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# A survey of the state of teacher effectiveness in four South Jersey high schools

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# A SURVEY OF THE STATE OF TEACHER EFFECTIVENESS IN FOUR SOUTH JERSEY HIGH SCHOOLS

by
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## ABSTRACT

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**A SURVEY OF THE STATE OF TEACHER EFFECTIVENESS IN FOUR SOUTH JERSEY HIGH SCHOOLS**

**1996**
Thesis Advisor: Dr. Lili Levinowitz

Master of Arts in Secondary Education

The purpose of this study was to investigate teachers' subjective perception of their teaching effectiveness and the factors that facilitate and/or inhibit their sense of efficacy in four South Jersey high schools. In addition, two problems were examined as to the impact of class size on teaching efficacy and does experience in teaching affect a teacher's sense of effectiveness?

The sample was selected from high school teachers in a two county area in southern New Jersey. Teachers were given a questionnaire to complete which was designed to identify important attitudes toward teaching efficacy. A total of 275 questionnaires were distributed and 136 were returned. Data were reported in means, modes, and frequencies for teacher effectiveness; and inferential statistics for comparing the efficacy of experienced versus new teachers.

Findings confirmed that teachers in the area are confident in their ability to teach. Two concerns surfaced that reflected a problem, class size and adequate teacher training. The most positive responses were a teacher's ability to adapt to curricular changes, the ability to re-adjust an assignment to a student's level of difficulty, and the ability to redirect a noisy student. There were no statistical differences between experienced and new teachers and their attitudes towards efficacy.

## MINI-ABSTRACT

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The survey was to determine a teacher's subjective perception of his teaching efficacy and the problems a teacher experiences , as well as does experience in teaching affect a teacher's effectiveness?

Class size and adequate teacher training were important to a teacher's sense of efficacy. Attitudes toward adaptability and student management were the most positive. No statistical difference existed between experienced and new teachers.

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## ACKNOWLEDGEMENTS

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## CHAPTER ONE

## PURPOSE OF THE STUDY

For almost thirty years, teacher efficacy has been the practice which separates good teachers from mediocre ones. Everyone who has been schooled in this country can easily recall and distinguish among those teachers who were effective and those who were not. Moreover, in school climates where achievement is fostered, a sense of efficacy exists among teachers. What is an effective teacher? According to Webster, it is a person with "the power to produce effects or intended results." Teachers who are effective believe that they have the power and ability to produce the desired results, and they feel that they indeed make a difference in a student's learning.

Although there are slight differences in the definitions of teacher efficacy, the literature supports the notion that high efficacy teachers have high academic standards for students, focus on instruction, keep students on task, and have students with high achievement performance.[1] These teachers when faced with a low or poor achievement student, will redouble their effort or modify their instruction and thus accept responsibility for a student who isn't learning as expected or who may be difficult to motivate.[2]

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[1] Patricia T. Ashton et al., "A Study of Teacher's Sense of Efficacy. Final Report, Vol. II," (Florida University, Gainesville, 1982, ED231835), v.

[2] Thompson, James R., Jr. and Handley, Herbert M., "Relationship between Teacher-Self-Concept and Teacher Efficacy," (A paper presented at the Annual Meeting of the Mid-South Educational Research Association , New Orleans, LA, 1990, ED327508), 3.

In Making a Difference by Patricia Ashton and Rodman Webb, their study of teacher efficacy lead them to observe that teachers were beginning to lose their connections with their schools, students, and colleagues, and even with their profession. Like Sizer (1984) they found that "teachers are rarely consulted, much less given authority, over the rules and regulations governing the life of their school; these usually come from 'downtown.'...Teaching often lacks a sense of and ownership, a sense among the teachers working together that the school is theirs, and its future and their reputation are indistinguishable."[3]

The criticism of American education is nothing new, but recently it has become more intense and specific. Since 1983 and the release of the Carnegie Report (Boyer 1983) and the National Commission on Excellence in Education (1983), teacher competence has come into the fore-front of that critism. The theory or "construct" of teacher efficacy was introduced into educational research by two Rand Corporation studies that reported a significant relationship between teacher efficacy and student achievement.[4]

In the Rand studies, a teachers' sense of efficacy has two independent dimensions, personal and teaching. A teachers' personal level of efficacy refers to their ability to teach competently, no matter what may threaten. If they doubt their ability to be an effective teacher, they may not perform as well as they might and become distracted by their incompetence. A teachers' sense of teaching efficacy refers to the expectation that teaching can influence student learning. Teachers with low teaching efficacy sometimes

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[3]Patricia T. Ashton and Rodman B. Webb, *Making a Difference* (White Plains: Longman Inc., 1986) , p. 164.

[4]Patricia Ashton, " Teacher Efficacy: a Motivational Paradigm for Effective Teacher Eduction," *Journal of Teacher Education*, 35, (1984), 28.

believe that students cannot learn and there is nothing they can do to change this. On the other hand, teachers with high teaching efficacy believe all students can learn. "Thus, the two Rand corporation evaluation studies were a breakthrough because they suggest that teachers' sense of efficacy is a component of teacher motivation associated with student achievement."[5] There were only two questions on the first efficacy questionnaire. It is evident from their brevity that these questions were rather simple and not very thorough.

1. When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment.
2. If I try really hard, I can get through to even the most difficult or unmotivated students.[6]

Ashton and Webb (1982) were among the first researchers to develop a multidimensional model of teaching efficacy, based on Bandura's cognitive social learning theory. According to Bandura, motivation is affected by both outcome expectations and efficacy expectations. "Outcome expectations are the judgments an individual makes about the likely consequences of specific behaviors in a particular situation or context. Efficacy expectations are an individual's belief about his or her own capability to achieve a certain level of performance in that situation or context.[7]

In 1984, Gibson and Dembo developed a thirty item scale known as the " Teacher Efficacy Scale" (TES), that yielded two factors consistent with the Rand items. They too had studied Bandura's theories on cognitive learning and agreed with Bandura that

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[5] Ashton and Webb, *Making a Difference*, p.3.

[6] Ibid, 28.

[7] Thomas R. Guskey and Perry D. Passaro, "Teacher Efficacy: A Study of Construct Dimensions," *American Educational Research Journal*, 31, (1994) , 629.

"mastery experiences enhance the individual's efficacy relative to the tasks involved."[8] In other words, a teacher's sense of efficacy is related to his ability to perceive and deal successfully with problems or situations that arise. In an attempt to test this idea, Gibson and Dembo devised the instrument which consisted of thirty questions which were scored on a six point Likert scale.

Later in 1990, Woolfolk and Hoy used a revised version of the Teacher Efficacy Scale with only sixteen of the original thirty items. The reason for using only sixteen of the original thirty was because Gibson and Dembo had determined that acceptable reliability coefficients resulted in these sixteen items. In addition, Woolfolk and Hoy added four others that referred to the adequacy of teachers' preservice preparation ,since this was relevant to their sample. Subsequently, Guskey and Passaro (1993), combined the results of Gibson and Dembo's TES as well as three additional items from the Woolfolk and Hoy instrument, since they had found these items to yield similar underlying characteristics for teacher efficacy. "Of these nineteen items, eleven had been found to load principally on the personal efficacy dimension and eight on the teaching efficacy dimension."[9]

Based on a report by Patricia Ashton in 1984, difficulties for maintaining a strong sense of teacher efficacy were due to the following factors: isolation, the difficulty in assessing one's effectiveness as a teacher, the lack of collegial and administrative support, as well as the sense of powerlessness that comes from limited collegial decision making.[10] Ten years

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[8] Landa L. Trentham,Steven Silvern, and Richard Brogdon, "Teacher Efficacy and Teacher Competency Ratings," *Psychology in the Schools*, 22,(1985), 344.

[9] Thomas R. Guskey and Perry Passaro, "Teacher Efficacy: A Study of Construct Dimensions,"(Paper presented at the annual meeting if the American Educational Research Association, Atlanta, 1993, ED359202), 4.

[10] Ashton, 1984, 28.

later, we see a slightly improved situation where teachers are beginning to become involved in district and building -level decision making policy. Restructuring, as this educational reform movement is known, proposes a "reconceptualization of the teacher's role in the educational enterprise."[11] This restructuring proposes to benefit learning and achievement outcomes by improving a teacher's working conditions and decision-making authority. This concept is highly desirable to the teaching community as long as working conditions improve or do not impede teacher efficacy. However, when state governments have limits on money that can be spent ( budget caps), and local schools are forced to limit the hiring of new teachers because of a lack of funds, the school climate becomes endangered. The concept of school climate as described by Hoy and Woolfolk explains its importance to maintaining teacher efficacy.

We prefer to use health metaphors to describe school climate. The concept of school health was developed to capture the nature of student to teacher, teacher to teacher teacher to administrator interactions. A healthy school is one in which harmony pervades relationships among students, teachers, and administrators as the organization directs its energies toward its mission.[12]

Is this change in climate a threat to teacher efficacy?

With the projected increase in the student to teacher ratio and because of the lack of district funds to hire new teachers, this is a distinct possibility. In Patricia Ashton's 1983 final report, Executive Summary on her study of Teacher's Sense of Efficacy she states that "Teachers tended to attribute teaching effectiveness to their own characteristics, and failure in teaching to environmental conditions such as administrators, lack of materials,

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[11] William P. Moore and Mary E. Esselman, "Exploring the Context of Teacher Efficacy: The Role of Achievement and Climate," (Paper presented at the annual meeting of the American Educational Research Association, New Orleans, ED370919), 2.

[12] Wayne K. Hoy and Anita E. Woolfolk, "Teacher's Sense of Efficacy and the Organizational Health of Schools," *The Elementary School Journal*, March , (1993), 356.

large classes, and unmotivated students. She also states that teachers are nearly unanimous in citing class size as an important factor in their ability to be effective motivators."[13]

## PURPOSE

Considering the aforementioned, the purpose of this study is to investigate teachers' subjective perception of their teaching effectiveness and the factors that facilitate and/or inhibit their sense of efficacy in four South Jersey high schools. Class size and its impact on teachers will be examined.

## PROBLEM

This study will attempt to identify, through a survey, the perceived state of teacher effectiveness in four South Jersey high schools. The following problems will be addressed.

1. Does class climate affect a teacher's attitude toward efficacy?

2. Does experience in teaching affect a teacher's sense of effectiveness?

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[13] Patricia T. Ashton et al, "A Study of Teacher's Sense of Efficacy. Final Report, Volume II,." (Gainsville, 1982, ED231835), 18.

# CHAPTER TWO

# REVIEW OF RELATED LITERATURE

## Introduction

A literature search was conducted to discover what research has been done in the field of teacher efficacy. Many studies have been conducted over the past twenty years in an attempt to assess the effectiveness of teachers and their personal sense of efficacy. Along with these studies, new assessment instruments have also emerged. This thesis examines the various attempts of assessment and the areas of teacher efficacy addressed by four previous studies: Ashton, 1984; Gibson and Dembo, 1984; Hoy and Woolfolk, 1993; and Guskey and Passaro, 1993.

## The Ashton Study[1]

Patricia Ashton, along with R.B. Webb and N. Doda, conducted a study in 1984 for the National Institute of Education entitled "A Study of Teachers' Sense of Efficacy." This report was presented as an Executive Summary to the University of Florida where Ashton is an Associate Professor in the education department. This study was designed as a reaction to the two Rand Corporation evaluation studies on how teachers have a positive effect on student learning. This construct on teachers' effectiveness is credited to Albert Bandura and his work on self-efficacy which states that "an individual's sense of

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[1] Patricia T. Ashton et al., "A Study of Teachers' Sense of Efficacy, Final Report, Vol. II.," (Florida University, Gainsville, 1982, ED231835), v.

efficacy operates as a cognitive mediator of behavior." That is, psychological experiences create expectations of personal efficacy; or behavior is not controlled by its immediate consequences but rather by the expectation created that the behavior will have an expected effect. The purpose of this research was to develop a framework for understanding the nature, antecedent, and consequences of efficacy attitude in teachers, and how to broaden the conceptual framework if necessary. Four specific objects were investigated to clarify the construct: 1) factors that facilitate and inhibit development of efficacy in teachers, 2) teacher behaviors that are indicative of a sense of efficacy, 3) effects of teachers' sense of efficacy on students, and 4) methods of influencing the development of teachers' sense of efficacy.

Ashton's study persued a multidisciplinary approach, incorporating the services of educational psychologists, sociologists, teacher effectiveness researchers, and classroom teachers. An advisory group was used to guide the design of the study and of the data collection which was based on Glaser and Strauss' (1967) description of the discovery of grounded theory. During the preliminary data collection phase, forty-nine teachers at two middle schools responded to a questionnaire that queried their feelings about teaching and the influence of the school on their attitudes of effectiveness. Four teachers, two with high and two with low efficacy attitudes, were observed five times and then interviewed regarding the frustrations and rewards of teaching.

Two middle schools with major organizational differences were selected for the study; an interdisciplinary teams versus a depatmentally organized team. In the middle school, teachers and students on a team had neighboring classrooms, and shared a similar

daily schedule. Interdisciplinary planning and discussion-making was utilized. In the traditional middle school, students remained with the same team of four teachers for three years. The two schools consisted of approximately 1000 students in grades six through eight. The student populations of both schools were comparable in socio-economic and racial distributions.

Teachers at both schools were asked to spend two hours completing a questionnaire and were paid $10 each for their participation. Approximately half of the teachers, 29 middle school and 20 junior high, completed the form. The sample consisted of 35 white female, 5 white male, 7 black female and 2 black male teachers. The majority of teachers fell into the age range of 25 to 35.

From the teachers' scores on the two Rand efficacy items, four teachers were identified for further study. These teachers were then observed teaching two of their classes four to five times over a six week period. They were paid $25 for their participation. When the observations were completed, the observers interviewed their teachers.

To further investigate the influence of organizational structure on teachers' sense of efficacy, a year long comparison of two teachers at each of the two middle schools was conducted. The data from the observations and interviews were analyzed using the techniques outlined by Glaser and Strauss (1967) for the discovery of Grounded Theory.

Major findings from the questionnaire showed a difference in focus when evaluating their personal effectiveness. The majority focused on subject matter but about one third focused on working effectively with students with special problems. Teachers

tended to attribute their teaching effectiveness to their own personal characteristics and failures to environmental conditions (lack of materials, large classes, unmotivated students, and administrators.) Middle school teachers were reported to be more satisfied with teaching than junior high teachers. However, middle school teachers reported more difficulties with collegial relations than junior high teachers.

The Grounded Theory that emerged was that the major social-psychological problem facing teachers is "the maintenance of a sense of efficacy in a profession that offers few supports for and myriad threats to the self-respect of its members."

Teaching is threatening to teachers' sense of efficacy because:

1. It is difficult for teachers to assess whether or not they make a lasting or significant difference to students.
2. Teachers do not share a technical culture which can be assessed for personal competence.
3. Teachers are isolated from one another.
4. Teachers must cope with the knowledge that their performance is monitored by colleagues and peers' opinions regarding this competence which may be based on second- hand information.
5. A non-interference ideology governs interpersonal relationships among peers.
6. The profession receives little public recognition, social status, remuneration or professional autonomy.
7. Teachers feel they receive little support from administrators and are treated 'unprofessionally' by them.
8. Many teachers have little say in the decisions that affect their work.
9. Teachers are barraged with criticisms from the media, public, and parents.
10. Many teachers suffer self-estrangement.

The second phase of the study was based on the research findings and consisted of a process-product study of 48 high school basic skills teachers as well as individual interviews and a pilot study comparison of three approaches to increase teacher efficacy. Findings from the two data collection phases were used to refine the framework of the questionnaire and to generate new research.

Basic skills, mathematics and communications teachers were selected for this part of the study. Students were placed in basic skills classes because of low scores on the annual Metropolitan Achievement Test (MAT). Forty-eight basic skills teachers in four high schools participated in the study. The sample consisted of 20 white females, 16 white males, one black male, and 3 black female teachers. The teachers had an average of ten years experience with a median of eight years of experience. These teachers were observed three times during a two-month period. Since curriculum was similar across the grades, observations were conducted in the ninth through eleventh grades.

Student achievement was measured by the subtests of the MAT test administered a semester later. The teachers completed a questionnaire including the two Rand questions, two additional efficacy scales, two items assessing teacher stress and a question regarding a teachers' responsibility for student learning.

Classroom observation measures included the Climate and Control System (CCS), Soar and Soar, 1981). This was used to obtain a record of the environment. The Teacher Practices Observation Record (TPOR), designed by Brown (1968), was used to analyze instructional methods used by the teachers in the classroom. The last test was the

Research for Better Schools (RBS) Engagement Rate Form (Huitt and Rim,1980) to estimate time-on-task in the basic skills classroom.

Major findings from the study indicated that teachers' belief in the educability of students (Rand Efficacy I) was significantly related to their students' achievement on the math section of the MAT. A teachers' sense of personal efficacy (Rand Efficacy 2) was significantly related to their students' language achievement from the MAT test. Several trends were indicated between teacher efficacy and teacher behavior (significant levels greater than .05 but equal to or less than .10). Teachers' belief in students' educability was negatively related to teachers' use of strong control tactics and positively related to a supportive, interactive style that permitted open communication and student involvement in decision making. Teachers' belief in their personal effectiveness was positively related to the teachers' maintenance of a secure, accepting classroom climate.

The Ashton study also conducted a small-scale pilot study to increase teachers' sense of efficacy. They found that if teacher effectiveness can be changed by workshops and training materials, and this change produces increased student achievement, teachers are very willing to adapt. Major findings from this pilot study indicated that an effective change effort would require the school's commitment to this change.

The Ashton study concluded that teachers' sense of efficacy was significantly related to student achievement. In addition, teachers' sense of efficacy was related to teacher and student behaviors. This suggests that more effective teachers are more than likely attentive to student's needs and more apt to respond to them. Their research also suggests that teachers' efficacy is 'reciprocally and multiply determined by a complex and

interrelated set of variables. Given this uncertainty, teachers' sense of efficacy is in continual jeopardy.'

Unlike the Ashton study, with basically four questions, the present study used a survey instrument of 32 questions to see how teachers would respond. Also, the present study is rather inclusive since only high school teachers participated. While the previous study focused on training needs of middle to high school teachers for the improvement of effectiveness, the present study wants only to determine the general state of teacher effectiveness in the area. It also will attempt to determine whether teacher longevity has any role to play in teacher effectiveness either positively or negatively.

The Gibson and Dembo Study[2]

The development of the Teacher Efficacy Scale (TES) began in a pilot study where 53 sample items were administered to 90 teachers. The basis of the initial survey was from the results of teacher interviews and an analysis of previous research dealing with teacher efficacy. The data involved factor analysis , the elimination of items with poor variability, and the use of only those items that loaded clearly on one of the factors (Gibson and Dembo, 1982). The remaining items were corrected and revised to eliminate ambiguities. The revised TES consisted of 30 items on a six point Likert format from strongly disagree to strongly agree.

By 1984, Sherri Gibson, Director of Auxilary Education, Clovis , CA, and Myron H. Dembo, from the University of Southern California had published their study on

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[2] Sherri Gibson and Myron H. Dembo, "Teacher Efficacy: A Construct Validation," *Journal of Educational Psychology*, 76,no 4,(1984) 569-582.

Teacher Efficacy: A Construct Validation. This project was specifically initiated to "develop an accurate instrument to measure teacher efficacy, to provide construct validation support for the variable, and to examine the relationship between teacher efficacy and observable teacher behaviors."

The Gibson and Dembo Study was divided into three phases: 1) Factor Analysis, 2) Multitrait-Multimethod Analysis, and 3) Classroom Observation. Subjects in Phase 1 were 208 elementary teachers selected from 13 elementary schools within two neighboring districts. Teaching experience ranged from one to thirty-one years with approximately 75% of the participants being female. The subjects were then asked to complete the survey. From the data, two substantial factors emerged from the factor analysis with Factor 1 (Personal Teaching Efficacy) accounting for 18.2% of the total variance and Factor 2 (Teaching Efficacy) accounting for 10.6% of the total variance. The data supported both Bandura's and Ashton and Webb's model of teacher efficacy. That is, that one's behavior is determined by both a general outcome expectancy as well as a sense of self-efficacy. This applied to the construct of teacher efficacy would reflect the degree to which students can be taught given their family background, socioeconomic status and school conditions. The second factor of Teaching Efficacy was equally represented. By using the Rummel (1970) suggestion, both oblique and orthogonal rotations were used to compare item loadings and degree of correlations between factors. With the delta value set at zero, the oblique rotation revealed that the factors were only moderately correlated ($r = -.19$). The orthogonal factor structure revealed a strong level for significance of factor

loadings ( > .45). What was determined by the data was the internal consistency reliability of the TES .

Phase 2, the Multitrait-Multimethod Analysis involved the participation of 55 teachers. These teachers were enrolled in graduate education courses at a state university in California where they completed two teacher efficacy, verbal ability and flexibility studies. These studies included tests or measures of the TES and a more open-ended test of teacher efficacy where teachers were asked to name 10 to 20 variables which contributed most to the success or failure of students. The measures of verbal ability were the Verbal Facility Test (Coleman et al.,1966) and Controlled Associations Test (French, Ekstrom, and Price, 1963). The measures of flexibility were the Finding Useful Parts and the Planning Test. These tests were adaptations from the Educational Testing Service. Two questions directed the research study of Phase 2. 1) Does evidence of teacher efficacy gathered from different sources in different ways converge? and 2) Can teacher efficacy be differentiated from other constructs? Analysis of the data showed intercorrelations between these traits (verbal ability, flexibility, and teacher efficacy) in two formats, closed-ended and open-ended. The data passed the criteria for convergent validity. They were significant beyond the .05 level and were .30, .39, and .42, respectively. Because all three traits passed the test for convergent validity, two other tests for discriminant validity were performed. The results of the Phase 2 study verified the distinction between teacher efficacy and verbal ability and flexibility. These constructs were already identified in Gibson and Dembo's research as being present in effective

teachers and lent support and validation for the use of the TES to measure the construct of teacher efficacy.

Phase 3, Classroom Observation, consisted of investigating the following question: Do high-and low-efficacy teachers exhibit differential patterns of teacher behaviors in the classroom related to academic focus, feedback, and persistence in failure situations? Because the sample size was n=8 and the nature of the study was quite new, the raw data were reported and interpreted descriptively. An attempt was made to examine global academic time by collapsing academic and non-academic categories of the teacher-use-of-time measures. This failed to yield results. It was difficult to accurately reflect the students' engagement rates, and anecdotal and observation data suggested that differences in students' rates may have existed between high-and low-efficacy teachers.

The Gibson and Dembo Study concluded that teacher efficacy is multidimensional, and consists of at least two dimensions that correspond to Bandura's model of self-efficacy (personal teacher efficacy and teaching efficacy). They found that the measures of teacher efficacy identified through different methods do converge, while at the same time they can be differentiated from verbal ability and flexibility. From their classroom observations, the data suggest that teacher efficacy may influence certain patterns of classroom behavior known to yield achievement.

The chief value of the Gibson and Dembo Study was the development of the 30 question Teacher Efficacy Scale and its proven reliability as a survey instrument. The present study is utilizing the TES with the inclusion of a question relating to class size. As suggested by Gibson and Dembo in their general discussion, the present study is also

investigating the relationships between teacher characteristics such as sex, years of teaching experience, grade levels, and personal attribute

## The Hoy and Woolfolk Study[3]

Published in 1993, the Hoy and Woolfolk Study was conducted under the auspices of Rutgers University. The purpose of the study was to examine the relationships between two carefully specified dimensions of teacher efficacy (general and personal) and aspects of social organization often called school climate. School climate is composed of institutional integrity, principal influence, consideration, resource support, morale, and academic emphasis.

The Hoy and Woolfolk Study was conducted in thirty-seven elementary schools in New Jersey from which one hundred seventy-nine teachers were randomly sampled. The sample represented a diverse group of schools from various geographic and socioeconomic levels of the state, but twenty-seven of the thirty-seven were drawn from districts that were above average in wealth so the sample was skewed toward more advantaged districts. Five teachers were selected from each school, and 97% of the teachers completed the questionnaire. They had a mean of 14.43 years of experience and an average age of 42. Most had tenure (80%) and most were women (83%). The average class size was 21 students with a range of 5 to 36.

The variables of general and personal teaching efficacy were measured using a version of the Teacher Efficacy Scale TES (Gibson and Dembo 1984) adapted by Woolfolk and Hoy 1988,1990. Factor analysis of the instrument in earlier samples

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[3] Wayne K. Hoy and Anita E. Woolfolk, "Teacher's Sense of Efficacy and the Organizational Health of Schools," *The Elementary School Journal*, March, (1993), 355-371.

produced two independent dimensions of general and personal teaching efficacy. The efficacy instrument was modified to five personal and five general teaching efficacy items from the Woolfolk and Hoy version of the TES. These items were chosen because they had the highest factor loadings in the earlier research. A six point Likert scale from strongly agree to strongly disagree was used. For both the dimensions of general teaching efficacy and personal teaching efficacy, the higher the score, the more efficacious. In their study, alpha coefficients of reliability were .77 for personal teaching efficacy and .72 for general teaching efficacy.

Dimensions of a school's health were assessed using a version of the Organizational Health Inventory for elementary schools. This is a 39 item instrument that measures the six elements of school health (Hoy, Podgurski, et al., 1991; Hoy, Tarter, et al.,1991). Participants were asked to indicate the extent to which each statement characterizes their school along a four point Likert scale from rarely to very frequently occurs. The following are the six elements of school health:

1. Institutional integrity is a school's ability to cope with its environment in a way that maintains educational integrity of its program.
2. Principal influence is the principal's ability to influence the actions of superiors.
3. Consideration is principal behavior that is friendly, supportive, open, and collegial.
4. Resource support refers to a school where adequate supplies are available and extra resources are readily supplied.
5. Morale is a collective sense of friendliness, openness, enthusiasm and trust among faculty.
6. Academic emphasis is the extent to which a school is driven by a quest for academic excellence.

Each scale had a relatively high reliability coefficient. Alpha coefficients for each subtest in the sample were as follows: institutional integrity .86, principal influence .83, consideration .91, resource support .87, morale .89, and academic emphasis .72. Organizational Health Inventory supported its construct validity. Criterion validity was also supported by the findings that openness of climate was related to school health.

As stated, questionnaires were administered to the teachers by a researcher in their schools. Each questionnaire contained the two instruments as well as background information items. Because teacher efficacy is typically viewed as an individual characteristic, Hoy and Woolfolk used each individual teacher's perceptions of school health as a unit of analysis. That is, health perceptions were not aggregated at the school level.

A series of statistical analyses was conducted to analyze the data and test the hypotheses. Findings showed that teachers' perceptions of the dimensions of organizational health of a school were moderately related to each other. The relationship between general and personal teaching efficacy, although statistically significant, was weak ($r=.15$, $p < .05$). In order to enhance further the relationship between variables such as academic emphasis and personal teaching efficacy, a series of multiple regression analyses was performed. Only principal influence, academic emphasis, and educational level had significant effects on teachers' sense of personal efficacy.

The Hoy and Woolfolk Study was surprised to learn that personal teaching efficacy was not related to high teacher morale; that is feelings of trust, confidence, etc. were not related to personal teaching efficacy. They also were surprised to find that the

only personal variable of the study that uniquely predicted personal teaching efficacy was educational level. Teachers with graduate credits and further education were more likely to have a sense of personal teaching efficacy. One of the factors not examined by this study was the performance of the students. One other finding by the Hoy and Woolfolk Study was that a sense of general teaching efficacy was best predicted by institutional integrity and morale. This is the perception that a teacher can develop a sense that it is possible to overcome the home environment of difficult students by limiting the influence of negative parents in the school. Hoy and Woolfolk believe that a successful school probably must limit negative parental and community influences and expand on positive contacts.

From their study, Hoy and Woolfolk found that a sense of personal teaching efficacy and a sense of general teaching efficacy were relatively independent. There were differences between those characteristics that explained personal and general teaching efficacy. That is, teachers with experience believed that they could motivate difficult students and at the same time they felt a sense of powerlessness to overcome the negative constraints of the home environment. They also found (in an earlier study) that student teachers become more confident in their abilities to "get through to difficult students" but become less confident ,after student teaching, that schools could overcome the limits of the home environment and family background.

Unlike the Hoy and Woolfolk Study, the present study is concentrating on the efficacy of high school teachers instead of elementary teachers. Also, the general wealth of the area would not be considered above average; rather average to below. The present

study is also limited to the degree of teacher efficacy and not school health except for the question of resource. The Hoy and Woolfolk Study was also interested in developing goals for teacher preparation programs as to the skills and knowledge needed to accomplish the day-to-day teaching tasks. The present study is focusing on the attitudes of teacher effectiveness in the area.

The Guskey and Passaro Study[4]

In 1993, Thomas R. Guskey and Perry D. Passaro completed a study entitled, " Teacher Efficacy: A Study of Construct Dimensions." This study was consistent with the earlier research by Ashton and Webb (1986), Gibson and Dembo (1984), and Woolfolk and Hoy (1990), on the notion that teacher efficacy is a multidimensional construct. Their data, unlike the previous studies, were unable to encounter a distinction between personal teaching efficacy versus teaching efficacy. The distinctions they found related to beliefs about the influence of teachers on students' learning. Whether the item referred to personal or teacher influence made no difference on the outcome of teaching efficacy.

Their study included a total of 342 subjects; 283 experienced classroom teachers and 59 preservice teachers. The teachers represented the entire teaching staffs of three medium sized suburban/rural school districts in two different states. Of the teachers, 187 were women and 96 were men. These teachers taught in grades K-12 and had an average of 10.4 years of teaching experience. The preservice teachers were enrolled in a large Western university. All were in their junior or senior year and had completed several teaching practicums.

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4 Thomas R. Guskey and Perry Passaro, "Teacher Efficacy: A Study of Construct Dimensions," (Paper presented at the annual meeting of the American Educational Research Association, Atlanta, 1993, ED359202), 1-22.

In the Guskey and Passaro Study, teacher efficacy was measured by using an altered form of the Teacher Efficacy Scale, TES (Gibson and Dembo,1984). They began with the 16 items from Gibson and Dembo that yielded significant factor loadings and 15 that were employed in the Woolfolk and Hoy(1990) extended study. To those items, they added three additional items that Woolfolk and Hoy had found significant, plus the two Rand items. (1. When it comes right down to it, a teacher can't do much because most of a student's motivation and performance depends on his or her home environment. and 2. If I really try hard, I can get through to even the most difficult or unmotivated students. ) Of the 21 items, twelve had been found to load principally on the personal efficacy dimension and nine on the teacher efficacy dimension. These items were then altered or reworded to reflect a personal-internal orientation (P-I), or a teaching-internal (T-I) or a personal-external (P-E) orientation. An example of the wording change is "When a student does better than usually, many times it is because I exert a little extra effort." This was altered to read, "When a student does better than usually, many times it is because *the teacher* exerts a little extra effort," becoming a T-I item. The following is an explanation of the factor structure:

> Personal-Internal (P-I): When I really try, I can get through to the most difficult students.
>
> Personal-External (P-E): Even when I really try, it is hard to get through to the difficult students.
>
> Teaching-Internal (T-I): When teachers really try, they can get through to most difficult students.
>
> Teaching-External (T-E): Even when they really try, it is hard for teachers to get through to the difficult students.

The two Rand items were left unaltered. The altered and unaltered items were then reassembled and numbered as they were in the Woolfolk and Hoy Study (1990). The resulting TES scale consisted of twenty-one items. There were six T-E items, five P-E items, five T-I and five P-I items. The responses to these items were made along a six point Likert scale from "strongly agree," to "strongly disagree." This altered scale was then administered to the experienced teachers at the beginning of a district-wide staff meeting. The staff was able to complete the information within 10 to 15 minutes. Ninety-two percent of the returned forms were usable. The preservice teachers were given the survey at the beginning of their regularly scheduled class meetings. Ninety-five percent of the returned forms were usable. Subjects were told that the results were for research purposes only. They were assured of anonymity in their responses. They were told the results would be reported in summary form only.

In their discussion of results, Guskey and Passaro carefully checked for inconsistencies in item responses on the altered TES. They used the DISCRIM Procedure from Statistical Analysis System (SAS) but found no significant differences between the experienced teachers' responses compared to those of the preservice teachers. Because of any lack of significant difference among teachers, a decision was made to combine all subjects in further analyses. Because the purpose of their study was to examine the factor structure (P-I, P-E, T-I, T-E ) the data were analyzed to generate a two-factor solution.( Kim & Mueller,1978).

The subjects' responses to the altered TES were then submitted to factor analytic procedures using generalized least squares estimates. Not until an interative procedure to

improve the estimates of communality was used, were the two factors extracted. To determine the degree of correlation between factors, the delta value was set at zero and an oblique rotation revealed only moderately correlated factors ( r = -.23). They then chose varimax rotation with Kaiser normalization as the final solution. The varimax rotation converged in three interactions and yielded a two-factor model that accounted for 30 % of the total variance in item responses. They found that the more efficacious responses were low scores for the externally oriented items ( loading on Factor-1) , but high scores for the internally oriented items ( loading on Factor-2). They found the loading order of personal and teaching oriented items on each factor to be random.

In their discussion, Guskey and Passaro supported the idea that teacher efficacy is a multidimensional construct. As mentioned before, of the teachers they surveyed, they did not find any evidence to indicate a distinction between personal and teaching efficacy. Their findings were as follows:

1. The internal factor appeared to represent perceptions of personal influence, power, and impact in teaching and learning situations, reflecting a positive and optimistic perspective.

2. The external factor related to perceptions of the influence, power, and impact of elements that lie outside of the classrooms and may then be beyond the direct control of individual teachers; these emphasized a negative perspective.

A principle value of the Guskey and Passaro Study was to examine the kinds of TES instruments utilized by the various efficacy researchers. The present study chose to implement the Gibson and Dembo instrument with slight modifications of demographic information and an added question pertaining to class size. The present study is primarily concerned with perceived attitudes of teacher efficacy among high school teachers.

# CHAPTER THREE

# PROCEDURES AND ANALYSIS

## Description of the Population

The target population of this study was regular high school teachers. Regular high school teachers were defined as those who teach any subject area from special education to college preparatory in grades nine through twelve. The accessible population of the study was regular high school teachers in a two county area of Southern New Jersey, namely, Cumberland and Salem Counties.

## Description of the Subjects

The subjects of the study were high school teachers selected from four high schools in the two county area. Two urban and two suburban schools were selected and personal contacts in all of the schools were made. Before the subjects were approached to participate in the study, school principals were contacted in writing and by phone to discuss the possible participation of their school.

All high school teachers, as defined above in each identified school, received the survey.

## Description of the Survey Instrument

The Teacher Efficacy Scale Survey was developed by Gibson and Dembo in their 1984 study on the efficacy of teachers. The thirty point questionnaire used by Gibson and Dembo seemed appropriate after reviewing the literature and examining other TES surveys. One modification, concerning class size, was made to reflect the concern of the present investigator as to the general effect class size has on teacher efficacy. A second modification was made to the original survey and it was the inclusion of demographic information. With this information, the present researcher could evaluate the effect of teaching experience on a teacher's sense of effectiveness.

When the survey instrument was completed, it was distributed by colleagues and family members to the teachers of the various high schools. The survey instrument is presented in Appendix A.

## Procedures

After subjects were chosen from the two county area, individual surveys were distributed. A confirmation call from each principal was received prior to the distribution of the surveys. Also, before distribution took place, a call was made to each of the survey distributors from each building, and follow-up procedures were discussed.

Distribution was made through the school inter-office mail system directly to all high school teachers. The number of surveys distributed was based on the number of high school teachers in each school. The two urban schools received seventy-five surveys each.

The larger suburban school also received seventy-five surveys. The smaller suburban school received only fifty.

Respondents were given a cover letter which describes the research being undertaken and the importance of their response. A two week period was allowed for completion of the questionnaires. All of the aforementioned letters are included in appendix B.

Completed questionnaires were picked up, after two weeks, from the central office of each school. A reminder call to the assisting survey collectors was made and it was decided to continue with whatever surveys had been collected. An additional week was given to complete the survey.

This survey was conducted in late February and early March 1996. The data collection phase of this research was completed by March 31,1996. After the completion of this phase, analysis of data began.

## Analysis

Data from surveys were analyzed in relationship to those questions which specifically related to teacher efficacy both internally and externally compared to the questions relating to teaching difficulties or non-efficacious teaching strategies. Results are reported in frequencies, means, and modes. Adaptations were grouped into two categories as follows: teacher efficacy, (questions 1,3,5,7,8,12,14,19, 20, 21, 22, 24, 27, 30, and 31) and teacher difficulties, (questions 2,4,6,9,10,11,13,16,17,18,23,25,26,28, and 32).

Hypothesis one consists of statements designed to access the attitudes of high school teachers toward their teaching effectiveness. These statements were positively worded so that strong agreement or agreement with a positively worded statement indicates a favorable attitude toward a positive perception of their teaching effectiveness.

A teacher with a completely positive perception of his ability to be an effective teacher would report a mean rating of 4.1 or higher. A teacher with a completely negative attitude toward his perception of teacher efficacy would report a mean rating of 1.6.

Statements 23 and 26 were included to determine the teachers' perception of increased class size and its impact on teacher efficacy.

In the demographic information , the number of years of teaching was examined to see if increased years of teaching experience has any bearing on attitude toward teacher effectiveness. Data for faculty teaching over seven years were randomly eliminated to equalize cell size. A *t*-test for independent means was calculated on this one dimensional design for differences.

# CHAPTER FOUR

## PRESENTATION AND ANALYSIS OF DATA

### Background

Questionnaires were distributed to high school teachers in four south Jersey high schools. Seventy-five were distributed to each school except for Schalick that received fifty. The following were returned: Bridgeton 51,( 68%), Vineland 21, (28%), Schalick 25,(50%), and Cumberland, 33 ( 44%).

### Reliability

The alpha coefficient representing the internal consistency of the survey instrument was .68.

### Teacher Efficacy

All of the 130 high school teachers returning the questionnaires responded to the majority of the survey questions. Because the questions were grouped into two categories, **teacher effectiveness** and **problems teachers experience**, the results are reported on two different tables. Those questions that were positively grouped are reported in table 1 A and represent teaching efficacy. Only persons who responded to the questions as written were considered. Mean responses for the questions in table A ranged from 2.7 to 3.9 which indicated a wide range of variation in answers. If however, question seven is individually addressed and removed, the mean response range changes

from (2.7 to 3.9) to (3.2 to 3.9) , a difference of only .7. Since questions seven addresses teacher training, and it was the only negatively answered question, this seems to indicate

**Table 1 A**

**TEACHER EFFECTIVENESS: ALL HIGH SCHOOL TEACHERS**

| | | N | ME | MO | F 5 | F 4 | F 3 | F 2 | 1 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | When a student does better than usual, many times it is because I exerted a little extra effort. | 130 | 3.6 | 4 | 12 | 77 | 23 | 17 | 1 |
| 3 | If parents comment to me that their child behaves much better at school than at home, it would probably be because I have some specific techniques of managing his behavior which they may lack. | 131 | 3.3 | 4 | 13 | 50 | 34 | 33 | 1 |
| 5 | If a teacher has adequate skills and motivation, she/he can get through to the most difficult students. | 130 | 3.2 | 4 | 12 | 53 | 19 | 41 | 5 |
| 7 | I have enough training to deal with almost any learning problem. | 130 | 2.7 | 2 | 7 | 35 | 21 | 53 | 15 |
| 8 | My teacher training program and/or experience has given me the neceessary skills to be an effective teacher. | 130 | 3.6 | 4 | 19 | 79 | 9 | 17 | 6 |
| 12 | When a student is having difficulty with an assignment, I am usually able to adjust to his /her level. | 130 | 3.8 | 4 | 9 | 97 | 14 | 10 | 0 |
| 14 | When a student gets a better grade than he usually gets, it is because I found better ways of teaching that student. | 130 | 3.3 | 4 | 4 | 55 | 50 | 20 | 1 |
| 15 | When I really try, I can get through to the most difficult students. | 128 | 3.3 | 4 | 8 | 65 | 21 | 29 | 5 |
| 19 | When the grades of my students improve it is usually because I found more effective teaching approaches. | 132 | 3.3 | 4 | 4 | 64 | 43 | 17 | 4 |
| 20 | If my principal suggested that I change some of my class curriculum, I would feel confident that I have the necessary skills to implement the unfamiliar curriculum. | 128 | 3.9 | 4 | 19 | 92 | 10 | 5 | 2 |
| 21 | If a student masters a new concept quickly, this might be because I knew the necessary steps in teaching this concept. | 131 | 3.5 | 4 | 12 | 71 | 27 | 20 | 1 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 22 | Parent conferences can help a teacher judge what to expect from a student. | 129 | 3.4 | 4 | 18 | 58 | 25 | 25 | 3 |
| 24 | If a student did not remember information I gave in a previous lesson, I would know how to increase his retention in the next lesson. | 131 | 3.5 | 4 | 1 | 68 | 39 | 22 | 1 |
| 27 | If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him quickly. | 133 | 3.8 | 4 | 17 | 90 | 14 | 7 | 5 |
| 30 | When a child progresses after being placed in a slower group, it's usually because the teacher has had a chance to give him extra attention. | 131 | 3.4 | 4 | 12 | 58 | 36 | 24 | 1 |
| 31 | If a student could not do an assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty. | 131 | 3.5 | 4 | 21 | 61 | 19 | 24 | 6 |

that teachers do not feel entirely confident in their training to deal with every problem. The mode response for all of the questions was a 4, except for question 7 which was a 2.

Item 20 received the highest mean response of 3.9. This seems to indicate that high school teachers in general feel confident in their abilities to adapt to new curricula. Items 12 and 27 both reported a mean response of 3.8. These two questions addressed the ability of a teacher to make adjustments to a student's learning abilities, and a teacher's ability to redirect a noisy student. This too, would indicate that teachers feel quite confident in their ability to control the classroom and help students learn.

Other items that received the higher mean ratings were 1 and 8. One involved the exertion of extra effort by the teacher to improve student performance, and eight which added experience into the teacher training question. This appeared to indicate that although teacher training can't adequately prepare a teacher for the difficulties a student might have, experience will help one develop the necessary skills to be an effective teacher.

Those negatively grouped questions numbers 2, 4, 6, 9, 10, 11, 13, 16, 17, 18, 23, 25, 26, 28, and 32 are reported in table 1B and represent the problems teachers face. Again, only persons who responded to the questions as written were considered. Mean responses for the questions above ranged from 2 to 4.5. Again, this appears to represent a large variation in answers. However, if question 26 is removed ( this is the question on class size), the mean response range varies only 1.95. The mode in this table is also more varied, indicating the ambiguity of opinion. Class size was definitely a concern of the majority of teachers. Out of 135 respondents, 126 answered that they felt class size was an important aspect to their ability to be an effective teacher. Those questions that scored 60 or higher in the agree or strongly agree range reflect a concern by the majority of teachers in the following areas: lack of community support, frustration because of class size, parental responsibility, school policies that hinder progress, and the frustration experienced when good teachers are unable to reach students.

Questions six and sixteen address the problem of the home environment and its influence on a student's ability. The respondents were almost evenly divided in their responses . This seems to indicate that family background and support are very important to most teachers and they are somewhat perplexed as to what can be done to circumvent the influence of home environment on students.

With the addition of demographic information , the number of years of teaching experience was able to be evaluated separately from those teachers with many years of teaching experience. The number of teachers with fewer than seven years of teaching

experience was 25. Like experienced teachers, the majority of new teachers agreed that

**Table 1 B**

**TEACHER PROBLEMS: ALL HIGH SCHOOL TEACHERS**

| | | N | ME | MO | F 5 | F 4 | F 3 | F 2 | F 1 |
|---|---|---|---|---|---|---|---|---|---|
| 2 | The hours in my class have little influence on students compared to the influence of their home environment. | 128 | 3 | 2 | 13 | 37 | 26 | 49 | 3 |
| 4 | The amount that a student can learn is primarily related to family background. | 130 | 2.46 | 2 | 3 | 22 | 21 | 70 | 3 |
| 6 | Student's inability to accept discipline | 127 | 3.3 | 4 | 18 | 49 | 15 | 42 | 3 |
| 9 | Lack of community support. | 133 | 3.4 | 4 | 14 | 62 | 30 | 25 | 2 |
| 10 | Students placed in slower groups. | 130 | 3.6 | 4 | 19 | 74 | 13 | 21 | 4 |
| 11 | Differences among teaching styles are reasons for variation in student achievement. | 126 | 3.6 | 2 | 8 | 39 | 30 | 43 | 6 |
| 13 | Teacher can't keep student on task. | 131 | 2.2 | 2 | 2 | 12 | 15 | 84 | 18 |
| 16 | Teacher is limited due to home environment of student. | 128 | 2.9 | 2 | 5 | 45 | 23 | 49 | 6 |
| 17 | Teachers are not a powerful influence on students. | 131 | 2 | 2 | 1 | 9 | 13 | 73 | 35 |
| 18 | If students are disruptive, teacher blames himself. | 127 | 2.7 | 2 | 1 | 47 | 13 | 59 | 7 |
| 23 | Class size too large, motivation difficult. | 130 | 3.6 | 4 | 27 | 60 | 20 | 20 | 3 |
| 25 | Parents should do more with their children. | 131 | 3.95 | 4 | 34 | 67 | 22 | 6 | 2 |
| 26 | Smaller class size (25 or fewer). | 135 | 4.5 | 5 | 84 | 42 | 5 | 3 | 1 |
| 28 | School rules hinder a good job. | 131 | 3.67 | 4 | 17 | 90 | 14 | 7 | 5 |
| 32 | Good teachers can't always reach students. | 131 | 3.5 | 4 | 21 | 61 | 19 | 24 | 6 |

**Table 2 A**

**TEACHER EFFECTIVENESS : TEACHERS WITH LESS EXPERIENCE**

| | | N | ME | MO | F 5 | F 4 | F 3 | F 2 | F 1 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Teacher exerted extra effort. | 25 | 3 | 4 | 2 | 13 | 4 | 6 | 0 |
| 3 | Teacher has some techniques to manage child's behavior. | 25 | 3.68 | 4 | 5 | 11 | 5 | 4 | 0 |
| 5 | Teacher with adequate skills can motivate difficult child. | 25 | 3.5 | 4 | 4 | 11 | 2 | 7 | 0 |
| 7 | Teacher has enough training to deal with any learning problem. | 25 | 2.5 | 2 | 1 | 5 | 4 | 11 | 4 |
| 8 | Teacher training/experience has given necessary skills to teacher. | 25 | 3.5 | 4 | 3 | 13 | 4 | 4 | 1 |
| 12 | When student has difficulty I can usually adjust to his level. | 25 | 3.7 | 4 | 1 | 18 | 5 | 2 | 0 |
| 14 | When student gets a better grade, teacher found a new way to teach. | 25 | 3.3 | 4 | 1 | 12 | 6 | 6 | 0 |
| 15 | When teacher tries, he can get through to difficult child. | 25 | 3.28 | 4 | 2 | 10 | 7 | 5 | 1 |
| 19 | When grade improves, it's due to better approach. | 25 | 3.8 | 4 | 2 | 18 | 3 | 2 | 0 |
| 20 | If principal changes curriculum, teacher has confidence to do so. | 25 | 3.4 | 4 | 0 | 14 | 8 | 2 | 1 |
| 21 | If student masters new concept, I knew how to teach it. | 25 | 3.28 | 4 | 1 | 12 | 6 | 5 | 1 |
| 22 | Parent conferences can help a teacher judge what to expect from a student. | 25 | 3.4 | 4 | 3 | 11 | 5 | 5 | 1 |
| 24 | If student can't remember, I would know how to increase retention. | 25 | 3.36 | 4 | 2 | 10 | 8 | 5 | 0 |
| 27 | Teacher knows how to redirect noisy student. | 22 | 4 | 4 | 4 | 15 | 3 | 0 | 0 |
| 30 | Slower child advance due to extra teacher attention. | 25 | 3.56 | 4 | 4 | 11 | 5 | 5 | 0 |
| 31 | If student unable to do assignment, I could assess and correct level of difficulty. | 25 | 3.64 | 4 | 5 | 10 | 7 | 2 | 1 |

the training they had in college was not adequate to deal with any learning problem. They also agreed that they were not given the skills to be an effective teacher ( questions 7 and 8).

**Table 2 B**

**TEACHER PROBLEMS: TEACHERS WITH LESS EXPERIENCE**

| | | N | ME | MO | F 5 | F 4 | F 3 | F 2 | F 1 |
|---|---|---|---|---|---|---|---|---|---|
| 2 | The hours in my class have little influence on students compared to the influence of the home. | 25 | 3.4 | 4 | 2 | 13 | 4 | 6 | 0 |
| 4 | The amount that a student can learn is related primarily to family background. | 25 | 2.39 | 2 | 0 | 2 | 6 | 14 | 1 |
| 6 | Student's inability to accept discipline. | 23 | 2.9 | 2 | 1 | 8 | 3 | 10 | 1 |
| 9 | Lack of community support. | 25 | 3.6 | 4 | 2 | 14 | 7 | 2 | 0 |
| 10 | Students placed in slower groups. | 25 | 3.9 | 4 | 3 | 19 | 2 | 1 | 0 |
| 11 | Differences among teaching styles are reasons for variation in student achievement. | 25 | 3 | 4/2 | 1 | 10 | 3 | 10 | 1 |
| 13 | Teacher can't keep student on task. | 25 | 2.16 | 2 | 0 | 1 | 5 | 16 | 3 |
| 16 | Teacher is limited due to home environment of student. | 29 | 3.1 | 4 | 2 | 11 | 7 | 7 | 2 |
| 17 | Teachers are not a powerful influence on students. | 25 | 1.96 | 2 | 0 | 0 | 6 | 12 | 17 |
| 18 | If students are disruptive, blame teacher. | 25 | 2.8 | 2 | 0 | 10 | 1 | 14 | 0 |
| 23 | Class size too large, motivation difficult. | 24 | 3.8 | 4 | 4 | 14 | 4 | 2 | 0 |
| 25 | Parents should do more with their children. | 25 | 3.7 | 4 | 5 | 11 | 6 | 3 | 0 |
| 26 | Smaller class size (25 or fewer). | 26 | 4.46 | 5 | 13 | 12 | 1 | 0 | 0 |
| 28 | School rules hinder a good job. | 24 | 2.6 | 2 | 1 | 5 | 4 | 12 | 2 |
| 32 | Good teachers can't always reach students. | 25 | 3.88 | 4 | 5 | 14 | 4 | 2 | 0 |

The only question on which teachers ranged 15 in agreement to 9 unsure or undecided was question 31. This demonstrates the division even among new teachers on their ability to accurately assess the ability of students.

Problem 2: Means, standard deviation , and *t* -test summary data are presented in Table 3 A. The researcher failed to find statistically significant differences between attitudes of new and experienced teachers.

**Table 3 A**

| | | N | M | SD |
|---|---|---|---|---|
| 1 | New Faculty | 25 | 103.64 | 7.63 |
| 2 | Experienced Faculty | 25 | 102.76 | 8.97 |

*p< .05 $t_{(48)} = .710$

These results may have occurred due to a type two error or possibly because the results indirectly validate the survey instrument. This also seems to indicate that those people choosing to become teachers are being better trained and better screened than before.

# CHAPTER FIVE

# SUMMARY AND CONCLUSIONS

## Purpose and Problem of the Study

The purpose of this study is to investigate teachers' subjective perception of their teaching effectiveness and the factors that facilitate and/or inhibit their sense of efficacy.

Specifically, the study will attempt to identify, through a survey, the perceived state of teacher effectiveness in four local high schools. In addition, two problems will be addressed. Problem one is that of class climate (size) and its affect on a teacher's attitude of efficacy. Problem two asks if experience affects a teacher's sense of efficacy.

## Design and Analysis

The subjects of this study were high school teachers selected from high schools in the two county area of Southern New Jersey consisting of Cumberland and Salem Counties. High school teachers are those teachers who teach any subject area from special education to college preparatory in grades nine through twelve.

The survey instrument was a questionnaire chosen after a review of the literature. Two modifications of the Gibson and Dembo Teachers Efficacy Scale (TES) were made to reflect the desire of the present investigator to determine the relevance of class climate (number of students per class) and years of experience on teaching efficacy.

After the subjects were identified, the survey was distributed in their schools through the inter-office mail system directly to all high school teachers.

Respondents were given a cover letter along with the questionnaire. A reminder call to the assisting survey collectors extended the collection date by one week. This was all completed by March 31, 1996.

Data from the surveys were analyzed in relationship to those questions which specifically related to teacher efficacy compared to those questions relating to teacher difficulties or problems. Results are reported in frequencies, means, and modes.

Hypothesis one consists of statements designed to assess high school teachers' attitudes toward their teaching effectiveness. Statements 23 and 26 were included to determine what impact there would be on teacher efficacy. Also, from the demographic information, the number of years teaching was examined to see if an increased teaching experience has any bearing on teacher effectiveness. Data for faculty teaching over seven years were randomly eliminated to equalize cell size. A *t*-test for independent means was calculated on this one dimensional design for difference.

## Results of the Study

The survey questions were grouped into two categories, teacher effectiveness and problems teachers experience. Therefore, the results were separated to reflect the different categories.

Group A, represented by those questions that were positively grouped, reported consistently high scores in all questions except for question seven. Question seven reflected that the majority of respondents doubted that they had acquired sufficient

training to deal with almost any learning problem. However, question eight, which referred to teacher training in conjunction with teacher experience, was rated very high with a mean response of 3.6. This suggested that even when training was not enough, experience was the factor that helped provide the necessary skills to be an effective teacher.

The category that received the highest mean response was item 20, which dealt with a teacher's adaptability to curricular changes. The other two highly scored items were 12 and 27. Twelve affirmed the teacher's ability to re-adjust an assignment to a student's level of difficulty and twenty-seven the ability to redirect a noisy student.

Group B, represented by those questions that were negatively grouped, reported the problems teachers face . The mean response for these questions ranged from 2 to 4.5. Those questions dealing with class size reported a mean of 3.6 and 4.5. Class size was a definite concern of all teachers since the highest negative score, 4.5, was reflected in question 26. Additional problems teachers face that were negatively scored reflected a concern by the majority of teachers in the following areas: community support, class size, parental responsibility, school policies that hinder progress, and the frustration experienced when good teachers were unable to reach all students. This seems to indicate a willingness by most teachers to confront difficult situations and try to remedy them.

Questions six and sixteen addressed the problems of the home environment and its influence on students' abilities. Respondents were almost evenly divided, which would indicate that familial support is very important to most teachers.

Problem two examined the effect of years of experience versus a relatively new teacher. The results revealed no statistically significant differences between experienced teachers and new ones.

## Conclusions and Recommendations

Based on the data acquired from the present study, teachers in the survey area feel confident in their ability to teach. Only two concerns surfaced that really present a problem to today's teachers, class size and sufficient training.

It can be concluded that teachers at the high school level desire more training and acquisition of newer skills. They also clearly want more support from the community as well as greater parental involvement and responsibility. They are willing to make changes and adapt to new curricula. This is especially important since many schools are presently undertaking a change to block scheduling which requires new techniques in teaching and many hours of teacher training to successfully adapt. Teachers seem unafraid of change, but what does remain constant is the anxiety of large class size in the wave of change. Classes larger than 25 students pose a threat to efficacious teaching. Although other studies seem to negate this concept, this study emphatically says class size is an important factor.

Another important factor to being an efficacious teacher is the ability to reach the majority of students and to adjust to their level of need. At times, teachers become frustrated due to their own inabilities. What becomes even more difficult is the stumbling block placed upon the teacher by the administration or school policies.

New teachers also displayed a very positive outlook on their teaching abilities.

They mirrored the same concerns about reaching students as did their more experienced colleagues. They also displayed anxiety over large classes and inadequate teacher training. They too, are somewhat frustrated by a lack of parental and community support. They are, however, more positive when dealing with the administration.

The following areas are suggested for further study.

* A study that asks teachers to describe what courses of study are most valuable to new teachers.
* A study on block scheduling.
* A study on what students think are the qualities of efficacious teachers.

# APPENDIX A

| Please indicate the degree to which you agree or disagree with each statement below by circling the appropriate numeral to the right of each statement. | Strongly agree 5 | Agree 4 | Unsure 3 | Disagree 2 | Strongly Disagree 1 |
|---|---|---|---|---|---|
| 1. When a student does better than usual, many times it is because I exerted a little extra effort. | 5 | 4 | 3 | 2 | 1 |
| 2. The hours in my class have little influence on students compared to the influence of their home environment. | 5 | 4 | 3 | 2 | 1 |
| 3. If parents comment to me that their child behaves much better at school than he/she does at home,it would probably be because I have some specific techniques of managing his/her behavior which they may lack. | 5 | 4 | 3 | 2 | 1 |
| 4. The amount that a student can learn is primarily related to family background. | 5 | 4 | 3 | 2 | 1 |
| 5. If a teacher has adequate skills and motivation, she/he can get through to the most difficult students. | 5 | 4 | 3 | 2 | 1 |
| 6. If students aren't disciplined at home, they aren'tlikely to accept any discipline. | 5 | 4 | 3 | 2 | 1 |
| 7. I have enough training to deal with almost any learning problem. | 5 | 4 | 3 | 2 | 1 |
| 8. My teacher training program and/or experience has given me the necessary skills to be an effective teacher. | 5 | 4 | 3 | 2 | 1 |
| 9. Many teachers are stymied in their attempts to help students by lack of support from the community. | 5 | 4 | 3 | 2 | 1 |
| 10. Some students need to be placed in slower groups so they are not subjected to unrealistic expectations. | 5 | 4 | 3 | 2 | 1 |
| 11. Individual differences among teachers account for the wide variations in student achievement. | 5 | 4 | 3 | 2 | 1 |
| 12. When a student is having difficulty with an assignment, I am usually able to adjust it to his/her level. | 5 | 4 | 3 | 2 | 1 |
| 13. If one of my new students cannot remain on task for a particular assignment, there is little I could do to increase his/her attention until he/she is ready. | 5 | 4 | 3 | 2 | 1 |
| 14. When a student gets a better grade than he usually gets, it is usually because I found better ways of teaching that student. | 5 | 4 | 3 | 2 | 1 |
| 15. When I really try, I can get through to the most difficult students. | 5 | 4 | 3 | 2 | 1 |
| 16. A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement. | 5 | 4 | 3 | 2 | 1 |
| 17. Teachers are not a very powerful influence on student achievement when all factors are considered. | 5 | 4 | 3 | 2 | 1 |
| 18. If students are particularly disruptive one day, I ask myself what have I been doing differently. | 5 | 4 | 3 | 2 | 1 |

| | | | | | |
|---|---|---|---|---|---|
| 19. When the grades of my students improve it usually because I found more effective teaching approaches. | 5 | 4 | 3 | 2 | 1 |
| 20. If my principal suggested that I change some of my class curriculum, I would feel confident that I have the necessary skills to implement the unfamiliar curriculum. | 5 | 4 | 3 | 2 | 1 |
| 21. If a student masters a new concept quickly, this might be because I knew the necessary steps in teaching that concept. | 5 | 4 | 3 | 2 | 1 |
| 22. Parent conferences can help a teacher judge how much to expect from a student by giving the teacher an idea of the parents' values toward education, discipline, etc. | 5 | 4 | 3 | 2 | 1 |
| 23. When my class size becomes too large, I find myself frustrated in my ability to motivate students. | 5 | 4 | 3 | 2 | 1 |
| 24. If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson. | 5 | 4 | 3 | 2 | 1 |
| 25. If parents would do more with their children, I could do more. | 5 | 4 | 3 | 2 | 1 |
| 26. Smaller classes of 25 or fewer are more conducive to being an effective teacher. | 5 | 4 | 3 | 2 | 1 |
| 27. If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him quickly. | 5 | 4 | 3 | 2 | 1 |
| 28. School rules and policies hinder my doing the job I was hired to do. | 5 | 4 | 3 | 2 | 1 |
| 30. When a child progresses after being placed in a slower group, it is usually because the teacher has had a chance to give him/her extra attention. | 5 | 4 | 3 | 2 | 1 |
| 31. If one of my students couldn't do an assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty. | 5 | 4 | 3 | 2 | 1 |
| 32. Even a teacher with good teaching abilities may not reach many students. | 5 | 4 | 3 | 2 | 1 |

Demographic Information: Please check the appropriate line.

1. Type of school _____Urban _____Suburban
2. Years teaching _____1-3 _____4-7 _____8-12 _____13 or more
3. Level of education _____BA only _____Graduate credits _____Graduate
4. Age _____23-33 _____34-54 _____over 55 degree
5. Sex _____male _____female
6. Ethnicity ____White ____Black _____Hispanic _____Asian _____other

APPENDIX B

Dear Colleague,

My name is Maryanne Knudsen and I am a teacher at A.P. Schalick High School in Pittsgrove Township. I am finally to the survey portion of my master's thesis on effective teaching. I need your help in completing my paper. Please take a few minutes to read and answer the survey and demographic information. When finished, please return the survey sheet to the mailbox of your in school collector. Your anticipated assistance is greatly appreciated.

Sincerely,

Maryanne Knudsen

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