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EARLY CHILDHOOD EDUCATION STUDENTS' PERCEPTIONS OF  
THE MOST IMPORTANT ATTRIBUTES OF EFFECTIVE  
COLLEGE TEACHERS IN TAIWAN

DISSERTATION

Presented to the Graduate Council of the  
University of North Texas in Partial  
Fulfillment of the Requirements  
for the Degree of

DOCTOR OF PHILOSOPHY

By

Su-Yu Huang Yang, B.A., M.Ed.

Denton, Texas

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This study proposed (a) to identify the most important attributes of effective college teachers as perceived by students in Taiwan, (b) to investigate the influence of different factors on students' perceived attributes of effective college teachers, and (c) to determine if the students in various Taiwanese teachers colleges differ in their opinions of the most important attributes of effective college teachers. Three hundred and twenty-eight early childhood education students from four selected teachers colleges participated in this study by answering the questionnaire on student perceptions of the most important attributes of effective college teachers. Primary analysis of the data was completed using percentages and a MANOVA.

Students identified these factors as attributes of effective college teachers: rapport, effective teaching methods, enthusiasm, fairness, interaction, practical experiences, personality, clarity, and being well-prepared. The fact that sophomore students and freshman students value some factors differently was discovered in this study. In

addition, students who have previous teaching experience value all of the important attributes higher than those who do not have teaching experience before they attended teachers colleges. Students attending different teachers colleges do not differ in the value they assign the factors studied.

The study recommends that the student evaluation form for early childhood education students include the important attributes of effective college teachers found in this study. Further research in related areas is also suggested.

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## CHAPTER 1

### INTRODUCTION

Faculty members and students are the main components on college and university campuses. Students are the primary consumers of the services (i.e., instruction, counseling, and research) provided by institutions for instruction (Cruse, 1987; Donald, 1985; Gillmore, 1983-84; Miron & Segal, 1978). Because the quality of the faculty strongly affects student learning, the evaluation of college teachers has become one of the most important issues on the college and university campuses. Centra (1979) indicated that the assessment of a faculty member's teaching, research, and other activities should continuously give the individual an opportunity to improve on weak points and build on strengths. This idea was supported by a number of researchers (L'Hommedieu, Menges, & Brinko, 1990; Tiberius et al., 1989). The evaluation of faculty teaching effectiveness affects not only student learning but also faculty promotions, tenure, annual salary adjustments, awards, and selection into special development programs (Avi-Itzhak, 1982; Braskamp, Brandenburg, & Ory 1984; Donald, 1985; Martin & Martin, 1989; McKeachie, 1986; Schein, 1985).



The most influential evaluations of faculty performance include student assessment, department chairperson evaluation, colleagues' opinions, and self-evaluation. Among these types of evaluations, student assessment has been found to be more regularly used than any other method. Seldin (1980) stated that students are the only direct, daily observers of a professor's classroom teaching performance, academic advising, or other activities with students. Therefore, students are a readily available source of judgmental information in the overall evaluation of a professor.

In spite of some strongly opposing opinions of the use of student evaluations in faculty performance (Arubayi, 1987), student assessment is frequently used and endorsed by both students and faculty members (Abrami, 1989; Erdle & Murray, 1986; Erdle, Murray, & Rushton, 1985; Howard, Conway, & Maxwell, 1985; Klyczek, 1989; Marsh, 1986; Murray, 1985; Murray, Rushton, & Paunonen, 1990; Tollefson, Chen, & Kleinsasser, 1989). Seldin (1980) found that 95% of the liberal arts colleges in the United States utilize student evaluation of teaching effectiveness. Seventy-two percent of the responding college freshmen in a 1977 annual survey by the American Council on Education (ACE) indicated that students should evaluate faculty performance (Astin, 1978). In 1972, approximately 70% of a national sample of faculty members pointed out that faculty promotion should be based

in part on former students' evaluations of teachers (Centra & Creech, 1976). In addition, according to a 1989 survey by the Carnegie Foundation, 67% of the responding faculty agreed that student evaluation is an important consideration in the granting of tenure. Although there are contradictory opinions from faculty members regarding the ability of students to evaluate professors, many researchers (Arubayi, 1987; Cohen, 1981; Doyle and Crichton, 1978; Goldschmid, 1978; Miller, 1988) agreed that student evaluations of faculty instruction are valuable.

Since student evaluation of college teachers is such a significant activity on college and university campuses, the construction of student evaluation forms which contain the attributes of effective college teachers would seem to be an appropriate project. Although researchers have different opinions regarding the important attributes of effective college teachers, knowledge of what is being taught, enthusiasm for teaching, rapport between teacher and student, and organization of the learning situation are at least four agreed upon attributes (Dukes & Victoria, 1989; Marsh, 1983; Murray, 1983, 1985). In order for colleges and universities in Taiwan to implement student evaluations of teachers in an effort to improve instruction, it is essential that they first have an understanding of the important attributes of effective college teachers. This study, which is focused on early childhood education

students' perceptions of effective college teachers, should provide a basic understanding of the important attributes of effective college teachers in Taiwan.

#### Statement of the Problem

The problem of this study was early childhood education students' perceptions of the most important attributes of effective college teachers at teachers colleges in Taiwan.

#### Purposes of the Study

The purposes of this study were (a) to identify the most important attributes of effective college teachers as perceived by students in teachers colleges in Taiwan, (b) to investigate the influence of different factors on students' perceived attributes of effective college teachers, and (c) to determine if the students in various Taiwanese teachers colleges differ in their opinions of the most important attributes of effective college teachers.

#### Research Questions

In order to carry out the purposes of this study, answers were sought to the following questions:

1. What do early childhood education students consider to be the most important attributes of effective college teachers?
2. Are there significant differences in students' perceptions of the important attributes of effective

college teachers based on grade level and previous teaching experiences?

3. Are there significant differences in students' perceptions of the important attributes of effective college teachers among selected teachers colleges?

#### Need for the study

Student evaluations of teaching effectiveness began at Harvard University in 1924. Since that time many colleges and universities have used student assessment to evaluate faculty members' performances. After reviewing the literature on student ratings of college teachers for the period from 1971 to September 1988, Cashin (1988) concluded that student ratings have been found reliable, valid, and relatively free of bias. Klyczek (1989) found that, because student evaluations of effective faculty teaching are valuable, the evaluation of teaching effectiveness is a common practice with a long history in higher education.

Taiwanese teachers are greatly respected by students traditionally and culturally. Confucius was a great teacher 2,542 years ago in China. In order to express appreciation and respect to teachers, the birthday of Confucius, September 28, has been mandated as Teacher's Day in Taiwan since 1912. The fact that students in Taiwan hold teachers in such high esteem has made student evaluations of teachers unacceptable in the Taiwanese culture.

However, this situation is gradually being changed by young scholars who have completed their studies in the United States and other western countries where student evaluation of teacher effectiveness has been utilized for a long time. A growing awareness of democracy has also led to the realization that student evaluation of effective college teachers is a critical issue at college and university campuses in Taiwan. Although some colleges and universities have tried to implement the evaluation of effective teachers as a way of improving instruction, most still do not use student evaluations as a regular approach for assessing instruction. Even more unfortunate is the fact that the study of student evaluations of effective teachers is sparse (Chang, 1989).

It seems likely that student evaluation will be widely used in the colleges and universities of Taiwan in the near future. However, in order to provide reliable and valid information concerning teaching effectiveness, well-constructed rating forms must first be developed. Although the Taiwan government has recently placed emphasis on early childhood education, only public teachers colleges are currently allowed to train pre-school teachers. As the government considers the elevation of early childhood education from junior college to senior college status, the need to understand students' perceptions of effective college teachers in this movement becomes even more evident.

Hence, research on early childhood education students' perceptions of effective college teachers and the development of an effective student evaluation form seem paramount to the improvement of teaching effectiveness in Taiwan.

#### Significance of the Study

This study focused upon early childhood education students' perceptions of the most important attributes of effective college teachers in Taiwan. The significance of this study was its contribution to much needed research in the field of effective college teaching and the construction of student evaluation forms for college teachers.

#### Delimitations

There are many colleges and universities in Taiwan. Due to time restrictions, this study was confined to four selected teachers colleges in Taiwan. In this inquiry, only the perceptions of early childhood education students at the four selected teachers colleges which offer two-year teacher training programs were examined. Therefore, the results of this research cannot be generalized to represent the opinions of other college students, which may differ significantly from those of early childhood education majors at teachers colleges in Taiwan.

### Definition of Terms

The following terms have restricted meaning and are thus defined for this study.

Early childhood education students are persons who major in early childhood education at teachers colleges in Taiwan. In Taiwan, only one teachers college offers 4-year teacher training programs for students to become certified pre-school teachers. The other eight teachers colleges offer only 2-year teacher training programs. The government is currently considering the elevation of these 2-year teacher training programs to 4-year programs.

Important attributes refer to questionnaire statements which were considered most important by more than 50% of the subjects.

Effective college teachers are instructors who teach effectively as perceived by early childhood education students.

Perception refers to opinions expressed by early childhood education students regarding important attributes of effective college teachers.

Grade level refers to a student's classification at the freshman or sophomore level at teachers colleges in Taiwan.

Previous teaching experience refers to instructional experience that early childhood education students had before they attended teachers colleges in Taiwan.

## Summary

Student evaluation of faculty teaching has become one of the most important issues on college and university campuses. Evaluation affects not only student learning but also faculty promotions, tenure, annual salary adjustments, awards, and selection into special development programs. Although there are strongly opposing opinions regarding the use of student evaluation in faculty teaching, student evaluation is widely used by both students and faculty members. As colleges and universities in Taiwan seek to improve instruction through the use of student evaluations of teachers, knowing about the attributes of effective college teachers becomes increasingly crucial.

The purposes and research questions of the inquiry are provided in this chapter. The need for the research, the delimitations, and definition of terms used are also included.

A review of literature pertaining to student evaluations of effective college teachers is presented in Chapter 2. Methodology of this study, which includes instrumentation, population, sample, data collection, and methods of analysis of data, is explained in Chapter 3. Presentation of the data is shown in Chapter 4. The final chapter, Chapter 5, includes the summary, findings and discussions, conclusions, and recommendations of the study.



## CHAPTER 2

### REVIEW OF RELATED LITERATURE

Because student evaluations of college teachers have become one of the most important activities on college or university campuses, much research has been conducted in this area. This review is organized into the following subsections: (a) theories related to effective college teaching; (b) reasons for student evaluations of faculty teaching effectiveness; (c) reliability and validity of student evaluations of teaching effectiveness; (d) factors influencing student evaluations of teaching effectiveness; (e) student perceptions of teaching effectiveness; and (f) research on student perceptions of teaching effectiveness.

#### Theories Related to Effective College Teaching

The components of effective college teaching, or what factors constitute effective college teaching have not been fully identified by researchers. Most of the research in the past has neglected to indicate the priority of the components of effective college teaching.

Murray (1983), who employed factor analysis, suggested nine factors that are components of effective college teaching: clarity, enthusiasm, interaction, task

orientation, rapport, organization, use of media, pacing, and speech. Erdle and Murray (1986) found seven additional elements that should be included in effective college teaching: disclosure, expressiveness, emphasis, mannerisms, use of graphs, vocabulary, and rate of presentation.

Lowman (1984) indicated that intellectual excitement and interpersonal rapport are two dimensions of effective college teaching. The intellectual excitement dimension of Lowman's model has two components which are composed of the clarity of an instructor's communications and the emotional impact of these communications on students. The interpersonal rapport dimension of Lowman's model deals with an instructor's awareness of the interpersonal phenomena and with his or her communications with students in ways that increase motivation, enjoyment, and independent learning. Extremely warm and open, highly student-centered, and predictable are examples of high level aspects of the interpersonal rapport dimension.

From a study of university teaching around the world, Ballantine (1989) concluded that students' most frequent responses to questions regarding the elements of effective college teaching were eloquent, well-organized lectures; a pleasant personality; and the provision of important material for preparing for examinations. Recently, Bergman and Gaitskill (1990) conducted a study of 134 baccalaureate nursing students at a university in

southwestern Ohio. They found that students' perceptions of the most important attributes of effective teachers were self-control, cooperativeness, and patience; well informed, objective, and fair evaluation of students; and the ability to convey their knowledge to students.

Several researchers have ranked the priority of the components of effective college teaching. Feldman, for example, conducted a study of "The superior college teacher from the students' view" in 1976. Based upon non-structured responses of students, Feldman reported the following important attributes of effective teachers, in rank order: respect for students, knowledge, interestingness, availability, discussion, clarity, enthusiasm, fairness, organization, and elocution. The results, based upon the structured responses of students, show both similarities and differences from the results of non-structured responses. For the structured responses, important attributes of effective teachers were rank as: knowledge, interestingness, class progress, clarity, enthusiasm, organization, challenge, availability, discussion, and respect for students.

Reviewing 31 studies, Feldman (1988) further identified 22 comprehensive factors of effective college teaching. These factors were ranked by students in the following order: (a) teacher's sensitivity to, and concern with, class level and progress; (b) teacher's preparation, organization

of the course; (c) teacher's knowledge of the subject; (d) teacher's stimulation of interest in the course and its subject matter; (e) teacher's enthusiasm; (f) clarity and understandableness; (g) teacher's availability and helpfulness; (h) teacher's concern and respect for students; (i) perceived outcome or impact of instruction; (j) instructor's fairness, impartiality of evaluation of students, quality of examinations; (k) nature and value of the course material; (l) teacher's elocutionary skills; (m) nature, quality, and frequency of feedback from the teacher to students; (n) teacher's encouragement of questions and discussion, and openness to opinions of others; (o) nature and usefulness of supplementary materials and teaching aids; (p) teacher's intellectual expansiveness; (q) intellectual challenge and encouragement of independent thought; (r) teacher's motivation of students to do their best; (s) clarity of course objectives and requirements; (t) personality characteristics of the instructor; (u) teacher's encouragement of self-initiated learning; and (v) teacher's productivity in research and related activities. These factors, identified by Feldman, summarize fairly well the components of most theories related to effective college teaching.

Another researcher, Sass (1989), who conducted a study on "Motivation in the college classroom: What students tell us," ranked the priority of the components of effective

college teachers. Those important attributes were rated by students in the following order: (a) enthusiasm, (b) relevance (relatedness), (c) organization (well-planned, prepared), (d) appropriate difficulty level, (e) active involvement, (f) variety, (g) rapport, and (h) use of appropriate examples. These rankings of the components of effective college teachers differ from the results of Feldman's studies.

#### Reasons for Student Evaluation of Faculty Teaching Effectiveness

Student assessment of faculty teaching effectiveness can be used to improve teaching skills; to decide whether a faculty member should be promoted, tenured, or rewarded; and to help students select courses and professors (Avi-Itzhak, 1982; Centra, 1979; Goldschmid, 1978; Machina, 1987; Marsh, 1987; Martin & Martin, 1989; McBean and Nassri, 1982; McKeachie, 1986; Moses, 1986; Perlberg, 1979; Seldin, 1984; Trend & Andrews, 1984; Wetzstein & Broder, 1985). These three functions are addressed as follows.

#### Improving Teaching Skills

The literature provides evidence to support the idea that student evaluation of teaching effectiveness is a relatively direct method of obtaining information for improving teaching (Marsh, 1984, 1987; Marsh & Hocevar, 1991; McKeachie, 1986, 1990; Perry, 1990; Simon, 1987).

Centra (1973) randomly assigned more than 400 teachers from five types of colleges into three groups: (a) the feedback group, (b) the non-feedback group, and (c) the post-test group. Most instructors from the feedback group improved their teaching because of the information they received from their evaluation scores. In a subsequent study, Centra (1979) found a positive relationship between student evaluations and the improvement of teaching. Students possess the capability to indicate the real weaknesses and strengths of teaching methods used. Centra concluded that if student ratings affect future course planning in a positive manner, student evaluations contribute to improved teaching in higher education. For this reason, McBean and Nassri (1982) stated that student evaluation of teaching effectiveness in higher education is a healthy procedure which is logically sound.

In 1986, Wilson used student ratings to help faculty members improve their teaching. A consultation process was chosen that gave faculty members ideas about how to improve the aspects of their teaching which were rated low by students. Ninety-six faculty members participated in the program during a 3-year study. Wilson found that teachers in 24 of 46 classes showed statistically significant and positive changes in their overall teaching effectiveness ratings. A number of researchers have also concluded that providing feedback from students' evaluations on teaching

effectiveness improves teaching performance (Abrami, d'Apollonia, & Cohen, 1990; Carroll & Goldberg, 1989; L'Hommedieu, Menges, & Brinko, 1990; Martin & Martin 1989; Tiberius et al., 1989).

#### Use for Personnel Decisions

The most important duty of a faculty member is to teach or assist students. Consequently, student evaluation of faculty teaching has become an important source for administrators and faculty committees who decide which instructors should be promoted or rewarded (Miller, 1987; Seldin, 1984). There seems to be overall agreement that students are an important factor in the evaluation of teaching.

Marsh and Kesler (1976) even stated that faculty members were in general agreement that the data from student evaluations of faculty teaching effectiveness had a lawful position in personnel decisions regarding faculty members. Others researchers (Adams, 1989; Arubayi, 1987; Marsh, 1987; Marsh & Hocevar, 1991; Seldin, 1984) pointed out the fact that student evaluations of faculty performance in higher education are increasingly used as a factor in personnel decisions.

However, the use of student judgments on current course materials, the mastery of the subject, or the appropriateness of instructional objectives should be

carefully considered. Such judgments require professional training and should be left to a faculty member's colleagues (Andrews, 1985). Therefore, student evaluations for information about teaching are necessary but are not sufficient. Additional information from other sources should be carefully weighed, especially when the evaluation of performance is to be used in personnel decisions.

#### Helping Students Select Courses and Instructors

Although the major use of student evaluation is to guide instructional improvement and personnel decisions, helping students in their choices of courses and instructors is another function of student evaluation. Seldin (1980) stated,

As "consumers," students want more information about a course than the description of the content. They want to know how class time is spent, the instructional materials used, evaluation procedures, grading standards, frequency and nature of tests and assignments, and the instructional objectives. Also, they want to know the instructors' reputation for helpfulness, accessibility, sensitivity to student needs, ability to stimulate interest, his clarity, openness to opposing opinions, enthusiasm, classroom preparation, and personal idiosyncrasies. (p. 39)

Students are usually more concerned about their benefits from faculty than about personnel decisions or improving teaching. However, making the results of instructional evaluations generally available may unfairly label instructors and create an antagonistic climate between students and instructors (Arubayi, 1987; Goldschmid, 1978).



Caution is required when using the data in selecting courses and instructors. Machina (1987) and Murray (1979) stated that student evaluations as a source of reporting rather than evaluating, are the least sensitive yet often the most helpful guide in an overall assessment program. In fact, faculty members welcome the use of student evaluations as a guide to course and instructor selection.

#### Reliability and Validity of Student Evaluation of Teaching Effectiveness

Many researchers (Carroll & Goldberg, 1989; Erdle, Murray, & Rushton, 1985; McKeachie, 1979; Miller, 1988) indicated that student evaluations can offer reliable and valid information on certain aspects of teaching effectiveness in colleges and universities. Although literature on the reliability of student evaluation contains contradictory conclusions, most of the studies show that student evaluations of teaching effectiveness are reliable. Seldin (1984), for instance, determined that almost every study measuring the reliability of student evaluation reported a high level of both correlation over time and internal stability. Results of a study conducted by Carroll and Goldberg (1989) also supported these findings. The reliability of student evaluations of faculty is consistently higher than that of the faculty's self-evaluation or that of their evaluation by colleagues. Arubayi (1987) reviewed a number of articles and

reported correlation coefficients between .50 and .90 between student evaluations of faculty teaching and the evaluations of observers, peer lecturers, administrators, and former graduates. Arubayi found that the same instructors teaching different courses had similar ratings from their students. Craig, Redfield, and Galuzzo (1986) agreed that the reliability of student evaluations from various questionnaire forms is acceptable. However, Cruse's study (1987) revealed some problems in the measurement and interpretation of student evaluations of faculty teaching, including the ability of students to evaluate faculty behaviors. An earlier study by Feldman (1977) showed that students' evaluations of their instructors and courses have limited usefulness because the reliability is only average.

Comparing the reliability and validity of student evaluations, Murray (1979) and Seldin (1980) found that the question of validity is more difficult to address than is the reliability question. Reliability is the prerequisite of validity, a rating must be consistent and stable (reliable) before performance can be measured.

Student evaluations should not be the sole source of evaluative information to be used as a basis when judging instructor competence. The first reason for this position is that students may not take the evaluation seriously (Braskamp, Brandenburg, & Ory, 1984). Second, students are not always in a good position to judge the relevancy and

currentness of course content or the knowledge and scholarship of their instructors (Seldin, 1980). The third reason is that the size of classes and the characteristics of courses and instructors affect the validity of student evaluations (Centra, 1979; Miller, 1988; Murray, 1983). This raises the question, How can reasonable validity be attained? Arubayi (1987) observed that if students and instructors can agree on what constitutes effective teaching and can determine the qualities of an ideal professor, then they can safely conclude that students have the capacity to evaluate instructors' teaching and the validity of student evaluation can be considered acceptable.

Although research results are not consistent, Abrami, d'Apollonia and Cohen (1990) found after reviewing 43 validity studies on student evaluations that the average validity coefficient for student ratings is moderately positive. Other researchers (Scruggs et al., 1988) stated that student evaluation is sufficiently valid for use in both personnel decisions and for improvement purposes. From their study of the construct validity of evaluating teaching effectiveness, Howard, Conway, and Maxwell (1985) concluded that teaching effectiveness ratings by students are an effective evaluation method.

## Factors Influencing Student Evaluations of Teaching Effectiveness

Many techniques have been used over the years to identify potentially useful items for inclusion in formal systems of student assessment. Nevertheless, several factors remain that can influence student evaluations (Centra, 1979; McKeachie, 1986; Seldin, 1984). These factors include (a) student characteristics, (b) course and class characteristics, and (c) instructor characteristics. These factors are addressed in the following paragraphs.

### Student Characteristics

Student characteristics that can affect student ratings include age, gender, classification (freshman, sophomore, etc.), academic ability, grade-point average, expected grade in a course, reasons for taking a course, and personality differences. According to McKeachie (1986) and Seldin (1984), the most important variable affecting satisfaction is probably student expectations. Students who expect a teacher to be good usually find the teacher measuring up to that expectation. This may be because these students are more attentive, motivated, and disposed to learn than students who enter the classroom with low expectations.

According to the literature, the mean ratings given by female students and male students are almost identical

(Basow & Howe, 1987; Bennett, 1982). However, this does not mean that teachers who direct their teaching toward students of a particular gender or ability level are not rated differently by these student groups.

### Course and Class Characteristics

Course characteristics that can affect student evaluation include type of course requirements (major requirement, general college requirement, or elective), subject matter area, class size, and method of instruction. Doyle (1975) found that the relationship between student or course characteristics and student ratings were generally insignificant, or too small to have any practical significance. Nevertheless, other researchers have found positive relationships. For instance, Braskamp, Brandenburg, and Ory (1984) and Seldin (1984) found that students give low ratings to certain courses in a department regardless of the instructor. Also, several factors can be identified that interfere with any clear interpretation of the influence of any other factor on student evaluations. For example, teaching assistants may be teaching more required classes and larger classes than senior faculty. Also, teaching assistants receive lower ratings because of the confounding effects of at least three factors: required and elective status of the courses, rank of instructors, and the size of classes. Class size and course level affect

student ratings. Feldman (1984) found that students in large classes evaluate their teachers slightly lower than do students in smaller classes, and that students in senior classes rate their teachers higher than do students at lower classification levels. Cranton and Smith (1990) also concluded that the size of a class and the level of instruction are related to student ratings of instruction.

Centra and Creech (1976) found that instructors of classes with fewer than 15 students received the highest ratings, followed by those with 16 to 35 students. Instructors of classes with more than 100 students received higher ratings than instructors in classes with 35 to 100 students. Why are the results different? The classes of more than 100 students received higher scores because universities and colleges often assign better instructors, resources, and equipment to larger classes. Also, instructors usually prepare more materials for special, large classes than for smaller ones. Thus, classes with 35 to 100 students may not receive as much attention and may not allow time for instructor-student interaction (Centra, 1979). Instructors in smaller classes may have more time to answer students' questions and to develop closer relationships with students. However, Costello's (1977) findings showed no differences in student ratings between large class size and small class size.

### Instructor Characteristics

When evaluating faculty performance, students are affected by the instructor's personality (Basow & Silberg, 1987). Seldin (1984) stated,

There is a relationship between student ratings and instructor personality. Most researchers conclude that the instructors who garner the highest ratings are "substance" teachers, not merely entertainers. In fact, a professor who displays energy, humor, and enthusiasm, and is oriented is rated highly by students. Because they arouse students' interest in the subject matter, they receive the honor from their students. (p. 135)

After analyzing a great number of studies on research productivity and scholarly accomplishment of college teachers as related to their instructional effectiveness, Feldman (1987) concluded that certain aspects of faculty members' personalities conceivably have a positive effect on instructional effectiveness. These aspects include (a) intelligence (in the sense of brightness, quickness, and cleverness) and intellectual curiosity reflectiveness, intellectuality, and cultural and aesthetic sensitivity; (b) responsibility, persistence, and orderliness; and (c) ascendancy, forcefulness, and leadership. Although Centra (1979) found that faculty members who did not dress neatly or who had irritating personal mannerisms received low scores from student ratings, Buck and Tiene (1989) conducted a study and found that attractiveness did not affect students' ratings of teachers' effectiveness.

In addition to personality, a faculty members' academic rank, gender, teaching load, and research productivity affect their student assessments. For example, Centra and Creech (1976) surveyed 8,000 instructors at four academic ranks (instructor through professor) and found that they were virtually identical in their student ratings. Only teaching assistants received significantly lower scores, probably due to their limited experience. Although Ferber and Huber (1975) found that student ratings were slightly higher when teacher and student gender were the same, the small differences found were inconsistent and may have depended on the particular course being assessed. Buck and Tiene (1989) concluded that professors' gender was not a major factor in students' assessments. This result supports the findings of previous studies by Basow & Disterfeld (1985), Basow & Howe (1987), Bennett (1982) and Jackson (1983).

Regarding the teaching load, it seems feasible that faculty members with heavy teaching loads would receive lower student evaluations because they have no time to prepare teaching activities. However, this is not the case. In a study of ratings for instructors, Centra and Creech (1976) found that faculty members with 13 credit hours or more received the highest scores.



### Student Perceptions of Teaching Effectiveness

Students' perceptions of the characteristics of effective college teachers are not in agreement. In a study of students' perspectives of teaching effectiveness, Wuff et al. (1985) discovered that students perceived the evaluation of teaching effectiveness as important. The aspects of effective teaching that students perceive as important are documented in the literature. When Wilson (1986) asked students to describe 30 aspects of teaching effectiveness, the following five teaching factors were identified:

(a) organization and clarity, (b) analysis/synthesis, (c) teacher-student interaction, (d) teacher-group interaction, and (e) dynamism/enthusiasm. Wilson's 5 factors are very similar to the teaching behaviors identified by Erdle and Murray (1986).

In a study on the construct validity of measures of college teaching effectiveness, Howard et al. (1985) employed student raters, colleague raters, trained classroom raters, former student raters, and instructor self-raters to determine the validity of instructional evaluations. They focused on four dimensions of instruction, including skill, rapport, structure, and difficulty. In addition, three overall ratings were made: (a) instructor's overall teaching ability, (b) amount learned in the course, and (c) satisfaction with the course.

Using a very large sample and sophisticated, technically appropriate factor analytic procedures, Burdsal and Bardo (1986) found that the general qualities, in descending order, of student evaluations of teaching, were: (a) course organization/structure, (b) course value to the student, (c) attitude toward students, and (d) grading quality.

Feldman (1986) conducted a correlation study on college teachers' personality characteristics and teachers' effectiveness in the classroom as perceived by students and colleagues. A wide variety of personality traits that had been studied previously were grouped into 14 clusters of traits as follows: (a) positive self-regard, self esteem; (b) energetic and enthusiastic; (c) positive view of others: sympathetic, tolerant, supportive, and warm; (d) cautious and unspontaneous; (e) ascendant, forceful, conspicuous and a leader; (f) reflective, intellectual, cultural and aesthetically sensitive; (g) flexible, adaptable, open to change, adventurous; (h) emotionally stable; (i) sociable, gregarious, friendly, and agreeable; (j) anxious and neurotic; (k) responsible, conscientious, persistent, orderly; (l) bright, intelligent, sophisticated; (m) self-sufficient and independent; and (n) aggressive (not mild-mannered or subservient). He found statistically significant correlations between the instructional effectiveness of college teachers and 11 of the clusters of

personality traits. Three clusters: cautious and unspontaneous, self-sufficiency and independence, and aggressiveness were not found to be significant in Feldman's (1984) study.

Rivers (1987) studied the perceptions of teachers, administrators, students, and parents regarding effective teaching techniques employed by earth science and physics teachers in Virginia. He found nine important variables related to effective teaching: (a) positive motivation of students; (b) daily lesson plans; (c) effective instructional techniques; (d) field related activities; (e) student participation in junior academics, science fairs, and clubs; (f) controlled discipline; (g) concern for students' special needs; (h) enthusiasm for teaching area and academics; and (i) professional growth.

In a study on "The lecture: Analyzing and improving its effectiveness", Fink (1989) found four dimensions of effective teaching: (a) attitude toward students and toward oneself; (b) philosophy of knowledge, teaching and learning; (c) decisions concerning instructional strategies; and (d) skills in classroom communication. Fink concluded that skills are the most visible of these dimensions, whereas the instructor's philosophy and attitudes are the most fundamental.

Marsh and Hocevar (1991) conducted a factor analysis of student evaluations of teaching effectiveness for 24,158

courses. Their study identified the following 9 dimensions of the most important attributes of effective teaching:

- (a) learning/value, (b) instructor's enthusiasm,
- (c) organization/clarity, (d) group interaction, (e) individual rapport, (f) breadth of coverage,
- (g) examinations/grading, (h) assignments/readings, and
- (i) workload/difficulty.

#### Research on Students' Perceptions of Teaching Effectiveness

Research on students' perceptions of teaching effectiveness has often emphasized differences in students' major and gender. In a study on interfaculty differences in classroom teaching behaviors and their relationship to student instructional ratings, Erdle and Murray (1986) found that teaching behaviors reflecting interaction and warmth were exhibited more often by arts and humanities teachers than by natural science and social science teachers. Teachers in the arts and humanities were also found to exhibit behaviors reflecting rapport, interest, interaction, and expressiveness (interpersonal orientation) more frequently than teachers in the natural sciences, whereas the reverse was true for behaviors reflecting pacing and the use of graphs (task orientation).

When looking at the kinds of criteria focused on by students in different fields, Sheffield (1974) found generally accepted criteria as well as criteria specific to

certain disciplines. He grouped courses into four fields: physical sciences, biological sciences, social sciences, and humanities. Three frequently-mentioned characteristics of effective college teachers were among the top five in all fields: subject mastery, being well prepared and orderly, and encouraging students' questions and opinions. Teachers in the physical sciences were evaluated for stressing main points, presenting material at the students' level, and using teaching aids effectively. Biological science teachers were mentioned as being up-to-date, organized, and systematic. Courses in the social sciences did not show differentiated characteristics, but in the humanities, humor and enthusiasm were particularly appreciated. These findings suggest that students in the sciences value course structure and organization, while in the humanities students value enthusiasm. This distinction shows that student evaluations of teaching effectiveness differ across disciplines.

Miron (1985) studied instructors' and students' perceptions of a good professor at Tel Aviv University in Israel. A difference between instructors' perceptions of teaching effectiveness and students' perceptions of teaching effectiveness were found. Miron reported that instructors in the life sciences thought of the good university professor as a person who stimulated thinking, was well prepared for the lesson, and awakened intellectual

curiosity. In the humanities, a good university professor was described as a person who awakened intellectual curiosity, stimulated motivation, and interacted with students. Students described a good university professor as a person who was capable of transmitting material in an organized and interesting manner. Miron concluded that effective university teaching has different connotations for different individuals at different levels of higher education. Jones (1981) and Kaufman (1981) also noted that students in different departments viewed teaching and learning in different ways.

Basow and Silberg (1987) indicated that gender and major are the factors which affect students' perceptions of teaching effectiveness most frequently. They found that male social science majors made the largest distinction between male and female professors, in favor of the male professor. On organization/clarity, male social science students gave particularly positive ratings to male professors. The most negative ratings received by female professors were given by male engineering majors. On overall teaching ability, male social science majors, male humanities majors, and female engineering majors made a large distinction between male and female professors. On all measures, engineering majors gave the most negative evaluations, and humanities majors gave the most positive evaluations. Basow and Silberg found that both male and

female students gave male professors better ratings on instructor-individual student interaction. Since students' majors appear to affect evaluations of male and female professors, it is important to ascertain whether students in different majors vary in their attitudes toward women.

Student characteristics that could affect student ratings include age, gender, classification (grade level), academic ability, grade-point average, expected grade in a course, reasons for taking a course, and personality differences. These findings were discovered in the United States. For this reason, conducting research on student ratings to see how different student characteristics affect student ratings in Taiwan is an appropriate proposal. Because most Taiwanese colleges and universities still do not use student evaluations as a regular approach for assessing instruction, the determination of students' perceptions on the most important attributes of effective college teachers and teaching seems critical to the development of new student evaluation forms. In this study, classification, previous teaching experience, and institution are variables found among teachers college students. These variables were chosen for this study because previous teaching experience is likely to affect academic ability. Also, classification as well as academic ability is likely to affect student ratings.

The institutions selected for this study are located in different parts of the country. Each institution, reflects its part of the country and has a different school atmosphere as well as a different culture. Hence, choosing institutions as a variable to see students' perceptions of effective college teachers in these colleges will be necessary. Because all of the early childhood education students are females in Taiwan, gender will not be considered as a variable in this investigation.

#### Summary

Researchers have found that student evaluations are considered to be very important for improving teaching skills, personnel decisions, and helping students to select courses and instructors. Although there are questions as to the reliability and validity of student evaluations of teaching effectiveness, most studies show that student evaluations are reliable and valid. Major factors influencing student ratings are (a) student characteristics, (b) course and class characteristics, and (c) instructor characteristics. The literature reveals that, from the students' point of view, an effective instructor is one who is knowledgeable about the subject matter, has enthusiasm, exhibits clarity in organizing lesson plans, and interacts well with the students. The methodology employed in this study is presented in Chapter 3.



## CHAPTER 3

### METHODOLOGY

#### Introduction

The purposes of this study were (a) to identify the most important attributes of effective college teachers as perceived by students in teachers colleges in Taiwan, (b) to investigate the influence of different factors on students' perceived attributes of effective college teachers, and (c) to determine if students in different Taiwanese teachers colleges differ in their opinions of the most important attributes of effective college teachers. The general design, instrumentation, population, sample, data collection, and methods for analysis of data are presented in this chapter.

#### General Design

The primary research method utilized in this study was the survey method. The survey instrument was designed so that responses could be tabulated by students' perceptions on a Likert-type scale. Questionnaires were mailed to the chairperson of the early childhood education department at the four selected teachers colleges in Taiwan.

Data collected during the study were kept strictly confidential. The anonymity of each participant was assured

by providing a stamped, self-addressed, return envelope for subjects to use in mailing back their completed questionnaires and by not asking the participants for their names. In order to identify those who responded and those who failed to respond, each questionnaire was coded by placing an identification number on the returned questionnaire. This number was entered alongside the respondent's name on a control list.

#### Instrumentation

The survey instrument used in this study was revised and translated from the "Questionnaire on Student Opinions of the Most Important Attributes of Effective College Teaching" (Appendix A) which was developed by the Office of Research Planning at the University of Toledo in Ohio. This original instrument has been field tested by the University of Toledo. A letter (Appendix B) requesting permission to use the questionnaire for this study was mailed to the director of the Office of Research Planning at the University of Toledo. The granted permission is shown in Appendix C.

In this study, the research subjects were asked to respond to the measurement tool on a Likert-type scale. The possible response to be chosen to each item was one of the following five choices: most important (5), very important

(4), of average importance (3), somewhat important (2), of no importance (1).

Since this instrument was revised and translated into Chinese, the validity of the instrument was established for this study. Content validity was established by a subjective appraisal of items by a panel of five experts in Taiwan. The five experts had taught at teachers colleges for at least 10 years. Four were female and one was male. Items on the survey instrument were rated by the panel on the basis of their appropriateness for the study. Only items receiving at least two-thirds agreement by the panel as being appropriate items were retained for use in the final survey instrument. Based upon the panel's judgment, three items were deleted. The content validity of this instrument was supported. The worksheet used for establishing this content validity is provided in Appendix D.

After the content validity was established, a pilot study was conducted. Early childhood education students at Hualien Teachers College served as the pilot study group. During the pilot study, 20 randomly-selected subjects were asked to complete the questionnaire and to indicate the statements they did not understand or felt needed to be modified. The time needed to complete the questionnaire was calculated during the pilot study. The students were then

interviewed to verify their understanding of the instrument. Based on suggestions and comments from the pilot study, the questionnaire was then reworded.

#### Population

The target population consisted of all early childhood education students enrolled in 2-year teacher training programs in the 1991-1992 academic term at teachers colleges in Taiwan. There are nine teachers colleges in Taiwan. Eight of the colleges offer 2-year teacher training programs for early childhood education students to become pre-school teachers and one offers 4-year teacher training programs for future pre-school teachers. Each of the teachers colleges which provides 2-year teacher training programs had approximately 170 students majoring in early childhood education. There were 1,360 early childhood education students in the eight institutions. The number of early childhood education students at each teachers college is shown in Table 1.

#### Sample

The sample utilized in this study was chosen using a stratified, random sampling technique which selected four teachers colleges. One college was selected from each of the following four regions of the country: eastern, western, southern, and northern. The selected institutions were

Table 1

The Number of Early Childhood Education Students at Each Institution

Institution	Number of Students	
	Freshmen	Sophomores
Taipei Teachers College	83	83
Hsinchu Teachers College	82	82
Taichung Teachers College	82	81
Chaiyi Teachers College	82	82
Tainan Teachers College	82	82
Pingtung Teachers College	82	82
Taitung Teachers College	81	81
Hualien Teachers College	82	82
	Subtotal	656
	Total	1,311

National Hualien Teachers College, National Taichung Teachers College, National Pingtung Teachers College, and National Hsinchu Teachers College. Using the stratified random sampling technique, 50% of the early childhood education students at each of the selected four colleges were selected for inclusion in this study. The classification of the sample population at each selected institution is provided in Table 2.

Table 2

The Sample Population at Each Selected Institution

Institution	Number of Students	
	Freshmen	Sophomores
Hsinchu Teachers College	41	41
Taichung Teachers College	41	40
Pingtung Teachers College	41	41
Hualien Teachers College	41	42
Subtotal	164	164
Total		328

## Data Collection

Having established the validity of the instrument, a letter (Appendix G) requesting permission to conduct this study was sent to the president of each of the four selected colleges in Taiwan. When permission was received from each of the four presidents, a letter (Appendix F) with 90 questionnaires was sent to the chairperson of the early childhood education department at each of the colleges. The chairpersons were asked to distribute the questionnaires to pre-selected students during a weekly class meeting conducted by the leader-teacher. Names and identification numbers of the selected students were given to the chairperson. The student class leader was asked to collect

the completed questionnaires and to return them to the chairperson. The completed questionnaires were then mailed back to Hualien Teachers College using the stamped, self-addressed envelopes provided. Two weeks after the initial distribution of the survey, a follow-up mailing with another letter (Appendix E) and questionnaires was sent to the chairperson of early childhood education department at each of the selected colleges. This letter provided the chairperson with a list of names and the identification numbers of subjects who were tardy in returning their questionnaires, and asked the chairperson to deliver the questionnaires to the students during the weekly class meeting. The student class leader was again asked to collect the completed questionnaires and return them to the chairperson. The completed questionnaires were then mailed to Hualien Teachers College. The minimum acceptable return rate was set at 70% (Gay, 1981).

#### Methods of Analysis of Data

The completed questionnaires were keyed in, verified, and analyzed using the Statistical Package for Social Science (SPSS). Primary analysis of the data was completed using the statistics of percentages and a MANOVA. Percentages were utilized to determine the most important attributes of effective college teachers. These data answered research question 1, "What do early childhood

education students consider to be the most important attributes of effective college teachers?" A MANOVA was employed to determine significant differences in students' perceptions of the important attributes of effective college teachers in order to answer research question 2, "Are there significant differences in students' perceptions of the important attributes of effective college teachers by grade level and previous teaching experiences?" and research question 3, "Are there significant differences in student perceptions of the important attributes of effective college teachers among selected teachers colleges?" However, if significant differences existed among the four selected teachers colleges, the Tukey would be employed to test which two institutions contributed the differences.

#### Summary

In order to satisfy the purposes of this study, data were collected regarding the perceptions of early childhood education students for important attributes of effective college teachers on the survey instrument. The sample, which included 328 early childhood education majors, was selected from the population by using stratified, random sampling technique during the 1991-1992 academic term in Taiwan. The measurement tool was revised and translated from the "Questionnaire on Student Opinions of the Most Important Attributes of Effective College Teaching."



Research question 1 was answered using the percentage of responses which were considered to be the most important. Research questions 2 and 3 were tested using the one-way MANOVA. Chapter 4 contains the presentation and analysis of data according to the research questions of this study.

## CHAPTER 4

### PRESENTATION OF THE DATA

A description of the returns generated by the surveys is presented in this chapter. In addition, data pertinent to each research question are provided.

#### Return of the Questionnaires

Subjects for this inquiry were selected from four teachers colleges in Taiwan using a stratified, random sampling technique. A total of 328 early childhood education students participated in this study. Two hundred and twenty-seven students returned the questionnaires within 2 weeks of the initial mailing. The return rate after the second mailing increased to 287 of the 328 subjects, or 87.5%.

Returned questionnaires were examined carefully. Among the 287 returned questionnaires, 4 questionnaires were answered incompletely and were set aside as unusable. The remaining 283 questionnaires were analyzed for the study.

#### Data Pertinent to Each Research Question

Research question 1 dealt with the important attributes of effective college teachers as indicated by early childhood education students. Items indicated by at least 50% of the respondents were considered to be important

attributes. Research question 2 concerned significant differences in students' perceptions of important attributes of effective college teachers by grade level and previous teaching experience. A one-way MANOVA was utilized to answer this question. Research question 3 concerned significant differences in students' perceptions of important attributes of effective college teachers among the selected colleges. A one-way MANOVA was also employed to answer this question. Data for each of the research questions are presented as follows.

#### Students' Perceptions of the Most Important Attributes of Effective College Teachers

Early childhood education students' perceptions of the most important attributes of effective college teachers are addressed in the following analysis. As shown in Table 3, early childhood education students indicated 20 items as important attributes of effective college teachers.

More than three-fourths of the respondents considered item 38--Treats students with respect, as an important attribute of effective college teachers. This item was considered to be an important attribute by the largest percentage of subjects.

Item 6--Motivates students to do their best, item 17--Establishes good rapport with students in the classroom, item 45--Uses teaching methods which enable students to achieve objectives of the course, and item 48--

Table 3

Percentages of the Important Attributes Indicated by Early  
Childhood Education Students

No.	Item	Percent
5.	Acknowledge questions to the best of his ability	51.6
6.	Motivates students	65.4
9.	Has practical experience	58.7
10.	Communicates effectively	59.0
17.	Establishes good rapport	66.1
18.	Makes an effort to know students	60.4
19.	Demonstrates comprehensive knowledge	57.2
25.	Establishes interest in subject being taught	61.8
29.	Demonstrates a stable, level-headed personality	54.4
31.	Patiently assists students	55.1
33.	Is well prepared for class	51.9
38.	Treats students with respect	78.1
43.	Earns the respect of students	57.2
44.	Encourages intelligent, independent thought of students	54.4
45.	Uses effective teaching methods	65.4
46.	Presents an extensive lucid syllabus	50.2
48.	Seldom uses sarcasm with students	66.8
50.	Is fair to students	61.1

Table 3 continued

No.	Item	Percent
54.	Exhibits a genuine sense of humor	51.2
55.	Encourages moral responsibility	59.4

Note: N = 283

Seldom uses sarcasm with students, were indicated as important attributes of effective college teachers by approximately 65% of the early childhood education students. Approximately three-fifths of the subjects chose 6 items as important attributes of effective college teachers. Those attributes were: item 9--Has practical experience in the field in which the professor is teaching, item 10--Communicates effectively at levels appropriate to the preparedness of students, item 18--Makes an effort to know students in the classroom, item 25--Establishes sincere interest in subject being taught, item 50--Is fair to students in evaluation procedures, and item 55--Encourages moral responsibility in students by his or her example.

Item 19--Demonstrates comprehensive knowledge of his or her subject, item 29--Demonstrates a stable, level-headed personality, item 31--Patiently assists students with their problem, item 43--Earns the respect of students, and item 44--Encourages intelligent, independent thought of students earned support as important attributes of effective college

teachers from about 55% of the respondents. The remaining 4 items, item 5--Acknowledges all questions to the best of his or her ability, item 33--Is well prepared for class, item 46--Presents an extensive lucid syllabus for courses, and item 54--Exhibits a genuine sense of humor were indicated as important attributes of effective college teachers by approximately one-half of the early childhood education students.

#### Differences of the Important Attributes of Effective College Teachers by Grade Level

The following analysis addresses differences in students' perceptions of the importance of attributes of effective college teachers based on the subjects' grade level. The grade level of early childhood education students at teachers colleges in Taiwan included only freshmen and sophomores. One hundred and forty-six students were freshmen and 137 were sophomores. A one-way MANOVA was employed to test the significance of difference among the 20 important attributes expressed by the early childhood education students.

As displayed in Table 4, both freshman and sophomore students agreed upon the degree of importance on 14 items. Six items, 5, 6, 10, 29, 45, and 54, contained significant differences, however. Those items were: Acknowledges all questions to the best of his or her ability, motivates students to do his or her best, communicates effectively at

Table 4

Differences of the Important Attributes of Effective College Teachers by Grade Level

No.	Item	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
5.	Acknowledges questions to the best of his ability	3.229	3.229	8.20	0.005**
6.	Motivates students	1.864	1.864	5.72	0.018*
9.	Has practical experience	0.547	0.547	1.13	0.289
10.	Communicates effectively	3.973	3.973	8.81	0.003**
17.	Establishes good rapport	0.000	0.000	0.00	0.995
18.	Makes an effort to know students	0.556	0.556	1.26	0.263
19.	Demonstrates comprehensive knowledge	0.192	0.192	0.06	0.809
25.	Establishes interest in subject being taught	0.856	0.856	1.80	0.181
29.	Demonstrates a stable, level-headed personality	3.192	3.192	6.01	0.015*
31.	Patiently assists students	0.775	0.775	1.80	0.181
33.	Is well prepared for class	0.140	0.140	0.36	0.553
38.	Treats students with respect	0.016	0.016	0.08	0.780

Table 4 continued

No.	Item	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
43.	Earns the respect of students	0.637	0.637	1.63	0.203
44.	Encourages intelligent, independent thought of students	0.326	0.326	0.86	0.354
45.	Uses effective teaching methods	2.190	2.190	6.96	0.009**
46.	Presents an extensive lucid syllabus	0.370	0.370	0.68	0.409
48.	Seldom uses sarcasm with students	0.081	0.081	0.14	0.704
50.	Is fair to students	0.019	0.019	0.05	0.832
54.	Exhibits a genuine sense of humor	3.559	3.559	5.80	0.017*
55.	Encourages moral responsibility	0.008	0.008	0.01	0.903

Note: Freshmen = 146, sophomores = 137; \*p < .05, \*\*p < .01  
DF = 1.

levels appropriate to the preparedness of students, demonstrates a stable, level-headed personality, uses teaching methods which enable students to achieve objectives of the course, and exhibits a genuine sense of humor, respectively.



Differences of the Important Attributes of Effective College Teachers by Previous Teaching Experiences

The following analysis addresses differences in students' perceptions of the importance of attributes of effective college teachers based on the subjects' previous teaching experiences. Among the 283 respondents, 179 students did not have teaching experiences before they attended teachers colleges, and 104 students had previous teaching experiences. A one-way MANOVA was utilized to test the significance of difference among the 20 important attributes expressed by early childhood education students.

As shown in Table 5, there were no significant differences on 11 of the items between students who did and did not have previous teaching experiences. Nonetheless, items 9, 17, 25, 29, 33, 38, 44, 54, and 55 had significant differences between the two groups. These items were: has practical experience in the field in which the professor is teaching, establishes good rapport with students in the classroom, establishes sincere interest in subject being taught, demonstrates a stable, level-headed personality, is well-prepared for class, treats students with respect, encourages intelligent, independent thought by students, exhibits a genuine sense of humor, and encourages moral responsibility in students by his or her examples.

Table 5

Differences of the Important Attributes of Effective College Teachers by Previous Teaching Experiences

No.	Item	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
5.	Acknowledge questions to the best of his ability	0.007	0.007	0.02	0.893
6.	Motivates students	0.701	0.701	2.12	0.146
9.	Has practical experience	6.256	6.256	13.48	0.000**
10.	Communicates effectively	1.692	1.692	3.69	0.056
17.	Establishes good rapport	1.350	1.350	4.04	0.045*
18.	Makes an effort to know students	0.253	0.253	0.57	0.450
19.	Demonstrates comprehensive knowledge	0.857	0.857	2.63	0.106
25.	Establishes interest in subject being taught	2.859	2.859	6.09	0.014*
29.	Demonstrates a stable, level-headed personality	2.718	2.718	5.10	0.025*
31.	Patiently assists students	0.620	0.620	1.48	0.225
33.	Is well prepared for class	5.619	5.619	15.09	0.000**
38.	Treats students with respect	1.273	1.273	6.42	0.011**
43.	Earns the respect of students	0.612	0.612	1.56	0.212

Table 5 continued

Item	SS	MS	F	p
44. Encourages intelligent, independent thought of students	1.527	1.527	4.08	0.044*
45. Uses effective teaching methods	0.431	0.431	1.34	0.248
46. Presents an extensive lucid syllabus	1.301	1.301	2.42	0.121
48. Seldom uses sarcasm with students	0.017	0.017	0.03	0.861
50. Is fair to students	1.170	1.170	2.86	0.092
54. Exhibits a genuine sense of humor	8.747	8.747	14.69	0.000**
55. Encourages moral responsibility	4.356	4.356	8.97	0.003**

Note: 179 students did not have teaching experiences, 104 students had previous teaching experiences;  
\*p < .05, \*\*p < .01, DF = 1.

#### Differences of the Important Attributes of Effective College Teachers by School

The following analysis addresses differences in students' perceptions of the importance of attributes of effective college teachers based on the school attended. Students at four selected teachers colleges participated in this study. A one-way MANOVA was used to test the significance of differences among the 20 attributes indicated as important by the participants.

As seen in Table 6, no significant differences were evident on the degree of importance placed on any one of the 20 important attributes based on school attended. This means that early childhood education students at any selected teachers college agreed upon the degree of importance on all of the 20 important attributes. Therefore, further analysis by using Tukey was unnecessary.

Table 6

Differences of the Important Attributes of Effective College Teachers by School

No.	Item	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
5.	Acknowledge questions to the best of his ability	1.804	0.601	1.50	0.216
6.	Motivates students	1.005	0.339	1.01	0.389
9.	Has practical experience	0.029	0.010	0.02	0.996
10.	Communicates effectively	2.531	0.844	1.84	0.141
17.	Establishes good rapport	0.577	0.193	0.57	0.636
18.	Makes an effort to know students	1.730	0.577	1.31	0.272
19.	Demonstrates comprehensive knowledge	1.981	0.660	2.04	0.109
25.	Establishes interest in subject being taught	1.937	0.646	1.36	0.256

Table 6 continued

No.	Item	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
29.	Demonstrates a stable, level-headed personality	1.843	0.614	1.14	0.334
31.	Patiently assists students	1.268	0.423	1.00	0.391
33.	Is well prepared for class	0.882	0.294	0.75	0.523
38.	Treats students with respect	0.750	0.250	1.24	0.295
43.	Earns the respect of students	0.560	0.187	0.47	0.702
44.	Encourages intelligent, independent thought of students	0.727	0.242	0.64	0.591
45.	Uses effective teaching methods	0.200	0.066	0.21	0.893
46.	Presents an extensive lucid syllabus	2.028	0.676	1.25	0.291
48.	Seldom uses sarcasm with students	1.824	0.608	1.09	0.355
50.	Is fair to students	1.723	0.575	1.40	0.243
54.	Exhibits a genuine sense of humor	0.376	0.125	0.20	0.897
55.	Encourages moral responsibility	2.581	0.680	1.74	0.160

Note: \*p < .05, \*\*p < .01, DF = 3.

## CHAPTER 5

### SUMMARY, FINDINGS AND DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

The purposes of this study were (a) to identify the most important attributes of effective college teachers as perceived by students in teachers colleges in Taiwan; (b) to investigate the influence of various factors on students' perceived attributes of effective college teachers; and (c) to determine if the students in different Taiwanese teachers colleges differed in their opinions of the most important attributes of effective college teachers. This chapter contains a summary, the findings and discussions, conclusions, and recommendations for further research in the area of student evaluations of effective college teachers in Taiwan.

#### Summary

Research questions were addressed using a survey of early childhood education students during the 1991-1992 academic term at four selected teachers colleges in Taiwan. The survey instrument was revised and translated from the "Questionnaire on Student Opinions of the Most Important Attributes of Effective College Teaching," developed by the

Office of Research Planning at the University of Toledo in Ohio.

A five-point Likert-type scale was used to measure respondents' perceptions concerning important attributes of effective college teachers. Twenty early childhood education students at Hualien Teachers College participated in a pilot test of the questionnaire in order to aid in the revision of the instrument. Content validity was established through a panel of five experts in Taiwan.

Questionnaires were delivered to 328 subjects to initiate the main study. Two hundred and eighty-seven early childhood education students returned the questionnaires; 283 provided usable data. Techniques of statistical analysis included percentages and one way MANOVA.

### Findings and Discussions

The discussion of findings of this study is divided into sections based upon three research questions posed for the research. Summarized findings and a discussion of the individual summarized findings are included in each of the three sections.

#### Students' Perceptions of the Most Important Attributes of Effective College Teachers

The following findings address the perceptions of early childhood education students regarding the most important attributes of effective college teachers. The respondents

selected 20 items from 55 statements as important attributes of effective college teachers. These 20 important attributes are summarized as rapport (items 17, 38, 43, 48), effective teaching methods (item 45), enthusiasm (items 6, 18, 25, 31, 44), fairness (item 50), interaction (item 10), practical experiences (item 9), personality (items 29, 54, 55), clarity (items 5, 19, 46), and being well-prepared (item 33).

The attribute of rapport was strongly emphasized by the early childhood education students. The respondents chose "treats students with respect" as the most important attribute among the 55 statements. In addition, seldom uses sarcasm with students, establishes good rapport with students, as well as earns the respect of students were indicated by early childhood education students as important attributes of effective college teachers. These confirm the findings of Murray (1983) and Feldman (1988), whose studies were carried out on a different population in a different time frame in the United States.

Using effective teaching methods was perceived by 65% of the respondents as an important attribute of effective college teachers. Since teaching methods strongly affect students' learning outcome, the fact that subjects in this study selected this item as an important attribute is not surprising. This finding is very similar to the findings of Feldman's study in 1988.



Five of the items selected by early childhood education students could be classified under the category of enthusiasm. Only when an instructor expresses enthusiasm in teaching, can students feel warm, comfortable and willing to study. However, if an instructor cannot show enthusiasm in teaching, students feel bored. Enthusiasm was also addressed in studies by Bergman and Gaitskill (1990), Feldman (1988), Murray (1983), and Sass (1989).

Early childhood education students indicated that being fair to students in evaluation procedures is an important attribute of effective college teachers. Since tests are given very frequently by teachers in Taiwan, the fact that more than three-fifths of the subjects selected this item as the most important attribute seems reasonable. This finding confirms the results of Bergman and Gaitskill's study in 1990.

Interaction between teachers and students has been highlighted in several investigations. Murray (1985), for example, found that interaction was one of the important attributes of classroom teaching behaviors related to college teaching effectiveness. Approximately 60% of the early childhood education students in this study considered communicates effectively at levels appropriate to the preparedness of students to be an important attribute of effective college teachers.

Since early childhood education students will teach in pre-schools after they graduate from teachers college, practical experience is important for their profession. The students not only wanted to learn the theory of the educational profession but also wanted to gain practical experience from professors. This finding is unique because no other similar results are documented in the related literature.

Feldman (1988) found personality characteristics of an instructor to be a comprehensive factor of effective college teaching. Items 29, 54, and 55 of this study could be classified as a personality factor related to effective college teaching.

Approximately 55% of the early childhood education students perceived the demonstration of a stable, level-headed personality to be an important attribute of effective college teachers. The finding that the exhibition of a genuine sense of humor was indicated by more than half of the subjects as an important attribute is surprising, because most Chinese lack a sense of humor. This finding probably is an indication that the early childhood education students wanted their instructors to exhibit a genuine sense of humor so that learning was enjoyable and interesting. The fact that approximately three-fifths of the respondents indicated that the encouragement of moral responsibility in students by teachers' examples was predicable because

teachers are considered models in many aspects in Chinese society.

The attribute of clarity was included items 5, 19, and 46. Teachers must guide students learning. Therefore, teachers' ability to express ideas and course content clearly is significant to students' learning process. The early childhood students' indication that clarity was important attribute supports the studies of Bergman and Gaitskill (1990) and Feldman (1988).

Being well-prepared for class was indicated by more than half of the subjects as an important attribute of effective college teachers. Feldman (1988) and Sass (1989), in their studies, addressed the idea that being well-prepared was a significant component of effective teaching. It is obvious that teachers must be well-prepared for class in order to successfully teach.

#### Differences of the Important Attributes of Effective College Teachers by Grade Level

Freshman and sophomore students differed on the degree of importance given to 6 of the 20 most important attributes of effective college teachers. The significant differences of these 6 items regarding students' perceptions of their importance are discussed in the following paragraphs. Acknowledging all questions to the best of his or her ability, demonstrating a stable level-headed personality, and exhibiting a genuine sense of humor were perceived as

more important attributes of effective college teachers by sophomore students than by freshman students. However, motivating students to do their best, communicating effectively at levels appropriate to the preparedness of students, and using teaching methods which enable students to achieve objectives of the course, were perceived as important attributes of effective college teachers by more freshman students than sophomore students.

Since the freshmen only had approximately one month and half experience at a teachers college, they were just beginning their college life. Most of them spent a lot of time in learning the information presented in early childhood education professional subjects. Because of their inexperience, they probably did not have the ability to ask appropriate questions. Their perceptions of a teacher acknowledging all questions to the best of his or her ability was, therefore, not significantly important. However, because of their experience, the perceptions of sophomore students were more believable.

The freshman students also perceived the demonstration of a stable level-headed personality to be significantly less important than did sophomore students. It is possible that the freshmen were not able to understand the teachers' personalities as well as the more experienced sophomores. It is also possible that the less-experienced freshman

students were not aware of the influence of teachers' personalities on their ability to teach effectively.

There was also a significant difference between freshman and sophomore students regarding the importance given to the exhibition of a genuine sense of humor. Because the sophomore students had more than a year of learning experiences with college teachers, they understood college teachers better than did the freshmen. Hence, they were more aware of the importance of a teacher's humor.

Motivation of students was perceived as significantly more important by freshman students than by sophomore students. This was a predictable finding because freshmen were eager to acquire early childhood education professional knowledge, they probably expected college teachers to motivate their learning.

Freshmen considered teachers' ability to communicate effectively at levels appropriate to the preparedness of students significantly more important than did sophomore students. Because the freshman students had just come from the high school environment where communication with teachers is primary one-way and the goal is to obtain high test scores, they were eager to argue or discuss their opinions with their professors and, thus, had a strong desire to interact with them. The sophomores, on the other hand, probably took this communication for granted.

Because the freshman students were new at college campuses, they needed guidance from instructors to understand the contents of subjects. Hence, it is reasonable that freshmen perceived the use of teaching methods which enable students to achieve objectives of the course to be significantly more important than did sophomore students.

#### Differences of the Important Attributes of Effective College Teachers by Previous Teaching Experiences

Students who had previous teaching experiences and those who did not have teaching experiences before they attended teachers colleges differed on the degree of importance given to 9 of the 20 important attributes of effective college teachers. It is interesting that the students who had previous teaching experiences considered all of the 9 items to be significantly more important than did the students who did not have previous teaching experiences. Although the students who had previous teaching experiences perceived all of the 20 important attributes as more important than did students who did not have teaching experience, their perceptions of the importance of 11 items were not significantly different.

The differences in the importance given to various attributes may be attributable to teaching experience. Although both groups of students perceived almost all of the 20 attributes as being important, significant differences

were obviously related to teaching experience. For example, the item concerning the teacher having practical experience in the field and the item concerning the teacher being well-prepared for class probably were considered more important by students who had previous teaching experience than by students who did not have previous teaching experience. The experience of teachers exhibiting a genuine sense of humor was another attribute that students perceived as more important for effective teaching after they had teaching experience.

#### Differences of the Important Attributes of Effective College Teachers by School

There were no significant differences in students' perceptions of the degree of importance of any of the 20 important attributes based on the school attended. This was probably because early childhood education students at all teachers colleges come from all areas of the country. All of the students were required to pass the college entrance examination in order to attend the teachers colleges. There were no differences in the background of students at the selected teachers college. Another similarity was that the required and selected courses at all of the teachers colleges for early childhood education students were the same. More than 95% of the students lived on campus at the teachers colleges, and all of the teachers colleges are public institutions which are supported by the central

government. The fact that students' perceptions of which attributes of effective college teachers showed no differences based on schools was not surprising.

#### Conclusion

The following conclusions are based on the findings of this study:

1. Early childhood education students in teachers colleges in Taiwan value these factors as important attributes of effective college teachers: rapport, effective teaching methods, enthusiasm, fairness, interaction, practical experiences, personality, clarity, and being well-prepared.

2. Sophomore students in teachers colleges in Taiwan give more value than freshman students to these factors: acknowledging all questions to the best of their ability, demonstrating a stable level-headed personality, and exhibiting a genuine sense of humor. Freshman students value these factors more than sophomore students: motivating students to do his or her best, communicating effectively at levels appropriate to the preparedness of students, and using teaching methods which enable students to achieve objectives of the course.

3. Early childhood education students who have previous teaching experiences value all of the important attributes higher than students who do not have teaching experiences before they attended teachers colleges.



Sophomore and freshman students in teachers colleges in Taiwan do differ on the value assigned to these factors: having practical experience; establishing good rapport, establishing interest in the subject being taught; demonstrating a stable, level-headed personality; being well-prepared for class; treating students with respect; encouraging intelligent, independent thought of students; exhibiting a genuine sense of humor; and encouraging moral responsibility.

4. Students attending different teachers colleges do not differ in the value they assign the factors studied.

#### Recommendations

The findings of this study suggest several recommendations for developing a student evaluation form for use in Taiwan. Further research in related areas is also suggested.

1. It is recommended that the student evaluation form for early childhood education students include the 20 important attributes of effective college teachers found in this study.

2. In order to develop the student evaluation form for other types of universities and colleges in Taiwan, a study should be conducted to investigate the perceptions of students regarding the important attributes of effective college teachers at other institutions.

3. It is recommended that a study be conducted to compare the perceptions of faculty members and students regarding the important attributes of effective college teachers.

4. Further study should be conducted to investigate whether other factors, such as gender, academic area, class size, grade expectations, or future career plans really affect students' perceptions of important attributes of effective college teachers.

APPENDIX A  
QUESTIONNAIRE ON STUDENT OPINIONS OF THE MOST IMPORTANT  
ATTRIBUTES OF EFFECTIVE COLLEGE TEACHING  
AND LETTER TO STUDENTS

Please answer the questions in Part I and then read and follow the directions for answering the questions in Part II.

Part I

Please indicate your:

1. College\_\_\_\_\_.
2. Grade (Freshman or Sophomore)\_\_\_\_\_.
3. Previous years of teaching experiences\_\_\_\_\_.

Part II. The following are statements pertaining to your opinions of the most important attributes of effective college teachers. Please indicate whether, in your view, the attribute is most important, very important, of average importance, somewhat important, or of no importance. All information provided in response to this questionnaire will be kept strictly confidential. Your careful responses are essential to this study.

Rating: 5 -- Most important  
 4 -- Very important  
 3 -- Of average importance  
 2 -- Somewhat important  
 1 -- Of no Importance

- |   |   |   |   |   |
|---|---|---|---|---|
| 1. Evidences better than average speech qualities.....5   | 4 | 3 | 2 | 1 |
| 2. Constructs tests which lead to understanding on the part of the students rather than rote memory ability.....5 | 4 | 3 | 2 | 1 |
| 3. Provides several test opportunities for students.....5   | 4 | 3 | 2 | 1 |
| 4. Engages in continued formal study in his or her field.....5  | 4 | 3 | 2 | 1 |
| 5. Acknowledges all questions to the best of his or her ability.....5   | 4 | 3 | 2 | 1 |
| 6. Motivates students to do his or her best..5  | 4 | 3 | 2 | 1 |
| 7. Explains grading standards.....5   | 4 | 3 | 2 | 1 |
| 8. Publishes materials related to his or her subject field.....5  | 4 | 3 | 2 | 1 |
| 9. Has practical experience in the field in which the professor is teaching.....5                                 | 4 | 3 | 2 | 1 |

Rating:	5 -- Most important					
	4 -- Very important					
	3 -- Of average importance					
	2 -- Somewhat important					
	1 -- Of no Importance					
10.	Communicates effectively at levels appropriate to the preparedness of students.....	5	4	3	2	1
11.	Identifies comments which are his or her personal opinion.....	5	4	3	2	1
12.	Challenges students' convictions.....	5	4	3	2	1
13.	Utilizes visual aids to assist in subject matter achievement with students.....	5	4	3	2	1
14.	Announces tests in advance.....	5	4	3	2	1
15.	Makes written comments on corrected, returned assignments.....	5	4	3	2	1
16.	Presents organized supplementary course materials to students.....	5	4	3	2	1
17.	Establishes good rapport with students in the classroom.....	5	4	3	2	1
18.	Makes an effort to know students in the classroom.....	5	4	3	2	1
19.	Demonstrates comprehensive knowledge of his or her subject.....	5	4	3	2	1
20.	Exhibits an intelligent personal philosophy of life.....	5	4	3	2	1
21.	Encourages student participation in class.....	5	4	3	2	1
22.	Begins and ends classes on time.....	5	4	3	2	1
23.	Accepts justified constructive criticism by qualified persons.....	5	4	3	2	1
24.	Shares departmental duties with his or her colleagues.....	5	4	3	2	1

Rating: 5 -- Most important  
 4 -- Very important  
 3 -- Of average importance  
 2 -- Somewhat important  
 1 -- Of no Importance

25.	Establishes sincere interest in subject being taught.....5	4	3	2	1
26.	Takes measures to prevent cheating by students.....5	4	3	2	1
27.	Recognizes his or her responsibility for the academic success of students.....5	4	3	2	1
28.	Devotes time to student activities on campus.....5	4	3	2	1
29.	Demonstrates a stable, level-headed personality.....5	4	3	2	1
30.	Returns graded assignments promptly.....5	4	3	2	1
31.	Patiently assists students with their problems.....5	4	3	2	1
32.	Holds memberships in scholarly organizations.....5	4	3	2	1
33.	Is well prepared for class.....5	4	3	2	1
34.	Holds high standards of achievement for students.....5	4	3	2	1
35.	Is knowledgeable about the community in which he or she lives.....5	4	3	2	1
36.	Is readily available for consultation with students.....5	4	3	2	1
37.	Displays broad intellectual interests....5	4	3	2	1
38.	Treats students with respect.....5	4	3	2	1
39.	Raises the aspiration level of students..5	4	3	2	1
40.	Is able to show practical application of his or her subject matter.....5	4	3	2	1
41.	Organizes courses in a logical fashion...5	4	3	2	1

Rating: 5 -- Most important  
 4 -- Very important  
 3 -- Of average importance  
 2 -- Somewhat important  
 1 -- Of no Importance

42.	Makes appearances which assist programs of community organizations.....5	4	3	2	1
43.	Earns the respect of students.....5	4	3	2	1
44.	Encourages intelligent, independent thought by students.....5	4	3	2	1
45.	Uses teaching methods which enable students to achieve objectives of the course.....5	4	3	2	1
46.	Presents an extensive lucid syllabus for courses.....5	4	3	2	1
47.	Is consistently involved in research.....5	4	3	2	1
48.	Seldom uses sarcasm with students.....5	4	3	2	1
49.	Indicates that the demands of each assignment have been considered carefully.....5	4	3	2	1
50.	Is fair to students in evaluation procedures.....5	4	3	2	1
51.	Relates course materials to these of other courses.....5	4	3	2	1
52.	Uses more than one type of evaluation device.....5	4	3	2	1
53.	Is neatly dressed.....5	4	3	2	1
54.	Exhibits a genuine sense of humor.....5	4	3	2	1
55.	Encourages moral responsibility in students by his or her examples.....5	4	3	2	1



師範學院幼師科系學生對於良好的大學教師之重要特質  
意見調查表

親愛的同學您好：

本問卷主要的目的是要了解您對於良好大學教師重要特質的看法，以做為提升大學教學品質的參考，所以您所提供的資料相當的寶貴。

本問卷採無記名方式，對於您所填答的資料絕對保密，請您放心作答。

謝謝您的合作！

國立花蓮師範學院幼兒教育師資科  
中華民國八十年十月

第一部份：基本資料

1. 校名：國立\_\_\_\_\_師範學院

2. 年級： 1. 一年級  2. 二年級

3. 就讀師範學院以前有沒有教學經驗？  1. 有  2. 沒有

(請繼續填答)

第二部分：

填答說明：下列55題是有關於您對於良好(優秀)大學教師之重要特質的意見，請您依序填答。如果您認為該題敘述非常重要，請圈5；重要，請圈4；普通重要，請圈3；不重要，請圈2；非常不重要，請圈1。

	非 常 重 要	重 要	普 通 重 要	不 重 要	非 常 不 重 要
1. 有較好的講演技巧(品質) .....	5	4	3	2	1
2. 設計的試題能測試學生的理解力，而非測試單純的記憶力...	5	4	3	2	1
3. 提供學生多種測驗的機會 .....	5	4	3	2	1
4. 在他(她)的專業領域內繼續研究 .....	5	4	3	2	1
5. 盡可能回答學生的問題 .....	5	4	3	2	1
6. 激勵學生發揮最大的潛能 .....	5	4	3	2	1
7. 說明學期成績評量的標準 .....	5	4	3	2	1
8. 發表與專業有關的論文 .....	5	4	3	2	1
9. 對專業領域有實務的經驗 .....	5	4	3	2	1
10. 針對學生個別能力進行有效的溝通 .....	5	4	3	2	1
11. 對於別人的評論能加以說明 .....	5	4	3	2	1
12. 容許學生就不同的觀點提出批判性的看法 .....	5	4	3	2	1
13. 使用視聽媒體以幫助學生理解 .....	5	4	3	2	1
14. 預先告知學生考試的日期 .....	5	4	3	2	1
15. 在學生的作業上批註意見 .....	5	4	3	2	1
16. 提供學生有用的補充教材 .....	5	4	3	2	1
17. 與學生保持良好的師生關係 .....	5	4	3	2	1
18. 盡力去了解學生 .....	5	4	3	2	1
19. 對專業知識能充分的表達出來 .....	5	4	3	2	1
20. 表達個人對人生的看法 .....	5	4	3	2	1
21. 鼓勵學生熱心參與課內及課外的活動 .....	5	4	3	2	1
22. 準時上下課 .....	5	4	3	2	1
23. 接受學生建設性的批評 .....	5	4	3	2	1
24. 與同事分擔科系內的行政工作 .....	5	4	3	2	1
25. 對自己任教的科目有真正的興趣 .....	5	4	3	2	1
26. 採取有效的措施以防止學生作弊 .....	5	4	3	2	1

(請繼續填答)

	非 常 重 要	重 要	普 通 重 要	不 重 要	非 常 不 重 要
27. 認識自己有責任來協助學生獲得學業上的成就.....	5	4	3	2	1
28. 抽出時間參加學生校園內、外的活動.....	5	4	3	2	1
29. 有穩定的性格.....	5	4	3	2	1
30. 及時發還批改過的学生作業.....	5	4	3	2	1
31. 耐心的幫助學生解決疑難問題.....	5	4	3	2	1
32. 參加學術性的組織(團體).....	5	4	3	2	1
33. 課前準備充分.....	5	4	3	2	1
34. 設法提高學生的學業成就.....	5	4	3	2	1
35. 關心社區的活動.....	5	4	3	2	1
36. 樂於接受學生的詢問.....	5	4	3	2	1
37. 有廣泛的興趣.....	5	4	3	2	1
38. 尊重學生.....	5	4	3	2	1
39. 激勵學生追求更高的目標.....	5	4	3	2	1
40. 能指出所任教科目的實際用處.....	5	4	3	2	1
41. 教學有條不紊.....	5	4	3	2	1
42. 出席(參加)社區的活動.....	5	4	3	2	1
43. 獲得學生的尊重.....	5	4	3	2	1
44. 鼓勵學生獨立思考.....	5	4	3	2	1
45. 運用各種有效的教學方法來幫助學生學習.....	5	4	3	2	1
46. 發給學生清晰的教學大綱.....	5	4	3	2	1
47. 繼續不斷的從事研究.....	5	4	3	2	1
48. 不諷刺挖苦學生.....	5	4	3	2	1
49. 詳細考慮作業的範圍與要求.....	5	4	3	2	1
50. 評分過程公平合理.....	5	4	3	2	1
51. 介紹與本科目有關的教材.....	5	4	3	2	1
52. 使用各種評量成績的方法.....	5	4	3	2	1
53. 穿著整潔.....	5	4	3	2	1
54. 談吐幽默.....	5	4	3	2	1
55. 以身作則，鼓勵學生講道德、守義務.....	5	4	3	2	1

(謝謝您的合作！)

A Letter for Early Childhood Education Students

Dear Student:

As part of my doctoral research, I am conducting a study on "Early Childhood Education Students' Perceptions of the Most Important Attributes of Effective College Teachers at Teachers Colleges in Taiwan". I believe this study will help colleges to better understand students' opinions of effective college teachers. You have been randomly selected to participate in this important investigation.

Attached is the "Questionnaire on Student Opinions of the Most Important Attributes of Effective College Teaching." This questionnaire has two parts. Part I is for demographic information. Part II includes statements regarding attributes of effective college teachers. All of your responses will be kept confidential. Please complete and return the questionnaire to your class leader. Completed questionnaires will be mailed back in a stamped self-addressed envelope by your department chair.

Thank you for your cooperation.

Sincerely yours,

Su-Yu Huang Yang  
Doctoral Student  
University of North Texas  
Instructor  
Hualien Teachers College

親愛的同學： 您好！

本人正主持「師院幼師科學生對於有效的大學教師特質之意見調查」作為博士研究的一部分。我深信本研究有助於師院對於學生有關有效大學教師特質之進一步了解，您被選為本主要研究的參與者。隨函附上「師院學生對於有效的大學教師特質之意見調查問卷」乙份。這份問卷有兩部份：第一部份是基本資料，第二部份包含有關有效大學教師特質之敘述。您的答案一律保密。請填妥後把問卷交 貴班班長。作完的問卷將由 貴科科主任用回件信封寄回。謝謝您的合作。

美國北德州立大學博士候選人  
國立花蓮師範學院講師  
黃 素 玉 敬上

APPENDIX B

LETTER TO THE DIRECTOR OF THE OFFICE OF RESEARCH  
PLANNING, THE UNIVERSITY OF TOLEDO, OHIO.

Dr. Patsy F. Scott, Director  
Office of Research Planning  
University of Toledo  
Toledo, OH 43606-3398

July 10, 1990

Dear Dr. Scott:

Please allow me to introduce myself. I am a doctoral student at the University of North Texas, majoring in Higher Education, with Early Childhood Education as my teaching field. In reviewing the literature on student ratings of college faculty, both the chairman of my doctoral committee, Dr. Ron Newsom, and I found that you had designed and field-tested an excellent comprehensive and relevant questionnaire on criteria of effective teaching. I am writing to ask your permission to use your questionnaire in a study on students' perceptions of effective teaching attributes at various teachers' colleges in Taiwan.

The study is entitled "Early Childhood Education Students' Perceptions of the Most Important Attributes of Effective College Teachers in Taiwan." This inquiry is necessary because colleges in Taiwan do not use student evaluations of college teachers. Therefore, one way of getting feedback is to determine what students think are the most important attributes of effective college teachers. Your questionnaire will be an invaluable instrument in achieving this goal. Most of the data will be collected in Taiwan. At the study's completion, I will gladly send you a copy of the results of this investigation.

Again, I would greatly appreciate your permission to use your questionnaire "Questionnaire on Student Opinions of the Most Important Attributes of Effective College Teaching". If you have any questions, please feel free to call me at (817) 898-1503, or Dr. Newsom at (817) 565-2045. You may contact either of us by writing the Department of Higher Education, University of North Texas, Denton, TX., 76203.

Sincerely,

Su-Yu Huang Yang

APPENDIX C

PERMISSION FROM THE OFFICE OF RESEARCH PLANNING,  
THE UNIVERSITY OF TOLEDO, OH.



# The University of Toledo



Toledo, Ohio 43606-3390

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Office of the Vice President  
for Academic Affairs  
(419) 537-2587, 537-4117

July 23, 1991

Su Yu Yang  
1614 W. Hickory St.  
Denton, TX 76201

Your letter of July 10, 1991 requesting permission to use questionnaire items I had developed has been directed to me by Mrs. Patsy Scott, to whom it had been addressed. You are welcome to use the questionnaire items in your research and doctoral study.

I have enclosed the photocopies you sent, offering a few suggestions for changes in the wording to make the items gender appropriate.

Thank you for asking permission to use the material and best wishes for your success.

Sincerely,

A handwritten signature in dark ink, appearing to read "R. E. Perry".

Richard E. Perry  
Assoc. V. P. for Academic Affairs Emeritus

RRP:gk

Encl.

APPENDIX D  
WORKSHEET FOR ESTABLISHING CONTENT VALIDITY

Dear Dr. x x:

Attached is the instrument, "Questionnaire on Student Opinions of the Most important Attributes of Effective College Teaching." This instrument will be utilized in a study on "Early Childhood Education Students' Perceptions of Important Attributes of Effective College Teachers in Taiwan." Your help is needed in order to establish the content validity of each item in this instrument. For each item of the questionnaire, please indicate your acceptance or rejection by checking the appropriate column of agree (A) or disagree (D) on each item. If you agree with the item, believe that it describes an attribute of effective college teachers, please check A. If you disagree with the item, believe that it is not an attribute of effective college teachers, please check D. Also, if further judgment is desired, please complete the appropriate headings provided below. Thanks for your valuable expertise and personal contribution.

1. A D 11. A D 21. A D 31. A D 41. A D 51. A D  
 2. A D 12. A D 22. A D 32. A D 42. A D 52. A D  
 3. A D 13. A D 23. A D 33. A D 43. A D 53. A D  
 4. A D 14. A D 24. A D 34. A D 44. A D 54. A D  
 5. A D 15. A D 25. A D 35. A D 45. A D 55. A D  
 6. A D 16. A D 26. A D 36. A D 46. A D 56. A D  
 7. A D 17. A D 27. A D 37. A D 47. A D 57. A D  
 8. A D 18. A D 28. A D 38. A D 48. A D 58. A D  
 9. A D 19. A D 29. A D 39. A D 49. A D  
 10. A D 21. A D 30. A D 40. A D 50. A D

Items that need to be revised in this instrument:

Other statements that need to be added in this instrument:

Comments:

親愛的 教授： 您好！

隨函附上「師院幼師科學生對於有效的大學教師特質之意見調查問卷」乙份。這份問卷將作為「師院幼師科學生對於有效的大學教師特質之意見調查研究」的工具。您的協助對於建立本問卷的內容效度相當重要。對於問卷的每一題，請分別指出您的同意或不同意。假如您認為該題在描述有效的大學教師特質，請選「同意」。假如您認為該題不足以描述有效的大學教師特質，請選「不同意」。如果您認為有必須補充的，請在底下所附的空白內加以說明，謝謝您的幫忙！

同 意	不 同 意	同 意	不 同 意	同 意	不 同 意	同 意	不 同 意
1. ( ) ( )	16 ( ) ( )	31 ( ) ( )	46 ( ) ( )				
2. ( ) ( )	17 ( ) ( )	32 ( ) ( )	47 ( ) ( )				
3. ( ) ( )	18 ( ) ( )	33 ( ) ( )	48 ( ) ( )				
4. ( ) ( )	19 ( ) ( )	34 ( ) ( )	49 ( ) ( )				
5. ( ) ( )	20 ( ) ( )	35 ( ) ( )	50 ( ) ( )				
6. ( ) ( )	21 ( ) ( )	36 ( ) ( )	51 ( ) ( )				
7. ( ) ( )	22 ( ) ( )	37 ( ) ( )	52 ( ) ( )				
8. ( ) ( )	23 ( ) ( )	38 ( ) ( )	53 ( ) ( )				
9. ( ) ( )	24 ( ) ( )	39 ( ) ( )	54 ( ) ( )				
10. ( ) ( )	25 ( ) ( )	40 ( ) ( )	55 ( ) ( )				
11. ( ) ( )	26 ( ) ( )	41 ( ) ( )	56 ( ) ( )				
12. ( ) ( )	27 ( ) ( )	42 ( ) ( )	57 ( ) ( )				
13. ( ) ( )	28 ( ) ( )	43 ( ) ( )	58 ( ) ( )				
14. ( ) ( )	29 ( ) ( )	44 ( ) ( )					
15. ( ) ( )	30 ( ) ( )	45 ( ) ( )					

必需要修正的題項：

必需要再加進來的題項：

總評：

APPENDIX E

LETTER FOR THE PRESIDENT OF TEACHERS COLLEGES



## University of North Texas

Department of Higher and Adult Education  
College of Education

July 16, 1991

Dr. Fred Fwu-tyan Ho, President  
National Pingtung Teachers College  
Pingtung, Taiwan, 90007

Dear Dr. Ho:

At the University of North Texas, we would like to study "Early Childhood Education Students' Perceptions of the Most Important Attributes of Effective College Teachers in Taiwan". We believe our study will help you to better understand students' opinions of effective college teachers in Taiwan.

We would like to know if you are willing to allow us to solicit responses from early childhood education students at your college in the 1991-1992 academic year. If so, please send us a letter by August 25, 1991 granting us this permission. If you so choose, we would be please to share the findings of this study with you.

We hope to have the pleasure and opportunity of working with you in the near future.

Please mail your response to:  
Su-Yu Yang  
1614 W. Hickory  
Denton, Texas 76201

Sincerely yours,

Su-Yu Yang  
Doctoral Student  
University of North Texas  
Instructor  
Hualien Teachers College

Ron Newsom, Ph.D  
Committee Chair



APPENDIX F  
LETTER FOR THE CHAIRPERSONS OF EARLY CHILDHOOD  
EDUCATION DEPARTMENT

Dear Chairperson,

September 22, 1991

At the University of North Texas I am conducting a study on "Early Childhood Education Students' Perceptions of the Most Important Attributes of Effective College Teachers in Taiwan." I believe that this inquiry will help you to better understand students' opinions on effective college teachers in Taiwan.

Would you please distribute the enclosed questionnaires during the class meeting to the selected students in your department? Their names with the identification numbers are in the attached list. Please ask the class leader to collect the completed questionnaires and deliver them to your office. After the completed questionnaires have been collected, please mail them back using the provided stamped, self-addressed envelope by October 20, 1991.

Your kind assistance will be greatly appreciated.

Sincerely yours,

Su-Yu Huang Yang  
Doctoral Student  
University of North Texas  
Instructor  
Hualien Teachers College



親愛的科主任： 您好！

我現在就讀於美國北德州立大學，正主持一項有關「師院幼師科學生對於有效的大學教師特質之意見調查」的研究。我相信這個研究將有助於師院對於學生有關有效的大學教師特質意見有進一步的了解。敬請幫忙在班會時把這些問卷發給貴科的學生。學生的名字和編碼都列在所附的表上，請您請班長發問卷，問卷填完後交回您辦公室。並請您在十月二十日以前將問卷寄回來。

非常感謝您的鼎力支持！

美國北德州立大學博士候選人

國立花蓮師範學院講師

黃 素 玉 敬上

APPENDIX G

COVER LETTER FOR THE FOLLOWING UP MAILING

November 4, 1991

Dear Student:

Several days ago, you received a questionnaire asking you about your opinions of the most important attributes of effective college teachers. To date, I have not received your returned questionnaire.

I believe that this study will help colleges to better understand students' opinions on effective college teachers in Taiwan. Your returned questionnaire will help me identify the important attribute of effective college teachers. Please take a few minutes today, fill out the questionnaire, and mail it in the envelope which I have provided.

Your help and cooperation are greatly appreciated.

Sincerely yours,

Su-Yu Huang Yang  
Doctoral Student  
University of North Texas  
Instructor  
Hualien Teachers College

親愛的同學： 您好！

幾天以前，您想必已收到一份有關最重要的大學教師特質的意見調查問卷，至今仍未收到您的這一份問卷。我深信這個研究將有助於師院對於學生有關有效大學教師特質之意見有進一步的了解。敬請您花數分鐘的時間把問卷填妥並放入附上的回件信封，以便寄回。非常感謝您的幫忙！

美國北德州立大學博士候選人

國立花蓮師範學院講師

黃 素 玉 敬上

## REFERENCES

- Abrami, P. C. (1989). How should we use student ratings to evaluate teaching? Research in Higher Education, 30(2), 221-227.
- Abrami, P. C., d'Apollonia, S., & Cohen, P. A. (1990). Validity of student ratings of instruction: What we know and what we do not. Journal of Educational Psychology, 82(2), 219-231.
- Adams, M. R. (1989). Training and promoting junior faculty. Thought and Action, 5(2), 55-60.
- Andrews, H. A. (1985). Evaluating for excellence. Stillwater, OK: New Forums.
- Arubayi, E. A. (1987). Improvement of instruction and teacher effectiveness: Are student ratings reliable and valid? Higher Education, 16(3), 267-278.
- Astin, A. W. (1978). The American freshman national norms for fall, 1977. Los Angeles: American Council on Education and Cooperative Institutional Research Program, University of California.
- Avi-Itzhak, T. (1982). Teaching effectiveness as measured by student ratings and instructor self-evaluation. Higher Education, 11(6), 629-34.
- Ballantine, J. (1989). University teaching around the world. Teaching Sociology, 17(3), 291-296.
- Basow, S. A., & Disterfeld, M. S. (1985). Teacher expressiveness: More important for males than females? Journal of Educational Psychology, 77(1), 45-52.
- Basow, S. A., & Howe, K. G. (1987). Evaluations of college professors: Effects of professors' sex-type, and sex, and students' sex. Psychological Reports, 60(2), 671-678.
- Basow, S. A., & Silberg, N. T. (1987). Student evaluations of college professors: Are female and male professors rated differently? Journal of Educational Psychology, 79(3), 308-314.

- Bennett, S. K. (1982). Student perceptions of and expectations for male and female instructors: Evidence relating to the question of gender bias in teaching evaluation. Journal of Educational Psychology, 74(2), 170-179.
- Bergman, K., & Gaitskill, T. (1990). Faculty and student perceptions of effective clinical teachers: An extension study. Journal of Professional Nursing, 6(1), 33-44.
- Braskamp, L. A., Brandenburg, D. C., & Ory, J. C. (1984). Evaluating teaching effectiveness. Beverly Hills, CA: Sage.
- Buck, S., & Tiene, D. (1989). The impact of physical attractiveness, gender, and teaching philosophy on teacher evaluations. Educational Research, 82(3), 172-177.
- Burdsal, C. A., & Bardo, J. W. (1986). Measuring students' perceptions of teaching: Dimensions of evaluation. Educational and Psychological Measurement, 46(1), 63-79.
- Carnegie Foundation for Advancement of Teaching. (1989). The condition of the professorate: Attitude and trends. Princeton, NJ: Princeton University.
- Carroll, J. G., & Goldberg, S. R. (1989). Teaching consultants: A collegial approach to better teaching. Teaching, 37(4), 143-146.
- Cashin, W. E. (1988). Student ratings of teaching: A summary of the research. IDEA paper No. 20. Kansas State University, Manhattan. (ERIC Document Reproduction Service No. ED 302 567)
- Centra, J. A. (1973). Effectiveness of student feedback in modifying college instruction. Journal of Educational Psychology, 65(3), 395-401.
- Centra, J. A. (1979). Determining faculty effectiveness. San Francisco: Jossey-Bass.
- Centra, J. A., & Creech, F. R. (1976). The relationship between students, teachers, and course characteristics and student ratings of teacher effectiveness. (Project Report 76-1). Princeton, NJ: Educational Testing Service.
- Chang, F. Y. (1989). Reflectiveness of teachers' instruction: student evaluation in higher education. Journal of Educational Resource, 23(5), 64-68.

- Cohen, P.A. (1981). Student ratings of instruction and student achievement: A meta-analysis of multisection validity studies. Review of Educational Research, 51(3), 281-309.
- Costello, F. J. (Ed.) (1977). An analysis of a student evaluation of instruction in the graduate school of an urban university. Fort Lauderdale, FL: University of New Haven.
- Craig, J, R., Redfield, D. L., & Galuzzo, G. R. (1986). Evaluating effective teaching in colleges and universities: How far have we come? Paper presented at the 1986 annual meeting of the American Education Association, Kansas City. (ERIC Document Reproduction Service No. ED 282 888)
- Cranton, P., & Smith, R. A. (1990). Reconsidering the unit of analysis: A model of student ratings of instruction. Journal of Educational Psychology, 82(2), 207-212.
- Cruse, D. B. (1987). Student evaluation and the university professor. Higher Education, 15(6), 723-737.
- Donald, J. G. (1985). The state of research on university teaching effectiveness. In J. D. Donald, & A. M. Sullivan (Eds.). Using research to improve teaching. New Directions for Teaching and Learning, No. 23. San Francisco: Jossey-Bass.
- Doyle, K. O. Jr. (1975). Student evaluation of instruction. Lexington, MA: Lexington Books.
- Doyle, K. O. Jr., & Crichton, L. I. (1978). Student, peer, and self evaluations of college instructions. Journal of Educational Psychology, 70(5), 815-826.
- Dukes, R. L., & Victoria, G. (1989). The effects of gender, status, and effective teaching on the evaluation of college instruction. Teaching Sociology, 17(4), 447-457.
- Erdle, S., & Murray, H. G. (1986). Interfaculty differences in classroom teaching behaviors and their relationship to student instructional ratings. Research in Higher Education, 24(2), 115-127.
- Erdle, S., Murray, H. G., & Rushton, J. P. (1985). Personality, ,classroom behavior, and student ratings of college teaching effectiveness: A path analysis. Journal of Educational Psychology, 77(4), 394-407.

- Feldman, K. A. (1976). The superior college teacher from the student's view. Research in Higher Education, 5(3), 243-288.
- Feldman, K. A. (1977). Consistency and variability among students in rating in higher education. Higher Education, 6(3), 233.
- Feldman, K. A. (1984). Class size and college students' evaluations of teachers and courses: A closer look. Research in Higher Education, 21(1), 45-116.
- Feldman, K. A. (1986). The perceived instructional effectiveness of college teachers as related to their personality and attitudinal characteristics: Review and synthesis. Research in Higher Education, 24(2), 139-213.
- Feldman, K. A. (1987). Research productivity and scholarly accomplishment of college teachers as related to their instructional effectiveness: A review and exploration. Research in Higher Education, 26(3), 227-298.
- Feldman, K. A. (1988). Effective college teaching from the students' and faculty's view: Matched or mismatched priorities? Research in Higher Education, 28(4), 291-344.
- Ferber, M. A., & Huber, T. A. (1975). Sex of student and instructor: A study of student bias. American Journal of Sociology, 80(6), 949-963.
- Fink, L. D. (1989). The lecture: Analyzing and improving its effectiveness. In A. F. Lucas (Ed.), The department chairperson's role in enhancing college teaching. New Directions for Teaching and Learning, No. 37. San Francisco: Jossey-Bass.
- Gay, L. R. (1981). Educational research: Competencies for analysis and application. (2nd ed.). Columbus, OH: Charles E. Merrill.
- Gillmore, G. M. (1983-84). Students as a factor in faculty employment decisions and periodic review. Journal of College and University Law, 10(4), 557-576.
- Goldschmid, M. L. (1978). The education and improvement of teaching in higher education. Higher Education, 7(2), 221-245.



- Howard, G. S., Conway, C. G., & Maxwell, S. E. (1985). Construct validity of measures of college teaching effectiveness. Journal of Educational Psychology, 79(2), 187-196.
- Jackson, L. A. (1983). The influence of sex, physical attractiveness, sex role, and occupational sex linkage on perceptions of occupational suitability. Journal of Applied Social Psychology, 13, 31-34.
- Jones, J. (1981). Students' models of university teaching. Higher Education, 10(5), 529-49.
- Kaufman, B. J. (1981). Departmental differences in student perceptions of ideal teaching. Paper presented at the annual meeting of the Southeastern Psychological Association (Atlanta, GA, March 26, 1981). (ERIC Document Reproduction Service No. ED 212 251)
- Klyczek, J. P. (1989). A study of faculty characteristics affecting student evaluation of instruction in higher education. Unpublished doctoral dissertation. State University of New York at Buffalo.
- L'Hommedieu, R., Menges, R. J., & Brinko, K. T. (1990). Methodological explanations for the modest effects of feedback from student ratings. Journal of Educational Psychology, 82(2), 232-241.
- Lowman, J. (1984). Mastering the techniques of teaching. San Francisco: Jossey-Bass.
- Machina, K. (1987). Evaluating student evaluations. Academe, 73(3), 19-22.
- Marsh, H. W. (1983). Multidimensional ratings of teaching effectiveness by students from different academic settings and their relation to student, course/instructor characteristics. Journal of Educational Psychology, 75(1), 150-166.
- Marsh, H. W. (1984). Students' evaluations of university teaching: Dimensionality, reliability, validity, potential biases, and utility. Journal of Educational Psychology, 76(5), 707-754.
- Marsh, H. W. (1986). Applicability paradigm: Students' evaluations of teaching effectiveness in different countries. Journal of Educational Psychology, 78(6), 465-473.

- Marsh, H. W. (1987). Students' evaluations of university teaching: Research findings, methodological issues, and directions for future research. International Journal of Educational Research, 11(3), 253-388.
- Marsh, H. W., & Hocevar, D. (1991). The multidimensionality of students' evaluations of teaching effectiveness: The generality of factor structures across academic discipline, instructional level, and course level. Teaching and Teacher Education, 7(1), 9-18.
- Marsh, H. W., & Kesler, S. P. (1976). The validity of student evaluations: A comparison of faculty self-evaluation and student evaluation. CA: University of Southern California, Office of Institutional Studies.
- Martin, B. A., & Martin, J. H. (1989). Assessing the lecture performance of university faculty: A behavioral observation scale. Journal of Education for Business, 64(4), 157-60.
- McBean, E. A., & Nassri, S. A. (1982). Questionnaire design for student measurement of teaching effectiveness. Higher Education, 11(3), 273-278.
- McKeachie, W. J. (1979). Student rating of faculty: A reprise. Academe, 62(6), 384-397.
- McKeachie, W. J. (1986). Teaching tips: A guidebook for the beginning college teacher (8th Ed.). Lexington, MA: D. C. Heath and Company.
- McKeachie, W. J. (1990). Research on college teaching: The historical background. Journal of Educational Psychology, 82(2), 189-200.
- Miller, A. H. (1988). Student assessment of teaching in higher education. Higher Education, 17(1), 3-15.
- Miller, R. I. (1987). Evaluating faculty for promotion and tenure. San Francisco: Jossey-Bass.
- Miron, M. (1985). The good professor perceived by university instructors. Higher Education, 14(2), 211-15.
- Miron, M., & Segal, E. (1978). The good university teacher as perceived by the students. Higher Education, 7(1), 27-34.

- Moses, I. (1986). Self and student evaluation of academic staff. Assessment and Evaluation in Higher Education, 11(1), 76-86.
- Murray, H. G. (1979). Student evaluation of university teaching: Uses and abuses. Colloquium presented at the university of British Columbia, Vancouver, Canada. (ERIC Document Reproduction Service No. ED 189 920)
- Murray, H. G. (1983). Low-inference classroom teaching behaviors and student ratings of college teaching effectiveness. Journal of Educational Psychology, 75(1), 138-149.
- Murray, H. G. (1985). Classroom teaching behaviors related to college teaching effectiveness. In J. G. Donald., & A. M. Sullivan (Eds.). Using research to improve teaching. New Directions for Teaching and Learning, No. 23. San Francisco: Jossey-Bass.
- Murray, H. G., Rushton, J. P., & Paunonen, S. V. (1990). Teacher personality traits and student instructional ratings in six types of university courses. Journal of Educational Psychology, 82(2), 250-261.
- Perlberg, A. (1979). Evaluation of instruction in higher education: Some critical issues. Higher Education, 8(2), 141-157.
- Perry, R. P. (1990). Special section: Instruction in higher education, introduction to the special section. Journal of Educational Psychology, 82(2), 183-188.
- Rivers, V. J. (1987). Assessment of effective teaching techniques employed by earth science and physics teachers in Virginia as perceived by teachers, administrators, students, and parents. Unpublished doctoral dissertation, University of Virginia, Charlottesville.
- Sass, E. J. (1989). Motivation in the college classroom: What students tell us. Teaching of Psychology, 16(2), 86-88.
- Schein, M. W. (1985). Student achievement as a measure of teaching effectiveness. Journal of College Science Teaching, 14(6), 471-74.
- Scruggs, R. R., George, M. C., Rancy, D.C., & Miller, D. L. (1988). Education of teaching performance in U.S. dental school. Journal of Dental Education, 52(2), 102-107.

- Seldin, P. (1980). Successful faculty evaluation programs. NY: Coventry Press.
- Seldin, P. (1984). Changing practices in faculty evaluation. San Francisco: Jossey-Bass.
- Sheffield, E. F. (1974). Teaching in the universities: No one way. Montreal: McGill-Queen's University.
- Simon, K. (1987). Using student evaluations to improve teaching and make personnel decisions. (ERIC Document Reproduction Service No. ED 290 377)
- Tiberius, R. G., Sackin, H. D., Slingerland, J. M., Jubas, K., Bell, M., & Matlow, A. (1989). The influence of student evaluative feedback on the improvement of clinical teaching. Journal of Higher Education, 60(6), 665-681.
- Tollefson, N., Chen, J. S., & Kleinsasser, A. (1989). The relationship of students' attitudes about effective teaching to students' ratings of effective teaching. Educational and Psychological Measurement, 49(3), 529-536.
- Trend, J. S., & Andrews, P. H. (1984). Achieving upward mobility in academia: Priorities and strategies. Association for Communication Administration Bulletin, 50, 64-68.
- Wetzstein, M. E., & Broder, J. M. (1985). The economics of effective teaching. Journal of Economic Education, 16(1), 52-59.
- Wilson, R. C. (1986). Improving faculty teaching: Effective use of student evaluations and consultants. Journal of Higher Education, 57(2), 196-211.
- Wuff, D. H., Staton-Spicer, A. Q., Hess, C. H., & Nyquist, J. D. (1985). The student perspective on evaluating teaching effectiveness. Association for Communication Administration Bulletin, 53, 39-47.