

AN ANALYSIS OF FEELINGS OF ADEQUACY
OF ELEMENTARY CLASSROOM TEACHERS
TOWARD TEACHING SELECTED SEX
EDUCATION OBJECTIVES

By

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PREFACE

Sex education in the public schools has many professional organizations' support as well as such groups as the National Congress of Parents and Teachers, National Student Assembly, and various church organizations such as the National Council of Churches. Proponents of sex education in the schools say that the classroom offers the best opportunities to present all children with information regarding healthy sexuality. Teachers tend to be more knowledgeable than many parents about physiology, anatomy, health, psychology, and social problems. They can be more objective toward students and less emotionally involved.

A major reason given not to introduce sex education into the school curriculum has been a claim of the inadequacy of teachers. The primary purpose of this study was to analyze the feelings of adequacy of elementary classroom teachers toward teaching selected sex education objectives.

Appreciation is expressed to the Wichita, Kansas Public Schools and the Emporia, Kansas Public Schools for their assistance and cooperation.

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CHAPTER I

PRESENTATION OF THE PROBLEM

Introduction

The public schools of the United States are called upon to assist the family, the church, and other social institutions in a concerted effort in solving social problems relating to sex education. These problems were once thought to be the private task of the home and the church.

However, parents are hard pressed to meet the demands presented them from their youngsters' need for answers about their sexuality. A recent Purdue poll is illustrative of parents' need for assistance in sex education.

This poll reported that

. . . 1,000 teenagers showed that the majority "got the word" from their friends (53 percent of the boys, 42 percent of the girls). Another 15 percent "pieced things together" from a variety of sources (TV, movies, books, pornographic, and otherwise); 6 percent received instruction from school; 7 percent were advised by adults other than parents. Only 15 percent of the boys and 35 percent of the girls received sex information from their parents.¹

The reasons for parental insufficiency in this area are not difficult to understand. Many parents were brought up in an era when sex was talked about only in hushed tones or snickers. Straight forward answers were not supplied

them from their parents. Subjects like masturbation, "wet dreams", and intercourse were simply not discussed openly -- especially in front of the children. The one acceptable standard and advice given in premarital sex relation counseling was "don't". This "don't" standard was indoctrinated in a dogmatic manner denying any rational approach to the dialogue between parent and child.

Since many parents feel helpless in this area, what about the church as a medium for sex education? Our society has depended upon the church being a strong developer of attitudes and value positions of the young. However, it is generally agreed that the best efforts of the church are too limited. As Gudridge reported:

Most religious educators say that it is only recently that the church has begun to overcome its own former reluctance to deal openly with sexual matters, and while it can perform unimportant supportive functions, the church has too limited contact with the children to make an impact.²

Sex education in the schools is supported, through resolute action, by the following national organizations: American Association for Health, Physical Education and Recreation, American College of Obstetricians and Gynecologists, Committee on Maternal Health, American Public Health Association, National Congress of Parents and Teachers, National Council of Churches, National Education Association, American Association of School Administrators, National Student Assembly, YMCA and YWCA, Sixth White House

Conference on Children and Youth, Synagogue Council of America, United States Department of Health, Education, and Welfare (U. S. Commissioner of Education) and the United States Catholic Conference.³

Proponents of sex education in the schools say that the classroom offers the best opportunities to present all children with information regarding healthy sexuality. For one thing, teachers tend to be more knowledgeable than many parents about physiology, anatomy, health, psychology, and social problems.

Therefore, Helen Manley, executive director of the Greater St. Louis (Missouri) Social Health Association, says

. . . information about sex not only is a normal part of the subject matter in junior and senior high schools but also is an integral part that has to be conspicuously avoided if it is not to be included.⁴

Added support and incentive for schools was provided by the Congress of the United States when it authorized funds in Title III of the Elementary and Secondary Education Act to assist schools in innovative instruction programs. One area of innovation has been in sex education.⁵

Elizabeth Hendryson, President, National Congress of Parents and Teachers, issued a statement supporting sex education in the public schools. In describing the more recent vocal opposition to sex education, she states:

With the need for sex education so obvious and so urgent, its provision by the public schools is now assailed by extremist groups. In the January

issue of the bulletin of the John Birch Society the society's founder and president calls for "organized, nationwide, intensive and angry and determined opposition" to sex education in the public schools. Sex education, he charges, is a Communist plot to weaken the family, corrupt youth and destroy the concept of morality.⁶

Sex education in the public schools is a controversial subject. The personal nature of the subject matter taught is one reason for the controversy. Much state wide controversy of whether the public schools of Oklahoma should have sex education or not was experienced during the 1969 legislative session. Two of three newly elected board of education members of Anaheim, California, Union High School District ran on a "no sex education" platform. Anaheim has one of the model secondary school sex education curricula.⁷

However, professional organizations, persons, and literature continue to be pro-sex education. Florence B. Benell, Sacramento State College, said, "We can no longer afford to ask if sex education belongs in the school curriculum. We must now ask what is the best way for the curriculum to include sex education."⁸ Warren R. Johnson and Margaret Schutt, of the University of Maryland, stated, "Sex is becoming subject matter whether those in the educational establishment want it or not."⁹

Marvin Ack, Director of the Division-School of Mental Health, The Menninger Clinic, Topeka, Kansas, said,

. . . The members of the Division-School of Mental Health feel strongly that this (sex education) should be a part of the curriculum -- not because it is necessarily the best place where such education should be offered, but evidently the home has not been capable of performing this function.¹⁰

Background to the Study

Since the majority of professional organizations support sex education curriculum for public schools, why do not all schools provide a comprehensive sex education curriculum? Benell said, "There are teachers who claim they are inadequately prepared on the subject of sex education."¹¹

A special report by Education U.S.A., "Sex Education in Schools," reports,

. . . it is obvious that a crucial factor in sex education is the quality of the teacher. Because teachers now in service have had little or no preparation for this field and may feel insecure, hesitant, or lacking in knowledge. . . .¹²

A survey of sex education curricula in Kansas schools revealed that the lack of trained teachers in sex education was one of the reasons most often given to explain why a school district did not have sex education. Reported in Table I are responses from Kansas superintendents, board presidents, and curriculum directors, from a 1968 survey.¹³

Johnson and Schutt found that "inadequately trained teachers and adverse parental reactions"¹⁴ were cited most often by Maryland superintendents and board of education members as reasons why their school districts did not teach sex education.

Lester A. Kirkendall and Greg J. Miles, writing for the Review of Educational Research, December, 1968, said, "one of the most common objections to sex education is that inadequately trained teachers will be called upon to handle the subject."¹⁵

TABLE I
 RESPONSES NOT FAVORING SEX EDUCATION
 IN KANSAS SCHOOLS, SPRING, 1968

	Superin- tendents	Board Presidents	Curriculum Directors	Total
Percent Against Sex Education, Grades K-12	29%	38%	19%	
REASONS GIVEN	Number	Number	Number	Number
Fear of Community Reaction	27	10	4	41
See no Need of Sex Education	8	5	2	15
Not a School Responsibility	24	11	4	39
Sex Education Taught Incidentally	34	9	7	50
Lack of Trained Teachers	27	9	6	42
Lack of Effective Methods	20	11	5	36

SOURCE: Marvin J. Johnson. "A Survey of Sex Education Curricula in Kansas Schools." (unpub. Ed. Sp. thesis Kansas State Teachers College, Emporia, Kansas, 1968), p. 33.

Statement of the Problem

Teacher inadequacy seems then, to be a major deterrent to developing sex education curricula. Teacher training schools are not meeting this apparent need.

James L. Malfetti and Arline M. Rubin summed up their feelings from a questionnaire sent to chief administrative officers at each of seven hundred and thirty-four teacher preparation institutions listed in the 1966 Directory of the American Association of Colleges for Teacher Education:

With all the agitation directed toward sex education in the schools, it is time for teacher preparation institutions to face up to the question of who is going to teach the teachers.

For the most part, the teachers of sex education are trained only incidentally for this subject . . . only eight percent of the institutions responding offered a specific course intended to prepare teachers for teaching sex education, and only three percent of those that did not offer specific course work had plans to do so . . . Of those trained a very high percentage, in a sub-survey, felt that they were personally unable to teach about sex.¹⁶

The purpose of this study was to discover if elementary classroom teachers feel adequate to teach sex education.

When does a teacher feel inadequate to teach sex education? Are there certain areas of sex education that teachers might feel more adequate in than others? Is there any relationship between various demographic data of teachers and their feelings of adequacy toward teaching selected sex education objectives? Do large school district teachers feel more or less adequate to teach sex education than do small school district teachers? These questions

need exploring in order that effective teacher in-service programs and teacher training might provide the necessary professional experiences to enhance sex education efforts.

Hypotheses

The following hypotheses are so stated to test if there is any relationship between various demographic data of teachers and their feelings of adequacy toward teaching selected sex education objectives.

Ho: It is predicted that there is no significant difference (.05 level) in feelings of adequacy toward teaching selected sex education objectives.

- a. among age groups of elementary classroom teachers.
- b. between male and female elementary classroom teachers.
- c. among four marital status categories of elementary classroom teachers.
- d. between elementary classroom teachers having children and those not having children.
- e. among those elementary classroom teachers having children twelve years of age and under, those having children thirteen years and older, and those having children in both age groups.
- f. among elementary classroom teachers of different religions.
- g. among elementary classroom teachers of different teaching assignments.
- h. between elementary classroom teachers who have had a college level course or workshop related to the teaching of sex education and those who have not.
- i. among elementary classroom teachers having varying numbers of years teaching experience. (i.e., teaching experience will have no significant effect on the feelings of adequacy.)

- j. among elementary classroom teachers of different race. (i.e., race of a teacher has no significant effect on their feelings of adequacy.)

Four general areas of a persons life space were gleaned from the literature, as intregal parts of sex education. These four areas are social, physical, economic, and psychological. To more adequately identify the areas of sex education in which elementary classroom teachers feel inadequate to teach, the following hypothesis is presented.

Ho: Elementary classroom teachers' feelings of adequacy toward teaching selected sex education objectives will not differ significantly (.05 level) among the four areas of sex education: social, physical, economic, and psychological.

Ho: There is no significant difference (.05 level) in the mean scores of elementary classroom teachers of a large school district and the mean scores of elementary classroom teachers of a small school district, toward teaching sex education.

Definitions of Concepts

Various concepts that are pertinent to the above hypotheses are defined below.

Sex education Sex education consist of instruction to develop understanding of the social, physical, economic, and psychological phases of human relations as they are affected by male and female relationships. It is to be

distinguished from mere sex information and can best be described as character education. Emphasis is on attitude development and guidance related to associations between sexes. It implies that man's sexuality is integrated into his total life development as a health entity and a source of creative energy.

Feelings of adequacy Feelings of adequacy toward teaching sex education refer to an individual teacher's consciousness of feeling sure that he can adequately employ various learning activities to provide the experiences necessary for students to attain the selected sex education objectives. Examples of learning activities are observation, discussion, role playing, experimentation, and reading.

Elementary teachers Elementary teachers include teachers of kindergarten through the sixth grade.

Classroom teacher Classroom teachers include all certified teachers giving instruction in a classroom setting. This definition includes physical education teachers, but excludes administrators and supervisory personnel -- full or part-time.

Social, physical, economic, and psychological These four general areas of sex education are defined according to the major emphasis of each objective in the instrument. The instrument is presented in Appendix A. The development of the instrument is discussed in Chapter III. Each

objective was rated by a panel of judges to classify it as having major emphasis in one of the four areas.

Large school district The large school district used in this study had a population of more than 100,000 residents.

Small school district The small school district used in this study had a population of fewer than 25,000 residents.

Assumptions

The major assumption underlying the present study is that an individual's feelings of adequacy are measurable by responses to a questionnaire. It may be contended that feelings are implicit in the behavior of others and that any factual study of feelings would necessitate the observation of this behavior. However, Kluckhohn points out:

Acts, as has been said, are always compromises among motives, means, situation and values. Sometimes what a person says about his values is truer from a long term viewpoint than inferences drawn from his actions under specific conditions. The fact that an individual will lie under stress of unusual circumstances does not prove that truth is not a value which orients, as he claims, his ordinary behavior. As a matter of fact, people often lie by their acts and tell the truth with words. The whole conventional dichotomy is a form of behavior.¹⁷

Limitations

Generalizations drawn from this study should be limited to the populations sampled, or cautiously applied to other

elementary classroom teacher populations which closely resemble those included in this research.

The greatest limitation of ex post facto research is the inability to control the variables. There was also a lack of opportunity to select subjects in a truly random fashion. The lack of independent variable control causes a danger of improper interpretation of ex post facto research.

Significance

The researcher was unable to find significant research in the area of teacher's feelings of adequacy toward teaching sex education. With the increased interest and public debate about whether schools should be involved with sex education, this study was undertaken as an attempt to provide timely information that might be used by local school districts and teacher training institutions as stated below.

If the results of this investigation should reveal certain demographic factors as more characteristic of the model teacher with high feelings of adequacy, then these factors could be looked for when employing teachers for this curriculum area. However, if teachers' feelings of adequacy toward teaching sex education do not differ significantly when the various demographic factors are considered, then these factors may not be appropriate criteria to use in the selection of teachers for this curriculum

area. For example, if the sex of the teacher has no significant effect on his feelings of adequacy toward teaching sex education, then the sex of the teacher could probably be ignored when the teachers for sex education are selected.

Further, if this research reveals that teachers have feelings of inadequacy in one or more content areas of sex education, school districts and teacher training institutions might focus their in-service education toward these areas of weakness. As stated previously, the four content areas of sex education are social, physical, economical, and psychological.

Finally, if this research should reveal that large school district teachers differ from small school district teachers in their feelings of adequacy, different in-service methods and content may be needed. However, if there is no difference between the two groups of teachers, efforts to provide in-service methods and content may be similar for all teachers.

Summary

The writer has first presented representative lay and professional positions toward sex education. Professional organizations and publications are strong advocates for the schools playing a supporting role in sex education, with the family, the church, and other social institutions. Some organized effort in opposition to sex education in public schools has formed in recent years.

A primary reason given for not providing sex education in public schools is the lack of adequately prepared teachers. The researcher has attempted to formulate a framework within which to conduct a study concerning the feelings of adequacy of teachers toward sex education. The definition of concepts, background to the study, assumptions, limitations, significance of the study, and the hypotheses as presented in this chapter are part of this framework.

Chapter II contains a review of selected relevant literature. Chapter III completes the structural portion of this research with a discussion of design and methodology. Chapter IV is an analysis of the data. A summary of the study, implications, and recommendations for further study are reported in Chapter V.

FOOTNOTES

¹Beatrice M. Gudridge, Sex Education in Schools, Education U.S.A. National School Public Relations Association (Washington, 1969), p. 3.

²Ibid., p. 4.

³SIECUS (Sex Information and Education Council of the U.S. -- Educational Service) (December, 1968) (Mimeographed).

⁴Helen Manley, "Sex Education: Where, When, and How Should It Be Taught?" Journal of Health, Physical Education-Recreation XXXV (March, 1964), p. 23.

⁵Elizabeth Hendryson, "The Case for Sex Education," The P.T.A. Magazine (May, 1969), p. 21.

⁶Ibid., p. 21.

⁷"An Open Letter from the President," SIECUS (May, 1969).

⁸Florence B. Benell, "Eliminating Barriers to Sex Education in the Schools," The Journal of School Health XXXVIII (February, 1968), p. 68.

⁹Warren R. Johnson and Margaret Schutt, "Sex Education Attitudes of School Administrators and School Board Members," The Journal of School Health XXXVI (February, 1966), p. 65.

¹⁰Marvin Ack, A solicited letter from him giving a position on sex education in the public schools (April, 1969).

¹¹Benell, p. 68.

¹²Gudridge, p. 27.

¹³Marvin J. Johnson, "A Survey of Sex Education Curricula in Kansas Schools," (unpub. Ed. Sp. Thesis. Kansas State Teachers College, Emporia, 1968), p. 33.

¹⁴Johnson and Schutt, p. 67.

¹⁵Lester A. Kirkendall and Greg J. Miles, "Sex Education Research," Review of Educational Research XXXVIII (December, 1968), p. 537.

¹⁶James L. Malfetti and Arline M. Rubin, "Sex Education: Who Is Teaching the Teachers?" The Record (Teacher College, Columbia University) LXIX (December, 1967), pp. 214-222.

¹⁷Clyde Kluckhohn, "Value and Value Orientations in the Theory of Action," eds., T. Parsons and E. Shils, Toward a General Theory of Action (Cambridge, 1951), p. 406.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

Introduction

In Chapter I, the writer attempted to portray the need for research in the area of teachers' feelings of adequacy toward teaching sex education. This chapter will focus upon relevant literature in the area of sex education. Four specific areas of sex education will be discussed. The areas are: sex education today, deterrents to sex education, objectives of sex education, and teachers and sex education.

Sex Education Today

If we feel that sex is an important aspect of life, then it is important to enable people to think clearly about it. This the public school systems can do if the parents of America will let them. . . .¹

says Ira L. Reiss, Professor of Sociology at the University of Iowa.

The public schools tend to be slow to react and resistant to change. They also tend to reflect societal values. Therefore, improved curricula in sex education might be expected to be slow arriving. However, there

are many groups pushing for the acceptance of their programs of sex education.

Recognizing these pressures, the Joint Committee of the National School Board Association and the American Association of School Administrators passed a resolution in 1967 calling for "one sound, interrelated, and sequential program in health education, including sex and family life education" which would operate from kindergarten through grade 12, and which would avoid "band-wagon approaches, crash programs, and piecemeal efforts focused on one or a few topics that happen to be enjoying popularity or extensive press coverage."²

Change is coming about, however slowly. Sex education is becoming as much a part of today's public and private school curricula as English, science, and the social studies. It is no longer a program for the future, but is present in our schools today. Broader programs of sex education are being initiated.

Some have been encouraged by state legislation. Illinois enacted its sex education law in 1965, followed by Maryland and New York in 1967, Michigan and Ohio in 1968.

The editors of Education U.S.A. surveyed the states in September, 1968 to discover whether the state board of education had adopted (a) a policy statement on sex education; and (b) guidelines to help local school districts develop programs in sex education.

Of 31 replies, 16 states--Connecticut, Delaware, Florida, Georgia, Iowa, Illinois, Maryland, Michigan, Minnesota, New Jersey, North Carolina, Ohio, Oregon, Virginia, Washington, and Wisconsin--reported that they had developed or were developing policy statements.

Six additional states reported to Education U.S.A. or to another survey by the State University of New York at Albany that, while they had no policy statements, there were state guidelines for local districts to follow. These were Alaska, Colorado, Indiana, New Mexico, South Carolina, and Utah.

Another four states--Mississippi, Montana, New Hampshire, and South Dakota--said they were planning workshops, providing speakers and/or materials, or otherwise getting ready to consider broadened programs of sex education and family living.

Much of this activity has been encouraged by the U.S. Office of Education. It announced in 1966 that schools, communities, and state agencies wishing to establish or improve programs in sex and family life education might be eligible for federal grants. Teacher and counselor institutes, graduate fellowships, state leadership training, adult education, library improvement, curriculum development, research, and demonstration were given as examples of projects that might qualify for federal funds under Titles I, II, III, and V of the Elementary and Secondary Education Act; Titles III, V, and XI of the National Defense Education Act; Title I of the Higher Education Act; the Cooperative Research Program; and various vocational and library services acts.³

Why have sex education programs become a major concern for the nations schools? What are reasons for sex education in schools? Smith, Krouse, and Atkinson reported:

. . . there are six important reasons for including complete sex education in the public-schools curriculum: (1) The emancipation of women made them freer members of our present-day society; (2) modern living has led to greater mobility of population and more anonymity than has been known previously; (3) the increased development of contraceptives and prophylactics has created a problem in itself; (4) advancements in the study of psychology have led to increased knowledge and realization of the importance of frustrations; (5) there are more sex stimuli in modern movies, theatre, advertising, magazines, and even popular songs; (6) an increased difference of opinion on matters of sex conduct leads to a need for guidance in such matters.

Other factors that support those who advocate sex education for all youth include the problems of illegitimate births, divorce rates, venereal diseases, juvenile delinquency, and maladjustments of otherwise productive citizens.⁴

Deterrents to Sex Education

Understandably the school cannot assume responsibility for all things. However, when other social institutions fail to fulfill their obligations in sex education the school cannot allow the student to be deprived of important knowledge.⁵

Several research studies indicate that school administrators frequently gave community or parental opposition as a reason for not including any planned sex education in the curriculum. Results of two representative studies follow.

Kenkel reported, from a 1955 study of two hundred eighty high school principals in Iowa, that thirty-three percent of their schools offered no instruction in sexuality. The chief reason for not offering a course in sex education was the unavailability of qualified teachers. The second most stated reason was a fear of adverse community reaction.⁶

Elizabeth Force reported, from her survey of opinion among the chief school officers of the then forty-eight states, that a fear of public criticism created confusion and doubt about the wisdom of teaching this kind of material.⁷

A concern that parents may lose or abdicate their role as sex educators is another deterrent to the schools!

assuming responsibility for sex education. However, Dr. Evalyn Gendel, Kansas State Department of Health, Maternal and Child Health Division, said:

From all experience in Kansas communities and elsewhere, parents who are carrying out their responsibilities and are sincerely concerned with it, welcome enhancement from the school program. It supplements the home job.

The timid, inhibited or fearful parent who has not been involved may become more secure in communicating with his child when there is a program at school. Grade school parents, whose children were enrolled in a fourth, fifth, or sixth grade program were amazed at the doors that were opened for discussion.

The neglected, preoccupied or indifferent home may protest the loudest, but no right has been denied that was ever exercised.⁸

Despite these problems, schools are becoming more involved in sex education. They must not look at this area of education as their singular responsibility, however, since the schools are but one segment of the total community. The community is responsible for the total sex education of the members of its society.⁹

Some say that the school gets the responsibility of sex education by default, because other agencies of the community have not done the job. Others believe that, since schools have a captive audience this would be the logical and most convenient place for appropriate instruction. Dr. Gendel gave the following as a reason for sex education in the schools:

The reason should be because we believe that positive educational principles must be applied in the study of human sexuality just as they are in any other important area of learning and that the school environment is the only one which can supply

these . These principles are: that accurate, scientific information from reliable resource materials, opportunity for exchange of ideas and dialogue with knowledgeable adults (teachers) and with peers in respectful surroundings (the classroom) are necessary to establish a foundation for learning. I know of no other area where we wrap the subject in a cloud of mystery and myth, depend on gossip, experimentation and questionable sources for information and then expect the child to cope with, understand or respect the subject.¹⁰

Teaching what it means and what it takes to be a man or woman in the present day, with self respect and social responsibility, must be the whole community's job through its social units: families, churches, schools, and other community agencies. Schools must have a part in the total sex education of children.¹¹

Deterrents to the development of sex education curricula may be avoided. Careful planning and the involvement of parents and teachers in the beginning phases of planning are essential.

A carefully prepared explanation of (1) the reasons for the program, (2) the content of the course or the information to be taught if it is to be integrated into another course, (3) the textbooks, reference sources, visual aids, and other materials to be used for instructional purposes, (4) the teacher's qualifications, and (5) the desired results of the course will contribute to alleviating any concern that may arise. This explanation should be made with taste and an approach suitable to such a situation.

To begin a program without the cooperation and understanding of those concerned may lead to difficulties that could be far more hazardous than never beginning such a program at all.¹²

In sum, deterrents to sex education programs are first, school administrators say there is community opposition;

secondly, sex education is the responsibility of the parents; thirdly, schools are given the responsibility for sex education by default; and fourthly, teachers are not adequately prepared to teach sex education. However, deterrents may be overcome by careful planning and the involvement of the community.

Objectives of Sex Education

Any endeavor in the education of youth must have planned objectives in order to gain approval. Objectives are needed to provide a plan of direction and to allow an evaluation of what has been accomplished.

The literature revealed many different lists of goals or objectives for sex education. Since sex education in public schools is a popular topic for both amateur and professional journalists, publications yield many lists of objectives for this curriculum area.

Lester A. Kirkendall has stated objectives of sex education as they formerly were as compared to the goals toward which we seem to be moving today.

A. The goal was formerly--

Almost solely to provide information about the biological origins of the human being, the reproductive processes, and physiological sex development.

Today we need to add--

The need for understanding sex in its broader social and psychological aspects.

B. The goal was formerly--

To provide children and youth the information and attitudes which would be helpful to them in their personal lives.

Today we need to recognize that--

Sex education is needed throughout the life cycle and goes beyond immediate personal needs to influence the individual in his roles of citizenship, of maleness or femaleness, as a worker, and a general influencer of public opinion.

C. The goal was formerly--

To subdue and repress all manifestations of sexuality outside the marriage state.

Today we are concerned with--

The integration of sex into a meaningful, purposeful pattern of living. In this approach sex education becomes an integral part of human relations education.

D. The goal was formerly--

To keep sex hidden, to keep it out of sight in a relatively homogeneous, restricted, and closed society.

Today the goal needs to be--

To understand how to deal with sex in an open society in which views and ideas are actively interchanged, and people with a wide range of cultural backgrounds mingle freely.

E. The goal was formerly--

To hand down in an authoritative and authoritarian way, the information the individual "needed to know."

Today the goal must be--

To provide the kind of knowledge and insight an individual needs for making choices in a "free choice" situation.

F. The goal was formerly--

To see that sexuality was exercised within a relatively static and conventionally accepted ethical framework.

Today we must face the fact--

Sex education has to be concerned with the development of an ethical -- moral framework which will fit a society which is radically changed from the society of a generation ago, and which will change even more in the future. One might ask what value framework can we develop now which will enable the individual to cope with the world thirty-four years hence -- especially in the year 2000?¹³

The goals of a sex education program must be inclusive enough to give a time for factual information and time for the development of wholesome attitudes. McQueen listed the following points as being representative of a successful sex education program:

1. The program must be planned to fit the local situation and must be based on the needs of children and young people in the area.
2. The program should have a philosophy as well as clearcut objectives.
3. Teachers must be carefully selected and specially trained for sex education programs.
4. Parents should be involved, and there should be a realistic program of parent education.
5. The community should assume a share of the responsibility.
6. Young people themselves must share in the effort if programs are to be effective.¹⁴

Kirkendall suggested the following as desirable objectives of sex education in a recent publication of SIECUS:

1. To provide for the individual an adequate knowledge of his own physical, mental, and emotional maturation processes as related to sex.
2. To eliminate fears and anxieties relative to individual sexual development and adjustments.
3. To develop objective and understanding attitudes

toward sex in all of its various manifestations -- in the individual and in others.

4. To give the individual insight concerning his relationships to members of both sexes and to help him understand his obligations and responsibilities to others.

5. To provide an appreciation of the positive satisfaction that wholesome human relations can bring in both individual and family living.

6. To build an understanding of the need for the moral values that are essential to provide rational bases for making decisions.

7. To provide enough knowledge about the misuse and aberrations of sex to enable the individual to protect himself against exploitation and against injury to his physical and mental health.

8. To provide an incentive to work for a society in which such evils as prostitution and illegitimacy, archaic sex laws, irrational fears of sex, and sexual exploitation are nonexistent.

9. To provide the understanding and conditioning that will enable each individual to utilize his sexuality effectively and creatively in his several roles, e.g., as spouse, parent, community member, and citizen.¹⁵

Thomas feels that sex education includes four major objectives:

1. To promote the development of personal knowledge and appreciation of one's sexual nature and needs.

2. To foster mature understanding of the place or role of sex in the individual's personal, family and social life.

3. To provide realistic preparation for responsible decision-making in regard to sexual activities.

4. To enlarge and deepen comprehension of the individual and social implications of changing sex roles in contemporary society.¹⁶

Smith, Krouse, and Atkinson, writing for The Educator's Encyclopedia presented these objectives of sex education.

Sex education is primarily concerned with the development of good mental health and an adjustment to life and adulthood. The course content is aimed at helping the individual play a valuable role as a contributing citizen in a family situation. Such education, which must of necessity be concerned with the physical development of the individual, should also be concerned with his emotional, social, moral, and intellectual development.

The physical aspects of sex education may be considered not as an entity in themselves but as an integral portion of the total being. Since education is usually considered to be concerned with the total individual, an understanding of the role of sex in the adjustment to adulthood should receive as much attention as that given to other aspects of the developing personality.¹⁷

In sum, sex education objectives include the behavioral goals that will develop the total individual. Emphasized in the literature was the physical, social, economical, and psychological development of the individual.

Teachers and Sex Education

The selection of teachers who are capable to teach sex education is a major task. Joseph S. Darden recommended that college students who plan to teach should take a course in methods and materials in sex education instruction in addition to a basic course in sex education.¹⁸

Most teacher preparation institutions, however, do not offer courses intended to prepare teachers for sex education. A survey of two hundred fifty teacher preparation institutions conducted by Teachers College, Columbia University, revealed that only twenty-one offered a course or courses intended to prepare teachers to teach sex education.

The survey indicated that, of the other two hundred twenty-nine institutions, six planned to offer courses in the future and two hundred twenty-three had no plans for such courses.¹⁹

Fowler, puts the blame on state colleges and universities for turning out teachers who are uninformed on teaching sex education.²⁰

Walter and Stinnett reported:

Recognizing that the major responsibility of education for family living will be carried by teachers in the existing framework of our present educational system . . . we should strive to introduce family life materials in the courses for prospective teachers.²¹

The problem of colleges and universities in beginning instruction in sex education for educators is also one of a lack of qualified instructors.²²

The need to provide training for teachers has brought about the development of workshops in methods and concepts of teaching sex education. The Sex Information and Education Council of the United States (SIECUS), 1855 Broadway, New York, New York, 100023, was established recently. Its purpose is

. . . to establish man's sexuality as a health entity; to identify the special characteristics that distinguish it from, yet relate it to, human reproduction; to dignify it by openness of approach, study, and scientific research designed to lead toward its understanding and its freedom from exploitation; to give leadership to professionals and to society, to the end that human beings may be aided toward responsible use of the sexual faculty and toward assimilation of sex into their individual life patterns as a creative and re-creative force.²³

SIECUS provides specialists for many of the workshops sponsored by local or state agencies. The Council publishes a list of summer workshops for training and helping teachers of sex education. Materials and a monthly bulletin are available through membership in SIECUS.

Manley points out:

Research and experience seem to indicate that in the secondary school, men, women, married, or single, with or without children, have equal success with boys or girls or mixed groups in sex education.²⁴

Gordon Van Haeft, chief of the New York State Education Department Bureau of Secondary Curriculum Development said, "There are relatively few trained health educators, and among those aren't many who can establish a rapport with pupils on sex education."²⁵

Dr. Esther Schultz, a SIECUS staff member, is active in training teachers for sex education. As a specialist in this field, she emphasizes:

The way a teacher approaches this subject is in itself a kind of sex education. You can't assign it to anybody who has trouble saying "penis" or "vagina" in mixed company. The teacher has to be calm and collected. He must be broadminded and forthright, not easily shocked. And he must not be a moralist.²⁶

In sum, training for sex education is a weakness in teacher training institutions. The problem is one of who will teach the teachers. In-service programs are an effort to fill this gap in teacher training.

Summary

Sex education today is a major concern of the public schools of our nation. The United States Office of Education has given the major governmental impetus to the development of new sex education curriculums and the expanding of existing programs.

Deterrents to developing sex education programs were given. The deterrent of the inadequacy of teachers is of primary concern to this research.

Objectives of sex education include behavioral goals to develop the whole individual.

A final section of this chapter presented the paradox of the lack of programs to train teachers for sex education instruction. Teacher training institutions are lacking in this area of curriculum. Some progress is being made in providing in service training programs.

The following chapter contains the research methodology and procedures.

FOOTNOTES

¹Ira L. Reiss, "Sex Education in the Public Schools: Problem or Solution?" Phi Delta Kappa, LIX (September, 1968), pp. 52-56.

²Beatrice M. Gudridge, Sex Education in Schools, National School Public Relations Association (Washington, 1969), p. 30.

³Ibid., pp. 31-32.

⁴Edward W. Smith, et al, "Sex Education," The Educator's Encyclopedia (Englewood Cliffs, New Jersey, 1961), p. 344.

⁵Ibid., p. 346.

⁶William F. Kenkel, "A Survey of Family Life Education in Iowa High Schools," Marriage and Family Living, XIX (November, 1957), pp. 379-381.

⁷Elizabeth S. Force, "High School Education for Family Living," Annals of the American Academy of Political and Social Science, CLXXI (November, 1950), p. 157.

⁸Evalyn S. Gendel, M. D., "Sex Education Is Character Education," The Kansas Teachers, LXXVI (March, 1968), pp. 24-25.

⁹Lester A. Kirkendall and Helen M. Cox, "Starting a Sex Education Program," Children, XIV (July -- August, 1967), p. 136.

¹⁰Ibid., p. 136.

¹¹Ibid., p. 136.

¹²Smith, et al, p. 345.

¹³Lester A. Kirkendall, "Some Goals for Sex Education," (Mimeographed).

¹⁴Mildred McQueen, "Program of Sex Education," The Education Digest, XXXIII (October, 1967), pp. 11-14.

¹⁵Lester A. Kirkendall, Sex Education, Sex Information and Education Council of the United States SIECUS Study Guide No. 1 (New York, 1967), pp. 10-11.

¹⁶Father John L. Thomas, "Some Moral Guidelines in Sex Education," Catholic School Journal, VXVIII (March, 1968), pp. 26-27.

¹⁷Smith, et al., pp. 343-344.

¹⁸Joseph S. Darden, "The Placement of Sex Education in the Curricula of Selected High Schools in Georgia," (unpub. Ph.D. dissertation, University of New York, 1963).

¹⁹Julia I. Dalrymple, "Family Life Education," Encyclopedia of Education Research, Third Edition (New York, 1960), p. 516.

²⁰Jim Reid, "Sex Education Series," The Daily Oklahoman, November 27, 1968, p. 1.

²¹James Walters and Nick Stinnet, "Should Family Life Education be Required," Journal of Home Economics, LX (October, 1968), p. 644.

²²Henry A. Bowman, "Collegiate Education for Marriage and Family Living," Annals of the American Academy of Political and Social Science, CCLXXII (November, 1950), pp. 148-155.

²³Sex Education, Sex Information and Education Council of the United States, SIECUS Study Guide No. 1 (New York, 1967).

²⁴Helen Manley, "Sex Education: Where, When, and How Should It Be Taught?" Journal of Health, Physical Education and Recreation, XXV (March, 1964).

²⁵John W. Machacek, "A New Look at Sex Education," New York State Education, LIV (May, 1967), pp. 24-26.

²⁶Seymour Holzman, "Sex Education Is Here to Stay," Scholastic Teacher (February 8, 1968), p. 6.

CHAPTER III

RESEARCH METHODOLOGY AND PROCEDURES

Design of the Study

The design of this study was basically ex post facto in nature. Kerlinger gives the following definition for ex post facto research.

. . . that research in which the independent variable or variables have already occurred and in which the researcher starts with the observation of a dependent variable or variables. He then studies the independent variables in retrospect for their possible relations to, and effects on, the dependent variable or variables.¹

In theory, an ex post facto design is less scientific than a true experimental design. As suggested in the definition, the inability to control the variables is the greatest limitation of ex post facto research. Whereas, it is possible to choose subjects randomly in ex post facto studies, it is not possible to assign either subjects or treatments to groups at random, because both subjects and treatments are already assigned to the group. Thus, a second limitation of this type of research design is the lack of opportunity to select subjects in a truly random fashion. The third limitation is the danger of improper interpretation of ex post facto research. This third

limitation is brought about by the first limitation, lack of independent variable control.²

However, ex post facto research design is of value to the area of education. Kerlinger said:

Despite its weaknesses, much ex post facto research must be done in psychology, sociology, and education simply because many research problems in the social sciences and education do not lend themselves to experimental inquiry.³

Instrumentation

Investigative Data Sheet

The investigative data sheet was constructed especially for this study to elicit the following information: age, sex, marital status, children's ages, religion, current teaching assignment, sex education training, teaching experience, and race. It was felt that an examination of the effects of these independent variables upon the dependent variable, feelings of adequacy, would contribute needed data for persons developing sex education curricula.

Feelings of Adequacy in Teaching Sex Education Instrument

An instrument was needed to measure feeling of adequacy in teaching sex education. The first step in its development was to prepare a list of selected objectives for sex education. The researcher used several guides already developed and in use to obtain a representative listing of objectives. The main sources for this task were the New York City Board of Education Curriculum Bulletin,⁴

The American School Health Association's Growth Patterns and Sex Education,⁵ and curriculum guides from the Greater St. Louis School Health Association,⁶ and The American Association of Health, Physical Education, and Recreation.⁷ This original list of objectives numbered forty-eight.

Establishing Validity A panel of judges was requested to evaluate the forty-eight objectives and contribute their expertise in establishing a comprehensive sex education objectives list for the elementary grades.

Members of the panel of judges were: Thomas S. Cunningham, Family Life Specialist, Oklahoma State University; Hazel Ingersol, Professor of Family Relations and Child Development, Oklahoma State University; Nick Stinnet, Professor of Family Relations and Child Development, Oklahoma State University; Julia McHale, Professor of Psychology, Oklahoma State University, Edwin Fair, Director of Kay County Guidance Clinic, Ponca City, Oklahoma; Dr. Evalyn S. Gendel, State Department of Public Health, Maternal and Child Health Division, Topeka, Kansas; and Dr. Audrey McMasters, Obstetrician, Oklahoma City Medical Center.

Each judge was requested to make any comments, pro or con, concerning each objective. The judges made suggestions for rewriting, rewording, eliminating, and adding new objectives. The researcher took their expertise at face value and eliminated any objective that a judge deemed inappropriate, rewrote those objectives where suggested,

and added new objectives. The resulting list contained fifty-two objectives.

The judges were also requested to classify each objective according to its primary emphasis. The four categories used for classifying were social, physical, economic, and psychological.

The researcher used a simple majority vote of the judges as sufficient to classify an objective as either social, physical, economic, or psychological in its major emphasis. The final typology projected eleven objectives classified as social, twenty as physical, two as economic, and nineteen as psychological. The objectives were placed in the questionnaire so that the odd numbered questions had a like number of objectives from each content area as did the even numbered questions.

Determining Reliability A pilot study was utilized to establish an estimate of internal reliability of the instrument. The question, "Do you feel adequate to employ learning activities to provide the experiences necessary for your students to attain the following objectives?" was asked. Fifty-two objectives followed the question. The teachers responded to each objective by means of a Likert type scale. The scale ranged from one to five or "very adequate" to "very inadequate." A copy of the instrument may be examined in Appendix A.

The instrument was administered to twenty-four elementary school teachers in two elementary schools. The

teachers responded to the questionnaires on their own time. They were encouraged to respond in writing to any part of the instrument that they disagreed with or that they believed did not communicate well. All grade levels were represented by the participating teachers.

The instruments were scored and the data were treated for reliability by using the Spearman-Brown Prophecy formula $R = \frac{2r}{1+r}$. This formula provides for an estimate of the reliability of the test. Odd and even questions were used to establish split-halves for correlation purposes. The split-halves were treated as two separate tests. This was accomplished by distributing objectives of each content area between odd and even numbered objectives. The range of scores was fifty-six through one hundred sixty-one. The data yielded an estimate of reliability of .98, derived from the Spearman-Brown Prophecy formula.

No change in the instrument was made as the result of the pilot study. The teachers did not object to or make suggestions for rewriting any of the questions. The final instrument is reproduced in Appendix A.

The Sample

The population for this study was selected from the elementary schools in Wichita and Emporia, Kansas. All of Emporia's nine elementary schools participated. Wichita had ninety-one elementary schools but two of their schools had pilot programs in sex education. The pilot schools

were isolated from the study as most of the pilot schools' teachers had received special training for teaching sex education. Therefore, the researcher felt that to include these two schools would contaminate the data collected for the study. The remaining eighty-nine elementary schools, in Wichita, were assigned numbers. A table of random numbers was used to select sixteen elementary schools to make up the population of the study from Wichita.

Possible Emporia participants numbered eighty-one and possible Wichita participants numbered two hundred eighty-nine for a grand total of possible participants of three hundred seventy. Individual schools ranged in faculty size from two teachers to thirty-six teachers. Emporia and Wichita were chosen to provide an opportunity to measure the relationship between a large and a small school district in their teachers' feelings of adequacy toward teaching sex education.

Data Collection

The researcher met with the principal of each elementary school participating in this study. The instrument was discussed and any questions the principals had concerning the study were answered. Instruments were supplied to each principal at these meetings.

The principal presented the instrument to each classroom teacher under his supervision. The teachers responded to the instrument on their own time and returned the

completed instrument to the principal within one week. The researcher returned to each city and collected the instruments.

Three hundred fifteen elementary classroom teachers participated in this study out of a possible total sample population of three hundred seventy. This was eighty-five percent participation. There was no follow up of the fifteen percent not participating.

Statistical Analysis of the Data

After the data had been collected from all schools, the instruments were given a code number. Personal data and responses to each item of the instrument were transferred to IBM cards, after which programs designed for the IBM Computer 360 Model 50 were used in the analysis of the data.

The one-way analysis of variance, t-test, and Duncan's Multiple Range Test were used in analyzing the data. The one-way analysis of variance was used in analyzing various demographic data in relationships to feelings of adequacy scores. The Duncan's Multiple Range Test was implemented to identify areas of significance when a significant F statistic developed from the analysis of variance analyses. The t-test was used to analyze the relationship of the feelings of adequacy scores between the large and the small school districts.

Summary

The design of this study was basically ex post facto in nature. The development of an instrument, to measure feelings of adequacy toward teaching sex education, was outlined. Finally, the collection of data and the statistical treatment of the data were outlined. Chapter IV will contain the presentation and the analysis of the data.

FOOTNOTES

¹Fred N. Kerlinger, Foundations of Behavioral Research (New York, 1966), p. 360.

²Ibid., pp. 361-362.

³Ibid., p. 372.

⁴New York City Board of Education, Family Living Including Sex Education, Curriculum Bulletin, 1967-1968, No. 11.

⁵American School Health Association, "Growth Patterns and Sex Education," The Journal of School Health (Columbus, Ohio, 1967).

⁶Helen Manley, A Curriculum Guide in Sex Education (St. Louis, 1964).

⁷AAHPER (editors), Sex Education Resource Unit Grades 5, 6, or 7 (Washington, D.C., 1967), American Association of Health, Physical Education and Recreation.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter has two purposes. One is to present a report of the demographic data describing the sample population. The second purpose is to present the data concerning each of the hypotheses as stated in Chapter I.

Demographic Data

Twenty-five elementary schools participated in this study. Nine schools were from a small school district and sixteen schools were from a large school district. The number of classroom teachers in each school ranged from two teachers to thirty-six teachers. Eighty-five percent of the classroom teachers from these schools participated. A total of three hundred fifteen of a possible three hundred seventy classroom teachers responded. No follow up attempt was made to obtain the participation of the fifteen percent of sample population not responding.

The school which had the lowest percent of participation had twenty-eight percent of its teachers to participate. Twenty-one of the schools had eighty-five percent participation or better with all of the classroom teachers of twelve schools responding.

A detailed discription of the sample population is presented in Table II, according to the demographic variables used in the study. The typical elementary classroom teacher in this study was forty-three years of age, female, married with children thirteen years old and over, protestant, and caucasian. She has from eleven to fifteen years of experience as an educator and has not had any special training in sex education.

Analysis of Data Relating to the Hypotheses

The analysis that follows presents mean scores as a measure of feelings of adequacy. The feelings of adequacy scale used in responding to the questionnaire was: very adequate = 1; adequate = 2; undecided = 3; inadequate = 4; and very inadequate = 5. Therefore, the mean scores may be interpreted according to this scale. Positive mean scores have a range of 1.00 through 2.50. Negative mean scores have a range of 3.51 through 5.00. Mean scores from 2.51 through 3.50 are considered as undecided. For example, if a group of teachers have a mean score of 2.03, this may be interpreted to mean that they have feelings of adequacy toward teaching selected sex education objectives. Of course, this interpretation must be limited to the instrument used and the population studied.

TABLE II
 DEMOGRAPHIC DATA DESCRIBING THE
 SAMPLE POPULATION

Variable	Number	Percent
Age 20-29	95	30
30-39	55	17
40-49	43	14
50-59	73	23
60-69	49	16
Total	315	100
Sex Male	29	9
Female	286	91
Total	315	100
Marital Status		
Single	44	14
Married	230	73
Widowed	22	07
Separated or Divorced	19	06
Total	315	100
Number Having Children		
Yes	185	58
No	130	42
Total	315	100
Ages of Children		
12 years and under	50	27
13 years and over	108	58
Both age groups	27	15
Total	185	100
Religion		
Protestant	295	93
Roman Catholic	14	04
Jewish	1	01
Other	5	02
Total	315	100

TABLE II (Continued)

Current Teaching Assignment		
Grade 1	47	15
Grade 2	34	11
Grade 3	41	13
Grade 4	44	14
Grade 5	34	11
Grade 6	37	12
Kindergarten	26	08
Combination	22	07
Other	30	09
Total	315	100
Number Having Sex Education Training		
Yes	47	15
No	267	85
Total	314*	100
Experience as an Educator		
0-5 years	99	31
6-10 years	43	14
11-15 years	42	13
16-20 years	39	12
Over 20 years	92	30
Total	315	100
Race of the Respondent		
Caucasian	290	92
Negro	21	07
Other	03	01
Total	314*	100

*totals differ because no response was indicated in a single instance on each of the asterisk items.

Ho: It is predicted that there is no significant difference (.05 level) in feelings of adequacy toward teaching selected sex education objectives.

a. among age groups of elementary classroom teachers.

b. between male and female elementary classroom teachers.

- c. among four marital status categories of elementary classroom teachers.
- d. between elementary classroom teachers having children and those not having children.
- e. among those elementary classroom teachers having children twelve years of age and under, those having children thirteen years and over, and those having children in both age groups.
- f. among elementary classroom teachers of different religions.
- g. among elementary classroom teachers of different teaching assignments.
- h. between elementary classroom teachers who have had a college level course or workshop related to the teaching of sex education and those who have not.
- i. among elementary classroom teachers having varying numbers of years teaching experience.
- j. among elementary classroom teachers of different race.

Tables III and IV present data concerning the effect of the independent variable, age, upon the dependent variable of the teachers' feelings of adequacy toward teaching sex education. The mean scores range from 2.01 to 2.21, which indicates positive feelings of adequacy toward teaching the sex education objectives.

There were positive feelings of adequacy toward teaching selected sex education objectives, regardless of the age of the teacher. In addition, there are no significant differences (.05 level) in feelings of adequacy toward teaching selected sex education objectives among the five age groups of elementary classroom teachers. Therefore, this study failed to reject the null hypothesis as stated above.

TABLE III
 MEAN SCORES OF FEELINGS OF ADEQUACY TOWARD
 TEACHING SELECTED SEX EDUCATION OBJECTIVES
 FOR DESIGNATED AGE GROUPS

	Age of Classroom Teacher				
	20-29	30-39	40-49	50-59	60-69
Sample Size	95	55	43	73	49
Means (Feelings of Adequacy)	2.01	2.01	2.08	2.21	2.11
Standard Deviation	0.45	0.51	0.51	0.53	0.50

TABLE IV
 ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY
 SCORES BY AGE GROUPS

Source	S.S.	d.f.	M.S.	F
Total	79.99	314		
Between Groups	2.02	4	0.50	
Within Groups	77.96	310	0.25	2.01 N

N-Not significant (.05 level), 2.41 required

The sex of the teacher, in this study, had no significant effect (.05 level) on the feelings of adequacy mean scores toward teaching selected sex education objectives. Both male and female teachers had positive feelings

of adequacy mean scores. However, the male teachers did have more positive feelings of adequacy than did the female teachers. The male teacher's mean score was 1.92 while the female teachers' mean score was 2.10.

An analysis of variance of the mean scores of the male and female teachers yielded an F score of 3.39. An F value of 3.89 is required for rejection of the null hypothesis stated previously. That is, there is no significant difference (.05 level) in feelings of adequacy toward teaching selected sex education objectives between male and female elementary classroom teachers. An analysis of variance was used in analyzing the data of these two groups to facilitate the analysis of data through the computer.

TABLE V

FEELINGS OF ADEQUACY TOWARD TEACHING SELECTED
SEX EDUCATION OBJECTIVES MEAN SCORES
BASED ON THE SEX OF THE TEACHER

	Male	Female
Sample Size	29	286
Means (feelings of adequacy)	1.92	2.10
Standard Deviation	0.42	0.51

TABLE VI

ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY TOWARD
TEACHING SELECTED SEX EDUCATION OBJECTIVES
SCORES AND SEX OF THE TEACHER

Source	S.S.	d.f.	M.S.	F
Total	79.99	314		
Between Groups	0.85	1	0.85	
Within Groups	79.13	313	0.25	3.39 N

N-Not significant (.05 level), 3.89 required

The marital status of the teachers in this study had no significant effect (.05 level) on their feelings of adequacy. Respondents had positive feelings of adequacy regardless of whether they were single, married, widowed, separated, or divorced. There was no significant difference, among the four groups, in their feelings of adequacy. Tables VII and VIII present the data concerning the variable marital status of the teacher.

Tables IX and X present data concerning the feelings of adequacy of teachers compared with whether they have children or whether they do not have children. This study failed to reject the hypothesis that there is no significant difference (.05 level) in feelings of adequacy toward teaching selected sex education objectives between elementary classroom teachers having children and those not having children. The means of the two groups were almost identical.

TABLE VII

FEELINGS OF ADEQUACY TOWARD TEACHING SELECTED
SEX EDUCATION OBJECTIVES BASED ON THE
MARITAL STATUS OF TEACHERS

	Single	Married	Widow/er	Separated or Divorced
Sample Size	44	230	22	19
Means (Feelings of Adequacy)	2.10	2.11	1.97	1.90
Standard Deviation	0.46	0.52	0.43	0.40

TABLE VIII

ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY
TOWARD TEACHING SELECTED SEX EDUCATION
OBJECTIVES SCORES AND MARITAL STATUS

Source	S.S.	d.f.	M.S.	F
Total	79.73	313		
Between Groups	0.01	1	0.01	
Within Groups	79.73	312	0.25	0.0073 N

N-Not significant (.05 level) 3.89 required

TABLE 1X

FEELINGS OF ADEQUACY TOWARD TEACHING SELECTED SEX
EDUCATION OBJECTIVES BETWEEN TEACHERS WITH
CHILDREN AND TEACHERS WITHOUT CHILDREN

Children:	Yes	No
Sample Size	185	130
Means (Feelings of Adequacy)	2.08	2.08
Standard Deviation	0.51	0.48

TABLE X

ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY TOWARD TEACHING
SELECTED SEX EDUCATION OBJECTIVES SCORES BETWEEN TEACHERS
WITH CHILDREN AND TEACHERS WITHOUT CHILDREN

Source	S.S.	d.f.	M.S.	F
Total	79.73	314		
Between Groups	0.01	1	0.01	
Within Groups	79.73	313	0.25	0.0073 N

N-Not significant (.05 level), 3.89 required

The teachers' children's ages had no significant effect (.05 level) on the feelings of adequacy toward teaching sex education. It was interesting to note, however, that feelings of adequacy tended to become less positive as the age groups of their children became older. Tables XI and XII present data concerning this demographic variable.

TABLE XI

THE RELATIONSHIP BETWEEN TEACHERS' CHILDREN'S AGES
AND FEELINGS OF ADEQUACY TOWARD TEACHING
SELECTED SEX EDUCATION OBJECTIVES

Children's Ages	12 Years and Under	13 Years and Over	Both Age Groups
Sample Size	50	108	27
Means (Feelings of Adequacy)	1.99	2.14	2.07
Standard Deviation	0.43	0.51	0.66

It was hypothesized that there is no significant difference (.05 level) in feelings of adequacy toward teaching selected sex education objectives among elementary classroom teachers of different religions. This study revealed a significant F score of 3.30. Therefore, the null hypothesis is rejected in favor of the research hypothesis: there is a significant difference (.05 level)

in feelings of adequacy toward teaching selected sex education objectives among elementary classroom teachers of different religions. (Note: The sub category of the Jewish religion was eliminated in the analysis of variance since there was only one respondent in this group.)

TABLE XII

ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY TOWARD
TEACHING SELECTED SEX EDUCATION OBJECTIVES
SCORES BASED ON AGES OF CHILDREN

Source	S.S.	d.f.	M.S.	F
Total	49.45	184		
Between Groups	0.76	2	0.38	
Within Groups	48.69	182	0.26	1.42 N

N-Not significant (.05 level), 3.06 required

TABLE XIII

THE EFFECT OF TEACHERS' RELIGION BASED ON THEIR
FEELINGS OF ADEQUACY TOWARD TEACHING
SELECTED SEX EDUCATION OBJECTIVES

Religion	Protestant	Roman Catholic	Other
Sample Size	295	14	5
Means (Feelings of Adequacy)	2.08	2.19	1.55
Standard Deviation	0.48	0.55	0.39

The analysis of variance yields a result establishing significance or non-significance. It does not tell the researcher where the significant difference is. Therefore, Duncan's Multiple Range Test was employed to identify the religion or religions that differ significantly in their feelings of adequacy mean scores.

TABLE XIV

ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY TOWARD
TEACHING SELECTED SEX EDUCATION OBJECTIVES
SCORES BASED ON RELIGION OF TEACHERS

Source	S.S.	d.f.	M.S.	F
Total	76.09	313		
Between Groups	1.58	2	0.79	
Within Groups	74.50	311	0.23	3.30 S

S-Significant (.05 level), 3.04 required

Table XV reveals the results of the Duncan Test. There was no significant difference in the means (feelings of adequacy scores) between Protestant teachers and Roman Catholic teachers. The significant difference lies between these two groups of teachers and the group of five teachers classified as "other religions." Since this group was so small in comparison to the other religion groups the significance is only a statistical one and becomes less

significant when the numbers in each category are considered. The five teachers in the "other religions" category specified their religion. Two were Latter Day Saints, one was Greek Catholic, one said no religion, and a fifth did not respond to the request to specify religion.

TABLE XV
DUNCAN'S MULTIPLE RANGE TEST ON
THE VARIABLE OF RELIGION

Religion	Other	Protestant	Roman Catholic
Means	1.55	2.08	2.19

Teaching assignment had no significant effect on the feelings of adequacy of teachers toward teaching selected sex education objectives. Sixth grade teachers had the most positive feelings of adequacy mean scores with a 1.91. However, all teaching assignment categories had positive feelings of adequacy mean scores. The mean scores ranged from 1.91 to 2.18. Tables XVI and XVII present this data.

TABLE XVI

THE EFFECT OF TEACHING ASSIGNMENTS ON FEELINGS
OF ADEQUACY SCORES TOWARD TEACHING
SELECTED SEX EDUCATION OBJECTIVES

Teaching Assignment	Sample Size	Means	Standard Deviation
Grade 1	47	2.08	0.41
Grade 2	34	2.18	0.43
Grade 3	41	2.20	0.58
Grade 4	44	2.11	0.52
Grade 5	34	2.02	0.53
Grade 6	37	1.91	0.38
Kindergarten	26	2.03	0.46
Combination	22	2.16	0.47
Other	30	2.03	0.67

TABLE XVII

ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY TOWARD
TEACHING SELECTED SEX EDUCATION OBJECTIVES
SCORES BASED ON TEACHING ASSIGNMENTS

Soucre	S.S.	d.f.	M.S.	F
Total	79.99	314		
Between Groups	2.39	8	0.29	
Within Groups	77.59	306	0.25	1.81 N

N-Not significant (.05 level), 1.98 required

Forty-seven teachers said they had some sex education training. Their mean score was only slightly more positive than the two hundred sixty-seven teachers who said they did not have sex education training. The original hypothesis was not rejected. The hypothesis was: there is no significant difference in feelings of adequacy toward teaching selected sex education objectives between elementary classroom teachers who have had a college level course or workshop related to the teaching of sex education and those who have not. This data is presented in Tables XVIII and XIX.

TABLE XVIII

SEX EDUCATION TRAINING'S EFFECT ON FEELINGS
OF ADEQUACY TOWARD TEACHING SELECTED
SEX EDUCATION OBJECTIVES

	Sex Education Training	No Training
Sample Size	47	267
Means (Feelings of Adequacy)	1.77	1.89
Standard Deviation	0.82	0.69

TABLE XIX

ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY TOWARD
TEACHING SELECTED SEX EDUCATION OBJECTIVES SCORES
BASED ON TEACHERS' TRAINING IN SEX EDUCATION

Source	S.S.	d.f.	M.S.	F
Total	162.09	313		
Between Groups	0.57	1	0.57	
Within Groups	161.52	312	0.51	1.10 N

N-Not significant (.05 level), 3.89 required

Tables XX and XXI present data concerning the variable teaching experience and feelings of adequacy scores. More experienced teachers were more positive in their feelings of adequacy toward teaching sex education than were less experienced teachers. However, teachers' mean scores were positive regardless of the number years of experience teaching. The range of mean scores was from 1.84 to 2.10.

There was no significant difference (.05 level) in feelings of adequacy toward teaching selected sex education objectives among elementary classroom teachers having varying numbers of years teaching experience.

There was no significant difference (.05 level) in the feelings of adequacy scores among teachers of various race. Caucasians had a mean score of 2.01 compared with the Negro mean score of 2.08. Three teachers were classified as "other" race. Their mean score was 2.48.

TABLE XX

THE EFFECTS OF TEACHING EXPERIENCE ON FEELINGS
OF ADEQUACY SCORES TOWARD TEACHING SELECTED
SEX EDUCATION OBJECTIVES

Years Experience	0-5	6-10	11-15	16-20	Over 20
Sample Size	99	43	42	39	92
Means (Feelings of Adequacy)	2.10	2.03	1.90	1.98	1.84
Standard Deviation	0.53	0.44	0.71	0.36	0.78

TABLE XXI

ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY TOWARD
TEACHING SELECTED SEX EDUCATION OBJECTIVES
SCORES BASED ON TEACHING EXPERIENCE

Source	S.S.	d.f.	M.S.	F
Total	121.90	314		
Between Groups	3.45	4	0.86	
Within Groups	118.44	310	0.38	2.26 N

N-Not significant (.05 level), 2.41 required

TABLE XXII

THE EFFECTS OF THE TEACHERS' RACE ON FEELINGS
OF ADEQUACY SCORES TOWARD TEACHING SELECTED
SEX EDUCATION OBJECTIVES

Race	Caucasian	Negro	Other
Sample Size	290	21	3
Means (Feelings of Adequacy)	2.01	2.08	2.48
Standard Deviation	0.69	0.41	0.41

TABLE XXIII

ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY TOWARD
TEACHING SELECTED SEX EDUCATION OBJECTIVES
SCORES AND RACE OF TEACHERS

Source	S.S.	d.f.	M.S.	F
Total	145.78	313		
Between Groups	0.74	2	0.37	
Within Groups	145.04	311	0.46	0.80 N

N-Not significant (.05 level), 3.04 required

In sum, the teachers in this study had positive feelings of adequacy toward teaching sex education. Various demographic data were introduced as variables. Only the religion variable yielded a significant (.05 level) feelings of adequacy mean score difference. The importance of this significance was reduced when statistical analysis revealed that the five respondents giving "other" as their religion made up the group significantly different in their feelings of adequacy. Demographic variables having no significant effect on teachers' feelings of adequacy were age, sex, marital status, family status, ages of children, teaching assignments, teachers' training, teaching experience, and race.

In order to test whether teachers' feelings of adequacy toward teaching sex education may vary between content areas of sex education the following hypothesis was posited.

Ho: Elementary classroom teachers' feelings of adequacy toward teaching selected sex education objectives will not differ significantly (.05 level) among the four content areas of sex education: social, physical, economic, and psychological.

Each objective in the questionnaire had been classified according to its major emphasis. The four categories of the typology were: social, physical, economic, and psychological. The mean scores (feelings of adequacy measure) of the three hundred fifteen participants are presented

by content area in Table XXIV below. All four content mean scores represent positive feelings of adequacy toward the selected sex education objective.

TABLE XXIV
FEELINGS OF ADEQUACY MEAN SCORES
OF THE FOUR CONTENT AREAS OF
SEX EDUCATION

Content Area	Social	Physical	Economic	Psychological
Sample Size	315	315	315	315
Means (Feelings of Adequacy)	2.04	2.16	2.01	2.03
Standard Deviation	0.52	0.56	0.65	0.49

Presented in Table XXV are analysis of variance data concerning the above hypothesis. The computed F value of 4.81 is significant at the .01 level. The F value needed for significance at the .01 level is 3.78. In order to identify the content area or areas that are significantly different, Duncan's Multiple Range Test was employed.

Inspection of Table XXVI reveals that the physical content area of sex education yielded a higher mean score than the other three content areas. The content areas of economic, psychological, and social were not significantly different in their mean scores. The physical content area

mean score is significantly different from the mean scores of the other three content areas. The teachers had less positive feelings of adequacy in the physical content area.

TABLE XXV

ANALYSIS OF VARIANCE: FEELINGS OF ADEQUACY TOWARD
TEACHING SELECTED SEX EDUCATION OBJECTIVES
SCORES BASED ON CONTENT AREAS

Source	S.S.	d.f.	M.S.	F
Total	400.87	1259		
Between Groups	4.55	3	1.51	
Within Groups	396.32	1256	0.31	4.81 S

S-Significant (.01 level), 3.78 required

TABLE XXVI

DUNCAN'S MULTIPLE RANGE TEST
THE VARIABLE CONTENT AREAS

Content	Economic	Psychological	Social	Physical
Means	2.00	2.03	2.04	2.16

The following hypothesis was posited to study whether the size of a school district has any significant effect on feelings of adequacy scores.

Ho: There is no significant difference (.05 level) in the feelings of adequacy mean scores of elementary classroom teachers of a small school district and the feelings of adequacy mean scores of elementary classroom teachers of a large school district, toward teaching sex education.

A t test yielded a t-statistic of 0.12 with degrees of freedom of 313. A t value of 1.96 is required to reject a null hypothesis at the .05 level. Therefore, the study failed to reject the null hypothesis. There was no significant difference in the feelings of adequacy scores of the teachers between the large and the small school district.

TABLE XXVII

FEELINGS OF ADEQUACY TOWARD TEACHING SELECTED SEX EDUCATION OBJECTIVES: SMALL SCHOOL DISTRICT ELEMENTARY CLASSROOM TEACHERS COMPARED WITH LARGE SCHOOL DISTRICT ELEMENTARY CLASSROOM TEACHERS

	Large School District	Small School District
Sample Size	240	75
Means (Feelings of Adequacy)	2.08	2.08
Variance	0.24	0.28
Standard Deviation	0.49	0.53
Standard Error of the Mean	0.31	0.62

Summary

The first part of this chapter presented demographic data of the sample population. Several demographic factors were used in the development of hypotheses in Chapter I. These hypotheses were restated in this chapter and an analysis of data concerning each one was presented. Religion of the teacher yielded a significant F score. The significantly different mean score was found to be that of the group of teachers classified under "other religions." This group had only five respondents which greatly limits any significance. There was no significant difference in mean scores between Protestant and Roman Catholic teachers.

A significant F score was revealed when the mean scores of the four content areas of sex education were compared. Teachers portrayed less feelings of adequacy toward teaching physical sex education objectives than the other three areas: social, economic, and psychological. However, even the feelings of adequacy mean score toward physical sex education objectives was 2.16, which is a positive score. In sum, teachers in this study indicated feelings of adequacy toward teaching sex education but felt more adequate in the areas of social, economic, and psychological objectives than they did in the physical area of sex education objectives.

The final finding reported in this chapter revealed that there was no significant difference in the feelings

of adequacy mean scores between the teachers in a large school district and the teachers of a small school district.

The next and final chapter will contain the summary, implications, and recommendations of this study.

CHAPTER V

SUMMARY OF RESULTS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter will first present a summary of the problem under study. Implications from the findings, documented in Chapter IV, will follow. This study, like many studies in behavioral science, has not considered all the possible variables influencing the measure being researched. Therefore, this chapter will conclude by presenting recommendations for further study needed to provide scientific data in developing sex education instructional curricula and in-service programs.

Summary of Results

A review of the literature and a descriptive research study by the writer reported that a major deterrent to developing sex education curricula is teacher inadequacy. The main theme of this study was to investigate the feelings of adequacy of elementary classroom teachers toward teaching selected sex education objectives.

Various demographic data were used in developing hypotheses to see if certain teacher characteristics have any significant relationship with teachers' feelings of

adequacy. It was also hypothesized that there would be no significant difference in feelings of adequacy scores among the four content areas of sex education social, physical, economical, and psychological. A final area of investigation was to determine if there were any significant differences in feelings of adequacy between teachers in large and small school districts.

The researcher selected a large school district and a small school district to participate in the study. All of the elementary classroom teachers in the small school district and a random selection of the elementary classroom teachers in the large school district made up the sample population. Eighty-five percent of the sample population participated. A description of the population can be found in Chapter IV.

An instrument, to measure feelings of adequacy of elementary classroom teachers toward teaching selected sex education objectives, had to be developed. A panel of experts, in fields related to sex education, was used to establish face validity of the instrument. An estimate of reliability was obtained through a pilot study in two elementary schools. Further use of the instrument is required in order to substantiate validity and reliability measures.

The findings of this study failed to show any significant relationship between the various demographic data of the respondents and their feelings of adequacy mean scores except when the religion variable was considered.

However, the significance of this variable's difference in mean scores is limited in that the difference was between five respondents listing their religion as "other" and all other respondents. No significant difference in mean scores was found between Protestant and Roman Catholic teachers, who made up all but six of the respondents. Therefore, it may be concluded that the religion of the teachers in this study did not have a significant effect on their feelings of adequacy.

The findings of this research also failed to show any significant difference in the feelings of adequacy mean scores between large school district teachers and small school district teachers.

Finally, this research indicated a significant difference in the feelings of adequacy mean scores of teachers among the four content areas of sex education. Statistical analysis revealed that the respondents had positive feelings of adequacy mean scores toward all four areas but that they felt significantly less adequate toward teaching the physical content area of sex education objectives.

In sum, this study showed that elementary classroom teachers, of this sample population, have positive feelings of adequacy toward teaching selected sex education objectives, less positive feelings of adequacy in the physical content area of sex education objectives, and no significant difference in feelings of adequacy between a large and a small school districts' teachers. It does not make

any significant difference in feelings of adequacy whether the teacher is male or female, young or old, married or unmarried, inexperienced or experienced. Other demographic factors that did not have any significant effect were whether the teacher had children or not, current assignment, sex education training, and race of the teacher. The significant difference in feelings of adequacy of the teachers when the religion variable was considered, became less important when the significant difference was between a group of five teachers giving "other" as their religion and all the other teachers.

Implications

To draw implications from this study, the researcher must limit any statements to the sample population and the instrument used. To make applications to other populations of elementary classroom teachers would be speculative. The following implications are made keeping the above limitations in mind.

The sex, age, marital status, family status, teaching experience, teaching assignment, sex education training, religion, and race of the teachers had no significant effect on their feelings of adequacy toward teaching selected sex education objectives. As these findings are further substantiated in similar studies, teacher recruitment and in-service training can benefit from this

information since teachers feelings of adequacy toward teaching sex education are positive.

This study revealed that the teachers, as a group, had positive feelings of adequacy toward teaching selected sex education objectives, but felt significantly less adequate in the physical content area of sex education. Therefore, the physical content area would need most emphasis in in-service training programs involving these teachers if the sex education objectives were to be taught.

This study further revealed that the feelings of adequacy of a small school district's elementary classroom teachers did not differ significantly from a large school district's elementary classroom teachers' feelings of adequacy. Therefore, similar sex education in-service training programs might be implemented for teachers regardless of whether they are teachers in a small district or a large district. The orientation of the teachers did not seem to make a significant difference in their feelings of adequacy toward teaching sex education.

Recommendations

Behavioral science research studies can as often be depicted by what they fail to take account of as by what they study. The following recommendations are offered for future studies in the realm of teachers' feelings of adequacy toward teaching sex education.

First, further studies should be implemented using the

instrument developed for this study. These replicating studies would be to see if like results are found when different populations are studied. Balanced sub samples could be selected in order to study the interaction effect between various demographic variables and the resulting effect on feelings of adequacy toward teaching sex education.

Secondly, a variable not considered in this study, which may influence teachers' feelings of adequacy toward teaching sex education, is their personal opinions of whether sex education objectives should be taught in their classroom. This research did not measure attitudes toward sex education in schools. These attitudes may be a determining factor in their feelings of adequacy.

Thirdly, a fruitful area of future research might be an investigation of the influence the school principal's attitudes toward sex education have upon teachers' feelings of adequacy toward teaching sex education.

Fourthly, do teachers from different teacher education programs differ significantly in their feelings of adequacy toward teaching sex education? A study comparing senior education students from two or more teacher education colleges might prove fruitful.

Fifthly, the writer recommends studies be designed to investigate relationships, if any, between a community's attitudes toward sex education in their school and teachers' feelings of adequacy toward teaching sex education.

Finally, what does significantly effect teachers' feelings of adequacy toward teaching sex education? How can persons responsible for the selection and training of teachers know when a teacher is prepared adequately to teach sex education? What characteristics describe a teacher who will most likely succeed in this area of instruction?

These additional studies are needed to add to limited knowledge available in planning sex education curricula and the selection of teachers. Teacher training programs and in-service education of teachers could be planned from the data analyzed from these studies.

SELECTED BIBLIOGRAPHY

- AAHPER (Commission). Health Concepts: Guides for Health Instruction (Washington, D. C., 1967), American Association for Health, Physical Education, and Recreation.
- AAHPER (editors). Sex Education Resource Unit Grades 5, 6, or 7 (Washington, D.C., 1967), American Association for Health, Physical Education, and Recreation.
- American School Health Association. "Growth Patterns and Sex Education." The Journal of School Health, Columbus, Ohio: American School Health Association, XXXVII (May, 1967).
- Bennell, Florence B. "Eliminating Barriers to Sex Education in Schools." The Journal of School Health. Columbus, Ohio: American School Health Association, XXXVIII (February, 1968), 68-71.
- Bowman, Henry A. "Collegiate Education for Marriage and Family Living." Annals of the American Academy of Political and Social Science, CCLXXII (November, 1950), 148-155.
- Calderone, Mary S. "The Development of Healthy Sexuality." The Journal of Health, Physical Education and Recreation, XXVII (September, 1966), 23-27.
- Corocan, Judy. "Sex Education in Schools Urged by Doctor, Minister." The Topeka Daily Capital, January 16, 1968.
- Dalrymple, Jula A. "Family Life Education." Encyclopedia of Educational Research. Third Edition, 516-521. New York: The Macmillan Company, 1960.
- Darden, Joseph S. "The Placement of Sex Education in the Curricula of Selected High Schools in Georgia." (unpub. Ph.D. dissertation, University of New York, 1963).
- "Family Living Curriculum Guide, Grades K-6." Community Consolidated School District 15, Paletine, Illinois, 1967.

- "Family Living Including Sex Education." Curriculum Bulletin 1967-1968 Series, No. 11, Board of Education of the City of New York.
- Force, Elizabeth S. "High Education for Family Living." Annals of the American Academy of Political and Social Science, CCLXXII (November, 1968), 156-158.
- Gendel, Evalyn S. "Sex Education Is Character Education." The Kansas Teacher, LXXVI (March, 1968), 23-28.
- Gudridge, Beatrice M. "Sex Education in Schools." Education U.S.A. Washington: National School Public Relations Association, 1969.
- Hendryson, Elizabeth. "The Case for Sex Education." The PTA Magazine (May, 1969), 20-21.
- Holzman, Seymour. "Sex Education Is Here to Stay." Scholastic Teacher, CXCVI (February 8, 1968), 6-7.
- Jerome, C. R. L. Statistical Inference. Ann Arbor, Michigan: Edwards Brothers, Inc., 1964.
- Johnson, Marvin J. "A Survey of Sex Education Curricula in Kansas Schools." (unpub. Specialist in Education thesis, Kansas State Teachers College, Emporia, Kansas, 1968).
- Johnson, Warren R. and Margaret Schutt. "Sex Education Attitudes of School Administrators and School Board Members." The Journal of School Health. Columbus, Ohio: American School Health Association, XXXVI (February, 1966), 64-68.
- Jones, Lowell B. "How to Start a Sex Education Program." The Nation's Schools, LXXX (July, 1967), 33-35.
- Kenkel, William F. "A Survey of Family Life Education in Iowa High Schools." Marriage and Family Living, XIX (November, 1957), 379-381.
- Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart, and Winston, 1966.
- Kirekendall, Lester A. "Some Goals for Sex Education." (Mimeographed).
- _____. Sex Education (Discussion Guide No.1) New York: Sex Information and Education Council of the United States, Inc., 1965.

- _____ and Helen M. Cox. "Starting a Sex Education Program." Children, XIV (July-August, 1967), 136-140.
- _____ and Archie Hamilton. "Current Thinking and Practices in Sex Education." High School Journal, XXXVII (February, 1954), 143-148.
- _____ and Deryck Calderwood. "The Family, The School, and Peer Groups; Sources of Information About Sex." The Journal of School Health, XXV (September, 1965), 290-297.
- Kluckhohn, Clyde. "Value and Value Orientation in the Theory of Action." Ed. T. Parsons and E. Shils. Toward a General Theory of Action. Cambridge: Howard University Press, 1951.
- Luckey, Eleanora Braum. "Helping Children Grow Up Sexually How? When? by Whom?" Children, XIV (July-August, 1967), 130-135.
- Machacek, John W. "A New Look at Sex Education." New York State Education, LIV (May, 1967), 24-26.
- McHugh, James T. "Sex Education in the Catholic Schools." The Catholic School Journal, LXVIII (March, 1968), 19-23.
- McQueen, Mildred. "Program of Sex Education." The Education Digest, XXXIII (October, 1967), 11-14.
- Malfetti, James L. and Arline M. Rubin. "Sex Education: Who Is Teaching the Teachers?" The Record (Teacher College, Columbia University), LXIX (December, 1967), 214-222.
- Manley, Helen. A Curriculum Guide in Sex Education. St. Louis, Missouri: State Publishing Co., Inc., 1964.
- _____ "Sex Education: Where, When, and How Should It Be Taught?" Journal of Health, Physical Education, and Recreation (March, 1964).
- New York City Board of Education. Family Living Including Sex Education. Curriculum Bulletin, 1967-1968 Series, No.11.
- Peale, Norman Vincent. Sin, Sex, and Self Control. Connecticut: Fawcett Publications, Inc., 1967.
- Reid, Jim. "Sex Education Series." The Daily Oklahoman, November 27, 1968.

- Reiss, Ira L. "Sex Education in the Public Schools: Problem or Solution?" Phi Delta Kappan, LIX (September, 1968), 52-56.
- Reiss, Ira L., ed. "The Sexual Renaissance in America." The Journal of Social Issues, XXII (April, 1966).
- Robbins, Jhan an June. "The Growing Need for Sex Education in Our Schools." Good Housekeeping, CLXI (November, 1965), 94-95, 255-259.
- Schiller, Patricia. "Sex Education That Makes Sense." NEA Journal, LVII (February, 1968), 17-19.
- Shipman, Gordon. "The Psychodynamics of Sex Education." The Family Coordinator -- Journal of Education, Counseling, and Services, XVII (January, 1968), 3-12.
- Siegel, Sidney. Nonparametric Statistic for the Behavioral Scientists. New York: McGraw - Hill Book Company, 1956.
- Smith, Edward W., et al. "Sex Education." The Educator's Encyclopedia. Englewood Cliffs, New Jersey: Prentice-Hall, 1961.
- Thomas, Father John L. "Some Moral Guidelines in Sex Education." The Catholic School Journal, LXVIII (March, 1968), 26-27.
- Walters, James and Nick Stinnett. "Should Family Life Education be Required." Journal of Home Economics, LX (October, 1968), 641-644.
- Wiley, Robert Claud. "An Investigation of the Relationship Between Elementary School Socioeconomic Status and Teacher Professionalism." (unpub. EdD dissertation, Oklahoma State University, 1969).

APPENDIX A

AN INSTRUMENT TO MEASURE FEELINGS OF
ADEQUACY IN TEACHING SEX EDUCATION

5. Religion
 Protestant = 1
 Roman Catholic = 2
 Jewish = 3
 Other = 4 Please
 Specify _____ 5. _____
6. Current Assignment
 Grade 1 = 1
 Grade 2 = 2
 Grade 3 = 3
 Grade 4 = 4
 Grade 5 = 5
 Grade 6 = 6
 Kindergarten = 7
 Combination = 8 Specify _____
 Other = 9 Specify _____
 6. _____
7. Have you had a college level course or workshop related
 to the teaching of sex education?
 Yes = 1
 No = 2 7. _____
8. Experience as an educator (include the 1968-1969 school
 year and any fraction of a year as a complete year).
 0-5 yrs = 1
 6-10 yrs = 2
 11-15 yrs = 3
 16-20 yrs = 4
 over 20 yrs = 5 8. _____
9. Race
 Caucasian = 1
 Negro = 2
 Mexican-American = 3
 Oriental = 4
 American Indian = 5
 Other = 6 9. _____

FEELINGS OF ADEQUACY IN TEACHING SEX EDUCATION

Directions: Use the following definitions of sex education and feelings of adequacy in responding to the questions.

Sex Education consists of instruction to develop understanding of the social, physical, economic, and psychological phases of human relations as they are affected by male and female relationships. It is to be distinguished from mere sex information and can best be described as character education. Emphasis is on attitude development and guidance related to associations between sexes. It implies that man's sexuality is integrated into his total life development as a health entity and a source of creative energy.

Feelings of Adequacy toward teaching sex education refer to an individual teacher's consciousness of feeling sure that she(he) can adequately employ various learning activities such as observation, discussion, role playing, experimentation, and reading to provide the experiences necessary for students to attain the selected sex education objectives.

Express your feeling of adequacy toward attainment of the curriculum objectives listed below, by crossing out the number best representing your feelings of adequacy at this time. You are not expressing attitudes of whether or not the objective should be taught, but you are expressing your feelings of adequacy, in teaching for the objectives, keeping the definitions above in mind.

DO YOU FEEL ADEQUATE TO EMPLOY VARIOUS LEARNING ACTIVITIES TO PROVIDE THE EXPERIENCES NECESSARY FOR YOUR STUDENTS TO ATTAIN THE FOLLOWING OBJECTIVES IN SEX EDUCATION

Scale: 1-Very Adequate, 2-Adequate, 3-Undecided, 4-Inadequate, 5-Very Inadequate

- | | Example | | | | | |
|--|---------|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 1. The student should recognize that curiosity about oneself and others is natural. | | 1 | 2 | 3 | 4 | 5 |
| 2. The student should learn that all animals and people come into the world as babies. | | 1 | 2 | 3 | 4 | 5 |
| 3. The student should understand that animals care for their babies. | | 1 | 2 | 3 | 4 | 5 |
| 4. The student should understand the social differences between girls and boys. | | 1 | 2 | 3 | 4 | 5 |

5. The student should recognize that the parts of our body differ in appearance and in function. 1 2 3 4 5
6. The student should learn that baby animals and human babies grow from eggs. (ova) 1 2 3 4 5
7. The student should appreciate the fact there is a growth process during pregnancy. 1 2 3 4 5
8. The student should understand the physical and social differences between girls and boys. 1 2 3 4 5
9. The student should understand and learn to use the correct terminology for body parts. 1 2 3 4 5
10. The student should understand that children and babies are dependent upon older members of the family or other adults. 1 2 3 4 5
11. The student should understand that living things produce other living things of the same kind. 1 2 3 4 5
12. The student should become aware that animal babies develop from eggs inside the body of the mother. (Mammal distinction and human vs. other mammals to be clarified) 1 2 3 4 5
13. The student should become aware that human babies develop from eggs inside the mother's body. 1 2 3 4 5
14. The student should gain some understanding of interaction among family members; parent with parent, parent with children, child with child, and children with newborn. 1 2 3 4 5
15. The student should learn and understand that parents have their own needs in a family. 1 2 3 4 5
16. The student should appreciate the fact that human babies need love, time, and care in order to grow and develop. 1 2 3 4 5
17. The student should accept the fact that parents are husband wife to each other. 1 2 3 4 5
18. The student should learn what comprises femininity and masculinity. 1 2 3 4 5
19. The student should appreciate the differentiation in sex-determined roles of members

- of the family, including those of the extended family. 1 2 3 4 5
20. The student should understand the fact that a female egg (ovum) from the mother and a male egg (sperm) from the father unite to produce a baby. 1 2 3 4 5
21. The student should develop some understanding of the future roles of girls and boys as parents. 1 2 3 4 5
22. The student should appreciate parental love that provides for the care, protection, and guidance of children. 1 2 3 4 5
23. The student should appreciate that his morally acceptable role behavior creates affection and pride in his parents. 1 2 3 4 5
24. The student should appreciate the fact that girls and boys learn their future roles as mothers and fathers by helping in the home. 1 2 3 4 5
25. The student should understand that fertilized eggs (ova), of different animals and mammals, vary in time needed to produce a new individual. 1 2 3 4 5
26. The student should appreciate that animals vary in the number of offspring produced at a given time and in a lifetime. 1 2 3 4 5
27. The student should understand, at an elementary level the meaning of friendship. 1 2 3 4 5
28. The student should recognize that children of the same family are different from each other. 1 2 3 4 5
29. The student should accept his own sex identity. 1 2 3 4 5
30. The student should understand that animals vary in the amount of parental care that is needed for the nurture of offspring. 1 2 3 4 5
31. The student should understand the relationship of behavior to consequence with ensuing personal responsibility. 1 2 3 4 5

32. The student should understand the body changes at the preadolescent period. 1 2 3 4 5
33. The student should become aware that puberty initiates the physical changes leading to manhood and womanhood. 1 2 3 4 5
34. The student should become aware that puberty initiates the psychological changes leading to manhood and womanhood. 1 2 3 4 5
35. The student should learn to expect and handle intelligently emotional changes which accompany physical changes. 1 2 3 4 5
36. The student should appreciate the importance of hygienic habits during preadolescence. 1 2 3 4 5
37. The student should recognize that each member of the family is entitled to privacy. 1 2 3 4 5
38. The student should understand the importance of responsible social behavior consistent with moral and ethical values. 1 2 3 4 5
39. The student should understand the process of human fertilization, how the unborn baby grows, and how the baby is born. 1 2 3 4 5
40. The student should appreciate the influence of heredity on growth and development. 1 2 3 4 5
41. The student should understand that during puberty changes occur in the reproductive organs of girls and boys which prepare them eventually for womanhood and manhood. 1 2 3 4 5
42. The student should understand that many problems in boy-girl relationships naturally grow out of variations in development. 1 2 3 4 5
43. The student should understand the increased nutritional needs which result from a maturing body. 1 2 3 4 5
44. The student should appreciate the need for a variety of social activities on the part of boys and girls, for full human development. 1 2 3 4 5
45. The student should understand wholesome recreational outlets as a means for emotional release in relation to the natural changes that occur in puberty. 1 2 3 4 5

46. The student should appreciate that irresponsible sexual behavior adversely affects the moral fiber of society. 1 2 3 4 5
47. The student should appreciate that sexual activity, that produces an illegitimate child, is an irresponsible act. 1 2 3 4 5
48. The student should understand that sexual activity, that produces an illegitimate child, inflicts unknown psychological damage to a defenseless child. 1 2 3 4 5
49. The student should become aware of his sex identity through clothing, general appearance, activities, and expectations. 1 2 3 4 5
50. The student should understand that children are expensive to parents. 1 2 3 4 5
51. The student should understand that sexual activity is socially acceptable only after marriage. 1 2 3 4 5
52. The student should begin to gain insight into family financial planning. 1 2 3 4 5

APPENDIX B
TYPOLOGY OF OBJECTIVES

TYPOLOGY OF OBJECTIVES

Each question in the foregoing questionnaire is a sex education objective. These objectives were classified according to their major emphasis. The four content areas of sex education are given below. Under each content area are listed the numbers of the questions (objectives) with major emphasis in that area. It should be emphasized that many of the objectives also have strong secondary emphasis. However, no attempt is made to indicate secondary emphasis.

Content Areas of Sex Education

Social	Physical	Economic	Psychological
3	2	50	1
4	5	52	15
10	6		16
14	7		17
19	8		18
31	9		21
37	11		22
44	12		23
46	13		27
47	20		28
51	24		29
	25		30
	26		34
	32		35
	33		38
	36		42
	39		45
	40		48
	41		49
	43		

APPENDIX C
IBM PRINT OUT OF MEAN SCORES

IBM PRINT OUT OF MEAN SCORES

The mean scores of the 315 teachers are listed below. The mean scores represent feelings of adequacy. The possible range in mean scores is from 1.00 (very adequate) to 5.00 (very inadequate). The actual range of these scores was from 1.00 (very adequate) to 4.06 (very inadequate).

Urban School District

2.88000	2.12000	2.27000	2.46000	2.38000	2.13000	2.46000	2.21000	1.71000
2.08000	2.42000	2.21000	1.81000	2.06000	2.00000	2.46000	2.77000	2.44000
2.06000	3.00000	1.35000	2.35000	2.10000	2.04000	2.02000	1.90000	1.63000
2.10000	1.79000	1.96000	2.10000	2.00000	2.27000	1.21000	2.38000	2.50000
1.50000	2.27000	2.31000	2.29000	2.00000	2.60000	2.21000	1.75000	1.98000
2.13000	1.96000	1.92000	2.08000	1.96000	2.10000	1.65000	1.67000	2.00000
2.27000	4.06000	1.27000	2.06000	1.33000	2.10000	1.63000	2.37000	1.88000
2.58000	2.35000	1.00000	2.85000	1.31000	2.31000	2.42000	2.48000	1.00000
1.94000	2.00000	2.31000	1.85000	2.56000	2.27000	2.00000	2.17000	1.92000
2.00000	2.77000	2.38000	2.13000	2.08000	2.42000	2.63000	2.31000	2.71000
2.19000	1.52000	1.35000	2.15000	1.73000	2.00000	1.25000	2.67000	1.92000
1.02000	2.17000	1.73000	2.37000	2.29000	1.65000	2.19000	2.25000	2.23000
2.42000	2.29000	2.08000	3.58000	1.29000	2.38000	1.92000	1.40000	2.17000
1.83000	2.19000	2.23000	1.92000	3.23000	2.52000	2.75000	2.15000	2.02000
2.25000	2.00000	2.38000	2.37000	1.88000	2.00000	1.44000	1.88000	1.71000
2.08000	2.85000	2.17000	2.71000	2.00000	2.00000	2.63000	2.31000	2.21000
1.00000	2.00000	1.87000	2.29000	2.02000	2.44000	1.40000	4.21000	1.04000
1.00000	1.94000	2.06000	2.17000	2.73000	2.00000	1.08000	1.98000	2.02000
2.83000	2.60000	2.06000	2.27000	2.02000	2.00000	2.02000	2.50000	1.98000
2.04000	3.58000	2.87000	2.48000	1.96000	2.40000	1.88000	2.25000	2.46000
1.94000	1.67000	2.02000	1.52000	2.19000	2.52000	2.21000	2.54000	2.23000
1.94000	2.12000	1.94000	2.37000	2.00000	2.56000	2.17000	1.83000	1.88000
2.00000	2.60000	2.12000	1.94000	2.00000	2.13000	2.73000	1.19000	2.44000
1.27000	2.25000	1.08000	1.35000	1.94000	2.77000	1.00000	1.88000	1.00000
3.60000	1.08000	2.00000	1.71000	2.40000	1.37000	2.31000	1.90000	1.46000
2.23000	1.31000	1.88000	2.17000	1.62000	2.13000	2.15000	1.58000	2.44000
2.21000	2.35000	1.92000	1.46000	1.79000	2.00000			

Rural School District

2.10000	2.17000	1.60000	2.81000	1.92000	2.00000	1.69000	1.81000	2.63000
1.73000	2.17000	2.04000	2.06000	2.00000	1.67000	1.75000	3.12000	1.42000
2.56000	1.62000	1.85000	1.85000	2.06000	1.65000	1.31000	1.23000	1.35000
1.92000	2.04000	2.71000	3.13000	2.23000	1.83000	1.73000	2.96000	1.81000
2.60000	2.00000	2.27000	1.00000	1.75000	1.88000	2.40000	2.15000	2.17000
1.46000	1.77000	2.00000	1.33000	3.06000	2.00000	3.12000	3.15000	1.63000
1.33000	2.21000	2.58000	3.25000	2.13000	2.06000	2.00000	1.85000	2.19000
1.75000	2.17000	2.88000	2.17000	2.94000	3.04000	1.10000	2.19000	2.15000
2.79000	1.52000	1.54000						

APPENDIX D
PERCENTAGE BREAKDOWN OF THE
PARTICIPATING SCHOOLS

PERCENTAGE BREAKDOWN OF THE PARTICIPATING SCHOOLS

School Code Number	Possible Participants	Participants	Percent
201	8	8	100
202	2	2	100
203	13	11	85
204	9	9	100
205	2	2	100
206	15	12	80
207	13	12	92
208	5	5	100
209	14	14	100
101	12	11	89
102	20	19	95
103	14	14	100
104	21	18	86
105	18	18	100
106	36	10	28
107	11	11	100
108	17	17	100
109	11	11	100
110	33	28	85
111	20	14	70
112	14	13	91
113	15	12	80
114	14	12	86
115	21	21	100
116	12	11	88
Totals	370	315	85

VITA

3

Marvin Joseph Johnson

Candidate for the Degree of

Doctor of Education

Thesis: AN ANALYSIS OF FEELINGS OF ADEQUACY OF ELEMENTARY CLASSROOM TEACHERS TOWARD TEACHING SELECTED SEX EDUCATION OBJECTIVES

Major Field: Educational Administration

Biographical:

Personal Data: Born in Neodesha, Kansas, May 14, 1936, the son of Mr. and Mrs. Melford Cecil Johnson.

Education: Graduated from Thayer High School, Thayer, Kansas, May, 1954; received the Bachelor of Science degree from Kansas State College, Pittsburg, Kansas, in 1958, with a major in physical education; received the Master of Science degree from Kansas State College, Pittsburg, Kansas, in 1962, with a major in school administration; received the Specialist in Education degree from Kansas State Teachers College, Emporia, Kansas, in 1968, with a major in school administration; completed requirements for the Doctor of Education degree at Oklahoma State University in May, 1970, with a major in educational administration.

Professional Experience: High school teacher in Atlanta, Kansas Rural High School, 1957-1959; high school teacher in Altoona, Kansas Rural High School, 1959-1962; superintendent of schools in Galesburg, Kansas Public Schools, 1962-1963; principal of Gridley, Kansas Rural High School, 1963-1965; superintendent of schools, Burlingame, Kansas Public Schools, 1965-1967; assistant to the superintendent of schools, Emporia, Kansas Public Schools, 1967-1968; graduate teaching assistant, College of Education, Oklahoma State University, 1968-1969; superintendent of schools, Hillsboro, Missouri Public Schools, 1969-1970.