communicating instructions |
|                      | (15) Writing/purposes. The student writes for a variety of audiences and purposes, and in a variety of forms. The student is expected to: (A) write to express, discover, record, develop, reflect on ideas, and to problem solve (4-8); (B) write to influence such as to persuade, argue, and request (4-8); (C) write to inform such as to explain, describe, report, and narrate (4-8); |                                                                                                                        |
|                      |                                                                                           |                                                                                                                        |
Table 9-3

**Analysis of 5th grade curriculum emphasis on collaborating**

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<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 5th grade activities</th>
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</thead>
</table>
| Collaborate (students work in groups to accomplish a task or assignment) | §110.7. English Language arts and Reading, Grade 5.  
(20) Writing/evaluation. The student evaluates his/her own writing and the writing of others. The student is expected to:  
(A) apply criteria to evaluate writing (4-8);  
(B) respond in constructive ways to others' writing (4-8);  

(22) Writing/connections. The student interacts with writers inside and outside the classroom in ways that reflect the practical uses of writing. The student is expected to:  
(A) collaborate with other writers to compose, organize, and revise various types of texts, including letters, news, records, and forms (4-8); and  
(B) correspond with peers or others via e-mail or conventional mail (4-8).  

§126.3. Technology Applications, Grades 3-5.  
(8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:  
(A) use communication tools to participate in group projects;  
(C) participate with electronic communities as a learner, initiator, contributor, or mentor. | • Collaborate from 50-90% of class time  
• Collaborate on social studies activities “The Hacker Trail” and “Civil War game boards” |
Table 9-4

Analysis of 5th grade curriculum emphasis on gathering and evaluating needed resources

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 5th grade activities</th>
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<tbody>
<tr>
<td>Gather and evaluate needed resources (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not)</td>
<td>§110.7. English Language arts and Reading, Grade 5. <strong>(1)</strong> Listening/speaking/purposes.** The student listens actively and purposefully in a variety of settings. The student is expected to: (A) determine the purposes for listening such as to gain information, to solve problems, or to enjoy and appreciate (4-8);</td>
<td>- Learn “Big 6” approach to research (through librarian): task definition, information-seeking strategies, location and access, use of information, synthesis, evaluation</td>
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<td><strong>(2)</strong> Listening/speaking/critical listening. The student listens critically to analyze and evaluate a speaker's message(s). The student is expected to: (A) interpret speakers' messages (both verbal and nonverbal), purposes, and perspectives (4-8); (B) identify and analyze a speaker's persuasive techniques such as promises, dares, and flattery (4-5); (C) distinguish between the speaker's opinion and verifiable fact (4-8); and</td>
<td>- Learn about online indexes and search engines</td>
</tr>
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<td><strong>(5)</strong> Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to: (B) demonstrate effective communications skills that reflect demands such as interviewing, reporting, requesting, and providing information (4-8);</td>
<td>- Learn about evaluating websites and determining their validity, through librarian</td>
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<td></td>
<td><strong>(8)</strong> Reading/variety of texts. The student reads widely for different purposes in varied sources. The student is expected to: (B) select varied sources such as nonfiction, novels, textbooks, newspapers, and magazines when reading for information or pleasure (4-5); and (C) read for varied purposes such as to be informed, to be entertained, to appreciate the writer's craft, and to discover models for his/her own writing (4-8);</td>
<td>- Learn about avoiding plagiarism through paraphrasing and documenting, through librarian</td>
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<td><strong>(10)</strong> Reading/comprehension. The student comprehends selections using a variety of strategies. The student is expected to: (B) establish and adjust purposes for reading such as reading to find out, to understand, to interpret, to enjoy, and to solve problems (4-8); (J) distinguish fact and opinion in various texts (4-8);</td>
<td>- Do language arts and social sciences research projects at the end of the year</td>
</tr>
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<td><strong>(12)</strong> Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts (genres). The student is expected to: (J) describe how the author's perspective or point of view affects the text (4-8).</td>
<td>- Evaluate product marketing claims’ credibility</td>
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<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 5th grade activities</th>
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</table>
| Gather and evaluate needed resources (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not) | (13) **Reading/inquiry/research.** The student inquires and conducts research using a variety of sources. The student is expected to:  
(B) use text organizers, including headings, graphic features, and tables of contents, to locate and organize information (4-8);  
(C) use multiple sources, including electronic texts, experts, and print resources, to locate information relevant to research questions (4-8);  
(D) interpret and use graphic sources of information such as maps, graphs, time lines, tables, or diagrams to address research questions (4-5);  

(21) **Writing/inquiry/research.** The student uses writing as a tool for learning and research. The student is expected to:  
(B) organize prior knowledge about a topic in a variety of ways such as by producing a graphic organizer (4-8);  
(C) take notes from relevant and authoritative sources such as guest speakers, periodicals, or on-line searches (4-8);  

§112.7. **Science, Grade 5.**  
(2) **Scientific processes.** The student uses scientific methods during field and laboratory investigations. The student is expected to:  
(B) collect information by observing and measuring;  

(3) **Scientific processes.** The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to:  
(A) analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information;  
(B) draw inferences based on information related to promotional materials for products and services;  

(4) **Scientific processes.** The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:  
(A) collect and analyze information using tools including calculators, microscopes, cameras, sound recorders, computers, hand lenses, rulers, thermometers, compasses, balances, hot plates, meter sticks, timing devices, magnets, collecting nets, and safety goggles; and |

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<th>Samples of approaches to coverage in 5th grade activities</th>
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<tbody>
<tr>
<td><strong>Gather and evaluate needed resources</strong>&lt;br&gt;(with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not)</td>
<td><strong>§113.7. Social Studies, Grade 5.</strong>&lt;br&gt;(25) <strong>Social studies skills.</strong> The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:&lt;br&gt;(A) differentiate between, locate, and use primary and secondary sources such as computer software; interviews; biographies; oral, print, and visual material; and artifacts to acquire information about the United States and Texas;&lt;br&gt;(D) identify different points of view about an issue or topic;&lt;br&gt;(E) identify the elements of frame of reference that influenced the participants in an event; and&lt;br&gt;(27) <strong>Social studies skills.</strong> The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:&lt;br&gt;(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and&lt;br&gt;(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.</td>
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<td><strong>§126.3. Technology Applications, Grades 3-5.</strong>&lt;br&gt;(4) <strong>Information acquisition.</strong> The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to:&lt;br&gt;(A) apply appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies; and&lt;br&gt;(B) select appropriate strategies to navigate and access information on local area networks (LANs) and wide area networks (WANs), including the Internet and intranet, for research and resource sharing.</td>
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<td>(5) <strong>Information acquisition.</strong> The student acquires electronic information in a variety of formats, with appropriate supervision. The student is expected to:&lt;br&gt;(A) acquire information including text, audio, video, and graphics; and&lt;br&gt;(B) use on-line help and documentation.</td>
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<td>(6) <strong>Information acquisition.</strong> The student evaluates the acquired electronic information. The student is expected to:&lt;br&gt;(A) apply critical analysis to resolve information conflicts and validate information;&lt;br&gt;(B) determine the success of strategies used to acquire electronic information; and&lt;br&gt;(C) determine the usefulness and appropriateness of digital information.</td>
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</table>
### Table 9-5

**Analysis of 5th grade curriculum emphasis on analyzing and organizing information**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 2\textsuperscript{nd} grade activities</th>
</tr>
</thead>
</table>
| Analyze and organize information (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | §110.7. English Language arts and Reading, Grade 5.  
(10) Reading/comprehension. The student comprehends selections using a variety of strategies. The student is expected to:  
(B) establish and adjust purposes for reading such as reading to find out, to understand, to interpret, to enjoy, and to solve problems (4-8);  
(G) paraphrase and summarize text to recall, inform, or organize ideas (4-8);  
(J) distinguish fact and opinion in various texts (4-8);  
(L) represent text information in different ways such as in outline, timeline, or graphic organizer (4-8).  
(13) Reading/inquiry/research. The student inquires and conducts research using a variety of sources. The student is expected to:  
(D) interpret and use graphic sources of information such as maps, graphs, timelines, and diagrams to address research questions (4-5);  
(E) summarize and organize information from multiple sources by taking notes, outlining ideas, and making charts (4-8);  
(F) produce research projects and reports in effective formats using visuals to support meaning as appropriate (4-5);  
(G) draw conclusions from information gathered from multiple sources (4-8); and  
(H) use compiled information and knowledge to raise additional, unanswered questions (3-8).  
(19) Writing/writing processes. The student selects and uses writing processes for self-initiated and assigned writing. The student is expected to:  
(B) develop drafts by categorizing ideas, organizing them into paragraphs, and blending paragraphs within larger units of text (4-8);  
(21) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to:  
(D) summarize and organize ideas gained from multiple sources in useful ways such as outlines, conceptual maps, learning logs, and timelines (4-8);  
(23) Viewing/representing/interpretation. The student understands and interprets visual images, messages, and meanings. The student is expected to:  
(B) interpret important events and ideas gleaned from maps, charts, graphics, video segments or technology presentations (4-8); and |  
- Learn how to make charts and graphs  
- Work on organizing with paragraphing  
- Work on organizing for particular genres  
- Determine several different ways to solve math problems  
- Organize explanations of science experiments with audiences in mind  
- Organize experiment data with charts and graphs  
- Study charts and graphs to determine what experiment was (work backwards)  
- Compile data from homework experiments as a class and determine trends  

*(table continues)*
Table 9-5 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
</tr>
</thead>
</table>
| **Analyze and organize information** (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | §111.17. Mathematics, Grade 5.  
(5.5) Patterns, relationships, and algebraic thinking. The student makes generalizations based on observed patterns and relationships. The student is expected to:  
(A) describe the relationship between sets of data in graphic organizers such as lists, tables, charts, and diagrams; and  
(5.13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to:  
(A) use tables of related number pairs to make line graphs;  
(B) describe characteristics of data presented in tables and graphs including median, mode, and range; and  
(C) graph a given set of data using an appropriate graphical representation such as a picture or line graph.  
(5.14) Underlying processes and mathematical tools. The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:  
(B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;  
(C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; |  |

§112.7. Science, Grade 5.  
(2) Scientific processes. The student uses scientific methods during field and laboratory investigations. The student is expected to:  
(C) analyze and interpret information to construct reasonable explanations from direct and indirect evidence;  
(D) communicate valid conclusions; and  
(E) construct simple graphs, tables, maps, and charts using tools including computers to organize, examine, and evaluate information.  

(table continues)
### Table 9-5 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
</tr>
</thead>
</table>
| **Analyze and organize information**  
(students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | (4) **Scientific processes.** The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to:  
(A) collect and analyze information using tools including calculators, microscopes, cameras, sound recorders, computers, hand lenses, rulers, thermometers, compasses, balances, hot plates, meter sticks, timing devices, magnets, collecting nets, and safety goggles; and  
(B) **Science concepts.** The student knows that adaptations may increase the survival of members of a species. The student is expected to:  
(B) analyze and describe adaptive characteristics that result in an organism's unique niche in an ecosystem; and | |
| §113.7. **Social Studies, Grade 5.**  
(2) **History.** The student understands how conflict between the American colonies and Great Britain led to American independence. The student is expected to:  
(B) summarize the events that led to the creation of the U.S. Constitution | |
| (5) **History.** The student understands important issues, events, and individuals of the 20th century in the United States. The student is expected to:  
(A) analyze various issues and events of the 20th century such as urbanization, industrialization, increased use of oil and gas, world wars, and the Great Depression; and | |
| (6) **Geography.** The student uses geographic tools to collect, analyze, and interpret data. The student is expected to:  
(A) apply geographic tools, including grid systems, legends, symbols, scales, and compass roses, to construct and interpret maps; and  
(B) translate geographic data into a variety of formats such as raw data to graphs and maps. | |
| (8) **Geography.** The student understands the location and patterns of settlement and the geographic factors that influence where people live. The student is expected to:  
(C) analyze the location of cities in the United States, including capital cities, and explain their distribution, past and present; and | |
| (9) **Geography.** The student understands how people adapt to and modify their environment. The student is expected to:  
(C) analyze the consequences of human modification of the environment in the United States, past and present. | |

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Table 9-5 (continued).

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 2nd grade activities</th>
</tr>
</thead>
</table>
| **Analyze and organize information**  
(students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | (13) **Economics.** The student understands the impact of supply and demand on consumers and producers in a free enterprise system. The student is expected to:  
(B) evaluate the effects of supply and demand on business, industry, and agriculture, including the plantation system, in the United States.  
(14) **Economics.** The student understands patterns of work and economic activities in the United States. The student is expected to:  
(A) analyze how people in different parts of the United States earn a living, past and present;  
(C) analyze the effects of immigration, migration, and limited resources on the economic development and growth of the United States;  
(E) analyze how developments in transportation and communication have influenced economic activities in the United States; and  
(19) **Citizenship.** The student understands the importance of individual participation in the democratic process. The student is expected to:  
(B) analyze the role of the individual in national elections;  
(21) **Citizenship.** The student understands the fundamental rights of American citizens guaranteed in the Bill of Rights and other amendments to the U.S. Constitution. The student is expected to:  
(A) summarize the reasons for the creation of the Bill of Rights;  
(D) summarize selected amendments to the U.S. Constitution such as those that extended voting rights of U.S. citizens.  
(23) **Culture.** The student understands the contributions of people of various racial, ethnic, and religious groups to the United States. The student is expected to:  
(C) summarize the contributions of people of selected racial, ethnic, and religious groups to our national identity.  
(24) **Science, technology, and society.** The student understands the impact of science and technology on life in the United States. The student is expected to:  
(D) analyze environmental changes brought about by scientific discoveries and technological innovations such as air conditioning and fertilizers; and | (table continues) |
Table 9-5 (continued).

<table>
<thead>
<tr>
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<th>Samples of approaches to coverage in 2nd grade activities</th>
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</thead>
</table>
| **Analyze and organize information**  
(students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships) | (25) **Social studies skills.** The student applies critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology. The student is expected to:  
(B) analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions;  
(C) organize and interpret information in outlines, reports, databases, and visuals including graphs, charts, timelines, and maps;  
(D) identify different points of view about an issue or topic;  
(E) identify the elements of frame of reference that influenced the participants in an event; and  
(F) use appropriate mathematical skills to interpret social studies information such as maps and graphs. | |
| | (27) **Social studies skills.** The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  
(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and  
(B) use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision. | |
| | **§126.3. Technology Applications, Grades 3-5.**  
(7) **Solving problems.** The student uses appropriate computer-based productivity tools to create and modify solutions to problems. The student is expected to:  
(B) use appropriate software to express ideas and solve problems including the use of word processing, graphics, databases, spreadsheets, simulations, and multimedia; and | |
| | (8) **Solving problems.** The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:  
(B) use interactive technology environments, such as simulations, electronic science or mathematics laboratories, virtual museum field trips, or on-line interactive lessons, to manipulate information; and | |
| | (10) **Communication.** The student formats digital information for appropriate and effective communication. The student is expected to:  
(C) use appropriate applications including, but not limited to, spreadsheets and databases to develop charts and graphs by using data from various sources. | |
**Table 9-6**

**Analysis of 5th grade curriculum emphasis on determining best format**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 5th grade activities</th>
</tr>
</thead>
</table>
| Determine best format (with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, PowerPoint, report, manual, brochure, proposal, or procedure, etc.) | §110.7. *English Language arts and Reading, Grade 5.*  
(8) Reading/variety of texts. The student reads widely for different purposes in varied sources. The student is expected to:  
(C) read for varied purposes such as to be informed, to be entertained, to appreciate the writer’s craft, and to discover models for his/her own writing (4-8).  
(12) Reading/text structures/literary concepts. The student analyzes the characteristics of various types of texts (genres). The student is expected to:  
(B) recognize that authors organize information in specific ways (4-5);  
(C) identify the purposes of different types of texts such as to inform, influence, express, or entertain (4-8);  
(D) recognize the distinguishing features of genres, including biography, historical fiction, informational texts, and poetry (4-8);  
(13) Reading/inquiry/research. The student inquires and conducts research using a variety of sources. The student is expected to:  
(F) produce research projects and reports in effective formats using visuals to support meaning as appropriate (4-5);  
(15) Writing/purposes. The student writes for a variety of audiences and purposes, and in a variety of forms. The student is expected to:  
(F) choose the appropriate form for his/her own purpose for writing, including journals, letters, reviews, poems, narratives, and instructions (4-5); and  
(21) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to:  
(E) present information in various forms using available technology (4-8); and  
(22) Writing/connections. The student interacts with writers inside and outside the classroom in ways that reflect the practical uses of writing. The student is expected to:  
(A) collaborate with other writers to compose, organize, and revise various types of texts, including letters, news, records, and forms (4-8); and |  
• Choose format 30% to most of the time  
• Often choose from “menu” of possible formats |

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<table>
<thead>
<tr>
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<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 5th grade activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Determine best format</strong>&lt;br&gt;(with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, PowerPoint, report, manual, brochure, proposal, or procedure, etc.)</td>
<td><strong>(25) Viewing/representing/production.</strong> The student produces visual images, messages, and meanings that communicate with others. The student is expected to:&lt;br&gt;(A) select, organize, or produce visuals to complement and extend meanings (4-8); and&lt;br&gt;(B) produce communications using technology or appropriate media such as developing a class newspaper, multimedia reports, or video reports (4-8).</td>
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</table>

**§111.17. Mathematics, Grade 5.**<br>(5.15) **Underlying processes and mathematical tools.** The student communicates about Grade 5 mathematics using informal language.<br>The student is expected to:<br>(A) explain and record observations using objects, words, pictures, numbers, and technology; and

**§112.7. Science, Grade 5.**<br>(6) **Geography.** The student uses geographic tools to collect, analyze, and interpret data. The student is expected to:<br>(A) apply geographic tools, including grid systems, legends, symbols, scales, and compass roses, to construct and interpret maps; and<br>(B) translate geographic data into a variety of formats such as raw data to graphs and maps

**§113.7. Social Studies, Grade 5.**<br>(26) **Social studies skills.** The student communicates in written, oral, and visual forms. The student is expected to:<br>(D) create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies; and

**§126.3. Technology Applications, Grades 3-5.**<br>(11) **Communication.** The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to:<br>(A) publish information in a variety of media including, but not limited to, printed copy, monitor display, Internet documents, and video; and
<table>
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</table>
| Select communication style (with audience and purpose in mind, students decide level of formality; use style principles: active voice, conciseness, action in verb rather than noun, actor as subject, etc.) | §110.7. English Language arts and Reading, Grade 5.  
(3) Listening/speaking/appreciation. The student listens to enjoy and appreciate spoken language. The student is expected to:  
(C) assess how language choice and delivery affect the tone of the message (4-5).  
(5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to:  
(A) adapt spoken language such as word choice, diction, and usage to the audience, purpose, and occasion (4-8);  
(D) use effective rate, volume, pitch, and tone for the audience and setting (4-8); | • Discuss words/phrases that audience will be most receptive to  
• Strive to find authentic voice rather resort to “prompt” voice  
• Use math language as well as explain math terms  
• Discuss difference in writing for scientific vs. non-scientific audience |
| §111.17. Mathematics, Grade 5.  
(5.15) Underlying processes and mathematical tools. The student communicates about Grade 5 mathematics using informal language. The student is expected to:  
(B) relate informal language to mathematical language and symbols | | |
| §113.7. Social Studies, Grade 5.  
(26) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to:  
(A) use social studies terminology correctly; | | |
Table 9-8

Analysis of 5th grade curriculum emphasis on selecting design elements

<table>
<thead>
<tr>
<th>Principle</th>
<th>Coverage in 5th grade TEKS</th>
<th>Samples of approaches to coverage in 5th grade activities</th>
</tr>
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<tbody>
<tr>
<td><strong>Select design elements</strong> (with audience and purpose in mind, students decide how to strategically use color, informative headings, graphics, bulleted/numbered lists, fonts, white space; use design principles: single space, double space between paragraphs, no indentions; no all-capital or centering)</td>
<td>§110.7. English Language arts and Reading, Grade 5. (23) Viewing/representing/interpretation. The student understands and interprets visual images, messages, and meanings. The student is expected to: (A) describe how illustrators’ choice of style, elements, and media help to represent or extend the text’s meanings (4-8); (24) Viewing/representing/analysis. The student analyzes and critiques the significance of visual images, messages, and meanings. The student is expected to: (A) interpret and evaluate the various ways visual image makers such as graphic artists, illustrators, and news photographers represent meanings (4-5); and (25) Viewing/representing/production. The student produces visual images, messages, and meanings that communicate with others. The student is expected to: (A) select, organize, or produce visuals to complement and extend meanings (4-8); and (B) produce communications using technology or appropriate media such as developing a class newspaper, multimedia reports, or video reports (4-8).</td>
<td>• May choose from menu of items to include (language arts) • May have free reign—bullets, drawing, numbering (math) • May not discuss due to class inquiry format (science) • May not discuss due to lack of technology (social science)</td>
</tr>
<tr>
<td>§112.7. Science, Grade 5. (6) Geography. The student uses geographic tools to collect, analyze, and interpret data. The student is expected to: (A) apply geographic tools, including grid systems, legends, symbols, scales, and compass roses, to construct and interpret maps; and (B) translate geographic data into a variety of formats such as raw data to graphs and maps</td>
<td></td>
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<tr>
<td>§126.3. Technology Applications, Grades 3-5. (10) Communication. The student formats digital information for appropriate and effective communication. The student is expected to: (A) use font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience; (B) use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays, Internet documents, and printed materials; and (C) use appropriate applications including, but not limited to, spreadsheets and databases to develop charts and graphs by using data from various sources.</td>
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</table>
Table 9-9

Analysis of 5th grade curriculum emphasis on usability testing

<table>
<thead>
<tr>
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<th>Samples of approaches to coverage in 5th grade activities</th>
</tr>
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<tbody>
<tr>
<td><strong>Do usability testing</strong>&lt;br&gt; (students “test drive” what they wrote to see if it does what they want it to—that they connect with the audience and accomplish their purpose)</td>
<td>§110.7. English Language arts and Reading, Grade 5.  &lt;br&gt;(5) Listening/speaking/audiences. The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to:  &lt;br&gt;(E) give precise directions and instructions such as for games and tasks (4-5); and  &lt;br&gt;(20) Writing/evaluation. The student evaluates his/her own writing and the writing of others. The student is expected to:  &lt;br&gt;(C) evaluate how well his/her own writing achieves its purposes (4-8);  &lt;br&gt;(21) Writing/inquiry/research. The student uses writing as a tool for learning and research. The student is expected to:  &lt;br&gt;(F) evaluate his/her own research and raise new questions for further investigation (4-8).</td>
<td>• Peer edit for language arts  &lt;br&gt;• Test out Civil War board games directions for social sciences  &lt;br&gt;• Explain problem solutions to younger students and principal for math  &lt;br&gt;• Test out experiment procedures and object descriptions for science</td>
</tr>
<tr>
<td>§111.17. Mathematics, Grade 5.  &lt;br&gt;(5.14) Underlying processes and mathematical tools. The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:  &lt;br&gt;(B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;  &lt;br&gt;(5.16) Underlying processes and mathematical tools. The student uses logical reasoning. The student is expected to:  &lt;br&gt;(B) justify why an answer is reasonable and explain the solution process.</td>
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<tr>
<td>§113.7. Social Studies, Grade 5.  &lt;br&gt;(27) Social studies skills. The student uses problem-solving and decision-making skills, working independently and with others, in a variety of settings. The student is expected to:  &lt;br&gt;(A) use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution; and</td>
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Table 9-9 (*continued*).

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<thead>
<tr>
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<th>Samples of approaches to coverage in 5th grade activities</th>
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<tbody>
<tr>
<td>Do usability testing</td>
<td>§126.3. Technology Applications, Grades 3-5. (12) Communication. The student uses technology applications to facilitate evaluation of communication, both process and product. The student is expected to: (B) evaluate the product for relevance to the assignment or task; and (C) create technology assessment tools to monitor progress of project such as checklists, timelines, or rubrics.</td>
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### Table 9-10

**Analysis of 5th grade curriculum emphasis on presenting**

<table>
<thead>
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</table>
| **Present** (students orally deliver what they produced to a group) | §110.7. English Language arts and Reading, Grade 5.  
(3) **Listening/speaking/appreciation.** The student listens to enjoy and appreciate spoken language. The student is expected to:  
(C) assess how language choice and delivery affect the tone of the message (4-5).  
(5) **Listening/speaking/audiences.** The student speaks clearly and appropriately to different audiences for different purposes and occasions. The student is expected to:  
(D) use effective rate, volume, pitch, and tone for the audience and setting (4-8);  
(F) clarify and support spoken ideas with evidence, elaborations, and examples (4-8).  
(21) **Writing/inquiry/research.** The student uses writing as a tool for learning and research. The student is expected to:  
(E) present information in various forms using available technology (4-8); and | • Share work with teacher, parent, or group  
• Present math projects  
• Present collaborative solution to math problem posed to class  
• Present math solution process to group/class  
• Present science experiment process to different-age-group audience  
• Present science experiment results to class using visuals highlighting changes |
| **§126.3. Technology Applications, Grades 3-5.**  
(11) **Communication.** The student delivers the product electronically in a variety of media, with appropriate supervision. The student is expected to:  
(B) use presentation software to communicate with specific audiences. |
CHAPTER 10

ANALYSIS OF STUDY RESULTS: EXTENT TO WHICH TEXAS K-5 CURRICULA PREPARE STUDENTS TO WRITE SUCCESSFUL NON-ACADEMIC DOCUMENTS UPON GRADUATION

The discussion below analyzes how the K-2 and 3-5 grades cover the study professional communication principles. Following a summary of K-5 coverage, I discuss K-2 and 3-5 coverage individually in more detail. I grouped the grades this way because the TEKS seem to fall into these groups; many of the TEKS are the same or similar for K-2 and for 3-5.

Summary of Analyses (K-5)

The following sections summarize K-5 coverage of each of the study principles.

Understand the situation requiring communication. Because K-2 students are just beginning to learn to communicate in writing, the work they produce is “topic” based rather than “audience” or even “writer” based. By second grade, students are beginning to grasp the concept of a “communication situation” because of their teachers’ efforts in providing sufficient background information. These students’ grasp solidifies as they proceed through the later years of elementary school. By providing adequate background information and placing the assignment in an education “context,” teachers of third-fifth graders ensure that their students understand the communication situation and know how to approach it.

Define audience. Focusing primarily on real audiences they are familiar with, K-2 students work on adding details to their writing that would enable their audience to
follow their discussion. However, they do not really *define* the audience by analyzing their background and attitude. Nor do they select vocabulary or communication format based on audience preferences. Third and fourth graders work on *identifying* an audience but not really on more thoroughly *defining* that audience, but they do adjust content based on audience. Fifth graders, however, do examine audience in more depth by considering point of view and may adjust word choices, but not necessarily communication format, based on this examination.

*Clarify purpose.* K-2 students do not typically determine their purpose themselves; instead, their purpose is dictated by the type of writing they are learning to create at the moment. In third-fifth grades, students begin to understand, through both reading and writing, the four “traditional purposes” of communication, but they do not necessarily drill down to more specific purposes for particular communication situations.

*Collaborate.* The amount of collaboration students engage in increases from K-2 as teachers introduce students to such activities and accommodate differing maturity levels. Collaboration continues to be an increasing part of learning activities in third through fifth grades. Maturity, however, continues to affect the frequency of group work, and the classrooms’ limited computer access can affect collaboration options.

*Gather and evaluate needed resources.* Students in K-2 gather information through a variety of research methods, including doing interviews and using databases as well as print sources, although not necessarily with an audience and purpose in mind. Because they are still mastering reading fundamentals, however, kindergarten and first grade students don’t really examine source credibility. Second graders, though, do evaluate sources in conjunction with their more frequent use of the Web to
do research. Third through fifth graders begin learning how to use tools (print and electronic) for locating sources, although they do not necessarily research with an audience and purpose in mind. Evaluating these sources becomes a greater part of research in fourth and fifth grade, although it is not clear how much a part evaluation becomes. Many teachers see the Internet as a useful tool but one that they have not yet learned how to help students use effectively.

*Analyze and organize information.* Teachers of K-2 students typically provide their students significant help structures like templates to aid them in analyzing and organizing information. Therefore, the students themselves are not being guided in their analysis and organization by concerns for audience and purpose but by a provided structure. Teachers of third through fifth graders continue to provide significant help structures that assist students with these skills.

*Determine best format.* While K-2 students do learn about and practice different formats, when given a choice, the students typically choose the format they prefer to communicate in rather than the format that would best suit their audience and purpose. While third through fifth graders sometimes have the opportunity to choose their format, typically their choice is not based on audience needs either.

*Select communication style.* Because they are still trying to express their own ideas in standard English, K-2 graders do not select vocabulary or delivery style based on their audience or purpose. Their communication is primarily writer based. Third and fourth graders study communication style in the literature they read and work on choosing words carefully, but still not necessarily choosing in relation to an audience or
purpose. Fifth graders, though, work on awareness of audience in choosing a communication style, even in math and science.

*Select design elements.* Because K-2 students have limited daily access to computers in their classrooms, focusing on design principles regularly is difficult, so teachers emphasize the “larger” design elements like headings, balance, focus, and structure on a one-to-one basis. The purpose of the graphics students create is typically to help them express their ideas rather than to help the audience understand. Similarly, third graders practice creating graphics but do not necessarily tailor design elements for a particular audience or purpose. Fourth and fifth graders may think of audience in relation to design in a general way, but the elements they choose are still very writer based. Availability of technology in grades 3-5 continues to be an issue in teachers’ adequately covering design.

*Do usability testing.* Usability testing is a limited part of the K-2 curriculum, primarily with “sequencing” and revising, especially revising process descriptions and argument validity. Third through fifth graders do progressively more usability testing, and fifth graders even revise based on that feedback. Fifth graders peer edit in language arts and review procedures they have written for social sciences, math, and science.

*Present.* K-2 graders have many opportunities to share their work, both informally and formally. The goal of these opportunities, however, seems to be simply to get practice presenting their work in front of a group of their peers as opposed to tailoring their presentation for a variety of audiences, which would be difficult logistically. Third through fifth graders also frequently present their work informally and less
frequently present it formally. These presentations are also generally writer based, rather than audience based, with the aim of giving the students practice as speakers.

**Assessing K-2 Coverage**

The following sections analyze K-2 coverage of each of the study principles.

*Understand situation requiring communication.* Because K-2 students are just beginning to learn to communicate in writing, the work they produce is “topic” based rather than “audience” or even “writer” based. By second grade, students are beginning to grasp the concept of a “communication situation” due to their teachers' efforts in providing sufficient background information.

Because kindergarten students are learning the rudiments of physical writing, they spend much writing time on shaping letters and learning punctuation and mechanics, as well as word composition principles. However, they also spend a significant amount of time working on development with details sufficient for someone besides themselves to follow their typically personal narrative. Thus, they understand their *topic* well but have only a vague understanding of a “communication situation.” Kindergarten writing organization progresses through the year from primarily descriptive drawing to predominantly descriptive writing.

Students' understanding of the communication situation improves only slightly in first and second grade. The first grade TEKS lay out lofty goals of first graders grasping their communication situation, but Gahan and Schroeder find this understanding to be something their students struggle to attain due to immaturity. To ensure that their second grade students understand the communication situation, Peters and Young try to set up their assignments with adequate background information, and to some degree,
their students keep that situation in mind as they write. This search for information, then, is typically teacher led, rather than student led—not the pro-active student effort the TEKS describe.

**Define audience (students carefully consider the background and attitude of the person they are communicating with to ensure that they connect with that person).**

Focusing primarily on real audiences they are familiar with, K-2 students work on adding details to their writing that would enable their audience to follow their discussion. However, they do not really define the audience by analyzing their background and attitude. Nor do they select vocabulary or communication format based on audience preferences.

While the kindergarten TEKS regarding audience and purpose deal with speaking and reading/listening, teachers are also introducing these concepts in writing. With their teacher’s prompting, kindergarteners are able to include details that might clarify their topic for their audience (usually non-specified) as well as to determine another author’s audience, but choosing words and delivery style based on audience or purpose is generally not their concern.

While the TEKS don’t explicitly state that first grade students should be able to define an audience and purpose, they do state that students should be able to tailor their communication toward a particular audience for a particular purpose. Gahan and Schroeder find that their students make limited, but important, inroads toward that goal. Gahan and Schroeder work on defining audience primarily through discussing audiences students already know (parents, peers, teacher, students in another grade level) and then adding detail sufficient for that audience to understand their point. To
some extent, second grade students do think about their audience (usually someone they know or can identify closely with) when choosing content and words through which to convey that content.

**Clarify purpose (students clarify what they want to accomplish with their writing in relation to an audience).** K-2 students do not typically determine their purpose themselves; instead, their purpose is dictated by the type of writing they are learning to create at the moment. Kindergarteners’ primary communication purpose seems to be simply to share their experience. First grade students’ understanding of purpose is tied to types of assignments they write (letters, lists, narratives, “how-to”s), but it is also tied up in their obligation to their teacher to produce the assignment. The purpose justifies the assignment and is something that has some relevance to the students as second graders.

**Collaborate (students work in groups to accomplish a task or assignment).** The amount of collaboration students engage in increases from K-2 as teachers introduce students to such activities and accommodate differing maturity levels. Kindergarteners receive bi-monthly exposure to working in groups to accomplish a goal. The first grade TEKS specify participation in group projects without qualifying the type of participation. Gahan and Schroeder see a variety of levels of participation in collaborative projects, in keeping with the maturity level of their students. Both teachers allow their students a lot of leeway in participating in groups, accommodating those who are not “ready” yet. Collaboration for social studies projects as well as other learning activities is a regular part of Peters and Young’s second grade classes, aligning well with TEKS recommendations.
Gather and evaluate needed resources (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not). Students in K-2 gather information through a variety of research methods including doing interviews and using databases as well as print sources, although not necessarily with an audience and purpose in mind. Because they are still mastering reading fundamentals, however, kindergarten and first grade students don’t really examine source credibility. Second graders, though, do evaluate sources in conjunction with their more frequent use of the Web to do research.

As part of their research activities, kindergarten students interview and search for sources with the Internet, but they do not evaluate the sources they gather, although source evaluation is one of the kindergarten TEKS. Although both Gahan and Schroeder work with their first grade students to gather information for projects from a variety of types of sources (books, magazines, people, the Internet), neither addresses source evaluation in any significant way (though it is a TEKS requirement) since what their students can use is determined by what they can actually read.

Because they are more familiar with and intrigued by electronic sources than print ones, Peters and Young’s second grade students primarily use the Web for most of their research. In conjunction with this reliance, though, they discuss electronic source credibility to some extent, which is consistent with TEKS standards.

Analyze and organize information (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to
convey information relationships). Teachers of K-2 students typically provide their students significant help structures like templates to help them analyze and organize information. Therefore, the students themselves are not being guided in their analysis and organization by concerns for audience and purpose but by a provided structure.

Teacher-made research templates provide kindergarten students a plan to help them analyze whether information they have located is what they need. Whereas the TEKS specify that first grade students should be *drawing conclusions* from information they have gathered, Gahan and Schroeder’s students are doing well to analyze the information in simple ways (“Is what I’m looking for there?”) and organize that information with significant help structures. The students have a purpose in mind and possibly an audience because they usually present their projects to the class, but this audience and purpose do not necessarily inform their information gathering or analysis and organization process. Because analysis and organization are difficult concepts for even second graders to grasp, Peters and Young also provide structured help to lead them through these tasks. The TEKS standards, which call for students to more aggressively and competently approach analysis and organization, seem to expect competency instead of a more realistic “being familiar with.”

_Determine best format_ (with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, PowerPoint, report, manual, brochure, proposal, or procedure, etc.) While K-2 students do learn about and practice different formats, when given a choice, the students typically choose the format they prefer to communicate in rather than the format that would best suit their audience and purpose.
Kindergarten students get to try out different genres requiring small amounts of writing but format digitally in only a limited way, although the TEKS specify they should publish information electronically. The TEKS do not specify that first grade students choose a format based on audience, purpose, and communication situation but do indicate that students should learn about and practice different simple forms of writing, which they do in Gahan and Schroeder’s classes. When the students do choose a format, it is usually the one in which they prefer communicating. Both Peters and Young’s second grade students often have the opportunity to choose the format in which to convey their work, including PowerPoints, but this choice is also generally tied to what the students prefer rather than what the audience needs.

Select communication style (with audience and purpose in mind, students decide level of formality and use style principles: active voice, conciseness, action in verb rather than noun, actor as subject, etc.) Because they are still trying to express their own ideas in standard English, K-2 students don’t select vocabulary or delivery style based on their audience or purpose. Their communication is primarily writer based.

While the TEKS require that students intentionally choose words appropriate for their rhetorical situation, McCormack’s kindergarten classes do not focus on this skill. Although the TEKS specify that first graders should consciously consider their audience in choosing words to express their ideas, Gahan and Schroeder find that their students are primarily still trying to master writing in “standard” English—complete sentences beginning with a capital and ending in a period. For Peters and Young’s second grade
students, communication style is more writer based than audience based, focused on choosing vocabulary that best expresses the student’s ideas.

Select design elements (with audience and purpose in mind, students decide how to strategically use color, informative headings, graphics, bulleted/numbered lists, fonts, white space; use design principles: single space, double space between paragraphs, no indentions; no all-capitals or centering).

Because K-2 students have limited daily access to computers in their classrooms, focusing on design principles regularly is difficult, so instructors emphasize the “larger” design elements like headings, balance, focus, and structure on a one-to-one basis. The purpose of the graphics students create is to help them express their ideas rather than to help the audience understand.

Although McCormack’s kindergarten students explore in a limited way how graphics support text, they do not intentionally use design elements, as the TEKS require. When Gahan and Schroeder do discuss how to select design elements with their first grade students, it is on more of an individual basis and with the goal of making things easier for the audience to read since design is not a major focus. They frequently use bullets with class listing activities like brainstorming, but having only four computers for a class of eighteen or nineteen students limits the amount of tinkering students can do with other elements. Even though TEKS requirements specify teaching students about font attributes, color, and white space and tailoring graphics to an audience, Gahan and Schroeder don’t really address these. The graphics students create help them express themselves but are not necessarily created with an audience’s needs in mind.
Because design is perhaps more apparent and easier to manipulate electronically, Peters and Young’s second grade classes focus on design elements most when creating PowerPoints, concentrating on the “larger issues” like headings, balance, focus, and structure as opposed to some of the more detailed items the TEKS suggest like font, color, and white space. Especially regarding animation, students are able to see where their evaluation of their work as “great!” is not necessarily shared by their audiences.

_Do usability testing_ (students “test drive” what they wrote to see if it does what they want it to—that they connect with the audience and accomplish their purpose). Usability testing is a limited part of the K-2 curriculum, primarily with “sequencing” and revising, especially revising process descriptions and argument validity.

Usability tests are not generally part of the kindergarten curriculum. McCormack’s kindergarten students do not usually follow through on whether their solutions related to math or social studies are effective, although the TEKS require this testing. However, both Gahan and Schroeder have their first grade students “test out” written assignments involving sequencing, whether it be for language arts, social sciences, or math. This process adds a sense of completion to the assignment. Both Peters and Young incorporate some limited usability elements in their second grade classes, mainly in the areas of revision, although students check for cohesion rather than success in accomplishing their purpose. They do follow through on “how-to” assignments, checking for missing steps, and they do scrutinize arguments for validity.

_Present_ (students orally deliver what they produced to a group). K-2 students have many opportunities to share their work, both informally and formally. The goal of
these opportunities, however, seems to be simply to get practice presenting their work in front of a group of their peers as opposed to tailoring their presentation for a variety of audiences, which would be difficult logistically.

McCormack’s kindergarten students’ experience with presenting is centered on becoming comfortable sharing their work with others. It does not extend yet to intentionally modifying speech and style for different audiences, purposes, and rhetorical situations, as the TEKS suggest. First grade students have multiple opportunities throughout the week to present their work to the class. They typically receive feedback on their presentation, as well, from both their teacher and their peers. However, they are not necessarily presenting “to different audiences for different purposes and occasions,” as the TEKS require. Given the limitations of their school environment, achieving that goal would be difficult. Both Peters and Young’s second grade students have lots of opportunities to present their work, whether it be through sharing PowerPoints or projects, participating in a readers’ theater, or simply reading a paper they wrote.

Assessing 3-5 Coverage

The following sections analyze 3-5 coverage of each of the study principles.

Understand situation requiring communication. By providing adequate background information and placing the assignment in an education “context,” teachers of third-fifth graders ensure that their students understand the communication situation and know how to approach it.

By designing assignments that are “interconnected,” White and her colleagues ensure that their third graders understand the communication situation for most
assignments. In order to ensure that all their fourth graders understand the communication situation, Smith, Johnson, and Ayala supply background information from a variety of resources. This passive, “teacher-will-provide” approach differs from the student-led, independent research for background information the TEKS suggest. Helping their fifth grade students understand the communication situation is very important to Jackson and her colleagues. In all subject areas—language arts, math, social studies, and science—these teachers provide sufficient background and ask leading questions that prompt the students to apply already-learned concepts to communicate appropriately in the given situation.

Define audience (students carefully consider the background and attitude of the person they are communicating with to ensure that they connect with that person). Third and fourth graders work on identifying an audience but not really on more thoroughly defining that audience, but they do adjust content based on audience. Fifth graders, however, do examine audience in more depth by considering point of view and may adjust word choices, but not necessarily communication format, based on this examination.

While the TEKS indicate that third graders should be routinely tailoring their communication to particular audiences for particular purposes, White and her fellow teachers focus somewhat sporadically on their students’ understanding their audience and then modifying content, as opposed to more in-depth sentence elements, as needed. Similarly, Smith, Johnson, and Ayala’s fourth grade classes work on determining an audience and purpose for most of their writing but not necessarily on tailoring documents for that audience and purpose, as the TEKS suggest. The impetus
for the teachers’ focus seems to be making the activity more meaningful for the writer/student first, and then making the document more captivating to the audience. Jackson and her colleagues help their fifth-grade students grasp audience definition through working with point of view. This focus extends to considering word choices but probably not delivery.

*Clarify purpose* (students clarify what they want to accomplish with their writing in relation to an audience). In third-fifth grades, students begin to understand, through both reading and writing, the four “traditional purposes” of communication, but they do not necessarily drill down to more specific purposes for particular communication situations.

Third graders focus more broadly but more consistently on purpose than they do on audience. Fourth graders often study purpose by determining the author’s purpose in their readings and then work on the four traditional purposes (to inform, to persuade, to express, to entertain) in their own writing. In fifth grade, Jackson and her colleagues do address communication purpose, but they note that fifth graders are becoming increasingly interested in grades, so achieving a certain score tends to overwhelm any other writing goal.

*Collaborate* (students work in groups to accomplish a task or assignment). Collaboration continues to be an increasing part of learning activities in third through fifth grades. Maturity, however, can affect the frequency of group work, and the classrooms’ limited computer access can affect collaboration options.

White and her fellow teachers’ third graders participate in a variety of oral and written collaborative activities, the frequency of which depends on the students’ ability to
cooperate. Due to equipment and training limitations, however, they do not participate in the online collaboration the TEKS suggest. At least weekly, Smith, Johnson, and Ayala’s fourth graders collaborate in groups for research projects, problem-solving, and discussion (written and oral) or performances/presentations. They do not use electronic communication, either, however, when collaborating, as the TEKS suggest. Jackson, Frist, Mitchell, and Hales all incorporate collaborative activities frequently in their fifth grade classrooms, although they also are sensitive to the restrictions fifth graders’ maturity places on such activities. Through collaboration these teachers find they can step into the role of facilitator, guiding rather than leading group discussions and allowing students to learn from each other. It does not appear, though, that fifth graders collaborate using technology either.

*Gather and evaluate needed resources*  *(with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not).* Third through fifth graders begin learning how to use tools (print and electronic) for locating sources, although they do not necessarily research with an audience and purpose in mind. Evaluating these sources becomes a greater part of research in fourth and fifth grade, although it is not clear how much a part it plays. Many teachers see the Internet as a useful tool but one that they have not yet learned how to help students use effectively.

While White and her colleagues spend time helping their third grade students learn how to gather resources, primarily as part of several year-end projects, they do not spend time teaching their students how to evaluate these resources. The students learn about how to use print and online indexes to locate resources in the library,
resource books and the Internet; how to use a basic citation format; and how to paraphrase. Smith, Johnson, and Ayala’s fourth grade students all learn something about compiling bibliographies and about determining a website’s credibility, but the teachers also struggle with using the Internet effectively for research and with finding a role of books and other print resources. Although students discuss website credibility to some degree, it is not clear to what extent they work on evaluating the “usefulness and appropriateness of information,” as the TEKS specify.

Fifth graders appear to find the research process challenging and typically receive instruction in it only toward the end of the year. Most of their research practice takes place in language arts and social sciences, and they do not appear to spend much time assessing sources’ credibility, although practice in this skill is a TEKS requirement. Through the Library Media Specialist, though, they learn how to take the “Big 6” approach to research, use electronic search engines, evaluate websites, and avoid plagiarism.

**Analyze and organize information** *(students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey information relationships)*. Teachers of third through fifth graders continue to provide significant help structures that assist students with analysis and organization. Although the TEKS indicate that students should be analyzing information they gather from research as well as manipulating it in various ways, third graders are doing well to determine which information is important and then attempt to paraphrase it. White and her colleagues help their students with organization by providing structured, often
individual, assistance. Smith, Johnson, and Ayala’s students focus on organization and analysis to some degree in every subject area, but they still need assistance from their instructors in structuring their approaches to these tasks. It is not clear how much they use technology to analyze and organize information as the TEKS require.

Even though the TEKS heavily emphasize analysis and organization, Jackson and Frist do limited work in language arts and social sciences respectively on these skills, possibly because they are not a fifth grade TAKS focus, while Mitchell and Hales work much more on analysis and organization in math and science due to the nature of the subjects.

*Determine best format* (with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, PowerPoint, report, manual, brochure, proposal, or procedure, etc). While third through fifth graders sometimes have the opportunity to choose their format, typically their choice is not based on audience needs. Third graders do have the opportunity to choose the format for their work, usually within a prescribed range, including limited technological options. However, students do not usually have the audience in mind when selecting a format, although they may consider their communication purpose. They do study textual features of different genres to become more familiar with them.

Smith, Johnson, and Ayala’s fourth grade students also have limited opportunities to determine the formats in which they wish to convey their information, primarily for significant projects or reviews. Because students are still being *introduced* to various formats, especially those involving technology, teachers suggest possibilities more often than students initiate options. As with third graders, students’ format
choices appear to be tied less to audience considerations than to *writer preference*, which may involve choices best conveying their purpose.

Jackson, Frist, Mitchell, and Hales all give their fifth graders some degree of choice in formatting their work. These teachers appear to balance requiring students to try out recently introduced formats with allowing students to choose the format they wish, although, as with the previous grades, that choice is probably based on appeal to student rather than appropriateness for audience.

*Select communication style* (with audience and purpose in mind, students decide level of formality; use style principles: active voice, conciseness, action in verb rather than noun, actor as subject, etc.) Third and fourth graders study communication style in the literature they read and work on choosing words carefully, but not necessarily in relation to an audience or purpose. Fifth graders, though, work on awareness of audience in choosing a communication style, even in math and science.

Third graders examine communication style in a limited way through literary models they study; however, this examination is far from the intentional audience-directed language and delivery the TEKS require students to produce. Fourth graders extend this limited focus through analyzing word choices in literature, discussing word usage variations in relation to context, and honing their own written word choices. Smith, Johnson, and Ayala’s students appear to be considering the audience when studying word choice, however, not a particular audience, as the TEKS specify.

Jackson and her fellow teachers do discuss communication style with their fifth graders to some degree. Frist’s students work on selecting words that will make their audience most receptive to their message, while Jackson’s students work on finding
their individual, authentic voices. Mitchell and Hales work on helping their math and science students be aware of an audience that is not as familiar with technical terminology as they are. It appears, though, that students do not actually work much on tailoring their own language and delivery for the audience, purpose, and occasion.

Select design elements (with audience and purpose in mind, students decide how to strategically use color, informative headings, graphics, bulleted/numbered lists, fonts, white space; use design principles: single space, double space between paragraphs, no indentions; no all-caps or centering). Third graders practice creating graphics but not necessarily tailoring design elements for a particular audience or purpose. Fourth and fifth graders may think of audience in relation to design in a general way, but the elements they choose are still very writer based. Availability of technology in grades 3-5 continues to be an issue in teachers’ adequately covering design.

While White and her colleagues do create graphics at different stages of a learning activity, they do not focus on tailoring design for an audience through font, color, or white space. Since they lack enough computers and a color printer in their classrooms, students cannot easily work on these design elements.

Which design elements Smith, Johnson, and Ayala’s fourth graders are introduced to vary according to class and design does not appear to be a major focus. Students may choose design based on general rather than particular audience considerations. This trend continues through the fifth grade. As with format, Jackson and her fellow teachers’ students select design elements based on what they, the students, like rather than what would appeal to an audience. Availability of technology
continues to be an issue in these teachers’ adequately covering design, certainly in the depth the TEKS require.

Do usability testing (students “test drive” what they wrote to see if it does what they want it to—that they connect with the audience and accomplish their purpose). Third through fifth grades do progressively more usability testing, and fifth graders even revise based on that feedback. Fifth graders peer edit in language arts and review procedures in social sciences, math, and science.

The follow-through evaluation the TEKS suggest to monitor writing and problem solutions is not typically part of White and her colleagues’ third grade curriculum. In fourth grade, Smith, Johnson, and Ayala all include learning activities that emphasize audience perspective, but their students do not evaluate all their writing to ensure that it achieves its purpose. However, Jackson, Frist, Mitchell, and Hales all do usability testing in fifth grade whenever the teaching activity is appropriate. In addition to receiving feedback from the targeted audience on their document, students also revise based on that feedback. For language arts, usability testing takes the form of peer editing, while for social sciences, math, and science, audiences review procedures.

Present (students orally deliver what they produced to a group). Third through fifth graders frequently present their work informally and less frequently present it formally. These presentations are generally writer based, rather than audience based, with the aim of giving them practice as speakers.

White and her fellow teachers’ third grade students have frequent opportunities to present their work, although their sharing is more writer focused than audience
focused, more to give them an opportunity to speak in front of a group as well as
develop skills as an audience.

Fourth grade students can frequently present their work in Smith, Johnson, and
Ayala’s classes, sometimes formally to an entire class, possibly using technology, but
often informally for a small group or just their teacher. They don’t appear to focus on
tailoring language for their specific audience either; however, their audiences are
typically similar to themselves. The students in Jackson and her colleagues’ fifth grade
classes occasionally present formally also but frequently present informally. They will
sometimes present as the culmination of a project but will also present solutions as part
of daily collaborative or other learning activities.
CHAPTER 11

CONCLUSIONS/RECOMMENDATIONS

So are K-5 students being prepared for non-academic writing, the sort of writing they will be required to do upon graduation, both in their careers and in their civic lives? And are their teachers prepared to guide them in learning this type of writing?

Extent to Which K-5 Curricula Are Preparing Students for Non-Academic Writing and Suggested Changes

In seeking to determine the extent to which K-5 curricula prepare students for non-academic writing, I considered the study results as well as the perspectives of the teachers I interviewed.

*Study results and recommendations.* Recent studies (see Literature Review and Introduction) conclude that we must do a much better job of preparing our students for non-academic writing if they are to be able to compete in a global workplace. Texas’ McKinney Independent School District, with one of the fastest-growing populations in the nation, is doing a

- Good job of preparing students at the elementary-school level in the areas of collaboration and presentation
- Fair job of helping elementary-school students understand the communication situation, define audience, clarify purpose, gather and evaluate resources, and test usability
- Poor job of helping elementary-school students with analysis and organization

With their teachers’ help, K-5 students eventually grasp the communication situation and can broadly identify their audience and purpose, but they do not appear to
select words, format, communication style, or design based on that audience and purpose. Their writer-based focus affects their presentations as well, although they do have many opportunities to present their work. The K-5 TEKS relating to audience, purpose, format, communication style, and design seem too ambitious for what teachers indicate students are capable of in the areas of tailoring communication to audience and purpose. It would appear, at least in the classrooms represented in this study, that these TEKS are currently more “goals” to strive for rather than realistic “standards” to attain and perhaps surpass. However, the TEKS are definitely in line with professional communication concepts.

If teachers routinely incorporated audience and purpose considerations into every aspect of communication assignments (format, communication style, design), students could attain these goals. Many professionals struggle with simply remembering to consider the reader and, furthermore, do not know how to tailor their writing effectively to a reader’s needs. This is all the more reason for students to begin working on this skill early since such an ability would significantly increase an employee’s value.

The Technology Applications TEKS are divided into K-2 and 3-5, divisions that are too broad. The earlier grades are struggling with learning how to physically write, so requiring that they tailor design to audience and purpose is unrealistic. Many older teachers leave the technology applications to the younger members of the teaching team, who may have learned how to produce PowerPoints but not learned any guidelines about designing them. Because their students tend to be so far ahead of them technologically, many teachers leave the teaching of design to the students to
figure out and pass on to each other, though they may focus on the broader concepts like not using too much animation (and why). Those teachers who are comfortable with technology are more likely to embrace Smart Boards and webquests, for example. Also, the technology TEKS are not tested on TAKS, so teachers tend to “fit them in” at the end of the year after students have finished the subject-area TAKS tests.

The lack of readily accessible technology affects the degree to which students can experiment with design; few classrooms have more than four computers available to more than twenty-two students, although students do attend weekly sessions in a computer lab. This situation does not appear to be changing soon. The lack of technology accessibility also affects collaborative options, although K-5 students typically do a lot of collaborating in other ways.

In the areas of resource gathering and analysis, some teachers are still struggling to use the Internet, along with other technology, effectively—eager to embrace its potential but unsure of how to use it to best effect. Typically younger, technologically savvy teachers are taking greater advantage of these resources for their students. Along with expanded resources for students through the Internet comes an increased need for evaluating those resources’ credibility—not such a significant concern when the majority of student resources were in print. Analyzing and organizing—traditionally difficult skills requiring labor-intensive critical thinking—continue to be a challenge for students, with teachers providing significant assistance.

K-5 curricula do address usability in a broad sense in that students do peer critiquing and other forms of “solution”—evaluation, along with procedures “tests,” in language arts as well as math.
Teachers’ perspectives. The K-5 teachers I interviewed felt that the communication skills their students were currently learning applied to real life, empowered students, and laid a foundation upon which students could build.

Applying skills to real life

Many of the teachers I interviewed consciously work to ensure that students can see how the communication skills they are learning will transfer to the skills they need in their careers and civic lives.

• Alicia Ayala (4th grade) is “concerned” that TAKS “teaches one mode of writing—is that real life?” She reasons that the rationale for focusing on personal narratives is that if students cannot write in such a relatively easy mode, they cannot write in the more difficult ones, so at least educators know the child has achieved basic skills. “But to spend so much time . . . ,” she laments. “We’re playing catch-up since third grade’s focusing on reading [for the Reading TAKS in early March], focusing on what we have to do to pass [the Writing TAKS].” She feels, though, that her students have a “basis”: they “write with amazing voice, complete thoughts with interesting ideas, and [keep] audience in mind. Now they’re ready for other [enhancements]; they’re like sponges.”

• May Johnson (4th grade) reminds her students of how often they will be called on to write outside academia. She frequently ties writing to “life things.” She often reminds her students of the prevalence of writing in both their career and civic lives: “Even if you’re a garbage man, you must fill out tax
forms and communicate through email. You have to express your feelings and thoughts in an organized way.”

• Ella Frist (5th grade ) observes that unlike in fourth grade, where there is more story writing, in fifth grade students move to more content area writing such as scientific observations, connections in math to other areas, and rules for games. In fifth grade, students are “gear[ed] more toward adult writing,” she says, and she finds students either “love it or hate it.”

• Janalee Hales (5th grade ) tries to prepare her science students to solve problems effectively and cooperatively. She “tries to build as many connections as possible to the working world because in reality that’s really what the focus is--getting our future citizens ready for the tasks before them.” She enjoys holding “mini-debates to teach them respectful communication in a non-confrontational yet disagreeing manner.” She gives as an example “What’s in the Bubbles” in which a family is watching the tea kettle on a stove bubble up and discussing what’s in the bubbles: “Well, they’re bubbles of heat; no, they’re bubbles of air; they’re invisible water; no, they’re empty—there’s nothing inside those bubbles; they’re atoms in the water that are separating.” Each student decides whom they agree with and why and what their scientific evidence is. Then they separate into teams and each team presents the best evidence for its case. Students can change teams if convinced otherwise.

“It really gets them thinking in context of the science communication skills to help them resolve problems,” Hales concludes, “which is a lot of what we
deal with in the adult world. No matter what your job is, no matter what your career is in, you’re going to have a set of problems presented to you. How are you going to respectfully and effectively communicate some resolution strategies?"

- Carie Smith (4th grade) emphasizes the carry-over between experiments her students perform in the classroom and events that affect our daily lives. She insists, “The most important piece out of what I do is teaching kids to think—everything leads from that. MISD encourages teachers not to ask ‘yes/no’ questions.” In her field of science, Smith encourages her students to take a lesson and apply it to real life. For example, if the science experiment is about ice freezing and expanding, they might then extend this investigation to ask why pipes break if people live in an area without freezes—what had to have happened? Or soil erosion to camping. . . . Smith asserts that “the beginnings are there [of applying communication skills], but she admits that it’s only a step in the process.”

- Chase Young (2nd grade) wants to ensure his students feel comfortable using technology and presenting their ideas—skills they will need to succeed beyond school. He knows that “the technology will definitely resonate throughout their lives.” He adds that “being able to choose their best avenue for presentation is going to be good. . . working within their strengths and building on their weaknesses, which we do constantly. They’re certainly not bashful anymore with all the presentations.” One of his parents told him
recently, “My kid used to be shy. . . I don’t know whether to thank you, but now he’s in the talent show!”

Empowering students

Some teachers I interviewed believe that their students are learning communication skills that will help them confidently convey and support their positions.

- May Johnson (4th grade) wants students to be confident that they can produce competent communication on their own. She feels that her emphasis on making the students the editors of their own papers and using the teacher for reference to check for specific errors empowers students to take charge of their own learning.

- Sue Mitchell (5th grade) values the training her math students receive in defending their solutions. She believes that the writing her students do for math is “preparing them when given a task to complete it and justify why it was done as it was.” She feels like the presentations before their peers again train them to “be able to justify the reasonableness of their work.”

Laying a foundation

Many teachers spoke about how they were laying a foundation for solid communication skills to come.

- Amanda Jackson (5th grade) feels she is “beginning with some basic ideas. . . planting a few seeds.”

- Teresa Gahan (1st grade) feels that her students are “learning the basics of writing” and at the same time learning how to express their ideas in writing, knowledge that also helps with their speaking. She notes the “huge”
connection between writing and reading—“the kids that write learn to read; the kids that read learn to write”—skills that teachers focus on so heavily early in elementary school since these are “tools students will have to have.”

- Janet Peters (2nd grade) equates the foundation she is laying for her students to a child’s development: “they start out talking and go to walking.” She reminds her second graders frequently that when they get older they can use these skills in a way that “they’ll come off sounding like an educated person.”

- Anna Guirgis (3rd grade) hopes her students “think writing is fun and that they enjoy it.” She hopes they understand the steps of writing. She often emphasizes to her third graders that what they are doing—the research steps they are following—are the same ones college students follow.

- Nora Schroeder (1st grade) emphasizes to her students that “everything we do has to do with writing.” She likes “teaching kids manners.” “Everything we do is part of who they become,” she notes. She tells them frequently, “When you talk to me, I need your eyes to look at me.” Her class talks a lot about how to serve others. “Our class is a team,” she’ll say. “We don’t make fun of each other. If someone falls down, I want to see three or four of you hustling over to help.” “It’s all about community and the bigger picture and about communicating with parents so that they know their kids are loved and challenged,” she adds.
Extent to Which Texas Universities Train Teaching Candidates in Professional Writing Principles, and Suggested Changes

Assuming that they are committed to helping their students master the fundamentals of writing, are our K-5 teachers prepared to supplement their traditional reliance on primarily academic types of writing with a more aggressive focus on professional writing principles? To determine the extent to which teachers attending Texas colleges and universities learn these principles, I surveyed the education departments of the sixty-seven four-year colleges and universities in Texas. (See survey in Appendix D.) Out of sixty-seven surveys emailed, I received twenty-three responses—a 34 percent rate of return. Appendix G details and compares the training pre-service teachers receive in professional writing genres in Texas. Appendices H and I detail and compare the exposure pre-service teachers receive to the study professional writing principles:

- Understanding the situation requiring communication
- Defining audience and clarifying purpose
- Collaborating
- Gathering and evaluating needed resources
- Analyzing and organizing information
- Determining the best format
- Selecting communication style
- Selecting design elements
- Doing usability tests
- Presenting
Exposure of pre-service teachers in Texas to professional writing principles (See Appendices H and I.) All pre-service teachers at the surveyed universities learn about the importance of understanding the communication situation, defining audience, and clarifying purpose to some extent, but program emphasis varies widely. Some programs cover these principles explicitly in several courses and in great detail while others cover them informally yet expect students to consider them when completing assignments.

Likewise, although all surveyed education departments require collaborative work, the emphasis on teaching about collaboration varies significantly, from heavy to none at all. Respondents emphasized that the collaborative work might not require collaborative writing.

Regarding resource gathering and evaluation and information analysis and organization, almost all survey respondents noted that pre-service teachers have to write a number of research papers requiring these activities, including annotated bibliographies, but do not receive explicit training in these tasks.

Most departments allow some choice in communication format or at least introduce different formats so that students become familiar with them. Carol Bedard of the University of Houston—Downtown notes, “Choice of how to present information is an integral part of our program.” However, none of the surveyed departments indicated that professors offered instruction on how to choose the best format. Nor do they appear to offer instruction in how to choose the best communication style, although they discuss the topic in “public speaking” or “professionalism” courses. The same is true for design elements, although most require some visuals to accompany presentations and
address the topic to some degree in “public speaking,” “professionalism,” “educational technology,” or “curriculum” courses. This lack of instruction appears to result in an over-riding focus on content to the exclusion of design and style matters. As Susan McCormack of the University of Houston—Clear Lake notes,

They [Students] are also required to participate in online discussions/reflections, but because the discussions are online, I find that students are rather casual in the way that they respond. I notice that students are more interested in the implementation than they are in the details of the documents. While I model the type and quality of written correspondence, etc., the students do not usually transfer that modeling into their own work.

Few departments address usability with their students, although the University of Texas at Austin’s Randy Bomer commented, “It is an interesting and probably very useful proposition.”

All students in surveyed departments also present projects or assignments in most courses, but it is not clear from the respondents’ comments how much training students receive in presenting.

Training of pre-service teachers in Texas in professional writing genres (See Appendix G.) Regarding training in creating PowerPoints, all pre-service teachers at the surveyed universities get experience creating them for many of the education courses they are taking, and many learn how to use PowerPoints in their teaching, but few receive specific training in how to use design principles to create them well. The assumption of many education departments voiced by Gail Hartin of Southern Methodist University seems typical, “They already know how.” Only Southwestern Assemblies of
God University’s Glenda Boone noted that her school explicitly includes design elements in the content of PowerPoint instruction. The “Educational Technology” or “Computers in the Classroom” courses required in most programs may also touch on “training in” as opposed to simply “creation of.”

A similar attitude appears to prevail regarding instruction in creating email. Pre-service teachers write lots of email to teachers and classmates as part of course components like journal reflections, discussion boards, and assignment submissions, but they receive no explicit training in how to write effective email. As with PowerPoint instruction, students learn ways of using email but not of creating good messages. Only the University of St. Thomas’ Terry Brandt reported that students in their program “analy[ze] and discus[s]” examples of professional communication. Typical was the response of University of Texas’ Bomer, “They send email all the time, though I don’t think there is any formal instruction. I can’t imagine why there would need to be.”

Creating handouts for parents (“parent communication”), creating tests, and designing teaching materials are components of multiple courses. Most students create handouts for parents, most often a newsletter. Some respondents indicated that students work a lot on understanding the parent/teacher communication situation through role-playing and watching DVDs of oral parent/teacher communication, for example. But as with PowerPoint and email training, training in creating written parent communication does not appear to be design oriented. Nor does creating tests and teaching materials. Students produce all of these documents using technology, but they are part of course assignments and not explicitly taught regarding format or design.
Undergraduate pre-service teachers receive no training in grant proposal writing, with the exception of Boone’s (Southwestern Assemblies of God University) science students, who write a grant proposal in their technology class. Several respondents reported that they eagerly support students who wrote grant proposals, though, and most mentioned that the topic is covered at the Master’s level. Darrell Slabaugh, executive director of the McKinney Educational Foundation, which funds teacher grant requests, comments on the importance of such training:

We annually receive many grant applications for our limited staff grants and professional development programs at the McKinney Education Foundation. Generally most grants meet the standards we establish but like most application processes, we see a spectra of quality. Many have not fully answered criteria, provided substantial performance measures or tied them to accountability and outcome measures. Others may not be specific with expenditures and budget items, and some are vague in defining the parameters of the project. Exceptional grants most often come from those schools that have a librarian, secretary or administrator who has the talent and gifts to review and assure compliance with application requirements. The limited number of qualified applications suggests your premise of not being adequately trained is correct. (personal communication, July 28, 2008)

Likewise, undergraduates receive no training in creating conference presentations or writing journal articles, with the exception of those at Concordia University and in the University of North Texas’ Bilingual Education Students Organization. Respondents noted that occasionally an undergraduate student would
assist a professor during a conference presentation. However, these skills are focused on at the Master’s level.

Experiences of interviewed MISD teachers with professional writing training.

While all the twenty teachers I interviewed write all sorts of professional documents daily as part of their jobs (email; parent communication; activity handouts; assessments; newsletters; PowerPoints for parents, colleagues, and students, etc.) (see Appendix J), only one had taken a technical writing course in college (she was an English major). Some have taken the district-offered workshop on creating PowerPoints, but others have taught themselves. None has really thought much, though, about designing a PowerPoint with the audience in mind. Only three have participated in The New Jersey Writing Project in Texas, a two-week intensive training program that requires participants to write extensively and focuses heavily on audience and purpose.

These teachers’ lack of training in professional writing has handicapped their ability to obtain additional funding to enhance their class’s learning experience and share their teaching experiences and insights with their colleagues outside the district. Few have worked on a grant proposal, including the three with Master’s degrees, and even the library media specialist I interviewed, who is considered the “go-to” person for grant applications, received no training in writing them. And none has written conference papers or articles for professional journals.

Clearly, then, if teachers of Texas K-5 students are to supplement the traditional communication curriculum with professional writing principles, as trends in literacy as well as national literacy studies suggest they should, education programs need to focus more intensively on these principles in their pre-service teacher curriculum.
Professional writing principles need to become part of ingrained writing patterns because these are the skills that will best serve students after they graduate, both in their careers and their civic lives. Taking a single professional writing course in high school or college will not automatically change a person’s writing style; understanding how to tailor communication for audience and purpose; how to collaborate effectively; how to select, evaluate, analyze, and organize information efficiently and productively; and how to format presentations effectively requires focused instruction and constant practice over a long period of time.

When first graders write letters to troops in the Middle East, they can be learning the letter format, they can be thinking about what a soldier might want to hear, they can be thinking about the order of content to include that might be most interesting or comforting, and they can even choose the words to use to create that impact. Even as beginning writers, they could be practicing the skills they will need for writing beyond academia. As third graders research educational systems in other countries, those students can be choosing information and organizing it with the kindergarten class they plan to present their projects to in mind. They can be learning how to work together, respecting each others’ ideas and contributions. When fifth graders test out the instructions their classmates wrote for building a wind-powered car, they can be learning the value of usability testing to ensure their writing is effective. High school students are perpetually asking, “How am I going to use this in the ‘real world’?” In the case of professional writing, “this” is something a graduate will use every day.
APPENDIX A

QUESTIONNAIRE FOR K-5 TEACHERS ON USING PROFESSIONAL WRITING PRINCIPLES IN THE CLASSROOM
Questionnaire for K-5 Teachers on Using Professional Writing Principles in the Classroom

I. Your Background

What grade level do you teach? Subject area?

Taught how long?

Highest degree?

Exposure to professional writing

Did you take a technical writing course in college?

Was technical writing part of your teacher education?

Have you taken a training class or workshop in technical writing?

II. Your Professional Writing Experience

How often do you write. . . (highlight or circle)

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<td>1 2 3 4 5</td>
<td>Powerpoints</td>
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<td>1 2 3 4 5</td>
<td>Email</td>
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<td>1 2 3 4 5</td>
<td>Handouts</td>
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<td>1 2 3 4 5</td>
<td>Tests</td>
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<td>1 2 3 4 5</td>
<td>Teaching materials</td>
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<td>1 2 3 4 5</td>
<td>Flyers</td>
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</table>
III. Your Use of Professional Writing Principles in Student Assignments

In which of the following ways (if any) do you have your students use professional writing principles in the assignments you make? Please explain by giving a couple of examples.

Understand situation requiring communication (___% of assignments)

Define audience (students carefully consider the background and attitude of the person they are communicating with to ensure that they connect with that person) (___% of assignments)

Clarify purpose (students clarify what they want to accomplish with their writing in relation to an audience) (___% of assignments)
Collaborate (students work in groups to accomplish a task or assignment) (___% of assignments)

Gather and evaluate needed resources (with audience and purpose in mind, students do interviews, collect existing materials, use databases/Web, observe; determine which resources are credible and which are not) (___% of assignments)

Analyze and organize information (students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey relationships between information) (___% of assignments)
Determine best format (with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, powerpoint, report, manual, brochure, proposal, or procedure, etc.) (% of assignments)

Select communication style (with audience and purpose in mind, students decide level of formality; use style principles: active voice, conciseness, action in verb rather than noun, actor as subject, etc.) (___% of assignments)

Select design elements (with audience and purpose in mind, students decide how to strategically use color, informative headings, graphics, bulleted/numbered lists, fonts, white space; use design principles: single space, double space between paragraphs, no indentions; no all-capitals or centering) (___% of assignments)

Do usability testing (students “test drive” what they wrote to see if it does what they want it to—that they connect with the audience and accomplish their purpose; for example: have someone they wrote a set of instructions for actually use them and see if they make sense.) (___% of assignments)
Present (students orally deliver what they produced to a group) (___% of assignments)

IV. Applicability of Communication Skills Developed in Your Courses

How well do you think the communication skills developed in your courses translate into nonacademic (on-the-job or civic) writing tasks demanded of graduates?

What kind of flexibility do you have in curriculum design? In creating assignments?
APPENDIX B

EMAIL REQUESTING TEACHERS TO PARTICIPATE IN STUDY
Hi Ms. Serna:

I have been interviewing elementary school teachers in MISD this semester for my research and hoped I might include your insights. I am a doctoral student and teaching fellow in English at the University of North Texas and also have 4 children in MISD.

I was hoping you might be interested in participating in my research on how K-5 teachers incorporate professional writing principles into their course lessons and activities. **I would like to take you to lunch or dinner and learn about your teaching methods.** Or I can bring lunch to you during your planning time if that is more convenient for you.

**How would you benefit?**
In addition to helping my research, our interview might **benefit you** by providing a(n)

- No-stress opportunity to talk with an eager listener outside your school about your teaching philosophy
- Occasion to educate university faculty about what new teachers need to know
- Relaxing dinner

**What would you need to do?**
“Participating” would mean letting me interview you (about 30 minutes) over lunch or dinner about if and how you incorporate professional writing principles (like focus on
audience; purpose; collaboration; information selection, evaluation, and organization; presentation format; and usability) into your course activities.

I would want to use your information and insights in my dissertation, but you could certainly remain anonymous if you wished.

Please consider my request, and email or call me if you would like to participate. Your contributions would add significantly to our understanding of how the foundations of professional writing ability are laid. And I would enjoy getting to learn from you!

Hope to hear from you.

Marlea Treviño
Teaching Fellow
Dept. of English
University of North Texas
APPENDIX C

INSTITUTIONAL REVIEW BOARD PARTICIPANT AGREEMENT (INFORMED CONSENT)
Institutional Review Board Participant Agreement (Informed Consent)

Study Title: “Laying the Foundation for Successful Non-Academic Writing: Professional Writing Principles in the K-12 Curriculum of the McKinney Independent School District”

Hello! I am a teaching fellow at the University of North Texas, working on my dissertation in English and technical writing.

Study Overview
The focus of my research is the extent to which McKinney ISD K-12 curricula incorporate professional writing principles regarding

- Audience
- Purpose
- Collaboration
- Information selection, evaluation, and organization
- Presentation format
- Usability

Specifically I plan to determine which TEKS incorporate each of the above principles and then examine how they are applied in curricula, textbooks, lectures/activities, and assignments. I will focus on courses at McKinney elementary, middle, and high schools in Language arts, Math, Science, Social Sciences, and career-related areas (Business, Technical Writing, Communications, and Industrial Applications).

I would like to interview you because your insights into my subject area will significantly contribute to my research.
Participant Agreement
If you would like to participate in this study, please read the following and sign and date it. I will also give you a copy.

You may have these questions or others:

“What will I have to do?”
Participate in a 30-45-minute tape-recorded interview about if and how you incorporate professional writing principles into your courses.

“Who will see or hear my data?”
I will transcribe the audiotape and will be the only one besides my dissertation directors (Dr. Brenda Sims, Dr. Kathryn Raign, and Dr. Lynne Cooke) to hear it. I will code these consent forms and interview transcriptions and maintain them in separate locations to maintain confidentiality. I will keep audiotapes at my home for 5 years after the study; then I will destroy them. I will include your insights (attributed to a pseudonym if you wish) in my dissertation, which I may publish or use as part of a presentation.

“How are my rights protected?”
I have completed the National Institutes of Health “Human Participants Protection Education for Research Teams” course to ensure I understand your rights as a participant and how to protect them. In addition, this research study has been reviewed and approved by the UNT Institutional Review Board (IRB). Please contact the IRB at 940.565.3940 with questions regarding your rights.

“Where will we hold the interview?”
Wherever and whenever it is convenient for you.

“What if I decide after we meet that I don’t want to continue as a participant?”
No problem. I will return any data I have collected to you.

“Can I see how you used my data before you publish or present it?”
I will email you all relevant sections if you wish.

“How will you benefit, and how will I benefit?”
I will benefit because I will gain your insights for my research. You may benefit through the process of reflecting on and talking about your teaching philosophy and activities.

If you think of other questions, please contact me at [redacted] or [redacted]; I have given you my business card. You may also contact my faculty advisor, Dr. Brenda Sims, at [redacted] or [redacted].
In signing below, you voluntarily agree to be in the study and acknowledge that you have read and understand all the above.

__________________________________________  __________________
Signature of Participant      Date

__________________________________________
Printed Name of Participant

I [do /do not] wish you to keep my name confidential in any publications or presentations regarding this study.  ___________________________________
Signature of Participant

Code:________

In signing below, I certify that I have reviewed the contents of this form with the participant signing above. I have explained the possible benefits of the study. I believe the participant understood the explanation.

____________________________________________  _______________
Marlea Treviño       Date
APPENDIX D

EMAIL REQUESTING INFORMATION ON PRE-SERVICE TEACHER EDUCATION CURRICULA
Dr. Errett:

Do you remember how hard it is to collect data for your dissertation?

I would really appreciate the gift of your time so I could include data on Schreiner University in my research.

I am a doctoral candidate in English and Technical Writing at the University of North Texas. As part of my dissertation, I'm studying the types of training student teachers (especially K-5) receive in the kinds of writing they will have to do on the job.

I have studied the website for your education department. Could you take just a few minutes and comment on the extent to which students in your program receive training in the following areas:

- Creating PowerPoints
- Writing email
- Designing handouts or "parent communication"
- Creating tests
- Designing teaching materials
- Writing grant proposals
- Creating conference presentations or writing journal articles
I'm especially interested in your students' exposure to professional writing principles that they are expected to use in their own writing on the job. Would you take just a few more minutes to comment on the extent to which your curriculum exposes prospective teachers to the following concepts:

- Understanding the situation requiring communication
- Defining audience and clarifying purpose
- Collaborating
- Gathering and evaluating needed resources
- Analyzing and organizing information
- Determining the best format
- Selecting communication style
- Selecting design elements
- Doing usability tests
- Presenting

I am very grateful for the gift of your time and insights.

Marlea Trevino
Teaching Fellow
Dept. of English
University of North Texas

mhtrevino@sbcglobal.net
972.569.7965
APPENDIX E

QUESTIONNAIRE FOR K-5 CURRICULUM DIRECTORS ON PROFESSIONAL WRITING PRINCIPLES IN THE CURRICULA
Questionnaire for K-5 Curriculum Directors on Professional Writing Principles in the Curricula

V. Your Background

Name?
What grade levels have you taught? Subject area?
Taught how long?
Highest academic degree?
How long have you been in administration?
What area of curriculum are you responsible for?
What is your academic background in curriculum design?
What are your job responsibilities?

Exposure to professional communication principles
Did you take a technical writing course in college?
Was technical writing part of your teacher education?
Have you taken a training class or workshop in technical writing?

VI. Development of Course Curricula

Please explain the process by which course curricula in your area are determined.
VII. Use of Professional Writing Components in Curricula in Your Area

To what degree are the following professional writing components part of the curricula in your area? Please rate 1-5 (5 being high degree).

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<td>(<em>students determine how resources relate to their audience and purpose; with that audience and purpose in mind, they divide the materials into sections and then into paragraphs; they use tables, charts, and graphs to convey relationships between information</em>)</td>
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<td>(<em>with audience and purpose in mind, students decide whether to convey information as a memo, letter, email, PowerPoint, report, manual, brochure, proposal, or procedure, etc.</em>)</td>
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<td>(<em>with audience and purpose in mind, students decide how to strategically use color, informative headings, graphics, bulleted/numbered lists, fonts, white space; use design principles: single space, etc.</em>)</td>
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Do usability testing (students “test drive” what they wrote to see if it does what they want it to—that they connect with the audience and accomplish their purpose; for example: have someone they wrote a set of instructions for actually use them and see if they make sense.)

Present (students orally deliver what they produced to a group)

VIII. Applicability of Communication Skills Developed in Your Curriculum Area

How well do you think the communication skills developed in your curriculum area translate into nonacademic (on-the-job or civic) communication tasks demanded of high school graduates?

IX. Support Provided to K-5 Teachers

How much input do K-5 teachers have in creating curricula?

How much flexibility do K-5 teachers have in implementing curricula?

What additional TAKS-related responsibilities do K-5 teachers have beyond simply teaching the TEKS?
What professional development activities do you provide or suggest, and of those, which are most popular?

Which popular teaching strategies do you most favor (for example, The Big 6, 6 + 1 Traits, etc.)?
APPENDIX F

LETTER REQUESTING K-5 CURRICULUM DIRECTORS COMPLETE QUESTIONNAIRE
June 2, 2008

Ms. Dot Leach
Instructional Officer for Elementary Science
McKinney Independent School District
#1 Duvall St.
McKinney, TX  75069

RE: Requesting Information on MISD K-5 Curricula for Dissertation

Dear Ms. Leach:

I am finishing up my dissertation, “Laying the Foundation for Successful Non-Academic Writing: Professional Writing Principles in the K-5 Curricula of the McKinney Independent School District,” and would appreciate some comments from you. I realize you are very busy wrapping up the school year, but would you please take 10 minutes and complete the enclosed questionnaire?

I have spent the spring semester interviewing a number of inspiring and capable K-5 teachers across MISD to learn about their backgrounds in professional writing and how they incorporate professional writing components into their teaching. They universally praise the support they receive from the district as well as the flexibility they feel in implementing the state-mandated curriculum.

To round out my understanding of the MISD K-5 curricula, though, I would value some information from you. I have enclosed a brief questionnaire and would be honored if you would complete it and return it in the self-addressed, stamped envelope.

Thanks so much for the work you do for our children. Please email me or call if you have any questions. I am very grateful for the gift of your time and your insights.

Sincerely,

Marlea Treviño

Encl.
APPENDIX G

TRAINING OF PRE-SERVICE TEACHERS IN TEXAS IN PROFESSIONAL WRITING GENRES
<table>
<thead>
<tr>
<th>University</th>
<th>Creating PowerPoints (PPs)</th>
<th>Writing Email</th>
<th>Designing Handouts or Parent Communication</th>
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</thead>
<tbody>
<tr>
<td><strong>Austin College</strong></td>
<td>Dr. Julia Shahid, Assoc.</td>
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<tr>
<td></td>
<td>Prof. of Education¹</td>
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<td></td>
<td>Do this at least once per</td>
<td>Do this over</td>
<td>Do this in the assessment class</td>
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<td></td>
<td>each education class</td>
<td>over per class</td>
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<tr>
<td><strong>Baylor University</strong></td>
<td>Dr. Betty Conaway,</td>
<td>Teacher education students are required to design handouts for students.</td>
<td>Teacher education students are required to create tests on the computer.</td>
<td>Teacher education students are required to design handouts for students and design other teaching materials using technology.</td>
<td>In student teaching, they must present some of their lessons.</td>
<td>In their “Home/School/Church/Community” class they must develop a “Parent/Teacher Program” and a “Parent Involvement Program.” These must include handouts for the parents.</td>
<td>In one of their “Teaching Reading” classes—they must create 6 teaching tools.</td>
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<td></td>
<td>Prof. &amp; Dir. of Grad. Prog.²</td>
<td>Teacher education students are required to produce and use PP presentations.</td>
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<td><strong>Concordia University</strong></td>
<td>Dr. Gert Keiper, Dir. of ECE/Elem. Education³</td>
<td>In many of their Education classes they must do peer teaches using some kind of technology—at times this is a PP presentation. In student teaching, they must present some of their lessons.</td>
<td>Much of my communication with my students is by email.</td>
<td>In their “Home/School/Church/Community” class they must develop a “Parent/Teacher Program” and a “Parent Involvement Program.” These must include handouts for the parents.</td>
<td>One assignment is to create a unit—with detailed lesson plans—including assessments—with tests.</td>
<td>They receive limited amount of information on writing grants.</td>
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<td>Midwestern State University</td>
<td>Our pre-service teachers are required to take a &quot;Computer Applications for Education&quot; class. In this class, the students are exposed to all elements of using a computer as well as &quot;computer applications for the classroom including hardware and software, computer environments, telecommunication, and ethics.&quot; Other than that, our students do not receive any training in computer application.</td>
<td>Using PP.</td>
<td>Our pre-service teachers are required to take a &quot;Computer Applications for Education&quot; class. In this class, the students are exposed to all elements of using a computer as well as &quot;computer applications for the classroom including hardware and software, computer environments, telecommunication, and ethics.&quot; Other than that, our students do not receive any training in computer application.</td>
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<tr>
<td>Rice University</td>
<td>Dr. Linda McNeil, Prof. of Ed.</td>
<td>computer environments, telecommunications, and ethics. Other than that, our students do not receive any training in computer application.</td>
<td>They create multiple assessments as a part of their development of curriculum and they write narrative assessments of the children’s</td>
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<table>
<thead>
<tr>
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<tr>
<td>Sam Houston State University Dr. Patricia Williams</td>
<td>The students take a technology course to learn ways to use PPs in the classroom, etc. Plus, they often make PP presentations in class.</td>
<td>The students take a technology course to learn ways to use email, etc.</td>
<td>They have a course in classroom management, and one of the chapters in the book I used when I taught this course dealt with working with parents. We role play parent conferences, they watch a DVD on a conference, and they study Baumrind's research on parenting approaches.</td>
<td>They have a course in assessments.</td>
<td>They have a methods course. Plus, we teach this info throughout all the courses.</td>
<td>They actually have very little on this topic. I don't believe it is actually in the course materials, but one of the faculty members may be addressing it.</td>
<td>Unfortunately, they have little practice concerning this topic at the undergraduate level. I have written articles with some of the students and made presentations with them.</td>
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<td>Southern Methodist University</td>
<td>They already know how. They create some as course assignments in several of our courses.</td>
<td>Professio nalism course</td>
<td>Professionalism course</td>
<td>Course on formative and summative assessment</td>
<td>Infused into several courses</td>
<td>Not addressed at the undergraduate level</td>
<td>Not addressed at the undergraduate level</td>
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<tr>
<td>Dr. Gail Hartin, Dir. of Undergrad. Progs. &amp; Teacher Cert.</td>
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<td>Southwestern Adventist University</td>
<td>This is covered in an Educational Technology class; students also create PPs for assignments in different classes</td>
<td>No training</td>
<td>Students design a Parent Newsletter; several classes discuss the importance of parent communication.</td>
<td>This is covered in a Testing and Assessment class; other classes address this issue as well in terms of specific content areas.</td>
<td>All of our method courses address teaching materials.</td>
<td>No training</td>
<td>No training</td>
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<td>Dr. Carol Campbell</td>
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<td>Southwestern Assemblies of God University</td>
<td>My students learn about creating PPs in my science class, which is a junior-level class. They learn about font size, background contrast, etc.</td>
<td>I don’t teach anything about writing emails.</td>
<td>My students design and produce a newsletter for parents as a class assignment.</td>
<td>In my science and social studies methods classes, the students create rubrics.</td>
<td>We discuss creating and adapting teaching materials for their lesson plans. I emphasize citing sources of information, format, etc.</td>
<td>My students are required to write a grant proposal in my technology class.</td>
<td>I have had individual students assist me in conference presentation, but that is not part of my curriculum.</td>
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<td>Dr. Glenda Boone, Assoc. Prof. of Ed.</td>
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<td>Tarleton State University</td>
<td>Yes</td>
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<td>Dr. Stephen Anderson</td>
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<td>Texas A&amp;M University</td>
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<td>Dr. Bugrahan Yalvac, Assis. Prof. of Science Ed.</td>
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<tr>
<td>Texas A&amp;M University—Corpus Christi</td>
<td>We have two specific assignments requiring a well-developed PP presentation: 1) report and 2) introductory presentation by preservice teachers in their assigned clinical teachers’ classroom; also the use of technology is required in one of the three assigned lessons that are taught in the clinical teachers’</td>
<td>Occurs in courses that I have not taught</td>
<td>Varies according to the individual experience (with the clinical and cooperating teachers) that develops in the field-based block and during student teaching</td>
<td>Lots of experience and opportunity during the field-based semester and the student teaching semester</td>
<td>This would be a rare experience at the undergraduate level.</td>
<td>A few of the high achievers link up with faculty, but most do not.</td>
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<td>Texas A&amp;M University—Texarkana</td>
<td>Yes. All of our undergraduate teacher candidates take a course in technology that ensures that they can use PP to create presentations and instructional content. They use the Internet to research assigned topics such as learning disabilities, synthesize the information they found into a short paper that they complete in a word processor. They then extract information from the paper to create their presentations in PP.</td>
<td>Students develop information brochures or newsletters to communicate information to a selected audience.</td>
<td>We do not do this specifically in this undergraduate course but I'm sure they develop teaching materials in other courses. However, my graduate students in Instructional Technology (some of whom are already teachers) take courses in which they create teaching materials. In all of these activities, they use technology tools such as word processors, presentation software, visual organizers, spreadsheets, and multimedia software.</td>
<td>We do not do this specifically in this undergraduate course. However, my graduate students in Instructional Technology (some of whom are already teachers) take courses in which they write grant proposals. In all of these activities, they use technology tools such as word processors, presentation software, visual organizers, spreadsheets, and multimedia software.</td>
<td>We do not do this specifically in this undergraduate course. However, my graduate students in Instructional Technology (some of whom are already teachers) take courses in which they write grant proposals. In all of these activities, they use technology tools such as word processors, presentation software, visual organizers, spreadsheets, and multimedia software.</td>
<td>We do not do this specifically in this undergraduate course. However, my graduate students in Instructional Technology (some of whom are already teachers) take courses in which they write a research plan. In all of these activities, they use technology tools such as word processors, presentation software, visual organizers, spreadsheets, and multimedia software.</td>
<td></td>
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<tr>
<td>Dr. Bosede Aworuwa, Assoc. Prof. of Educational Technology¹³</td>
<td>The technology course entails a lot of exchange of e-mail messages between the instructor and students. In addition, the discussion board is also used extensively to discuss course content online. We use WebCT course management.</td>
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³³ Yes. All of our undergraduate teacher candidates take a course in technology that ensures that they can use PP to create presentations and instructional content. They use the Internet to research assigned topics such as learning disabilities, synthesize the information they found into a short paper that they complete in a word processor. They then extract information from the paper to create their presentations in PP.
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<td>platforms .</td>
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<td>as word processors .</td>
<td>visual organizers, spreadsheets, and multimedia software.</td>
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<tr>
<td>Texas Woman's University</td>
<td>1 course of &quot;training,&quot; several for reinforcement</td>
<td>Indirect reinforcement of professional language in most courses</td>
<td>2 courses</td>
<td>2 undergrad courses</td>
<td>3 undergrad. courses; more at graduate level</td>
<td>Graduate course offered in a different dept. within the college</td>
<td>Indirect reinforcement in all graduate-level courses</td>
</tr>
<tr>
<td>Dr. Gina Anderson</td>
<td>Students produce, but are not trained by this course</td>
<td>Students are expected to participate, but they are not trained by this course.</td>
<td>N/A</td>
<td>N/A</td>
<td>Students produce and use instructor-modeled work as sample</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>University</td>
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<td><strong>University of Houston--Downtown</strong>&lt;br&gt;Dr. Carol Bedard&lt;sup&gt;16&lt;/sup&gt;</td>
<td>Students create a PP of the portfolio and present it to faculty.</td>
<td>Requires formats addressed in syllabi</td>
<td>Students are required to write several letters to parents.</td>
<td>Possibly in another class. I am not sure.</td>
<td>This is presented in several literacy classes.</td>
<td>Masters students are exposed to this.</td>
<td>Masters students only</td>
</tr>
<tr>
<td><strong>University of North Texas</strong>&lt;br&gt;Dr. Jüne Azua&lt;sup&gt;17&lt;/sup&gt;</td>
<td>CECS, Computers in the Classroom, is a comprehensive course offering pre-service teachers a variety of tools, including essentials for PP presentations. Most education courses require presentations and these are typically PP presentations (since a requirement is multi-media presentations).</td>
<td>WeCTVis Blackboard is an integral part of our education courses and facilitates communication among class members.</td>
<td>This is emphasized in the professional portfolio, which involves three checkpoints throughout the teacher education program (the portfolio is updated to a higher level of proficiency at each checkpoint) and parent involvement and communication is an essential component. The foundations courses also target parental involvement and communication.</td>
<td>Assessment is a component of the instructional and application courses, particularly the four methods courses. Additionally, students complete at least two assessment courses in their specialty area and in the area of reading.</td>
<td>This is a major component in all teacher education courses (in courses that require admission to the teacher education program—not foundation courses).</td>
<td>The undergraduate courses do not require this; students are only informed about grant opportunities for funding.</td>
<td>This is not promoted so much at the undergraduate level, with the exception of the Bilingual Education Student Organization (BESO), which encourages students to participate as facilitators and as presenters at conferences. We have also designed an annual Professional Development School (PDS) Interdisciplinary Conference, in which students present during the pre-student teaching semester in a</td>
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<tr>
<td><strong>University of St. Thomas</strong></td>
<td>We require them to create and deliver PP-based presentations. We discuss the importance of professional communications, such as electronic mail, letters, handouts, and flyers, and we provide examples for analysis and discussion.</td>
<td>We require them to design and present teaching materials.</td>
<td>We require them to create tests.</td>
<td>We do not specifically teach the skills of writing grant proposals, although we frequently have students who do this and to whom we provide support.</td>
<td>Probably almost none.</td>
<td>Probably almost none at the undergraduate level.</td>
<td></td>
</tr>
<tr>
<td>Dr. Terry Brandt, Coor. of Undergrad, Teacher Ed.</td>
<td>We require them to create and deliver PP-based presentations. We discuss the importance of professional communications, such as electronic mail, letters, handouts, and flyers, and we provide examples for analysis and discussion.</td>
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<td>Probably almost none.</td>
<td>Probably almost none at the undergraduate level.</td>
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**University of Texas at Austin**

Dr. Randy Bomer

They have experience with creating PPs, frequently, for more than one. They send email all the time, though I They do receive advice about communicating with parents, in writing and other modes. This would depend on the faculty member. For most, I Yes, they have lots of experience with designing teaching Probably almost none. Probably almost none at the undergraduate level.
I doubt that they receive much actual instruction on how to do it well. In my opinion, there is in fact an over-reliance on this limiting genre. don’t think there is any formal instruction. I can’t imagine why there would need to be. They do lots of work on a variety of assignments, perhaps including handouts. There would be great variation among faculty. doubt that test writing is a big focus, though assessment is a major topic. There are many other ways to assess than through the use of tests, and in actual fact, teachers of grades EC through 4 do not spend a lot of time making tests. At the moment, they spend tons of time administering tests materials of many kinds.
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<tbody>
<tr>
<td>University of Texas—Permian Basin</td>
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<td>Since this is a counseling program, they don’t create tests or design teaching materials.</td>
<td>Since this is a counseling program, they don’t create tests or design teaching materials.</td>
<td>I have the writing center do a presentation in my Foundations of Counseling course to familiarize my students with APA requirements.</td>
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<tr>
<td>Dr. Linda Autry, Assist. Prof.</td>
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<tr>
<td>University of the Incarnate Word</td>
<td>Built into course assignments throughout program but not explicitly taught</td>
<td>Built into course assignments throughout program but not explicitly taught</td>
<td>Specific course focusing on this aspect; Parent Communication is an outcome of particular coursework.</td>
<td>Specific course focusing on this aspect; Assessment course ties various forms of assessment to specific learning standards/goals</td>
<td>Built into course assignments throughout program but not explicitly taught</td>
<td>Not addressed</td>
<td>Not addressed</td>
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<td>Dr. Elda Martinez</td>
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Since this is a counseling program, they don’t create tests or design teaching materials. I do have one group class where they design a 6 week group curriculum. I have the writing center do a presentation in my Foundations of Counseling course to familiarize my students with APA requirements.
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<td><strong>Wayland Baptist University</strong></td>
<td>PP is the media students use to deliver the showcase portfolio. They present the showcase portfolio to peers and university supervisors.</td>
<td>Students submit skills and dispositions via email. According to the student teacher handbook, “the student teacher must use good oral and written communication.”</td>
<td>A sampler of documents showing use of technology is part of the student teacher’s showcase portfolio.</td>
<td>A sample of assessments is part of the student teacher’s showcase portfolio.</td>
<td>A sampler of documents showing use of technology is part of the student teacher’s showcase portfolio.</td>
<td>Typically students do not participate in grant writing.</td>
<td>Typically students do not participate in publication to journals.</td>
</tr>
<tr>
<td><strong>Dr. Barbara Carr, Assoc. Prof. of Education &amp; Dir. of Student Teaching &amp; Field Experiences</strong></td>
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<tr>
<td><strong>West Texas A&amp;M University</strong></td>
<td>Taught in Educational Technology and Methods classes</td>
<td>Taught in Educational Technology and Methods classes</td>
<td>Taught in Methods classes</td>
<td>Taught in Methods classes</td>
<td>Taught in Methods classes</td>
<td>Individual basis</td>
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<td><strong>Dr. Renea Fike</strong></td>
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23 responses out of 67 sent—34% return

Additional notes:
**The rationale for the chart design is to allow the reader to easily find certain school’s programs and by comparing responses horizontally, get a sense of the school’s program as a whole. When comparing responses vertically, the reader can see how different schools compare.**

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APPENDIX H

EXPOSURE OF PRE-SERVICE TEACHERS TO PROFESSIONAL WRITING PRINCIPLES (PART 1)
Table Appendix H: Exposure of Pre-Service Teachers to Professional Writing Principles (Part 1)*

<table>
<thead>
<tr>
<th>University</th>
<th>Understanding the Communication Situation</th>
<th>Defining Audience and Clarifying Purpose</th>
<th>Collaborating</th>
<th>Gathering and Evaluating Needed Resources</th>
<th>Analyzing and Organizing Information</th>
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<tr>
<td><strong>Austin College</strong></td>
<td>I address each of these in context and not one by one. These issues are addressed in both the elementary field experience class as well as the assessment class.</td>
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<td><strong>Baylor University</strong></td>
<td>This term is used in education to describe necessary tasks in preparation for teaching individual lessons. All Baylor teacher education students are evaluated on their ability to complete these tasks in relationship to student characteristics. However this term can also be used in the context of professional writing, and in that context, Baylor teacher education students are not held accountable for these skills.</td>
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<td>Analyzing and Organizing Information</td>
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<td>Concordia University</td>
<td>The students do not receive training in this area, but they are expected to use it in assignments, lecture notes, etc. for their classes.</td>
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<td>At times they must collaborate in a small group to research a topic or to design a project for presentation.</td>
<td>In several of their classes they are required to write research papers using APA format and then they must present to their classmates using some type of visual or technology.</td>
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<td>Midwestern State University</td>
<td>We spend time discussing verbal and nonverbal communication, and they often make presentations in classes.</td>
<td>We discuss this topic in detail. For instance, I am having my students write a letter to secondary students. Therefore, we brainstormed ideas concerning what secondary students’ interests</td>
<td>They often work in cooperative groups.</td>
<td>I have them complete an annotated bibliography.</td>
<td>They often work in groups to present a topic to the classes. For instance, I have had students gather information about one of the special education categories, plan a presentation for their peers, and teach the needs, characteristics, special services provided, etc. to their classmates. They must have four resources per</td>
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<tr>
<td>Rice University</td>
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<tr>
<td>Sam Houston State University</td>
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<td>University</td>
<td>Understanding the Communication Situation</td>
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<tr>
<td>Southern Methodist University</td>
<td>This is addressed in the public speaking elective course or in the professionalism course, as well as other courses.</td>
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<tr>
<td>Dr. Gail Hartin, Dir. of Undergrad. Progs. &amp; Teacher Cert.</td>
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<td>person and an annotated bibliography, so that helps answer info about resources.</td>
</tr>
<tr>
<td>Southwestern Adventist University</td>
<td>This is addressed informally in many of our method courses.</td>
<td>This is addressed in a writing workshop class.</td>
<td>This is addressed in many of our method courses.</td>
<td>This is addressed in many of our method courses.</td>
<td>This is addressed in many of our method courses.</td>
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<tr>
<td>Dr. Carol Campbell</td>
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<tr>
<td>Southwestern Assemblies of God University</td>
<td>I address this concept using the Six Traits of Writing in RDG 3243 Reading and Writing Across the Curriculum.</td>
<td>I address this concept using the Six Traits of Writing in RDG 3243 Reading and Writing Across the Curriculum.</td>
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<tr>
<td>Dr. Glenda Boone, Assoc. Prof. of Ed.</td>
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<tr>
<td>Tarleton State University</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Dr. Stephen Anderson</td>
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<tr>
<td>Texas A&amp;M University</td>
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<tr>
<td>Dr. Bugrahan Yalvac, Assis. Prof. of Science Ed.</td>
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</tr>
</tbody>
</table>

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<th>Defining Audience and Clarifying Purpose</th>
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<tbody>
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<td><strong>Texas A&amp;M University—Corpus Christi</strong>&lt;br&gt;Dr. Martin Ward, Chair, Dept. of Teacher Ed.</td>
<td>Our preservice teachers have exposure to this as a part of their field experiences, but we have not yet identified this as curriculum for a particular course in our program.</td>
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<tr>
<td><strong>Texas A&amp;M University—Texarkana</strong>&lt;br&gt;Dr. Bosede Aworuwa, Assoc. Prof. of Educational Technology</td>
<td>This is done with my graduate-level students.</td>
<td>This is done with my graduate-level students.</td>
<td>This is done with my graduate-level students.</td>
<td>This is done with my graduate-level students.</td>
<td>This is done with my graduate-level students.</td>
</tr>
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<td><strong>Texas Woman’s University</strong>&lt;br&gt;Dr. Gina Anderson</td>
<td>Most, if not all courses</td>
<td>More specifically addressed at graduate level</td>
<td>Heavily taught and reinforced in all courses</td>
<td>Most courses</td>
<td>Mainly in 4000 level courses and graduate level</td>
</tr>
<tr>
<td><strong>University of Houston—ClearLake</strong>&lt;br&gt;Dr. Susan McCormack</td>
<td>To small degree</td>
<td>To small degree</td>
<td>To great degree</td>
<td>To great degree</td>
<td>To great degree</td>
</tr>
<tr>
<td><strong>University of Houston—Downtown</strong>&lt;br&gt;Dr. Carol Bedard</td>
<td>Covered using Cazden’s work as well as literature on conferencing</td>
<td>Covered in every writing assignment and in Foundations of Literacy course</td>
<td>This is a big issue that is covered in every class. All classes require collaboration.</td>
<td>In literacy courses students evaluate children’s and adult literature, tour book stores, libraries...</td>
<td>Integral part of the literacy classes. Students bring a Literacy binder in a pre-requisite course and add to it throughout the program</td>
</tr>
<tr>
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<tr>
<td>University of North Texas</td>
<td>This is a major concept in all bilingual and ESL courses.</td>
<td>This is open-ended, as students select their audience, which could be to parents, to other educators, to educate the general public on education issues, etc.</td>
<td>In many of our courses, students review the literature and present on a topic—often this is done in a cooperative group format.</td>
<td>In the majority of the courses</td>
<td>In the majority of the courses</td>
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<tr>
<td>Dr. June Azua17</td>
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<tr>
<td>University of St. Thomas</td>
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<tr>
<td>Dr. Terry Brandt, Coor. of Undergrad. Teacher Ed.</td>
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<td></td>
<td>Yes, explicitly</td>
</tr>
<tr>
<td>University of Texas at Austin</td>
<td>Definitely—very explicitly</td>
<td>Definitely—very explicitly</td>
<td>Yes, very much so.</td>
<td>Continually and in many domains</td>
<td>Yes, explicitly</td>
</tr>
<tr>
<td>Dr. Randy Bomer19</td>
<td></td>
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<tr>
<td>University of Texas—Permian Basin</td>
<td>Built into course assignments throughout program but not explicitly taught; not necessarily written communication</td>
<td>Not addressed</td>
<td>Built into course assignments throughout program but not explicitly taught; integrated into coursework assignments but not specifically focused on writing</td>
<td>Not addressed</td>
<td>Built into course assignments throughout program but not explicitly taught; in written research assignments</td>
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<tr>
<td>Dr. Linda Autry, Assis. Prof.20</td>
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<tr>
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<tr>
<td>Dr. Elda Martinez21</td>
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<tr>
<td>Wayland Baptist University</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Dr. Barbara Carr, Assoc. Prof. of Education &amp; Dir. of Student Teaching &amp; Field Experiences^2^</td>
<td>Educational Foundations and Methods classes</td>
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<td>Methods classes</td>
<td>All classes</td>
<td></td>
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</table>

23 responses out of 67 sent—34% return

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18 Personal communication, March 10, 2008, "As to the second part of your inquiry regarding our student’s exposure to professional writing principles: We do not provide any formal instruction beyond that which I have previously mentioned. As a matter of fact, our university has eliminated all writing courses in our core requirements. The only remaining writing courses are two creative writing courses (poetry and fiction) in our English department."

19 Personal communication, April 26, 2008, “First, I should point out that many of us in teacher education wince at the word “training.” We don’t think of what we do as simply providing “training,” which tends to seem like a sort of low-level practice of job tasks. We think of our work as involving teacher EDUCATION (not training) and as being about helping our students learn to reason as professionals, to reflect on what happens in classrooms, to make decisions on the basis of evidence, and to have deep understandings of diverse disciplines so that they can apprentice young people into those disciplines. In the domain of writing, we provide a course (Language arts Methods) to every students, and that course focuses on writing pedagogy. In that course, each students works on her/his own writing process, with special attention to revision, which has not always been a focus in their writing experience. The idea is to make them feel more like insiders in the world of composing. That doesn’t answer your question, but it’s one of the foci of writing in our program. In addition, throughout many courses in the program writing is a tool for thinking and learning.”

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APPENDIX I

EXPOSURE OF PRE-SERVICE TEACHERS TO PROFESSIONAL WRITING PRINCIPLES (PART 2)
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<th>University</th>
<th>Determining the Best Format</th>
<th>Selecting Communication Style</th>
<th>Selecting Design Elements</th>
<th>Doing Usability Tests</th>
<th>Presenting</th>
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<td>I address each of these in context and not one by one. These issues are addressed in both the elementary field experience class as well as the assessment class.</td>
<td>Don’t address.</td>
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<td>The students do not receive training in this area, but they are expected to use it in assignments, lecture notes, etc. for their classes.</td>
<td></td>
</tr>
<tr>
<td>Rice University</td>
<td>The students do not receive training in this area, but they are expected to use it in assignments, lecture notes, etc. for their classes.</td>
<td>The students do not receive training in this area, but they are expected to use it in assignments, lecture notes, etc. for their classes.</td>
<td>The students do not receive training in this area, but they are expected to use it in assignments, lecture notes, etc. for their classes.</td>
<td>The students do not receive training in this area, but they are expected to use it in assignments, lecture notes, etc. for their classes.</td>
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</tr>
<tr>
<td>Sam Houston State University</td>
<td>We vary the format, so students understand learning/teaching styles and multiple intelligences.</td>
<td>Until recently, all students were required to take a course titled Speech for Teachers. We are now adding this course material into the other courses.</td>
<td>They must use visuals in their presentations.</td>
<td>They take a course in assessments.</td>
<td>They typically present some topic in many of their classes.</td>
</tr>
<tr>
<td>Southern Methodist University</td>
<td>This is addressed in the public speaking elective course or in the professionalism course, as well as other courses.</td>
<td>This is addressed in the public speaking elective course or in the professionalism course, as well as other courses.</td>
<td>This is addressed in the public speaking elective course or in the professionalism course, as well as other courses.</td>
<td>N/A</td>
<td>This is addressed in the public speaking elective course or in the professionalism course, as well as other courses.</td>
</tr>
<tr>
<td>University</td>
<td>Determining the Best Format</td>
<td>Selecting Communication Style</td>
<td>Selecting Design Elements</td>
<td>Doing Usability Tests</td>
<td>Presenting</td>
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</tr>
<tr>
<td>Southwestern Adventist University</td>
<td>This is addressed informally in some of our method courses.</td>
<td>This is addressed informally in some of our method courses.</td>
<td>This is addressed in the Educational Technology class.</td>
<td>No training</td>
<td>Students make presentations in many of our classes.</td>
</tr>
<tr>
<td>Dr. Carol Campbell</td>
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<tr>
<td>Southwestern Assemblies of God University</td>
<td>I address this concept using the Six Traits of Writing and expository text structure lessons in two reading/writing classes.</td>
<td>I address this concept using the Six Traits of Writing and expository text structure lessons in two reading/writing classes.</td>
<td>Some exposure in the curriculum class</td>
<td>I don’t expose my students to this concept.</td>
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<tr>
<td>Dr. Glenda Boone, Assoc. Prof. of Ed.</td>
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<tr>
<td>Tarleton State University</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Dr. Stephen Anderson</td>
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<tr>
<td>Texas A&amp;M University</td>
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<tr>
<td>Dr. Bugrahan Yalvac, Assis. Prof. of Science Ed.</td>
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<tr>
<td>Texas A&amp;M University—Corpus Christi</td>
<td>Our preservice teachers have exposure to this as a part of their field experiences, but we have not yet identified this as curriculum for a particular course in our program.</td>
<td>Our preservice teachers have exposure to this as a part of their field experiences, but we have not yet identified this as curriculum for a particular course in our program.</td>
<td>Our preservice teachers have exposure to this as a part of their field experiences, but we have not yet identified this as curriculum for a particular course in our program.</td>
<td>Our preservice teachers have exposure to this as a part of their field experiences, but we have not yet identified this as curriculum for a particular course in our program.</td>
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<tr>
<td>Dr. Martin Ward, Chair, Dept. of Teacher Ed.</td>
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<tr>
<td>University</td>
<td>Determining the Best Format</td>
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<td>Selecting Design Elements</td>
<td>Doing Usability Tests</td>
<td>Presenting</td>
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<tr>
<td><strong>Texas A&amp;M University—Texarkana</strong>&lt;br&gt;Dr. Bosede Aworuwa, Assoc. Prof. of Educational Technology&lt;sup&gt;13&lt;/sup&gt;</td>
<td>This is done with my graduate-level students.</td>
<td>This is done with my graduate-level students.</td>
<td>This is done with my graduate-level students.</td>
<td>This is done with my graduate-level students.</td>
<td>This is done with my graduate-level students.</td>
</tr>
<tr>
<td><strong>Texas Woman’s University</strong>&lt;br&gt;Dr. Gina Anderson&lt;sup&gt;14&lt;/sup&gt;</td>
<td>4000 level and graduate</td>
<td>Most courses</td>
<td>Most courses</td>
<td>4000 level</td>
<td>All courses</td>
</tr>
<tr>
<td><strong>University of Houston—ClearLake</strong>&lt;br&gt;Dr. Susan McCormack&lt;sup&gt;15&lt;/sup&gt;</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>To limited degree—students present three times during a fifteen week semester</td>
</tr>
<tr>
<td><strong>University of Houston—Downtown</strong>&lt;br&gt;Dr. Carol Bedard&lt;sup&gt;16&lt;/sup&gt;</td>
<td>Choice of how to present information is an integral part of our program.</td>
<td>I am not aware of this.</td>
<td>Presentations are a part of most classes.</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>University of North Texas</strong>&lt;br&gt;Dr. June Azua&lt;sup&gt;17&lt;/sup&gt;</td>
<td>This is open-ended in most courses, but rubrics are provided indicating the significance of the format (Additionally, students are also referred to the writing center).</td>
<td>Communication is a major concept of educator standards, and students must consider this at a minimum of three points in education program when a professional portfolio is submitted at three checkpoints, with each checkpoint requiring a higher level of proficiency; students typically consider</td>
<td>The teaching reading and writing courses target writing elements</td>
<td>I’m not sure about this.</td>
<td>This is commonplace in education courses since collegiality is important, in which teachers share effective teaching techniques and also to ensure that the students become comfortable as presenters to students, colleagues, parents, as well as effective presenters at conferences.</td>
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<tr>
<td>University</td>
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<td>Selecting Design Elements</td>
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<tr>
<td>University of St. Thomas</td>
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<td>communication with parents and communicating with them in formal and informal formats</td>
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<tr>
<td>Dr. Terry Brandt, Coor. of Undergrad. Teacher Ed.</td>
<td>Yes, explicitly</td>
<td>Yes, explicitly</td>
<td>This would depend upon faculty members. But they do often collaboratively make posters in their classes, as part of class work on concepts and discussions of readings, and when they do make posters, elements of design are clearly present, whether or not they are named and deliberated. Still, as one would predict, this element of composing is understood by few faculty in the way you mean it.</td>
<td>Not at all, though it is an interesting and probably very useful proposition</td>
<td>Yes, quite a bit</td>
</tr>
<tr>
<td>University of Texas at Austin</td>
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<tr>
<td>Dr. Randy Bomer</td>
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<tr>
<td>University of Texas—Permian Basin</td>
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<tr>
<td>Dr. Linda Autry, Assis. Prof.</td>
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394
<table>
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<tr>
<th>University</th>
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<th>Doing Usability Tests</th>
<th>Presenting</th>
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</thead>
<tbody>
<tr>
<td>University of the Incarnate Word</td>
<td>Not addressed</td>
<td>Not addressed</td>
<td>Not addressed</td>
<td>Not addressed</td>
<td>Built into course assignments throughout program but not explicitly taught; integrated with presentations to peers</td>
</tr>
<tr>
<td>Dr. Elda Martinez (^{21})</td>
<td></td>
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<tr>
<td>Wayland Baptist University</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Dr. Barbara Carr, Assoc. Prof. of Education &amp; Dir. of Student Teaching &amp; Field Experiences (^{22})</td>
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<td></td>
</tr>
<tr>
<td>West Texas A&amp;M University</td>
<td></td>
<td>Research Design class</td>
<td>Many classes</td>
<td></td>
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<tr>
<td>Dr. Renea Fike (^{23})</td>
<td></td>
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</table>

23 responses out of 67 sent—34% return

Additional notes:

*The rationale for the chart design is to allow the reader to easily find certain school's programs and by comparing responses horizontally, get a sense of the school's program as a whole. When comparing responses vertically, the reader can see how different schools compare.*

1 Personal communication, April 9, 2008

2 Personal communication, April 3, 2008

3 Personal communication, March 18, 2008, “Our students take a writing course—“Writing Across the Curriculum”—before they are admitted into the Education Program. With most of their Education classes they are required to spend time in a classroom observing and teaching some classes—with detailed lesson plans. Before they student teach, they have been in different classes for about 180 hours.”

4 Personal communication, March 10, 2008, “As far as writing, my students get feedback from me on their writings and sometimes I take a few minutes in class to go over some elements that I see recurring in my students' writings. For example, my Block One students (juniors), I have noticed that several of them have been turning in "one BIG paragraph" to me instead of a paper with paragraphs containing similar thoughts. I addressed this
in class and reminded them that when they change thoughts, they should change paragraphs as well. I also made specific comments on students’ papers.”

5 Personal communication, March 8, 2008, “Our students major in their subject areas, so their ability to communicate is first of all grounded in the subject fields. Second, they are responsible for creating, teaching, and assessing two six-week courses during two summers of student teaching; for this work, they work closely with faculty and mentor teachers around issues of children’s learning, children’s cultures and pedagogy. They create multiple assessments as a part of their development of curriculum and they write narrative assessments of the children’s learning; these assessments go to the parents, the children and the children’s regular school. All aspects of the program include writing, which ranges from analytical and scholarly, to creative, to instructional.”

6 Personal communication, March 10, 2008

7 Personal communication, March 8, 2008

8 Personal communication, April 2, 2008

9 Personal communication, April 4, 2008

10 Personal communication, March 24, 2008, “Our students are exposed to all of the training areas except writing grant proposals. Writing is emphasized in all our courses. All students take a university writing exam and a writing sample before they are admitted to our program.”

11 Personal communication, April 3, 2008, “At our program, the courses I teach are all graduate level science education courses. Therefore, let me comment on the type of training our grad students receive. We do not teach “formally” any of the areas you have listed below. I guess there is this general assumption in our program that each grad student will learn all those skills through their interaction with their faculty and other grad students over their PhD studies. I actually agree with this assumption, since I believe most of these areas are contextual and the learning of them should be situated within the context. This does not mean that we should not take any incentives to teach them formally, however most of the areas listed (e.g., grant writing, email communication, a poster or a power point presentation, etc.) are quite a bit of politics embedded and context dependent that any attempt to standardize them and teach them to the students may not be a good idea. Students can very well practice them to develop some skills, but there is no way we can simply show them how to respond to the situations they may encounter in their profession.”

12 Personal communication, March 10, 2008

13 Personal communication, March 10, 2008

14 Personal communication, April 2, 2008

15 Personal communication, April 16, 2008, “Students are required to complete a Professional writing course before they enroll in my class, but I’m not sure that it truly assists them in preparing them for the type of writing expected of public school teachers. The students are expected to create PowerPoints and Photosstory 3 projects, but they are not trained by me. They are also required to participate in online discussions/reflections, but because the discussions are online, I find that students are rather casual in the way that they respond. I notice that students are more interested in the implementation than they are to the details of the documents. While I model the type and quality of written correspondence, etc., the students do not usually transfer that modeling into their own work.”

16 Personal communication, March 19, 2008

396
18 Personal communication, March 10, 2008, “As to the second part of your inquiry regarding our student’s exposure to professional writing principles: We do not provide any formal instruction beyond that which I have previously mentioned. As a matter of fact, our university has eliminated all writing courses in our core requirements. The only remaining writing courses are two creative writing courses (poetry and fiction) in our English department.”

19 Personal communication, April 26, 2008, “First, I should point out that many of us in teacher education wince at the word “training.” We don’t think of what we do as simply providing “training,” which tends to seem like a sort of low-level practice of job tasks. We think of our work as involving teacher EDUCATION (not training) and as being about helping our students learn to reason as professionals, to reflect on what happens in classrooms, to make decisions on the basis of evidence, and to have deep understandings of diverse disciplines so that they can apprentice young people into those disciplines. In the domain of writing, we provide a course (Language arts Methods) to every students, and that course focuses on writing pedagogy. In that course, each students works on her/his own writing process, with special attention to revision, which has not always been a focus in their writing experience. The idea is to make them feel more like insiders in the world of composing. That doesn’t answer your question, but it’s one of the foci of writing in our program. In addition, throughout many courses in the program writing is a tool for thinking and learning.”

20 Personal communication, April 2, 2008, Teaches master’s level counseling classes.

21 Personal communication, March 8, 2008, “I assume you are looking at the preparation of undergraduate student teachers. I also assume you are looking at all student teachers regardless of certification field.”

22 Personal communication, March 11, 2008, “Students complete all assessments electronically under the supervision of the cooperating teacher or university supervisor. Technology is integrated in each of the 20 required lesson plans, thus providing documentation of technology proficiency. “

23 Personal communication, March 13, 2008
APPENDIX J

INTERVIEWED TEACHERS' EXPERIENCES IN PROFESSIONAL WRITING GENRES
Kindergarten

Tracy McCormack presented information about the digital portfolios she does to MISD teachers, using a PowerPoint and handouts she created. However, she notes that she will not be able to convince other teachers to do the portfolios if they perceive that it will require a lot of time. She has therefore applied for a grant through the McKinney Education Foundation (MEF) for funds to set up the portfolio-making process so that it is easy for teachers (and older students) to do. Right now she relies on parent volunteers but must also spend a lot of her own time creating the portfolios. Because she is not comfortable writing a grant, McCormack relied on Wendy Dickerson, the Library Media Specialist at her school, to actually draft the proposal, although McCormack supplied the content.

McCormack doesn’t often create PowerPoints to use in the classroom, although she did make one recently of her students walking around the building and finding various shapes, so they could see themselves. She receives and sends a lot of email from parents (newsletter “general blurbs” to conserve paper), her team (she is the lead teacher), and administrators. And she does create her own tests that follow rubrics she and her team have created. She and her team share the handouts they make, and they do make a lot of them. They also use resources from the district’s shared drive provided through each subject --a “Framework” for each topic teaching, like “prisms” for science. The Framework gives the TEK, information, vocabulary, and teaching approaches. Teachers selected by the district update these during the summer.

McCormack feels confident writing the types of documents she writes on the job because writing is something she “like[s] to do.” She enjoys sharing her ideas with
others and talking about the “best way to go.” She likes collaborating with others, and she likes to talk in front of people too (even though she says she turns “beet red”).

First Grade

_Teresa Gahan_ probably answers email “constantly”—about fifteen to twenty emails a day. She frequently develops handouts or materials for her students to respond to while they are working at various stations (reading response, science, and math) several times a day. “That is huge—I’m always doing that on the computer,” she states. “Every year it changes, depending on the needs of the particular class, and so I have to adjust,” Gahan explains. These tailor-made materials she readily shares with her team. “I’m very ‘do and share,’” she comments.

With all the state-mandated tests, including reading and math assessments and performance-based evaluations that they often do with the students one-on-one, members of Gahan’s first-grade team do not really focus on traditional testing, at the end of a “unit,” for example. Within the cadre, they have developed their own assessments, but assessment is “ongoing”—“every bit is assessing” so that they can “know where to go now.” Every year these assessments change, “depending on the needs of a particular class,” notes Gahan.

She collaborates with her first grade team to produce numerous items of “parent communication” and a first grade newsletter. They also send parents the children’s spelling word lists and other subject-specific information.

Several years ago she wrote a grant proposal and gave a conference presentation, but these types of professional activities are just not very important to her
right now. She feels very comfortable with the types of writing she does do because she likes to write. “I’ve done it long enough,” she explains.

*Nora Schroeder* does not create PowerPoints herself very often because other members of her team can manipulate the technology more easily, but she does contribute to the content. She answers about twenty emails a day, “mostly campus things and administration,” especially curriculum directors.

As part of the “Assessment for Learning” initiative, Schroeder will, with her team, “use resources from text companies or old tests we’ve designed, look at the TEKS and decide what they need to know and develop tests.” She definitely feels that hers is a “data-driven” campus. Schroeder believes that first grade education has “taken a swing from paper and pencil evaluations; there’s much more hands-on performance or manipulating pictures, numbers, and materials.” For example, the performance assessments in math include comparing objects. Students order them from greatest to least for volume and mass. She says that this approach is “new to us” and has therefore occasioned some “grumbling district wide,” but Schroeder feels that the new assessments are “more developmentally appropriate for these little guys” than the previous “huge twenty-five-page math assessment they gave in the past,” five problems at a time over a week. “The non-readers struggled,” she explained.

As math point-person for the district, as well as team leader, Schroeder has had to explain the new approach to teachers. They create unit, chapter and three-, six-, and nine-week assessments. Schroeder sees a struggle with the new approach in that it is “hard to keep it simple enough yet get enough information to know if they got it or not.”
Schroeder does use the district shared drive—there is “lots of good stuff for language arts " like center ideas—but she and her team “really make up a lot of our own and share with our cadre”—an assessment, a document, a recording sheet, for example.

As far as grant proposals are concerned, a particular member of her campus is the primary grant writer. Although Schroeder thinks it “might be something that as [she] has more time [she] could look into,” she admits that it is not really her nature to “get out there and take a chance.”

Schroeder has presented programs for faculty meetings (also called “family gatherings” on her campus) on campus writing modeling. And as math point person for her grade level, she shares the year’s “new initiatives” district wide at campus meetings. She has also presented “Having Your Fair Share,” a lesson about probability in math at the first grade level, at Matharama in San Antonio. At this event she “taught” other first grade teachers using fractions and manipulatives and handouts in a “classroom” decorated with pictures of real students interacting during a similar lesson and posters that complemented the lesson.

Schroeder feels “fairly confident” in writing on the job. She “depends” on her team because they share with each other what they are writing, and everyone critiques together. When they have a special email to send, for example, they will pass the draft around for everyone’s input. And she saves particular emails from one year to the next to tweak as needed to suit the present occasion: “How will I word it this time/ How will I fix it?”
Second Grade

Janet Peters probably writes PowerPoints once a nine-week period on teaching concepts. She is also the math “point-person” (one of two per campus), which involves attending extra meetings and then presenting that information to the rest of the campus. Peters also regularly presents a special series called “Love and Logic” to parents and other teachers at Parent Teacher Organization meetings and teacher workshops.

She gets about 100 emails a day but responds to only the ones she “has to.” She does not have to design a lot of handouts since her curriculum is not “worksheet oriented”; it is more “hands-on manipulations.” As far as tests are concerned, some of their texts are older and not aligned with TEKS, so they do more informal assessments, and these assessments are rubric based (4,3,2,1) instead of being based on grades or averages.

Peters does not feel very confident writing “formalized writing.” She does not feel as though her writing could be considered “good writing.”

Chase Young creates a lot of PowerPoints during the summer, both for his students and for other teachers for staff development. He presents information on literacy for summer professional development conferences. Most of the emails he responds to are from his team; the least, from parents.

Young creates most of his teaching materials and all of the tests. When he wants to use a particular “mentor text” or example, he will create it if he can’t find one—he can make it funnier and involve all the students. “Kids love to hear their names in stories,” Young says.
Young does not write parent communication but has a webpage from which parents can get information about the class. Young does not write grant proposals because there are people at his campus who already do a great job at it.

Young does conference presentations, specifically the literacy institutes, as well as a module on learning styles, the applications supporting struggling audiences, and social studies integrations into reading, and he also writes the second grade reading curriculum for the district. In addition, he does a readers’ theater curriculum guide. He uses PowerPoint but also I-movies. To help illustrate proper bathroom procedure for the district, he made an I-movie based on a Star Wars theme. Darth Vader did all the bad things, and Luke showed the way the students were supposed to do things. “The kids seemed to like it. . . in a bathroom, far, far, away. . . .,” Young laughs. He has also done some for readers’ theaters and learning style applications. He uses the Smart Board too. “It’s a grade-level thing, but nobody else wants to use it, so I just have it in my room,” Young explains. “I always tell them [other teachers] how cool it is, but they’re like. . .nah. . . .”

Young thinks that he is so comfortable with technology because he grew up computer literate.

Third Grade

Kelly White does not often write PowerPoints because of time issues but would do more if she could. She answers a lot of email. She occasionally produces her own handouts and tests but relies most often on pre-made teaching materials. She communicates frequently with parents (through the third grade newsletter) and
peers/administrators (through email). She rarely writes grant proposals or makes conference presentations.

*Mary Garcia* creates PowerPoints occasionally to review science. Linda Blivens creates them to reinforce language arts skills like sequencing and context clues and to introduce math skills, like estimation, for example. Blivens and Garcia each answer or send at least twenty emails a day. They use more ready-made handouts than ones they have made themselves, and last year they created the tests that they plan to be using for the next few years. Their team compiles a weekly newsletter for parents that it sends through email.

Neither Garcia nor Blivens has written grant proposals or conference presentations. Blivens feels confident about her on-the-job writing because she was an event planner in her former career and had to do a lot of graphic work. Garcia, however, has to really think about what she is going to write and is not as comfortable.

*Anna Guirguis* has created two PowerPoints this year for her third graders to serve as samples for the ones they have to do on animal research (habitat, diet, environment) and living history. She answers about ten emails a day, a few from parents but primarily from the other third grade team members or her principal or assistant principal.

She contributes to a weekly parent communication sheet for parents of third graders that goes home every Monday. She does not create her own tests or teaching materials very often, finding the curriculum ideas on the district shared drive to be sufficient, although she will sometimes create a rubric to go along with an assignment and often “tweaks” existing materials to suit the needs of her particular class. She
consistently finds, for example, that her students need an outline to follow in doing research, so she has created them.

Guirguis likes the idea of writing a grant proposal but has not attempted one yet or written any conference presentations. She is not especially confident in her writing: “I think too much,” she explains. In writing notes to parents, she says it will take her a day “to get it right. I don’t want parents to think I don’t know how to spell,” she jokes.

Fourth Grade

Carie Smith does not often have to create PowerPoints. She usually creates one at the beginning of the year for Open House and another at the end of the year to showcase students’ progress. She would like to create more, though. She frequently writes email and has received specific guidelines from the superintendent about how to respond to email. These guidelines are about controlling tone and never replying to an emotional tone but rather simply picking up the phone and making a call. Another guideline is to never send or forward any humor but to stick to a business-like tone.

May Johnson echoes this guidance: “If there’s ever a doubt in email, pick up the phone; if you think your writing could be misconstrued, pick up the phone.”

She evaluates the ready-made tests and uses what is good. Her procedure depends on how much freedom she has to teach what she wants and to assess.

She occasionally makes flyers. For instance she made one about Cam Ride Along. She is preparing to write a grant proposal to Motorola for Smart Boards, a version of a flat-screened TV with colored pens that rest on trays with an eraser. Students can use their fingers to pull down a pre-loaded PowerPoint and interact with it. She rarely writes conference papers.
Overall she feels comfortable writing the types of documents she has to create in her career, even though she believes that writing is not her “gift.”

As team leader, Johnson writes a number of PowerPoints each year. She often creates one for Curriculum Night, at the beginning of the school year, and another at the end of the year, summarizing students’ progress. During the year, she often writes six to eight more for her students or for faculty meetings. If she goes to a conference, she is required to create a PowerPoint through which to share with teachers in her district the insights she gained. She usually writes and/or answers about fifteen to twenty emails a day and creates handouts several times a week. Examples are a newsletter for parents and team-leader meeting agendas.

She does have to individualize even pre-made tests for her ESL students to be sure they know the concepts. The district encourages teachers to write grant proposals, but time is always a factor.

Johnson feels confident writing these types of documents because writing is her academic strength: “grammar is my thing.”

Alicia Ayala, in combination with the other members of her team, creates several PowerPoints each year for parents (Meet the Teacher/ Curriculum nights). They create a few more for students—one on Texas History in preparation for a field trip and the other on reading strategies. She answers about forty emails per day, primarily internal, mostly from other teachers and administrators but some from parents.

She does not do much test creating because every nine weeks in the third, fourth, and fifth grades the students have district assessments tied to materials sent from the district. “They’re [students are] killed with so much testing,” Ayala says, so she
communicates primarily by conferencing and making frequent verbal checks to ensure that her students are understanding the material.

She sends out a weekly “Job Performance Report” to parents that includes a calendar of assignments and activities. At the beginning of the year, she also sent a weekly newsletter (using a pre-set format) because “parents are so needy at first.”

Ayala has not written any grant proposals, although she says, “I would love to. I just don’t have the time or skills. I’m a good writer, but I don’t know the format.” She has made a conference presentation for the district on readers' theater, and for the presentation, she used a PowerPoint she created.

She feels that writing is a “natural ability” of hers. At her current school, she was the second person hired. When asked what she wanted to teach, she quickly responded, “Fourth grade language arts.” She reports that she has always scored high in writing, especially creative writing, which she feels is her “gift.” At the college she attended, content rather than presentation was important. But she has learned a lot from her colleagues, she admits, especially the ones who have recently graduated from college. “My favorite way to do technology is by using a template,” she explains.

Fifth Grade

Amanda Jackson does not use a lot of PowerPoints in teaching; she prefers to use the ELMO instead so students can watch her model. She “wants them to see [her] handwriting” since they must be able to take notes in college. Any presentations she makes for parents, though, she prefers to put in PowerPoints.

Jackson probably writes/answers about fifty emails per day, to a mix of parents, peers, and administrators. Since she is the team leader, her email load is a bit greater.
She does use premade tests but revises them to address what she has taught. She prefers to use tests as a learning tool as opposed to an assessment because “we test kids so much.” However, to prepare her students for middle school, she will test them more now.

When Jackson was working on her Master’s ("years ago"), she worked on some conference presentations but now does not have time to focus on that when she is focused on the needs of her students. Presenting at conferences is “not a passion” of hers. She feels presenters often leave out the important application step: “This is how I did it in my room” (in addition to all the state-mandated requirements—“how I ‘got it all in.’”) However, she frequently asks people to come and watch her teach because she believes so strongly in sharing teaching strategies.

Jackson has not written any grant proposals here because she feels her school fortunately provides her with everything she needs to teach. When she worked in inner-city schools, she did write them, but she believes that her school here is “materials rich.” She also feels strongly that “the simple things,” for example, making a pop-up book, often have the greatest impact on students and can be “powerful on the elementary level.”

Because she is a respected veteran, Jackson writes/updates reading and social studies curriculum during the summers. She also wrote a script adopted district wide for teachers to use when making telephone calls to parents whose child failed the TAKS.

She feels confident writing the types of documents she writes “as long as I have someone to revise and edit.” She enjoys “bounc[ing] ideas off others.”
Ella Frist does not often create PowerPoints. She answers about ten emails per day, about half from parents, the others from her team, including the vertical teams at the school, as well as administrators.

She does not create many worksheets but does create various teaching items with her team. The team as a whole creates a newsletter, and she personally sends “parent communication” several times a month. In concert with her team, which she leads, Frist wrote several grant proposals to the MEF (McKinney Education Foundation)—one for a “Smart Board, one for a ceiling-mounted projector, and another for funding for her team to go to a curriculum mapping conference. She found the format for these applications to be self-explanatory but she met with administrators at her school as well as the Library Media Specialist several times to ensure that the application said what she “wanted it to say.”

Frist has also done several staff development presentations on the “Reading Comprehension Tool Kit” (an approach to teaching non-fiction articles) which the district has purchased for each school. The Kit emphasizes students “writing as they’re reading, and writing as they’re thinking—paying attention to their ‘inner conversation.’” It provides strategies to help students “tackle” finding main ideas in more challenging non-fiction work. Frist notes that this focus is especially important because of the non-fiction articles in TAKS. “Some kids have negative feelings about non-fiction,” observes Frist, “but these are interesting articles.” Frist notes that using the Kit began as a fifth grade strategy but is filtering down to fourth and third grades.
Frist feels very confident in writing the types of documents she creates in her job because she believes she was “prepared in school” and “can communicate well verbally, so writing is easy.”

Sue Mitchell probably creates a PowerPoint once a week. She’s “big on PowerPoints” because she can make them interactive—like a Jeopardy! game. She has used them in the presentations she has made for other teachers in her “cadre” on the seminars she has attended, most recently one on problem-solving with the focus on communication and another “Marcy Cook” seminar on integrating writing and social studies. Mitchell has also made PowerPoints to use during new teacher training, for which she is the designated “fifth grade math person.” These are orientations to expectations such as conference periods, policies, etc.

Mitchell responds to about fifteen to twenty emails a day, mainly from her team (she is the team leader) and staff, with a small portion of parent communication. She creates some of her tests and teaching materials but also uses some she finds on “Webcat” (the Region 10 shared drive) as well as the MISD shared drive.

She and her team write a newsletter to parents from a template that each grade level creates.

She would “love to understand” how to write a grant proposal but is “overwhelmed by the process.” She comments that the deadlines for the grants are so early—typically at the beginning of the year—which is a stressful time because she has got so much paperwork and she is “getting to know parents and kids.”

During the summers, she helps write curriculum for the district.
Mitchell feels very confident about her writing on the job because she “likes to get on the computer, mess around and figure things out.” She “likes to learn about new technology.”

Janalee Hales (5th) creates PowerPoints about three times a month for her students, often using a Jeopardy! game format with questions they can click on and answer. She also uses them for reading quizzes on nonfiction texts because “it makes them think they’re doing something exciting on the computer.” She also creates around one a semester to use in district or faculty teaching.

On a typical day, Hales responds to about fifty emails, equally divided between the district administration, parents, and her fifth grade team. She develops about 95 percent of her own handouts, tests, and teaching materials because “it’s hard to find” in pre-made form what is aligned with the TEKS and her school’s standards. Their current textbook has only two chapters that are aligned, according to Hales. She also finds that the textbooks are not written on a fifth grade reading level; instead she believes that the level is really much higher. She finds that textbook writers “take their general format and apply Texas standards to what they have” rather than “starting from Texas standards.” She also finds that sometimes, for example, in a unit on renewable and nonrenewable resources, the TEKS and texts disagree. “There’s big flashing lights on our curriculum that says not to use what’s in the textbook” for that, comments Hales.

Hales also writes curriculum for the district. She has written “a few” grant proposals for science and lab materials although she has not received any special training in how to do this; she “figured it out” based on information from the Internet and her reading. She also does presentations for faculty meetings and the district’s new
science teachers. She has also presented at one of her cadre meetings, which occur every nine weeks.

Hales was turned down by the MEF for her grant but got it with the PTO (Parent Teacher Organization). She feels “pretty confident” about writing everything else from experience. When she was “starting out in teaching,” she wanted “someone looking over [her shoulder] and reading everything [she] did.” Now “that’s impossible” since she is creating so much. “You go for it, you see how it goes, and you make changes as needed,” she says. She finds, though, that tone in email is “the biggest problem, the biggest uneasiness [she] still has in writing,” because it so “difficult to assess [her] own tone in email.”
REFERENCES


