The Action of Action Research:

An Analysis of Action Research Projects Completed in the UNT/Denton ISD PDS

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This research paper, a compliment of multiple sources, has the history of action research in UNT/Denton ISD professional development school (PDS), analysis of completed action research projects from 2008-2011, and a comparison of current UNT/Denton ISD PDS practices to the NCATE standards. Action Research is the inquiry part of a PDS model that all UNT elementary education, pre-service teacher/student interns complete with mentor teachers during student teaching. Approximately 300 projects were completed across 4 years in the Denton PDS.

Action Research

As simply put by Rory O˝Brien (1998), "Action research is learning by doing" (p. 3). He came up with this definition through research on the evolution of action research. He examined the processes of action research across sixty years of the development of Action Research. In his study he determined that Kurt Lewin (1946) is thought to be the father of action research. In the 1940˝s Lewin released a paper coining the term. Lewin characterized action research as "a comparative research on the conditions and effects of various forms of social action and research leading to social action, using a process of a spiral of steps, each of which is composed of a circle of planning, action, and fact-finding about the result of the action" (O˝Brien, 1998, p. 8).

O˝Brien shows three different models that can be used for Action Research. A model is an overview of a plan that can be used to conduct action research. The first model was created by Stephen Kemmis (1982). It is considered a basic model that is completed in two cycles. This one uses the steps: plan, action, observe, and reflect. The second model was created by Gerald Susman (1983). His model is one that continues until the problem is solved or the question is answered. This one is a circular model using the steps: diagnose, action plan, take action, evaluate, and specify learning. The third model O'Brien discusses is one created by Eric Trist and Fred Emery (1959). It is called The Search Conference. This

one must be done in a collaborative group. The main parts of this model are a pre and post conference, three session groups which each are followed by a presentation plenary.

O"Brien goes on to describe four types of Action Research that can be applied to any of the three models. The types are listed below:

- Traditional Action Research, created from Kurt Lewin"s work (1946), is focused on social action. According to O"Brien, "this traditional approach tends toward the conservative, generally maintaining the status quo with regards to organizational power structures" (p. 8).
- In Contextural Action Research, or action learning, was derived from Eric Trist"s (1959) work. It centers around the participants in the research also acting as the designers of the projects and as researchers. Everyone in this type are working as a whole. This type of action research mainly uses The Search Conference model.
- Radical Action Research ~~using~~ was created from the work of Antonio Gramsci (1971). This type of research focuses on overcoming power imbalances. Participatory Action Research also falls under Radical Research. This type works well for social transformation using advocacy.
- Educational Action Research came out of John Dewey"s (1929) work. This type of research works best in an educational setting to help professional educators become involved in community problem-solving. This type of research is also used for the development of curriculum, professional development, and learning.

These models and types within the models, serve as frameworks from which educators, nurses, and a myriad of other professionals, working for the common good can draw to study actions in social settings.

Action Research in a Professional Development School (PDS)

A professional development school (PDS) is a partnership between a university and a public P-12 school. The National Council for the Accreditation of Teacher Education, in 2002 presented to the PDS community a set of standards for determining the progressive development PDS. These standards help to prepare university students, candidates, or interns, to become effective teachers who meet the needs of a diverse classroom of students. Following and meeting the standards are important in order to improve the

P-12 school and the university. In the work of the partnership, the standards articulate that there will be inquiry based research that: "identify and meet students‟ learning needs; effect candidate learning; and determine a professional development agenda" (NCATE, 2001, p. 4). Within the five standards, Action Research falls under Standard 1: Learning Community. Within each standard, there are elements that define the standard, and are incrementally delineated across the developmental levels, indicating use of the element at the four different points of development. Table 1 shows the development of the standard regarding Action Research in a PDS.

Table 1: Levels of inquiry based learning: (NCATE, 2001, p. 18)

Standard I:	Learning Community			
Element	Beginning	Developing	At Standard	Leading
Work and Practice are Inquiry-Based and Focused on Learning.	The PDS participants articulate a shared goal of improving and assessing the learning of P-12 students, candidates, faculty, and other professionals. They express the belief that action research and other forms of inquiry are valuable tools in improving instruction.	Inquiry and action research are being used in some classrooms, but there may not be a clear conception of connections among the learning of P-12 students, candidates, and experienced educators. Some university and school faculty visit classrooms to observe each other‟s practice and to collect and share data; some use student outcome data to modify curriculum and instruction.	Practice in the PDS and partnering university is inquiry-based and an inquiry orientation weaves together learning, accountability, and faculty development. Inquiry is used routinely at an individual classroom, department, and school-wide level (at school and university) to inform decisions about which approaches to teaching and learning work best.	Sustained collaborative inquiry into improved learning for P-12 students is at the center of the partnership‟s vision and practices. Vehicles for sharing ideas and practices that have been successful in the PDS partnership are in place and are used to influence practice in the school district(s) and throughout the university (arts and sciences as well as professional education unit) The PDS participants share their inquiry-based learning experiences and results with audiences beyond the local PDS partnership.

The standards were field tested in multiple, varied PDS sites for five years prior to the publication in 2001. The University of North Texas, Denton PDS uses the standards as a method of determining the level of development and growth of the program.

University of North Texas and Action Research

The UNT/Denton ISD PDS was formed in 1994 and reconstructed in 2002. The NCATE PDS standards were made public in that year, and served as a guiding document for determining the progress of the Denton PDS. In 2005, representatives of the teacher, principal, district, university supervisor, university coordinator, student interns, and outside national advisors convened to review the NCATE PDS standards to determine how well the UNT/Denton ISD PDS partnership had been performing, based on the NCATE PDS standards. It was determined at that time that the PDS was functioning at a Beginning to At Standard level across 15 of the 22 elements in the standards. At the time, Action Research was not being practiced, accounting for several of the missing elements.

Five years ago, the PDS was in its fifth year of reconstruction, and the partnership was poised for further development. In order to strengthen the PDS, the notion of action research was introduced to the school collaborators, who embraced the idea of including action research as a component of the partnership. In 2007, when the PDS site coordinator and district partners began to look into making the PDS experience better they first looked to see where the program was according to the NCATE standards. The coordinator noticed that the inquiry standards were not being addressed. It was proposed at the time that Action Research be implemented into the program.

To guide the understanding of the implementation of Action Research into a PDS program, Towson University"s action research process was examined, partially because Towson had been a beta test site for the development of the NCATE PDS standards. Both the Townson model and the standards were used to come up with a way to put this into the Denton ISD PDS at UNT. Towson University was one of the leading schools in action research implementation during student teaching in a PDS school. Every intern who goes through the program at Towson U. is required to do an action research project with

a mentor teacher. Their supervisors are updated along the way and involved in the process as needed. This shows there is a partnership between the schools and university, which is recommended in the standards.

John Dewey‟s (1929) research also supports the standards requirement of collaboration. Dewey believed that educators should "focus on development of curriculum, professional development, and applying learning in a social context" (O„Brien, 1998, p. 9). Action research takes place in real world situations, tries to solve real world problems, the researcher gets the people involved into the research process, and the researcher is open about the intent of the research to the people involved (p. 3-4). To be able to do all of these things there has to be a close collaboration between the university and schools. This is noted in a review of the Towson University Action Research requirement.

Purpose

The purpose of this study was to examine 300+ completed Action Research projects conducted between the years 2008-2011, in the UNT/Denton ISD PDS, for trends in questions, methods, and findings reported by pre-service teachers (interns).

Question

The question posed by this study: What are the trends in Action Research studies, conducted across multiple years in a PDS partnership? Due to the qualitative nature of the research, no hypotheses were related to this question.

Data sources

In each spring semester, beginning in the spring of 2008, UNT/Denton PDS pre-service teachers (interns), conducted Action Research with mentor teachers, during their student teaching semester. The projects were generated by mentor teachers, school principals, and interns, and conducted in six-week blocks, producing approximately 50-80 completed projects annually. Interns completed an anonymous survey at the end of student teaching that provided their perspective of how their action research projects went, what were the questions asked, hypotheses made, how it was carried out, data collected, findings, recommended actions based on findings, and implementation. They were also given another area for any

additional comments. The data included reports on 303 Action Research studies completed in 2008-2011, each chronicling the elements listed.

Data analysis

To analyze the data, the data were sifted through both by hand and qualitative analysis computer tools. All projects that didn‟t have any or enough information for this study were removed. Throughout the four years around eighty projects included questions, but no other data were provided. Some of the reasons the projects were incomplete were: 1) not enough information, 2) no participation by the school, or 3) mentor teachers would not cooperate. This information was found in the comments area of the survey data. There were also around twenty projects that entered "did not do" for all questions in the survey. After this process there were approximately 200 action research projects eligible for analysis.

NVIVO is a software program that is used to analyze qualitative data. The program provides the qualitative researcher with the capacity to categorize non-numeric information, such as words. The word data from the surveys were uploaded into NVIVO after all projects were culled to the ones that provided meaningful data. Data were read, reviewed, coded, and categories developed using an emergent approach, which allowed categories to come forward naturalistically. NVIVO uses the term nodes to define categories. Within nodes, further categorization can occur. There were a total of fourteen categories, which were made into nodes in NVIVO. Sub categories were created in each node as needed to further sort the studies.

Emergent analysis categories. The component parts of the 200 Action Research projects were analyzed separately, initially then combined for further analysis after each of the component parts were analyzed. The first analysis conducted was on the questions reported in the survey data. The list below shows the categories and subcategories that emerged from the analysis of the questions.

Nodes and subcategories are listed alphabetically below:

- Bedtime
- Behavior
    - Attire
    - Breakfast
    - Consequences

    - Loss of time
    - Off Task
    - One on One
    - Plans
    - Positive Reinforcement
    - Seating
- Copies
- Eating
- Form of Instruction
    - Integration
- Games
    - Math Games
    - Review Games
    - Study Island
- Homework
    - Completion
    - Testing
- Math
    - Extra Practice
    - Involvement
    - Manipulative
- No Data
- Parent Involvement
    - Achievement
    - Attendance
- Reading
    - Daily
    - Home
    - One on One
    - Other
- Repetition
    - Language Arts
    - Math
    - Other
    - Participation
- Student Involvement
    - Encouragement and Motivation
    - Engagement
    - Other
- Testing
    - Benchmark
    - General Testing
        - ■Homework
        - ■Types of Tests
    - TAKS
- Transitions
    - Dismissal
    - During the Day
    - Morning
- Tutoring

The nodes/categories were used to look at specifics and connections between the data collected over the four years. There was a subcategory (other) created to place any outliers in the questions. There were also projects that were placed and analyzed in more than one category.

The Methods used in the projects were also put into nodes/categories and subcategories. This was done by using the information about how each study was carried out, the data collected, and from the findings questions in the surveys completed.

The categories and subcategories are alphabetically listed below:

- Asking or Surveying
- Comparing
- Daily Practice
- Documentation
    - Grades
    - No Data
    - Tallies
    - Timed
    - Written
- No Data
- Rewards
- Testing

The "No Data" category was added for the ones that were not able to complete their method as planned. This was needed because the data were inconsistent with the rest of the project.

Comparison analysis to NCATE PDS standards. Data were analyzed by comparing the Action Research studies to the NCATE PDS standards, using the developmental levels, within Standard I, Inquiry element. To compare Denton PDS to the standards two different types of analysis were used. The first was to compare the action research projects completed to the NCATE standards stated in Table 1. Many observations were completed in the current Denton PDS as a second way to compare the PDS to the standards.

Beginning: "The PDS participants articulate a shared goal of improving and assessing the learning of P-12 students, candidates, faculty, and other professionals. They express the belief that action research and other forms of inquiry are valuable tools in improving instruction." During 2006-2007, the university coordinator and principals discussed the inclusion of Action Research as a component of the

PDS program. In the Beginning stage the PDS coordinator looked to see if there was any inquiry based learning happening in the schools. It was apparent that none of the standard was being met. This is when action research began in Denton PDS, a two-year conversation. Action Research was implemented in the spring of 2008 as a trial run year. There were scattered data that year, and many projects were not completed fully. Starting in 2009, there were more completed projects that had data that were collected and shared at the end of each spring semester of student teaching.

Developing: "Inquiry and action research are being used in some classrooms, but there may not be a clear conception of connections among the learning of P-12 students, candidates, and experienced educators. Some university and school faculty visit classrooms to observe each other‟s practice and to collect and share data; some use student outcome data to modify curriculum and instruction." Observation of the current PDS indicates that schools were visited by supervisors, professors, and cadre coordinators, seeking ways to help the Action Research process. This part of the standard was met as early as 2008, and continues today. The 2009 data continued to show that not all teachers were participating in the project, with approximately 80% working with interns to complete Action Research in their classrooms. Some schools banned together to create school projects, which seemed to ease the pressure to create single projects. The bi-annual in-service training provided by lead teachers and the UNT coordinator eased the teachers toward implementation, particularly when completed posters of projects from previous years were shared. The Developing stage sustained for several years.

At Standard: The „At Standard‟ stage states that inquiry based research is:

1) Practice in the PDS and partnering university is inquiry-based and an inquiry orientation weaves together learning, accountability, and faculty development. Through interns and mentors working together along with UNT personnel to do action research and research on action research the learning, accountability, and faculty development are being achieved.

2) Inquiry is used routinely at an individual classroom, department, and school-wide level (at school and university) to inform decisions about which approaches to teaching and learning work best. Some of the comments posted in the survey confirmed that recommendations made by interns were carried out in the

classroom after the action research project was completed. In 2009, an intern stated, “The mentor teacher will be stating the objective on the board in her classes from now on.” An example from 2010 states, “Teachers using the growth plan will continue to use it”. In 2011 there was one that would be implemented the year following the research, “The entire first grade team will use the program next year in order to produce exceptional readers”. At the end of the 2011, it was apparent that over 90% of the teachers were implementing Action Research projects, a practice the district adopted across all schools in 2012, using the PDS program as a model for that decision.

Leading: The Leading part of the standards state that:

1) Sustained collaborative inquiry into improved learning for P-12 students is at the center of the partnership‟s vision and practices. This is noted throughout the projects reviewed. Teachers were very interested in students‟ learning, as noted in the plethora of studies regarding methods of improving reading and mathematics.

2) The PDS participants share their inquiry-based learning experiences and results with audiences beyond the local PDS partnership. UNT interns, mentors, university faculty, and anyone else involved throughout the year have always come together to have a celebration where they show their action research projects to each other in a public forum. This is a grand event to look at the accomplishments made as well as thank the mentor teachers and staff for their help and guidance throughout the year. UNT has always been able to show their collaborative works of research to the education community, but through this current research and another, this PDS is now stepping into informing people outside the PDS partnership.

3) Vehicles for sharing ideas and practices that have been successful in the PDS partnership are in place and are used to influence practice in the school district(s) and throughout the university (arts and sciences as well as professional education unit). Based on the data reviewed, this part of the standard was not made evident.

Trends/findings

Trends in models observed. The action research type that UNT/Denton mentor teachers and student interns currently use is the Educational one that John Dewey (1929) created. The models used

varied by type of research each pre-service teacher and mentor conducted. Three examples of models noted were apparent in the following studies:

1. Kemmis (model) - Behavior (category): This project was completed in a kindergarten classroom. The first plan of action was presented to the students with a behavior/reward chart. When the class filled up the chart there would be a reward. This seemed to be working, but it soon showed the students figured out when they could get a sticker and when it wasn‟t important. The next plan of action was to use the same behavior/reward chart, but this time a sticker was only given when another teacher complimented the class. This plan produced better results, because the students did not know when they would have an opportunity to earn stickers. The behavior was more constant in this practice. This action research project was planned to be carried out in two rotations of plan, act, observe, and reflect just as the Kemmis model was developed.

2. Susman (model) - Nonfiction Reading (category): This project was completed in a fifth grade classroom. The problem identified was raising students reading levels with nonfiction reading. The action plan was conducted with the grade level for all teachers to motivate nonfiction reading. The action took place over six weeks. The data were created and collected through documentation of books read, reading levels noted employing as SSI tool, and by retest of reading level at the end of the six weeks. The data showed that reading levels were only raised when the nonfiction books read were on or above the current reading levels. The findings were assessed and the information was implemented into the classroom. The Susman model goes through the following steps: diagnosing, action planning, taking action, evaluating, and specifying learning. This specific action research project followed the Susman model.

3. The Search Conference (model) - Copies with Bloom‟s Taxonomy (category): This project was conducted throughout an entire elementary school. The administrators collected worksheets used in classrooms, K-5, throughout the first half of the year. The preconference process was conducted before the interns were in the school. Once there, they were informed of the plan. The plan was to assess the importance of the worksheets being used according to Bloom‟s taxonomy. There were meetings conducted throughout the research and reports created along the way for documentation. This was

necessary to be able to get through all of the worksheets. The findings the interns concluded were that most copies were on Bloom‟s level three and that it was a normal amount of copies. Bloom‟s level three is called “application”, this shows that the majority of the worksheets were being used for students to apply their knowledge (Overbaugh & Schultz). They also decided further research with added information as to how many copies of each master copy was made, and the lesson plans that used the copies, would be needed to fully determine the importance of copies. The conference model helped in this action research project by allowing the interns to have collaborative support when completing their research.

Trends in Questions. In order to look at the trends in questions asked and researched, all of the coded information from NVIVO was used to create graphs for each year of types of questions asked and one for all of the years combined. The results by year are listed below:

Table 2 shows the percentage of topics addressed each year:

08-questions	%	09-questions	%	10-questions	%	11-questions	%
behavior	18.83	repetition	22.50	behavior	26.67	transition	26.67%
testing	18.18	reading	11.43	testing	23.33	student involvement	23.33
repetition	12.99	behavior	11.43	transition	16.67	reading	16.67
homework	8.77	testing	11.07	student involvement	8.69	behavior	13.33
reading	8.77	copies	7.14	parent involvement	7.51	testing	6.67
math	7.47	games	6.79	homework	7.28	parent involvement	3.33
eating	6.82	math	6.79	eating	4.93	forms of instruction	3.33
parent involvement	5.84	tutoring	6.07	tutoring	3.99	repetition	3.33
games	5.52	parent involvement	4.64	repetition	3.76	tutoring	3.33
student involvement	2.27	homework	4.64	reading	2.58		

forms of instruction	1.95	bedtime	4.64	math	2.58		
transition	1.95	eating	4.29	games	1.17		
		transition	2.50				
		forms of instruction	2.14				
		student involvement	2.14				

The questions posed by mentor teachers, working with interns, are based on an at-need basis determined by what the classroom, school, or district wants to be researched in order to improve student learning. Table 2 shows that bedtime was the least overall studied question, because it was only researched during 2009. This table also shows that over 4 years the subjects that were researched each year and can be predicted to continue to be researched are; testing, repetition, behavior, reading, parent involvement, student involvement, and transition.

Behavior and testing were the most researched topics across all years, even though they were not always the most researched each year. Every child is different and behavior is something that play a prominent role in every school. Each teacher has to learn about their classrooms each year in order to know what things will work best for that class. There might never be one specific answer to behavior problems, but action research over these questions will give teachers a place to start. Over the four years behavior was research 18.83% in 2008, 11.43% in 2009, 26.67% in 2010, and 13.33% in 2011. There has been research done on positive reinforcement, seating arrangements, one on one help, consequences, eating breakfast, and attire. Not all of these were asked each year, but each were researched throughout the four years.

Testing is an issue that all schools face. These questions about how to get children ready for the tests are the same questions every teacher asks every year. Most of the test questions asked and researched over the past four years were about state testing. Testing was researched 18.18% in 2008,

11.07% in 2009, 23.33% in 2010, and 6.67% in 2011. Using old action research results and questions is a way that teachers can have a starting point in knowing what has been researched and what might work for their class. Replication served many teachers throughout the years of research.

Repetition is something observed in the current PDS. Sometimes the only way to understand a concept or skill is to practice it many times. These action research questions proposed not only at doing it over and over again, but also examined specific areas such as math and language arts. Repetition was done through fast math, daily practice, and weekly meetings. Each was looked at and documented to see if there were any results on the children's grades. Repetition was completed 12.99% in 2008, 22.5% in 2009, 3.76% in 2010, and 3.33% in 2011.

Transition is something that can become a problem in every class. The time it takes to transition from activity to activity, from the bathroom, specials, lunch, or recess back into instruction time is valuable. Cutting down the time it takes to do all of the transitioning throughout the day is an easy way to gain more time to meet the academic needs of students. Transitions were researched 1.95% in 2008, 2.50% in 2009, 16.67% in 2010, and 26.67% in 2011. The main transition times researched were morning, during the day, and dismissal.

Trends in Methods. To be able to look at the trends of the methods used, the information was put into NVIVO to note which types of methods were the most and least used, Table 3 below shows the findings:

Table 3: Percentages of methods used each year:

08-method	%	09-method	%	10-method	%	11-method	%
documentation	25.65	documentation	28.57	documentation	39.44	documentation	46.67
compare	15.91	compare	22.50	compare	18.54	compare	26.67
no data	14.29	testing	11.07	asking/surveying	10.09	rewards	13.33
daily practice	11.04	asking/surveying	8.57	rewards	10.09	daily practice	10.00
asking/surveying	9.09	daily practice	7.14	testing	7.51	testing	3.33
rewards	3.90	no data	6.79	no data	3.05		

testing	3.90	rewards	5.00				

One trend that was quickly noted in 2008 was the first year and there were a lot of people who had no data in their methods used. Each year the rank of the no data category moved down, until in 2011 it was non-existent. This shows that with each year interns, schools, and the university were able to learn from the previous year and by 2011 they had found a way to do all of the projects with some type of method. The progression from year to year of data collection suggests a higher level of comfort among teachers and a trust that the projects were valuable to classroom improvement.

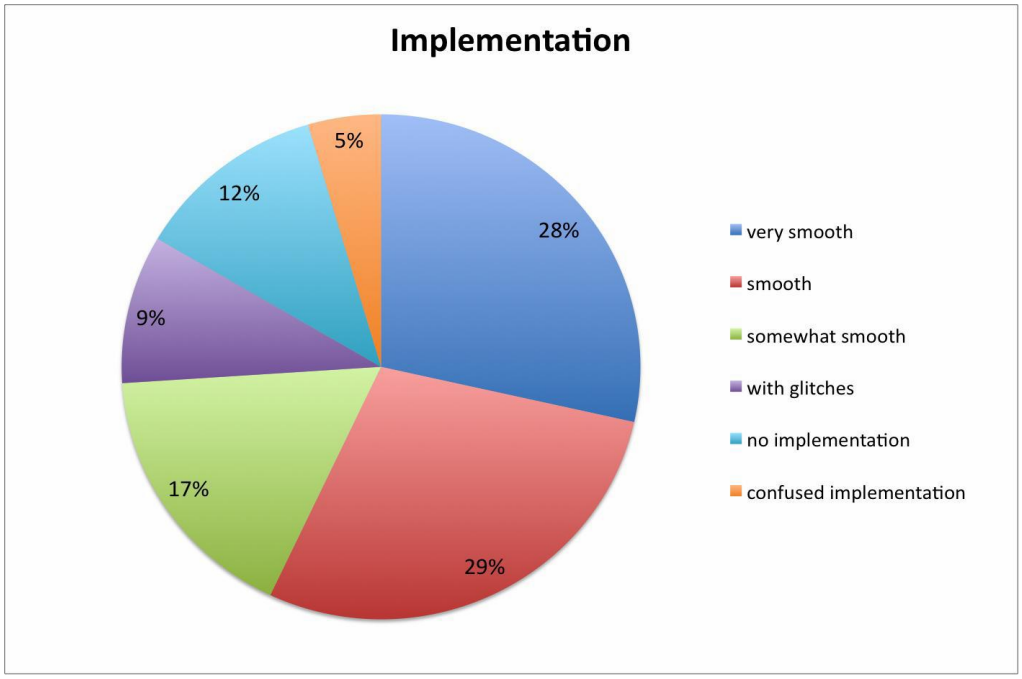
Documentation was the most used method for collecting data across all four years. The types of documentation used were, written, tallies, timed, or grades. Written and tallies were the most used when looking at the combined information. Documentation was done through observation primarily, and were generally collected by the intern, assisting the teacher, or at times, by the teacher, while the intern was student teaching.

Comparing was another type of method of collecting data used many times throughout the years. Comparison was done by looking at something done without an implementation and then with the implementation of an idea or strategy. Having a baseline and then comparing a before and after was a popular type of method used. An example of baseline data collection was the study of students" reading levels, followed by an intervention of intense, silent reading, with a baseline drawn at the six week mark, to determine differences in reading levels.

Rewards, testing, and daily practice are all about equal on the combined data. These were types of data that were used in most of the years. Most of the rewards were used as positive reinforcement. Testing was used across many different questions. Daily practice was mostly used in questions about repetition, student involvement, games, math, and forms of instruction.

Trends in Implementation. Each year the interns were asked how the implementation of their research went when working with their mentors. Interns could answer very smooth, smooth, somewhat

smooth, with glitches, no implementation, and confused implementation. Below is the chart showing the percentages of each type of implementation answered throughout all four years.



This chart shows that almost 75% of the interns had either a very smooth, smooth, or somewhat smooth experience during their action research projects. This number will hopefully grow as the partnership between the university, schools, and interns continues to grow. A deeper examination of the data revealed a relationship between the implementation and the methods trends. Any time a method was not specified, there was no implementation. When the data or methods were disconnected, the interns answered confused implementation or with glitches.

Over the years the no implementation and confused implementation began to decrease. In 2011 there were no longer any no implementation and only two confused implementation. This shows that there were gains made throughout the process of how the action research was done in the schools. From the comments made on each action research project it was evident that there was a closer partnership in the smooth and very smooth implementation answered questions. This supports that having a close partnership is key to having successful and productive Action Research.

Current practice - Action Research in 2012

Currently the Denton PDS has two cadre coordinators and approximately 30 interns in the program. There are two to three interns in each of the 14 elementary schools participating. Interns start mid August with rotations in the schools. Most of the first semester is getting to know the schools and being exposed to multiple grade levels and types of classes. Interns only go to the schools two days out of the week, and have the opportunity to substitute teach in Denton ISD on Fridays. The interns also attend four, three-hour classes each week during the fall semester, learning the pedagogy of mathematics, science, social studies, and language arts. The first semester helps to get the interns ready for the experience of student teaching. Interns and mentors get to vote on who they would like to have during the student teaching process. Principals, with the recommendations from cadre coordinators, have the final say in placing interns with mentor teachers for a full, five day a week student teaching experience.

During each rotation of student teaching, each lasting 6-8 weeks, interns complete one or two action research projects. The Action Research questions are created by the mentors and interns together. Interns have an idea of how each of the classrooms function from first semester rotations. During the first rotations, the interns and mentors are able to create a relationship and will not have to spend time during the student teaching weeks to do this. The Action Research projects are something mentors look forward to having an extra pair of hands to complete research, observations, documentation, and analysis of the data. Action research is seen as a way to help the classroom and school fine tune their craft. Interns are considered another member of the team and have ample time to begin their training towards being a teacher. When action research projects are completed interns are given the opportunity to give suggestions of how to continue the research, or implement the findings. The pattern that was started in 2008 continues to be refined and defined, based on the needs of the mentor teachers and interns.

Conclusion

Throughout the research, Action Research has been shown to be an important piece to the partnership between the universities and schools. Action Research keeps communication open and strengthens the partnership between the universities and schools. The research also showed that the communication between the interns and mentors is key in the success of the research done in the

classroom. Action Research is also a key feature in the NCATE standards and needed to be completed in schools to meet the standards of a PDS school. From the research there are questions and methods that are predicted to continue to be researched in years to come. Action Research has served as a part of interns becoming teachers. Through this research their ideas can be heard and implemented in the school. Action Research should continue to be a vital part of student teaching.

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