# TEACHERS' PERCEPTIONS OF THE EFFECT OF <br> CLASS SIZE ON TEACHER EFFECTIVENESS 

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## CHAPTER I

## THE RESEARCH PROBLEM

## Introduction

The determination of the effect of class size on the educational process is an area which has received much attention and debate by researchers, but results as of yet remain disappointingly inconclusive.

The earliest interest on the topic of class size recorded dates back to Comenius and Herodotus with research into class size actually beginning as early as 1893 with J. M. Rice and the most recent era of research beginning with Howard V. Blakes who studied research previous to 1950. Blakes (1954) found, in his study of class size research, 267 reports on class size, of which he chose 85 to examine. He found that 35 of the selected studies indicated small classes as being better, 18 supported large classes as being better, and 32 that the author did not consider to support either position.

Research has continued throughout the years, with the heaviest interest occurring during the 1970s. The results from the research endeavors show that no consensus has been achieved on whether class size has a significant effect on the educational or learning process.

There are a myriad of areas in which the correlation of variables to class size are studied, each of which concludes that either class size does have a significant effect or class size has no significant
effect. These conclusions are definitive in their own individual research reports, but the lack of consensus that exists within the conglomeration of reports only serves to confuse and misguide those needing and eventually using this information to make educational decisions that may have long term effects.

Two examples of the lack of consensus of the class size research are provided below. Henry J. Otto and associates (1954) found in a study of 50 small and 50 large classes that the total educational program was not discernably different in the small classes than from that found in the large classes. Martin N. O1son (1971), however, states several generalizations that support the smaller class size argument. These generalizations include: 1) teachers employ a wider variety of instructional strategies, methods and learning activities and are more effective with them when they have fewer rather than more students, 2) students benefit from more individualized instruction when teachers have fewer rather than more students, 3 ) students engage in more creative and divergent thinking processes when teachers have fewer rather than more students, 4) students learn how to function more effectively as members and leaders of groups of varying sizes and purposes when teachers have fewer rather than more students, 5) students develop better human relations and have greater regard for others when teachers have fewer rather than more students, 6) students learn the basic skills better when teachers have fewer rather than more students, 7) classroom management and discipline are better when teachers have fewer rather than more students, 8) teachers' attitudes and morale are more positive when teachers have fewer rather than more
students, and 9) student attitudes and perceptions are more positive when teachers have fewer rather than more students.

Even though the inconclusiveness of results does exist, one significant point continues to arise consistently within the research. Most teachers perceive an inherent value in smaller classes, both in terms of pupil effects and teacher morale. And most perceive large classes as a major negative influence on job satisfaction plus academic achievement, as well as personal and social development of their students (ERS, 1978).

With the increasing awareness of the need to terminate the inconclusiveness in the class size research, Ryan and Greenfield (1976), in their class size research, suggest an alternative to the present production model that has been consistently used throughout the years of class size research. In the production model, the school is seen as a set of resources arranged to yield a product which conforms to predetermined goals. The school is conceived as arranging its resources in such a way to maximize the production of a desired product. The researchers suggest, as an alternative to the production model, a service model. In the service model the school is perceived as a service or public utility which is seen as using and providing its resources to enable people to achieve ends that seem desirable to them.

According to Ryan and Greenfield (1976) the modes of research researchers have available for use include descriptive, evaluative, descriptive-interpretive, analytical and experimental, all of which have provided inconclusive results. Ryan and Greenfield (1976)
strongly suggest as a mode of research "direct research within the classroom or life in the classroom type research" (p. 265).

Direct research within the classroom is not perceived or welcomed as a serious form of research, "the research would be seen as soft and unreliable, since it would provide a set of magic numbers stipulating how big classes should be" (p. 265). In a review of the Ryan and Greenfield article, West (1976) cites that "much of the previous research misleads us about its effect because it is based upon inadequate conceptions of what schools are and what is going on in them" (p. 194).

A general shortcoming of educational research of many kinds has been its tendency to ignore the natural setting in which education occurs. Schools and classrooms provide a rich natural laboratory that researchers must work in to discover what the effective variables are in shaping the educational process and what the consequences of this process are for those involved in it. A strength of a service model for research purposes appears because it permits and, indeed, requires that the concerns, interests and problems of people involved with the school process be dealt with directly. It focuses attention upon the variables in the human or experiential dimension of school process and asks how people construe the social reality around them and make decisions within it (Ryan and Greenfield, 1976).
W. Gordon West (1976) cites that researchers have very little information on how teachers see different sizes of classes and how they work with them. It is time to stop making assumptions about what class sizes are and to stop making assumptions about their effects. We must know more about situations as they are and how people (pupils,
teachers, administrators and others) see those situations before we can direct how those situations should be changed to improve them. West continues by stating,
because education has long been regarded as a thing apart, almost a sacred activity, researchers have perhaps too easily been content to study it from the outside of the school and classroom. If they enter these precincts at all, they do so to make brief observations and depart swiftly (p. 195).

Researchers need to know more about the intentions, activities and experiences of people within the school process. In order to obtain such information, it appears there is no substitute for direct study. and observations in schools and classrooms. To expand knowledge along this dimension, researchers should explore and document, likely through case studies, how educators use the resources available to them to create learning environments (West, 1976). Concerning these observations, Ryan and Greenfield (1976) note that the observations could be questioned as being truly representative of the actual teaching-learning situation in classrooms and for all teachers and students.

An example of why researchers may have difficulty providing accurate information from classroom observations is provided. It appears that objectivity is lacking in the studies. For example, an observer in study $A$ watches an event, interprets the event and gives it a label; an observer in study $B$ watches a similar event and may 1) interpret it the same way and give it the same label or 2 ) interpret the same but give it a different label or 3) interpret it differently or he may not even witness the same event. It would be interesting to know teachers' opinions as to how much time must be spent observing a class in order to get a realistic and complete picture (Ryan and

Greenfield, 1976). The researchers also add that the "quality of the research and the usefulness of it is likely to be increased if the collaborative relationship is strengthened between researchers and school people. Most importantly, collaboration should probably extend to cooperative design of the research projects themselves" (p. 282).

A commission study in the U.S. on class size (Final Report of Presidents Commission on School Finances, 1976) proposed that additional studies should deal with the attitudes of teachers on class size and the effect of those attitudes, rather than size itself on the development of children. Russell Davis (1976) states that process research could be threatening to teachers who are not routinely subject to continuous observation. And according to Passarella (1978),
it may be advantageous at this time to scrutinize class size from a new perspective. That is, how does class size affect . . . teachers' perceptions of their own effectiveness (p. 3).

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Statement of Problem
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For years research on class size has been investigated with results remaining inconclusive and indicating a lack of consensus. In the research, two points arise which require further attention. One, teachers consistently indicate that smaller classes are better, and, two, a change is needed in the class size research methodology.

No previous investigation has attempted to examine the class size question from the teachers' perspectives. Further, no research has suggested that class size research be conducted from within the classroom by the teacher. Thus the provision for exposure of valuable information from this natural setting has been precluded.

The purpose of this study is to question and record the teachers' perceptions on the effect of class size on their teaching effectiveness. By communicating that their responses rather than researchers' generalizations are more significant, it is anticipated that teachers will readily participate and voice their opinions on this issue. The author is interested in finding out if this information may contribute to the development of a new class size research approach in which the teacher may be totally involved.

The question to be answered is will teachers take advantage of an opportunity to voice their opinions on an issue they perceive as being their number one concern (NEA, 1977), and thus contribute information which has never been collected through research, and which may aid in the development of a new methodology in class size research.

## Limitations

The research is very dependent on the sample responding truthfully to the questionnaire, rather than how they perceive the researcher, or other persons, as wanting them to respond.

The selective sample is not entirely representative of teachers statewide or nationwide.

## REVIEW OF LITERATURE

## Introduction

To understand the development of class size research to date as well as the inconclusiveness of its results, it is necessary to examine those areas that appear, according to the great numbers of research material, to be the two most popular areas associated with the class size issue. These include student achievement and teacher morale.

Research into class size pertaining specifically to teacher response is minimal. Basically this area in the class size research encompasses only surveys and polls with an occasional article dedicated to teacher opinions. No explanation can be given as to the lack of direct verbatim recording of teacher opinions and suggestions.

It is important to note that much of the research to date is not only inconclusive but questionale in its methodology and arrival at results. Many articles reviewed consisted of generalizations, unsupported assumptions and insights, with many repetitions of previous researchers' comments concerning the relationship of class size to educational outcomes. Few articles consisted of explicit explanations of research methods or statistical analyses of results.

Another reason for the lack of substantive generalizations has been the inadequacy of some of the research in that some
investigations have failed to control certain variable that inevitably influence results. They have also used such a variety of definitions of and meanings for class size that it is difficult to draw generalizations from their findings.

The most frustrating and confusing variable in examining the effect of class size according to the research material is the various interpretations of "large" and "small" classes. No consensus exists between the various researchers concerning these numbers. Class size defined ranges from "class size" to "pupil-teacher ratio," with numbers of students being totaled according to subject matter, size of school and types of schools (Passarella, 1978).

Most reviewers of the class size literature have failed to make distinctions between studies conducted at various levels of schooling, so the reader is often presented results from kindergarten classes and university classes in almost the same breath. Besides various levels of schooling being combined, grouping of different subject matter is also often combined. No commonality in definitions is due to the fact researchers have not been able to experimentally manipulate class size, so that "large" simply is taken as having more pupils than is normal in a particular school (Ryan and Greenfield, 1976).

In some ways large and small are matters of relativity because what is considered to be large or small basically changes from year to year since the enrollment of any school fluctuates somewhat year to year. What is lacking in all of the class size research is not one specific definition or number for class size but evidence regarding the influence of any absolute class size.

## Student Achievement

Lindbloom (1970) states that studies examining the effects of class size on pupil achievement reveal inconclusive results. It is imperative while reviewing class size and student achievement research to view both sides of the research to arrive at the best possible decision.

Martin N. Olson (1977) in 18,528 classroom observations assessed the effects of class sizes of $5,15,25$ and 36 on classroom and teacher performance. He consistently found that students in smaller classes performed higher than larger ones. Leuschner (1975) in his report of the findings of the effect of class size in Pennsylvania schools notes that especially within the junior high school, classes of 32 or more showed lower achievement growth for the sample of students examined.

Lynn M. Johnson and associates (1977) conducted a study to explore the effect of class size on reading and mathematics achievement of first grade pupils. In the comparison of 25 small classes of 19.9 students to 25 large classes of 26.7 students, they found that smaller classes significantly affected reading and overall achievement of first graders sampled. In a similar way Helmund Perl (1978) worked with grade levels $\mathrm{K}-5$ in an assessment of reading and achievement. He found that small classes had significant achievement gains in reading and arithmetic in grades $\mathrm{K}-2$. Small classes also influenced reading achievement in grades 3-5 but less than in earlier grades.

Glass, Cahen, Smith and Filby (1979) concluded, in their article on new interpretations of the class size research, that the average pupil achievement increases as class size decreases, and the typical
achievement of pupils in instructional groups of 15 and 20 achieve several percentile ranks above that of pupils in classes of 25 and 30. On the average, student achievement increases as class size is reduced and the advantage rises sharply for a class of 15 and below. Glass (1982) notes that in $69 \%$ of the instances in which classes of 18 and 28 were compared, smaller classes achieved at a higher level than larger classes. In 45 of 46 comparisons of class size, of 2 to 28 pupils, the smaller class showed a higher level of achievement than the larger class. Thibodeaux and Zuzan (1984), in a study of class size on student achievement in college classes, found in their comparison of a class of 196 to a class of 50 students on three objective tests, that on only one of the three tests did the large class perform better than the smaller class. The authors conclude that class size does affect student achievement.

In contrast to the above research, Smith (1971) reported in a study based on an annotated bibliography of some 34 studies, each dealing with research on class size and pupil achievement, that large classes or smaller classes have little or no effect upon student performance. Irving Flinker (1977) conducted an investigation in which a comparison of a large class of students (55) to two smaller classes (each numbering 34) was conducted. Each class was instructed on the same material with equal instruction time, and each teacher was assisted by an aid to help insure more individualized instruction. Each class was tested using the same achievement test. Flinker found that there is no conclusive evidence that a class of 30 children obtains better instruction and makes more progress than a class of 40. Burston and Hickox (1973) express the sentiment in their
discussion of the effect of class size; they also report that there is little relationship between class size and any productivity measure such as degree of learning.

Richard J. Murnance (1975) hypothesized, in his study of 875 inner city blacks, that larger classes would lead to a decrease in pupil achievement. Students were divided into three groups and tested using the Metropolitan Achievement Test over a two year period. Murnance's results indicated that class size has no influence on achievement in either reading or mathematics in the three groups. In a similar study, the Metropolitan school district (1976) conducted a study to measure the effects of class size on reading achievement of pupils in grades 1-3. Five hundred seventeen pupils were included in the three year longitudinal study. Each child was assessed with the California Achievement Test at the end of the year. Results showed that class size by itself was virtually non-predictive of third grade reading achievement.

In an experiment to test the effect of class size on achievement of ninth grade students, Joseph DeAngelis, Jr. (1977) compared 23 and 46 students in science laboratory courses in physical science. At the end of six months both classes took a standardized achievement test. DeAngelis found that the achievement of the students in small classes was not significantly different from that found in the class of 46 .

In a recent review of the research on class size carried out by the Educational Research Service (1978), it was stated that research dating back to 1893 has produced little confirmation of the widely held idea that smaller classes will produce greater student achievement. In a two year study by Shapson, Wright, Eason and

Fitzgerald (1980) who investigated four class sizes of $16,23,30$ and 37 on teacher expectations, attitudes, opinions and student achievement in reading, mathematics, composition and art, they found that contrary to teachers' opinions of smaller class size being better than large class size, there were no class size effects for achievement measures for reading, vocabulary, mathematics problem solving, art and composition.

Teacher Morale

When researching the area of teacher morale as it is affected by class size, much difficulty is encountered due to the confusion over the working definition of morale. Morale as it is used here will concern itself with job satisfaction.

Researchers investigating the nature of job satisfaction have indicated relationships between a number of factors and job satisfaction. Henry Harap (1959) summarized results of a 10 year study to discover what factors affect teacher morale. Although many factors affected the morale of the teachers, their responses indicated that a good salary and reasonably small classes were the most important factors fostering job satisfaction and high morale.

In polls conducted by the NEA, teachers responded to the effect of class size on teacher morale. In $1968,34.7 \%$ of teachers noted that class size was a major problem facing them. In a poll conducted in 1971, large class size was ranked at the top of teachers' problems by $34.7 \%$ of those responding. In 1974, three teachers in four (74.1\%) considered small classes extremely important for job satisfaction for the teacher. Also in 1974, $49.8 \%$ of teachers polled said classes they
were teaching were too large. In 1975, lower class size headed the list as the one improvement that would lead to better teacher morale. Flinker (1972) found in his research that there was less stress and tension for the teacher of smaller classes because of fewer learning problems, less paperwork, fewer behavior problems, easier class control, and less diversion. Leuschner (1975) discovered that working conditions were the most commonly seen as the most pressing problem in teachers' concerns.

A poll of 1,400 elementary teachers conducted by the Cleveland Teachers Union indicated that class size was the major issue confronting them. Glass and Smith (1982) conclude that in smaller classes teachers feel their morale is better, they like their pupils better, they have time to plan, and they are more satisfied with their performance.

Alternatives to Class Size Reduction

When reviewing the class size research, that teachers see class size reduction as the main solution to various classroom and instructional problems is quite evident, according to the vast numbers of references to class size reduction. When researching the possible use of alternatives such as teacher aids, parent aids or hiring of extra teachers, it becomes quite clear that teachers do not see these ideas as feasible alternatives. In fact, teachers see aids, parent aid and extra teachers as only "holding operations," because sometimes what a student needs can only be provided by a professional teacher (Ryan and Greenfield, 1976).

In reviewing the research material, it is evident that no natural progression of alternatives leading to the class size reduction has or will occur because "teachers do not foresee convincing administrators to change educational philosophies, to allow changes in teaching methods, or to appropriate funding for such alternatives" (p. 128).

When looking at teachers' opinions on class size reduction, it is important to question the influence of research material and writers' opinions about teachers concerning class size reduction. Do teachers actually want reduced class size for better teaching and morale or is it the "baby" of someone else? It is not surprising to find that opinion polls of teachers strongly favor smaller classes and allude to marvelous outcomes which they will insure. It is also understandable that teachers want to read article telling them they are overworked, underpaid and that fewer students in their classrooms will make teaching more professional and gratifying (Graduate Students, University of North Carolina, 1978).

One way to determine if teachers actually see class size reduction as a necessary change is through the recording and use of teachers' opinions and suggestions on the subject.

## Use of Teachers' Opinions and Suggestions

When researching the actual recording of teachers' opinions, what is typically found is in the form of the opinion poll or survey, in which only a single datum form is collected, either a yes or no answer. Besides the opinion poll and survey, an occasional article is dedicated to what teachers think specifically about the class size issue. These few articles are typically written and submitted to
journals by teachers themselves, and these articles often appear as human interest information, not as serious research material to be considered.

Polls and surveys do provide, of course, useful information but they do not allow for the teacher to elaborate on their opinion concerning the question, beyond a yes or no answer. Polls and surveys only allow a teacher to answer yes or no to a general question. The manner in which researchers use this information to represent teachers' opinions is perceived as incomplete and questionable in the extent that it may be publicized and used as conclusive data.

Concerning the typical type of class size research information,

## West states,

much of the previous research misleads us about class size effect because it is based on inadequate conceptions of what schools are and what is going on in them (p. 194).

West bases this statement on the fact that most researchers are not actually involved in the school setting daily but only are exposed when doing observations and research. Another point by West is that there is very little information on how teachers perceive different sizes of classes and how they work with those different sizes. Again, it is important to reiterate that within these inconclusive observations and generalizations teachers consistently perceive large classes as negative to job satisfaction, teacher morale, as well as pupil academic achievement.

Why then are the inconclusive results and generalizations from outside researchers presented as definitive in the class size issue? Passarella (1978) states that,
it may be advantageous at this time to scrutinize class size from a new perspective. That is how does class size affect . . . teachers' perceptions of their own effectiveness (p. 3).

METHOD AND PROCEDURES

## Sample

One hundred eighty-two high school teachers in central Oklahoma participated in the study.

The high schools participating in the present study are located in central Oklahoma and were selected on the basis of having a high school faculty of 20 or more teachers. The author perceived that a school with a faculty of 20 or more would have a student enrollment significantly large enough for use in the study.

Superintendents of 200 schools were contacted by phone or letter and requested to select three to five teachers from their high schools to respond to the questionnaire. Of the 200 superintendents contacted, 60 agreed to participate. Of the possible 300 questionnaires sent to the 60 superintendents to distribute, 182 responses were received by the author. The actual return rate per school was not monitored by the author.

## Instrument

The teacher questionnaire was designed by the researcher because of the lack of a formal instrument which addressed class size and, more specifically, provided opportunity for and requested teachers' opinions on areas related to class size.

The questionnaire consisted of 40 questions which examined areas of interest such as class size, workload, working conditions and teaching materials-facilities. Questions on teaching materials and facilities as well as working conditions were used primarily in which to embed class size and workload questions to prevent subjects from answering as they perceived the researcher or others as wanting them to.

There are various types of response choices provided in the questionnaire, they range from yes-no, always-to-never and excellent-to-poor. After each response choice, space is provided for the subject's comments. Biographical information on each subject was also collected. The instrument was pretested on 11 education majors at Oklahoma State University in order to obtain information concerning improvements of the questionnaire (Appendix A).

## Procedures

Superintendents of 200 schools were contacted by phone or letter (Appendix B) to explain the research project and were requested to randomly select three to five teachers within their high school to respond to the questionnaire. Of the 200 superintendents contacted, 60 agreed to participate. Schools were selected on the basis of having a high school faculty of not less than 20. This number was selected on the basis that a school with a faculty of not less than 20 would have a student enrollment large enough for use in the present research.

A sample questionnaire was sent to each superintendent for approval by the superintendent. Self-addressed, stamped envelopes containing three to five questionnaires were then distributed to them.

Each questionnaire contained instructions, a statement of purpose, and a guarantee of confidentiality in the introduction of the instrument to encourage uninhibited responses by the subjects (Appendix C). Upon completion, the questionnaires were then returned to the author.

Analysis of Data

In the analysis of the data, percentages were calculated on each individual question. In the examination of the data, responses of the total sample, specific groups, and individual questions were examined and compared. A cumulative percentage was also calculated for those teachers expressing their opinion when given the opportunity.

Background information was also collected on each respondent. Percentages on the areas of sex, years taught, grade taught, subject taught and number of students taught were calculated.

## CHAPTER IV

RESULTS AND DISCUSSION

## Introduction

The purpose of this study was to examine and record the perceptions of teachers on class size as they perceived it affecting their teaching effectiveness. In order to record and examine the teachers' perceptions, percentages were calculated for the questionnaire data.

## Rate of Response

In the questionnaire, 40 questions were presented for consideration. Of the 40,30 questions provided the teachers opportunity to comment and express opinions. Due to this opportunity to write in answers, it was impossible to record every response. Responses were collapsed into various categories based upon the author's opinion. Explanation of the collapse of information will be provided in the discussion of these specific tables of information.

The total percentage of those teachers choosing to comment on any question was $99.80 \%$. Those teachers choosing to comment on questions pertaining to class size was $76.94 \%$, to morale was $62.87 \%$, and to workload was $87.92 \%$.

Percentages were calculated for each question related to these topics of interest. These data are provided in the following tables.

Table I represents student's cooperation with the teacher as perceived by teachers.

TABLE I
Student's Cooperation

| Are the students cooperative with the teacher? | $\%$ |
| :--- | ---: |
|  |  |
| Always | 8.24 |
| Almost Always | 80.21 |
| Often | 9.89 |
| Sometimes | 1.00 |
| Never | 0.00 |
| No Response | .66 |

Eighty percent of the teachers questioned perceived their students as being almost always cooperative with them.

Table II represents the number of hours per day teachers spend preparing lesson plans.

TABLE II
Hours Preparing Lesson Plans Daily

| How much time daily does the teacher use for lesson plans? | \% |
| :--- | ---: |
|  |  |
| Less than one hour | 10.43 |
| 1 to 2 hours | 61.53 |
| 2 to 3 hours | 25.16 |
| 4 hours | 2.19 |
| 5 hours | .54 |
| No Response | .15 |

Over one-half of the teachers questioned spent 1 to 2 hours daily preparing lesson plans.

Tables III, IV, V, and VI provide results pertaining to questions addressing class size.

In Table III results indicate that teachers do perceive class size as affecting their teaching.

TABLE III
Class Size Affects Teaching

| Does class size affect the teachers' | teaching? |
| :--- | ---: |
|  |  |
| Always | 30.76 |
| Almost Always | 0.00 |
| Often | 27.47 |
| Sometimes | 24.17 |
| Never | 4.94 |
| No Response | 12.66 |

Cumulatively $82.40 \%$ of the teachers questioned perceived class size as affecting their teaching. Due to a flaw in the questionnaire, results do not indicate if these perceptions were positive or negative.

Table IV presents results indicating that typically teachers' class sizes are determined by enrollment.

TABLE IV
Determination of Class Size

| How are class sizes determined? | $\%$ |
| :--- | ---: |
| Administration | 6.04 |
| Enrollment | 73.62 |
| Other | 7.14 |
| Don't Know | 6.04 |
| No Response | 7.16 |

Seventy-three percent of the teachers questioned indicated class sizes were determined by enrollment.

Table V provides results showing teachers' opinions on compensation for class size by the hours in a school day.

TABLE V
Hours in a School Day

|  |  |
| :--- | ---: |
| Would the teacher want less or more hours in a school <br> day to compensate for class size? | $\%$ |
|  |  |
| Same | 76.92 |
| Increase | 20.32 |
| Decrease | 1.64 |
| No Response | 1.12 |

Table V results suggest that if given the opportunity to increase or decrease the hours in a school day to compensate for class size, teachers would choose to leave the hours in a school day the same.

Table VI provides results showing teachers' opinions on compensating for class size through changing salaries.

TABLE VI
Change in Salary to Compensate for Class Size

If class size could be increased or decrease at a $1 \%$ increase or decrease in pay, would the teacher

| Same | 63.73 |
| :--- | ---: |
| Increase | 18.13 |
| Decrease | 15.93 |
| No Response | 2.21 |

Table VI indicates that teachers, if given the opportunity to increase or decrease class size at a $1 \%$ increase or decrease in pay or class size, would choose to leave class size the same.

Concerning Table V and Table VI, one fact is apparent regarding teachers' reactions to the opportunity to compensate for class size. Teachers prefer to leave class size the same rather than compensating through changes in the hours in a school day or a $1 \%$ increase or decrease in pay.

Due to the flaw in the questionnaire concerning the positiveness or negativeness of class size on teaching, it is impossible to speculate on the relationships in the comparison of Table III, Table V, and Table VI. Without this comparison one can only hypothesize why teachers preferred to leave school hours the same or to leave class size the same rather than take a $1 \%$ increase or decrease in pay to compensate for class size.

Tables VII, VIII, IX, and X address the teachers' perceptions of behavior problems and the administration of punishment.

Teachers were given the opportunity to write in what they perceived as the four main causes of behavior problems. Since it was impossible to record each different response, the information was collapsed into two categories. Categorization of each answer was determined according to whether the answer was perceived by the author as an external cause or internal cause. External causes were those behaviors perceived as resulting from the characteristics of the environment, and internal causes were those behaviors perceived as resulting from characteristics of the child.

Table VII presents information concerning what teachers perceive as the main causes of behavior problems.

TABLE VII

Causes of Behavior Problems

| What does the teacher see as the four main |  |
| :--- | ---: |
| causes of behavior problems? | $\%$ |
|  |  |
|  |  |
| External Causes | 51.37 |
| Internal Causes | 6.45 |
| No Response | 42.18 |

Table VII indicates that over $50 \%$ of the teachers questioned perceived students' behavior problems being due to external causes.

Table VIII presents information concerning the comparison of the number of behavior problems occurring in teachers' classes.

TABLE VIII

Number of Behavior Problems

| Are the number of behavior problems occurring in |
| :--- |
| the teacher's classroom the same as the number of |
| behavior problems occurring in other teachers' classrooms? |

In Table VIII results indicate that teachers perceived the number of behavior problems occurring in their own classrooms as being the same or less than those occurring in other teachers' classrooms.

Table IX presents the percentage of teachers administering punishment when necessary.

TABLE IX

Administration of Punishment

| Does the teacher administer punishment? | $\%$ |
| :--- | ---: |
|  | 59.89 |
| Always | 0.00 |
| Almost Always | 9.89 |
| Often | 25.27 |
| Sometimes | 4.95 |
| Never | 0.00 |
| No Response |  |

Results indicate that over one-half of the teachers surveyed always administered punishment.

Table X provides results on principal support of the administration of punishment by the teacher.

TABLE X
Principal Support

| Does the principal support the teacher when <br> punishment must be administered? | $\%$ |
| :--- | ---: |
|  | 96.15 |
| Always | 3.29 |
| Often | 0.00 |
| Sometimes | .56 |
| Never |  |

Results show that $96.15 \%$ of the teachers questioned responded that their principal supported them when they administered punishment to their students.

Table IX presents the attitude of teachers regarding workload.

TABLE XI
Teachers' Workload

| Is the teachers' workload | $\%$ |
| :--- | ---: |
| Satisfactory | 70.73 |
| Too Much | 29.12 |
| Too Little | .15 |
| No Response | 0.00 |

Results show that the majority of teachers questioned felt their workload was satisfactory. However, more than one-fourth of the teachers questioned perceived their workload as too much.

Table XII shows that the majority of the teachers questioned felt their attitude toward work at the end of the day was optimistic.

TABLE XII

## Teachers' Attitudes

| What is the teachers' attitude toward work |  |
| :--- | ---: |
| at the end of the day? | $\%$ |
|  |  |
| Optimistic | 73.62 |
| Defeated | 15.93 |
| Indifferent | 4.94 |
| No Response | 5.51 |

Close to one-fourth of the teachers questioned, however, felt their attitude toward their work at the end of the day to be defeated. Teachers were given the opportunity to write in their answers concerning their attitudes toward their work at the end of the day. These answers typically fell into three categories, optimistic, defeated, and indifferent.

Table XIII represents the number of teachers having the use of a teacher's aid.

TABLE XIII
Teacher's Aid

| Does the teacher have the use of a teacher's aid? | $\%$ |
| :--- | ---: |
| Yes | 77.47 |
| No | 22.52 |
| No Response | .01 |

Over one-half had the use of a teacher's aid while close to one-fourth did not have the use of a teacher's aid.

## Biographical Information

Biographical information was also collected on each responding teacher. Information concerning years taught, grades currently taught, number of grades currently taught, subject areas and number of subject areas currently taught, and number of students currently taught was collected.

The ratio of females to males responding to the questionnaire was 1.44 to 1.

This biographical information is provided in the following tables.
Table XIV represents the years taught by the teachers questioned.

TABLE XIV
Years Taught

| Years | $\%$ | Years | $\%$ | Years | $\%$ |
| :--- | :---: | :--- | :--- | :--- | ---: |
| 37 | 93.64 | 24 | 85.47 | 12 | 63.03 |
| 36 | 93.10 | 23 | 85.47 | 11 | 57.54 |
| 35 | 93.10 | 22 | 84.93 | 10 | 52.05 |
| 34 | 92.56 | 21 | 83.29 | 9 | 48.76 |
| 33 | 92.56 | 20 | 80.55 | 8 | 42.72 |
| 32 | 91.47 | 19 | 78.36 | 7 | 37.23 |
| 31 | 90.93 | 18 | 76.72 | 6 | 30.64 |
| 30 | 89.29 | 17 | 75.63 | 5 | 26.80 |
| 29 | 89.29 | 16 | 73.44 | 4 | 19.66 |
| 28 | 89.29 | 15 | 70.15 | 3 | 18.07 |
| 27 | 89.29 | 14 | 66.86 | 2 | 10.88 |
| 26 | 88.75 | 13 | 65.22 | 1 | 3.29 |
| 25 | 87.66 |  |  |  |  |

More than three-fourths of the teachers questioned taught between 1 to 20 years with close to one-fourth teaching 21 years or more.

In Table XV the grade most typically taught by the teachers questioned was the llth grade.

TABLE XV
Grades Taught

| Grades taught | $\%$ |
| ---: | :---: |
| 9 | 71.47 |
| 10 | 84.62 |
| 11 | 86.82 |
| 12 | 69.25 |

Percentages were calculated by dividing the number of teachers teaching a specific grade by the total number of teachers questioned.

Table XVI ${ }^{1}$ represents the subject areas taught by the teachers questioned.

[^0]TABLE XVI
Subject Areas Taught

| Subject Area | $\%$ | Subject Area | $\%$ |
| :--- | ---: | :--- | ---: |
| Art | 2.74 | Math | 18.68 |
| Business | 9.89 | Music | 1.08 |
| English | 28.57 | Physical Education | 3.29 |
| Foreign Language | 3.29 | Science | 14.83 |
| Geography | .54 | Social Science | 7.14 |
| Government | .54 | Speech | 5.49 |
| History | 11.53 | Vocational |  |
| Home Economics | 6.04 | Agriculture | 1.64 |
| Journalism | 2.18 |  |  |
| Language Arts | 1.64 |  |  |

The subject area most typically taught was English (28.57\%), this is seen as representative of the number of English teachers in a typical high school.

Table XVII represents the number of subject areas taught by the teachers questioned.

TABLE XVII
Number of Subject Areas Taught

| Number of subject areas taught by teachers | $\%$ |
| :--- | ---: |
|  |  |
| 2 | 74.17 |
| 3 | 19.23 |
| 4 | 6.04 |
| No Response | 0.00 |

Results indicate that of the teachers questioned the majority of the teachers taught only one subject area.

Table XVIII represents the number of students taught by the teachers questioned.

TABLE XVIII
Number of Students Taught

|  |  |
| :--- | ---: |
| Number of students taught by teachers |  |
|  |  |
| 30 | 94.83 |
| 29 | 93.74 |
| 28 | 92.65 |
| 27 | 91.56 |
| 26 | 89.92 |
| 25 | 99.28 |
| 24 | 84.44 |
| 23 | 79.50 |
| 22 | 74.56 |
| 21 | 69.62 |
| 20 | 66.33 |
| 19 | 60.29 |
| 18 | 57.00 |
| 17 | 49.86 |
| 16 | 45.47 |
| 15 | 41.63 |
| 14 | 37.79 |
| 13 | 32.85 |
| 12 | 27.91 |
| 11 | 25.17 |
| 10 | 20.78 |
| 9 | 18.59 |
| 8 | 14.75 |
| 7 | 11.46 |
| 6 | 7.62 |
| 5 | 3.28 |
| 4 | 2.19 |
| 3 | 0.00 |
| 2 | 0.00 |
| 1 | 0.00 |

Results indicate that slightly greater than one-half of the teachers questioned taught classes of more than 18 students.

## Examination of Results

Results in each table were examined. Possible relationships existing between the results are examined and critical questions concerning these relationships are presented.

In the examination of the data, responses of the total sample, specific groups, and individual questions were examined and compared.

In the examination of Table III and other findings of this study, results show that all of the teachers questioned perceive themselves as effective, ninety-eight percent felt they were respected by their students, cumulatively $99.34 \%$ felt their students were always to sometimes cooperative, and ninety-eight percent felt they had control over their students. In the author's opinion, it appears a strong relationship exists and is indicated between those teachers perceiving themselves as effective and in control, with those teachers who also saw themselves as respected by students and having students who were also cooperative with them.

In a broad comparison of Table XIV, and Table XV, all of the teachers questioned considered themselves effective as teachers, however $29.12 \%$ perceived their workload was too much, and $15.93 \%$ had an attitude of defeated toward their work. The author questions how each group of teachers, specifically those with a defeated attitude toward their work and those considering their workload too much, can define their own teaching as effective.

In an examination of Table VI and Table XXI , results indicate that of those teachers teaching classes of 18 or more students, $48.78 \%$ felt that class size always affected their teaching. In a comparison to the overall sample, $29.12 \%$ felt that their workload was too much.

Results suggest that of those teachers teaching classes of 18 or more students, $34.14 \%$ felt their workload was too much. Those results suggest more teachers teaching classes of 18 or more students may feel that their workload is too much.

In an examination of Table XIV and Table XXI, results indicate that in the overall sample $29.12 \%$ felt that their workload was too much. Results suggest that of those teachers teaching classes of 18 or more students, $34.14 \%$ felt their workload was too much. These results suggest teachers teaching classes of 18 or more students may feel that their workload is too much, whereas the total sample of teachers did not perceive their workload as being too much.

In an examination of Table XII and Table XVIII, results suggest that the overall sample did not perceive their attitude toward their work to be defeated (15.93\%), whereas those teachers teaching 18 or more students strongly perceived their attitude toward work to be defeated (51.21\%). These results suggest that teaching classes of 18 or more students may contribute to the development of an attitude of defeated toward work by the teacher.

In an examination of Table XIV and other findings in this study, ninety-eight percent of the teachers questioned perceived themselves as having control over their students, $26.94 \%$ of these teachers also felt their workload was too much. It appears that the effort to maintain control over students may contribute, at least to one-fourth of these teachers questioned, to their perceiving their workload as too much.

In an examination of Table XII and Table XIV, in the overall sample only $29.12 \%$ considered their workload to be too much with
$28.02 \%$ administering punishment sometimes to never. Of those teachers who administered punishment sometimes to never, $62.74 \%$ considered their workload to be too much. This suggests that a possible relationship exists between the absence or infrequent administration of punishment and teachers considering their workload as too much. Also in Table XIV and Table XV, of the overall sample, 29.12\% considered their workload as too much with $15.93 \%$ having an attitude of defeated. For those teachers who considered their workload to be too much, $72.54 \%$ also perceived their attitude toward their work to be defeated. This result suggests that teachers who consider their workload to be too much may also develop an attitude of defeatism toward their work.

## Teachers' Perceptions

While it was impossible to represent all teachers' opinions and suggestions in the present study, many are provided for consideration. It is very important that these perceptions be considered simultaneously with the calculated results to obtain the most wholistic understanding of teachers' perceptions regarding class size. Teachers' perceptions regarding class size, workload, and attitude toward work are presented for consideration.

Class Size

In the questionnaire, teachers were asked if class size had a significant effect on their teaching and why. Teachers responded to the question with the following opinions.
"When they are very large I cannot take field trips with them. I have to be more disciplined and hard nosed with large classes."
"It depends on the attitude of the majority of students in the class toward the subject."
"The small classes are closer and more is accomplished, more individual attention is given to the students."
"If a class is too large, individuals cannot be given the attention they need. Large math-classes generate a depressing stack of papers to be graded every day."
"Smaller classes allow more detailed or better focused teaching."
"Most times I can accomplish more with a smaller class also give more individual assistance."
"A small class has an informal atmosphere but large classes are more structured just to keep order."
"I would like to spend more time working individually with students. This is difficult in large classes."
"When the classes are too large, a teacher seems to become lost in trying to get work graded, students tend to become a number rather than a person, some that need a little extra boost get lost because of too many students in a class."
"If too many people are in an undersized room, activities and mobility are restricted."
"It is difficult to teach a class that is too large, you spend most of your time on behavior problems."
"Individualized attention to student's needs is primary in teaching success."
"Too many students or too small a class both, make teaching more difficult."
"It is most difficult to keep 25 plus students quiet enough to teach them anything."

Workload

In the questionnaire, teachers were asked their opinions concerning their workload. Samples of their opinions are provided below.

```
"I spend too much time out of school, time is spent on
school functions."
"Pep club duty is alot of trouble, I find that one of my
classes suffers because I have to run the pep club."
"If I could have a student aid it would help and I think I
deserve one as much if not more than a coach."
"There is not enough time to grade papers or prepare for
class properly."
"Some classes are too large; making it difficult to be as
effective as I would like to be."
"As long as class size remains 25 or below, I can do an
adequate job."
"Too much free sponsorship, in the business community you
are paid for work done, in education this is not the case."
"Duties other than classroom teaching should be eliminated
or paid for like any other job."
"Preparing for two subjects, combined with the amount of
paper grading required to teach, keeps me working constantly
at school and home. Other responsibilities cut into my work
time."
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"I am preparing and teaching six different subjects in a
seven hour day."
"I have no complaints about teaching. I do have many
complaints about committees and sponsorships that take
preparation time and energy needed for teaching."
"The classroom teaching is just fine, I can handle that but
the class sponsorship, committee work, etc. is where I
become overloaded."
"Every secondary teacher needs a preparation time."
"Too much sponsoring plus working at ball games."
"I would enjoy spending more time with my family, I'm away
from home too much."
"I have four preparations each day and I spend all evening
preparing for them and grading papers."
"Teaching is a unique profession, if one is a clock watcher,
he needs to look for some other work."
"Sponsoring clubs takes away planning time for effective
teaching."
"Without a planning period, the paperwork (grading and planning) takes alot of evening and weekend hours."
```


## Attitude Toward Work

In the questionnaire, teachers were asked what their attitude was toward their work at the end of the day. A sample of their opinions is provided below.

```
"I enjoy my job or \(I\) would not be doing it. Some days
around deadlines I am too exhausted to worry or plan lessons
for regular classes."
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"Worn out."
"I'm pooped!"
"Need to escape for a few hours."
"Often dissatisfied with what I've accomplished."
"Tired; feeling of being behind; frustrated that I can't
accomplish all I wish."
"Many days I feel that I must be insane to remain in
teaching for the pay I receive."
"Good! Always looking for tomorrow, teaching is a good
profession, teaching is no more tiresome than any other
profession."
"Would like to go home and forget it, but know you can't.
"Exhausted, stressed, frustrated."
"I am very, very tired, sometimes angry, sometimes
discouraged, sometimes encouraged but looking forward to
another day."
"I would like more time to relax at home instead I find
myself doing school work."
"Ready to get caught up."
"Tired, sometimes too tired to grade at the expected speed."
"Tired, no time for preparation of work at school."
"I'm tired, I feel I have to neglect my homelife to do an
adequate job."
```

"The greater my workload the more tired and depressed I am at the end of the day."
"There must be an easier way to make a living."
"If it weren't for the minority of students that are really interested in getting an education $I$ would change occupations."
"Glad the day is over."
"Good. I enjoy teaching, but administration needs to learn to reward good work."
"I'm tired at the end of each day, but I'm always here at 7:45 the day after."
"Exhaustion! But no one expects as much of myself as I expect of myself."
"Thank God it is over!"

## CHAPTER V

SUMMARY, DISCUSSION AND CONCLUSION,<br>AND RECOMMENDATIONS

Summary

The purpose of the present study was to question and record teachers' perceptions of the effect of class size on their teaching effectiveness. It was the author's opinion that through this exploration and recording of teachers' perceptions of class size on teaching effectiveness, that teachers would readily respond to this opportunity, and that through their perceptions information would be collected that would provide a much needed new direction in class size research.

For the purpose of this study, a teacher questionnaire was designed by the author. No formal instrument existed that related to class size, as was needed for the present research study. The instrument was pretested on 11 education majors at Oklahoma State University in order to obtain information concerning improvements of the questionnaire.

The sample in the present study consisted of 182 high school teachers. The high schools that participated are located in central Oklahoma and were selected on the basis of having a high school faculty of 20 or more teachers. Superintendents of 200 schools were contacted and requested to select randomly three to five teachers from
their high schools to respond to the questionnaire. The questionnaires were then returned by mail to the author. Of the 300 questionnaires distributed, 182 were returned to the author.

Analysis of the data in the present study suggests that cumulatively $82.40 \%$ of the teachers questioned perceived class size as affecting their teaching effectiveness. When given the opportunity to elaborate upon their opinions, beyond a yes or no answer, $99.80 \%$ of the teachers questioned did; those choosing to comment more upon the class size question was 76.94\%, on morale was $62.87 \%$, and on workload was $87.92 \%$.

It is significant, while examining the data pertaining to class size, to also consider the information collected pertaining to morale and workload. It is interesting to note that of the teachers questioned, the majority perceived their class sizes as being satisfactory with their workload also being perceived as satisfactory. Their perceptions of their students was seen as positive with the majority perceiving their students as cooperative and respectful. Every teacher questioned perceived him- or herself as an effective teacher with almost three-fourths of the teachers' attitudes toward their work at the end of the day being optimistic.

More than three-fourths of the teachers perceived class size as affecting their teaching and their students' behaviors as affecting them. It appears, however, that if given the opportunity to reduce class size, through increases or decreases in pay or hours in a school day, the majority of the teachers questioned would choose to leave class size the same.

Teachers felt they had control over their students and had the same or less number of behavior problems occurring in their classes as other teachers. They perceived their students' behavior problems as being due to external causes. Over one-half of the teachers administered punishment themselves when necessary. They also spent one to two hours daily preparing lesson plans and had the use of a teacher's aid.

It appears the $99.80 \%$ response rate by the teachers when given the opportunity to express their opinions and the $76.94 \%$ response rate for the elaboration on the class size issue indicate that teachers are willing and have a desire to express their opinions and give suggestions on issues such as class size. This finding the author feels is consistent with Ryan and Greenfield's (1976) call for direct research within the classroom and possible collaboration on a cooperative design by teachers for class size research.

Discussion and Conclusions

This investigation constituted an attempt to question and record teachers' perceptions on the effect of class size on their teaching effectiveness. From these perceptions valuable information was to be gathered in hopes of also providing a new direction in class size research. On the basis of the findings of this study, there are a number of conclusions that appear to be justified. Results of the present study suggest that the most interesting data found was obtained from that group of teachers within the sample that taught classes of 18 or more students.

The sample as a whole perceived teaching with extreme optimism; all teachers questioned perceived themselves as effective teachers. Ninety-eight percent felt they were respected by their students and in control of their students. They spent one to two hours daily preparing lesson plans. They perceived class size as affecting their teaching often to never. They also felt their workload was satisfactory and perceived their attitude toward their work at the end of the day to be optimistic. However, the group of teachers who taught classes of 18 or more students did not express the same optimism and contentment. More than one-third of these teachers perceived class size as always affecting their teaching, they saw their workload as too much, and one-half perceived their attitude toward their work at the end of the day to be that of defeated.

Results of the present study also suggest that of those teachers who perceive themselves as having control over their students, a portion of those teachers also felt their workload was too much. And of those teachers who did not or infrequently administered punishment themselves when necessary, well over one-half felt their workload was too much. Of those teachers who considered their workload as too much, close to three-fourths of these teachers felt defeated about their work at the end of the day.

Conclusions that can be drawn from this present study suggest that the data given by the sample as a whole was strongly influenced by the different responses given by those teachers teaching small classes versus responses given by teachers teaching large classes. The obvious conclusions drawn from simply viewing the primary data are that the overall sample of teachers questioned felt very optimistic
and content with teaching. They encounter difficult situations while still maintaining their teaching effectiveness. They perceive their profession with great optimism and satisfaction. However, below these primary responses are the secondary responses of those teachers who teach larger classes. These responses show teachers having difficulty coping with circumstances, large classes preventing effective teaching, excessive workloads, and teacher dissatisfaction. These responses are in the author's opinion the most significant and the most consistently represented by the teachers when given the opportunity to write in their perceptions.

A critical possible limitation was requiring the participation of the school superintendent in the distribution and collection of the questionnaires. It could be suggested that their participation had a significant effect on the majority of the teachers' responses. The superintendent's participation might have influenced teachers' responses to particular questions within the questionnaire, in that the teachers responded as to how they perceived the superintendents as wanting them to. However, the teachers' written comments indicate that the superintendent's participation did not influence the teachers' responses.

The purpose of the study was seen as supported by the fact that $99.80 \%$ of the teachers questioned attempted to comment when given the opportunity and $76.94 \%$ chose to give further opinion on class size, thus indicating that teachers, when given the opportunity, would readily give potentially helpful opinions and suggestions on educational issues, such as class size.

## Recommendations

In the author's opinion, the present research indicates that teachers do have perceptions and opinions on the issue of class size which they are willing and eager to share. It is perceived by the author that the results of thie present study strongly suggest that further research concerning teachers' perceptions is warranted.

In the author's opinion, the present research approach does warrant consideration as a bridge for a new approach to class size research. The author suggests that further research be done on redesigning the instrument used in this research endeavor into a more quantifiable instrument. The submission of the results of the present research to tests of differences or relationships is needed.

The author recommends that the open ended response mode used in the instrument also be subjected to a quality analysis. The author sees this questionnaire format as a valuable mode for obtaining pertinent elaboration on information collected by single datum questions. The author realizes the difficulties in quantifying this type of information. The author perceives that if this information is quantified and subjected to the quality analysis, the author's assumptions, that teachers do have pertinent opinions and suggestions that they are willing to share and that could contribute to the development of a new approach to class size research, could be validated.

Finally, research in class size suffers greatly in credibility due to the lack of consensus and due to inconsistency of results. The major area of inconsistency is in the definition of "large" and "small." Until these terms are operationally defined, no research
endeavor will be able to contribute concrete evidence, including the present research, that class size affects any educational outcome, i.e., teaching effectiveness. The author perceives that researchers must stop "putting the cart before the horse" or stop doing research on class size until a consensus develops on an actual number representing "large" and "small."

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APPENDIX A

PRETEST QUESTIONNAIRE

The following questionnaire has been designed to assess the perceptions of teachers concerning their workload, working conditions, class size and teaching materials.

As a teacher your perceptions concerning these topics are very significant. It is the researcher's intention to categorize and record these responses in a present research project.

Please answer the following questions as thoroughly as possible. Complete confidentiality of results will be observed.

1. How many years of teaching experience do you have? $\qquad$
2. Sex: Male $\qquad$ Female $\qquad$
3. What grade or grades do you teach? $\qquad$
4. What subjects do you have in each class? 1. $\qquad$ 2. $\qquad$ 3. $\qquad$ 4._ 5._ 6 .__
5. How many students do you have in each class? 1. $\qquad$ 2. $\qquad$ 3. $\qquad$ 4. 5 . $\qquad$ 6.
6. Do you have a teacher's aid? A. Yes $\qquad$ B. No If yes, please describe his/her duties $\qquad$
$\qquad$ please describe his/her duties $\qquad$
7. Does the subject you teach require use of library facilities?
A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
8. Do you feel your students have adequate knowledge in the use of the library?
A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
9. How many hours a week can each of your classes use the library facilities? $\qquad$
10. Are you frequently informed of what materials are provided for your use in the school's library? A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
11. Does the school library provide students with newly published books and periodicals? A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
12. Does your school library have an audio-visual center?
A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
13. Concerning the effects of your workload, what would you consider your attitude toward your work at the end of the day to be?
14. How are your class sizes determined?
15. If you could reduce your class size, would you and how would you determine the size?
A. Yes $\qquad$ B. No $\qquad$ How
16. Do you feel each class should have a fixed maximum number of students? A. Yes__ B. No__ How many $\qquad$
17. I feel class size has a significant effect on my teaching? A. Always $\qquad$ B. Often $\qquad$ C. Sometimes $\qquad$ D. Never Why $\qquad$
$\qquad$
18. How much time do you spend weekly preparing for class? A. One day a week $\qquad$ B. Two days a week $\qquad$ C. Three days a week $\qquad$ D. Other $\qquad$
19. Do you think you spend more time, compared to other teachers, preparing for class? A. Yes__ B. No__ Why $\qquad$
20. How much time do you spend developing your own materials? $\qquad$
$\qquad$
21. Are you encouraged by the administration to develop your own materials? A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
22. Are you provided with adequate funding and information to develop your own materials?
A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
23. Do you prefer commercially made materials to teacher made materials?
A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$

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Does the subject you teach necessitate ordering more commercially made materials rather than developing your own teaching aids? A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
38. What types of commercially produced materials do you buy when ordering?
39. How often are you allowed to purchase commercially made materials? A. Once a year $\qquad$ B. Twice a year $\qquad$ C. Other $\qquad$
40. How much are you allowed to spend yearly on commercially produced materials?

If any of the preceding questions were difficult to understand or can be improved in any manner, please indicate the question number along with your suggestion on the following lines, comments are welcomed. Thank you very much.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

APPENDIX B

REQUEST FOR TEACHERS' PARTICIPATION


## Oklahoma State University <br> APPLIED BEHAVIORAL STUDIES IN EDUCATION <br> STILLWATER, OKLAHOMA 7407 116 NORTH MURRAY HALL (405) 6246040

October 27, 1983

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Pam Scruggs
239 S. Hester \#4
Stillwater, OK
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74074

Dear Superintendent
This letter is in regard to the previous letter $I$ sent you during the first week of October, concerning a request for permission to send a questionnaire about teacher attitudes to your high school teachers. Due to the overwhelming reception of this research project throughout the state, our limited funding is almost exhausted. Consequently, a contact with you by telephone must be abandoned. Instead, three questionnaires are enclosed for distribution to three high school teachers in your school. If you wish to copy and distribute more than three questionnaires to faculty members, please do so. Your cooperation in participating in the research is deeply appreciated, and it is deemed significant in maintaining the thoroughness of the research endeavor. Results will be sent to you at the conclusion of the project. Please return the completed questionnaires to the enclosed address. Thank you for your cooperation.

[^1]Pam Scruggs
Master's Student

Paul G. Warden, Ph.D.
Professor
Applied Behavioral Studies
in Education

APPENDIX C

FINAL QUESTIONNAIRE

The following questionnaire has been designed to assess the perceptions of teachers concerning their workload, working conditions, class size and teaching materials.

As a teacher your perceptions concerning these topics are very significant. It is the researcher's intention to categorize and record these responses in a present research project.

Please answer each question thoroughly. Opportunity is provided for you to elaborate on your answers, for example as with question 7 , where comments are requested and, with question 20 which is open ended. Complete confidentiality of results will be observed.

1. How many years of teaching experience do you have? $\qquad$
2. Sex: Male $\qquad$ Female $\qquad$
3. What grade or grades do you teach?
4. What subjects do you have in each class? 1. $\qquad$ 2. $\qquad$ 3. $\qquad$ 4. $\qquad$ 5. $\qquad$ 6. $\qquad$
5. How many students do you have in each class? 1. $\qquad$ 2. $\qquad$ 3. 4 ._ 5 ._ 6 . $\qquad$
6. Do you have a teacher's aid? A. Yes $\qquad$ B. No $\qquad$ If yes, please describe his/her duties
$\qquad$
$\qquad$
$\qquad$
. Does the subject you teach require use of library facilities? A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
7. Do you feel your students have adequate knowledge in the use of the library? A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
8. How many hours a week can each of your classes use the library facilities? $\qquad$
9. Are you frequently informed of what materials are provided for your use in the school's library? A. Yes $\qquad$ B. No $\qquad$ Comment
10. Does your school library have an audio-visual center?
A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
$\qquad$
11. How would you rate your school library facilities? A. Excellent $\qquad$ B. Good $\qquad$ C. Fair $\qquad$ D. Poor $\qquad$
12. Do you consider yourself to be an effective teacher? A. Yes
B. No $\qquad$ Why? $\qquad$ A. Yes $\qquad$
$\qquad$
$\qquad$
13. Do you feel you are respected by your students? A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
$\qquad$
14. Do you consider the students in your class to be cooperative with you? A. Always__ B. Almost always $\qquad$ C. Often $\qquad$ D. Sometimes $\qquad$ E. Never $\qquad$
15. Do you feel you have good control (good control being defined as control over your classroom situation without the principal's assistance) over your classes? A. Yes B. No $\qquad$ Comment $\qquad$
$\qquad$
16. How many behavioral problems (students disregarding disciplinary warnings and measures by teacher) do you encounter daily within your classes? (circle answer) A. 1 to 3 B. 4 to 6 C. 7 to 9 D. Other
17. Do you see this incidence as being more or less than other teachers? A. More $\qquad$ B. Less $\qquad$ C. Same $\qquad$ Why? $\qquad$
$\qquad$
18. What would you consider to be the main causes of the behavioral problems? 1.
19. 
20. 
21. 

4
21. Do you administer punishment?
A. Always $\qquad$ What type? B. Often $\qquad$ C. Sometimes $\qquad$ D. Never $\qquad$
$\qquad$
22. Does the principal support you when you must discipline a child? A. Always $\qquad$ B. Often $\qquad$ C. Sometimes $\qquad$ D. Never $\qquad$
23. Do you feel your students' behaviors have a significant effect on your morale and attitude toward your job? A. Yes $\qquad$ B. No $\qquad$ Why? $\qquad$
$\qquad$
24. If you had a choice of increasing or decreasing the hours in a school day to compensate for class size, would you: A. Increase the hours and decrease the class size_B. Decrease the hours and increase class size C. Leave hours the same D. Other $\qquad$ ———
$\qquad$
25. If your class size could be reduced or increase at a $1 \%$ increase or decrease in your pay, would you choose to: A. Decrease your class size__ B. Increase your class size___ Leave it the same Comment $\qquad$
$\qquad$
26. "I consider my workload (classroom teaching, class sponsor, etc.) to be: A. Too much $\qquad$ B. Too little C. Satisfactory__ Comment $\qquad$
27. Concerning the effects of your workload, what would you consider your attitude toward your work at the end of the day to be?
$\qquad$
$\qquad$
28. How are your class sizes determined?
29. If you could reduce your class size, would you, and how would you determine the size? A. Yes $\qquad$ B. No $\qquad$ How?
$\qquad$
30. "I feel class size has a significant effect on my teaching?" A. Always___ B. Often__ C. Sometimes__ D. Never___ Why?
$\qquad$ Wh. $\qquad$
$\qquad$
31. How much time do you spend daily preparing for class? A. Less than one hour a day__ B. 1 to 2 hours a day___ C. 2 to 3 hours a day $\qquad$ D. Other $\qquad$
32. Do you think you spend more time, compared to other teachers, preparing for class? A. Yes $\qquad$ B. No $\qquad$ Why?
33. How much time do you spend developing your own materials?
34. Are you encouraged by the administration to develop your own materials? A. Yes B. No $\qquad$ Comment $\qquad$
$\qquad$
35. Are you provided with adequate funding and information to develop your own materials? A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
36. Do you prefer commercially made materials to teacher made materials?
A. Yes $\qquad$ B. No $\qquad$ Comment $\qquad$
37. Does the subject you teach necessitate ordering more commercially made materials rather than developing your own teaching aids? A. Yes $\qquad$ B. No Comment $\qquad$
38. What types of commercially produced materials do you buy when ordering?
39. How often are you allowed to purchase commercially made materials? A. Once a year $\qquad$ B. Twice a year $\qquad$ C. Other $\qquad$
40. How much are you allowed to spend yearly on commercially produced materials?


VITA

PAMELEA ELAINE COOK<br>Candidate for the Degree of<br>Master of Science

Thesis: TEACHERS' PERCEPTIONS OF THE EFFECT OF CLASS SIZE ON TEACHER EFFECTIVENESS

Major Field: Applied Behavioral Studies
Biographical:
Personal Data: Born in Corpus Christi, Texas, March 16, 1959, the daughter of David and Marvalene Scruggs. Married to Lowell E. Cook on December 31, 1983.

Education: Graduated from Bixby High School, Bixby, Oklahoma, in May, 1977; received Bachelor of Science degree in Psychology and Teacher Certification in Secondary Education, December, 1981; completed requirements for the Master of Science degree at Oklahoma State University in December, 1985.

Professional Experience: Taught grades seven to twelve, Pawnee, Oklahoma, August 1982 to May 1983; graduate teaching assistant, Oklahoma State University, 1984-1985.


[^0]:    ${ }^{1}$ In order to examine the representativeness of this result, a survey was conducted in a local high school with an enrollment of 900. In the high school, seven English teachers served on the faculty. The author concludes from this survey that the $28.57 \%$ of those teachers that taught English is representative of the number of English teachers typically found in the high schools participating in the present study.

[^1]:    Sincerely,

