

ESSENTIAL COMPONENTS UTILIZED IN SCHOOL HEALTH
SERVICES PROGRAMS: DEVELOPMENT OF
AN INSTRUMENT

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CHAPTER 1

INTRODUCTION

In nursing research in recent years the growth of criteria-based instruments has flourished. In the field of school health services programs, however, researchers and practitioners have often commented on the lack of available instruments for measurement. Yet if nursing is to continually improve health care benefits for children in the school setting, then the essential components of school health services programs must be identified and be appropriately measured. This study was undertaken to develop a specific instrument to measure the essential components utilized in school health services programs. Through usage of this instrument, discrepancies in programs can be identified so that school health services programs may plan changes for the improvement of the health care that they provide their students.

Problem of Study

The problem of this study was to develop an instrument to measure the essential components utilized in school health services programs.

Justification of Problem

The ultimate goal of any profession is to improve the practice of its members so that the services provided to the clientele will have the greatest impact. (Polit & Hungler, 1978, p. 4)

In this era of increased emphasis on professionalism, accountability, cost-effectiveness, and consumer awareness, a health service must be able to justify its existence to the community it serves (Arndt & Huckabay, 1975; Braden & Herban, 1976; Polit & Hungler, 1978).

Through utilization of instruments, such professionals as nurse practitioners and administrators are able to gain an understanding of the phenomena with which they deal--to explain and sometimes predict and control the occurrences of these phenomena. Instruments provide information for effective nursing decisions, aid in accountability to clients, and clarify the forms and functions of the profession in meeting the health needs of society (Polit & Hungler, 1978).

An overall assessment of school health services programs is an important element in the effort to improve health care to students (Anderson & Creswell, 1980; Bryan, 1973; Howell & Martin, 1978; Texas Education Agency, 1975). Ideally, measurement should aim at results. However, due to the wide diversity of

activities in school health services programs, it is necessary to identify the essential program components and their degree of implementation in order to measure completeness, function, and program effectiveness (Anderson & Creswell, 1980). Studies have shown that if a school health services program possesses certain components, basic health objectives will be attained (Anderson & Creswell, 1980; Howell & Martin, 1978). Unfortunately, few overall comprehensive tools for determining whether these programs contain such components exist today (Anderson & Creswell, 1980; Haag, 1972; Howell & Martin, 1978).

In an informal survey conducted at a school nurse administrator's conference held in June 1981, it was found that 11 of 21 school districts had no means of assessing the completeness of their total health services program, and 20 of 21 answered "yes" to the question that a study of this nature would be of value or of use to them (with the remaining respondent stating that it would "possibly" be of use).

As discerned from the literature and the survey a need for assessing the essential components utilized

in school health services programs obviously exists. The following study should: (a) provide an instrument for measurement of essential components needed or existing in school health services programs, and (b) contribute to the improvement of the quality of health care that children receive in the school setting.

Assumptions

The assumptions for this study were as follows:

1. An assessment tool for measuring essential components existing in school health services programs is needed.
2. The person utilizing the tool is interested in developing an awareness of discrepancies between what a program has and what it does not have.
3. The awareness of discrepancies may create dissonance such that persons utilizing the tool may seek ways to improve their health services.

Definition of Terms

For the purposes of this study, the following terms were identified:

1. Public school districts--a school district maintained by the governmental authority of the local community.
2. School health services--all health activities and procedures as defined by the school district.
3. Essential component--one of the fundamental constituent parts (as determined by this researcher) of the whole of a school health services program.

Limitations

The limitations for this study were identified as follows:

1. A convenience sample was utilized for the pilot study.
2. Reliability was established based on a pilot study of a small group located within a limited geographic setting.

Summary

This study was designed to develop an instrument to measure the essential components utilized in school health services programs. The instrument provides the school health administrator with objective data to identify components needing improvement. This

information can then be utilized by the nurse practitioner in meeting the health needs of students.

CHAPTER 2

REVIEW OF LITERATURE

The review of literature pertains to the measurement of components in school health services programs. This review will discuss components, purposes, and methods of measurement of school health services. Past studies of component measurement will be presented, and the review will conclude with devices of measurement.

Components of Measurement

Components in school health services are the parts, which concurrently comprise the whole program. Thus, measurement of a health services program requires the identification of essential program components. Although not listed in the literature specifically as components--goals, objectives, principles, guidelines, recommended policies, resolutions, and standards--are all terms used to designate components of school health services. Through these terms, various organizations, joint committees, associations, and individual health professionals attempt to define the components of school health services programs.

Two committees which became the recognized authorities for interpreting components were (a) the White House Conferences on Children and Youth and (b) the Joint Committee of the National Education Association (NEA) and the American Medical Association (AMA), also known as the National Committee on School Health Policies (Anderson & Creswell, 1980). The White House Conferences established the components necessary for school health services. Vision, hearing, and dental screening; medical examinations; prevention and control of disease; and follow-up activities are representative of these components (Haag, 1972). The National Education Association and American Medical Association Joint Committee published several significant works which served as standard policy references: Health Education (1941); Health Services (1953); Health Appraisal of School Children (1969); and Suggested School Health Policies (1958, 1966).

Furthermore, the American Academy of Pediatrics provided guidelines for standards of practice for school physicians (American Academy of Pediatrics, 1966) and for school health professionals (American Academy of Pediatrics, 1977). The American Public

Health Association (1952a, 1952c) recommended standards for health services in secondary schools.

Individual school health professionals produced significant works in attempting to define comprehensive school health services programs. Swanson (1958) advocated the main purposes of the school health program as supervising family health, promoting good health, preventing illness, and providing nursing care for the sick. Anderson and Creswell (1980), Haag (1972), and Mayshark, Shaw, and Best (1977) defined specifically the various components which encompass school health services programs. In addition, Bryan (1973) provided a summary model of 20 guidelines for a school health program, and Nadar (1978) presented major goals for analyzing a total health program. Howell and Martin (1978) furnished objectives for such a program derived from policy statements relative to school health services.

The most commonly used guidelines on school health components would incorporate the statements from the American School Health Association (ASHA) and the American Nurses' Association (ANA). Collaborative studies among the ASHA, the ANA, and the National League for Nursing (NLN) produced significant results regarding school health components.

The Committee on School Nurse Policies and Practices of the ASHA originated material for local guides for school health services programs. The guide, Recommended Policies and Practices for School Nursing (American School Health Association, 1957) included concerns of the school nurse such as: (a) general responsibilities in accordance with established administrative policies, (b) qualifications, (c) status in the school, (d) pupil load, (e) specific areas of responsibility for school health, and (f) supervision. A more recent revision titled Guidelines for the School Nurse in the School Health Program (American School Health Association, 1974) outlined the essential components of school health services programs.

The ANA produced the Functions and Qualifications for School Nurses Employed in Staff Positions (American Nurses' Association, 1960) statement covered eight broad components. These components involved the nurse's functions for: (a) administration of the school health program, (b) role as a faculty member, (c) community, (d) evaluation and research, (e) health appraisal, (f) counseling and guidance, (g) health education, and (h) health protection and safety. A later revision of this statement (titled Functions and Qualifications for

School Nurses) by American Nurses' Association (1966) was in terms of assessing, planning, implementing, evaluating, study, and research. The ANA also provided guidelines for certification of school nurse practitioners (American Nurses' Association, 1979).

The NLN utilized the American Nurses' Association (1960) statement in a questionnaire to determine the specific knowledge and curriculum experience deemed necessary for the academic preparation of school nurses (Strobo, 1961). From Strobo's study, Florentine (1962) developed guidelines for the preparation of school nurses. These important documents defined role features of the school nurse and are frequently cited in the literature.

Contributing significantly to the development of the current researcher's instrument were guidelines from the state of Texas. The Texas Education Agency (TEA) provided a guide for the organization of school health in Texas (Texas Education Agency, 1975). The TEA manual emphasized written policies and procedures, clarification of roles, coordination of nurse activities with the school and community, and conformity to Texas laws and regulations. This manual is currently under revision. Further, the Texas State Board of

Education adopted revised school health services administrative procedures in September 1981 (Texas Education Agency, 1981), which are mandated for Texas schools.

These brief synopses of important documents have defined essential components of school health services programs. Once the components are defined, measurement of these constituent parts may be undertaken for various purposes.

Purposes of measurement

Measurement in health services can be utilized for many purposes such as control, planning, and feedback (Bryan, 1973, Meredith, 1976; Tinkham & Voorhies, 1972; Waters, 1976). Finding solutions to identified needs (as a result of measurement), determining needed areas of intervention, or anticipating future needs or problems (forecasting) involves assessment of variables (Blum, 1974). Both an inventory of present status and an assessment of progress toward predetermined goals are often the focus of health service measurement (Anderson & Creswell, 1980; Tinkham & Voorhies, 1972). Evaluation may be undertaken to provide "proof" of legitimacy and effectiveness of a social program

in order to justify society's continued support (Suchman, 1967). Once the purpose of measurement has been established, a means for accomplishing the desired purpose must then be chosen.

Methods of Measurement

As with all service oriented programs, school health services programs include the component of measurement. The words "appraisal," "assessment," and "evaluation" are used interchangeably in the literature and the interpretation often depends on the individual author (Blum, 1974; Braden & Herban, 1976; Suchman, 1967).

In order to assess, evaluate, or appraise, one must have something to compare results against--standards. Blum (1974) stated that "values operate to set goals, and simultaneously set standards of expectations to measure accomplishments toward these goals" (p. 221). Carter (1976) defined standards as "models that provide a means of comparison or units of reference--rules for measuring quantity, extent, value, or quality" (p. 6). Standards or acceptable/recommended practices are necessary for a comprehensive view of a nursing service: normative planning provides a statement of what ought to be (Blum, 1974).

This statement will enable a planning body to determine areas of weakness by comparison. Blum further stated that a planning body can derive a set of generally valued goals and health aims favorable to the community's interest in health activities. In this respect, the guides, standards, and recommendations which comprise the components of a school health services program are, in reality, the valued goals or health aims of the community at large (Blum, 1974; Haro, 1974).

Many methods are utilized in measuring health service programs against standards. Research techniques can appraise various components (Haag, 1972). Self-evaluation, assessment by an outside group, and independent surveys provide means of assessment (Mayshark, et al., 1977). Bryan (1973) has defined the process of assessment as (a) stating the objectives, (b) listing the behavioral objectives to be considered, (c) selecting the measuring devices, (d) keeping records of the findings, and (e) interpreting the findings to improve the health program.

Similarly, Suchman (1967) stated that the success or failure of a program may be evaluated by (a) effort, (b) performance, (c) adequacy of performance,

(d) efficiency, and (e) process. Tinkham and Voorhies (1972) recommended gathering and analyzing data, identifying community (school) nursing needs, planning action, implementing and evaluating (the nursing process) as a means of measurement. Braden and Herban (1976) applied a systems approach to assessment, planning, implementation, and evaluation as a means of control. In measuring the worth of an action, Braden and Herban provided the American Public Health Association's definition of evaluation:

The process of determining the value or amount of success in achieving a predetermined objective. It includes at least the following steps: Formulation of the objective, identification of the proper criteria to be used in measuring success, determination and explanation of the degree of success, recommendations for further program activity. (Braden & Herban, 1976, p. 119)

Carter's (1976) method of evaluating the quality of care is through appraisal of the nursing process and patient outcomes as reflected in the nursing care plans, nursing records, patient or family interview, and observation of the environment.

As observed, the methods of measurement are varied. Thus, provided is a selection of methodology for accommodating the purposes of investigation.

Past Studies of Measurement

The following studies demonstrated some of the purposes, methods, and results of assessing school health services programs. The purposes of these studies were to gain understanding of the phenomenon of school health and to examine the currently accepted practices of the existing components in light of hard data results. Through these studies over the years, generation, synthesis, and consolidation of data occurred.

A study of early significance was the health survey of 86 cities, followed by a study of 70 cities, conducted by the American Child Health Association in 1923 and 1925 (cited in Pigg, 1976). The purpose of these studies was to provide data for health administrators in the evaluation of school health activities. Five monographs were derived from these studies which described the instruments to measure observable aspects of school health programs (Franzen, 1933).

A field study conducted in Tennessee from 1930-1936 was undertaken to determine the worth of the public supported program and to formulate suggestions for improvement (Walker & Randolph, 1941). The study was conducted through utilization of the school health records and included 58,000 children in a longitudinal

study covering 6 years. The results suggested the unproductivity of frequent routine procedures, the importance of service to younger versus older children, having the parent present at the time of physical examination, focusing the attention of children and parents on the importance of health status, and the need for preschool health care.

Nyswander (1942) undertook a 4-year intensive study of school health services in New York City. The study (known as the Astoria Study) questioned whether current practices could be accommodated to the recent recommendations coming from the earlier studies. In order to create better health services, several objectives emerged:

1. Best methods to identify students needing medical care.
2. Maintenance of cumulative health records.
3. Coordination between teacher, nurse, and physician to prevent duplication and conflicting advice.
4. Efficient use of professional time.
5. How to re-educate the school staff in new ways of work and thought.

Following the Astoria study (Nyswander, 1942), Yankauer (1947) evaluated two New York City elementary

schools to determine if the changes made as a result of the Astoria Study truly detected health problems, or if children were slipping through the process undetected. Yankauer's (1947) study showed that the Astoria plan was working satisfactorily in the schools surveyed. Of the number of sixth graders surveyed, most of the uncared for minor physical defects could have been detected on entry to elementary school if a more complete physical examination had been performed. The one area detected as lacking was the significant number of children with potential future mental disturbances.

A Regent's inquiry by the New York State Education Department was undertaken to determine what the educational system of New York state was accomplishing (Winslow, 1938). The five major divisions of the school health program investigated were sanitation, mental hygiene, health instruction, physical education and recreation, and health services.

The promotion of further evaluation studies of individual components of the total health program were being stressed (American Public Health Association, 1952), mainly as a result of findings among young adults examined for Selective Service during World

War II (Smith, 1948). Smith stated that fully half of these findings were due to neglect during childhood and early youth. The School Health Section Committee on Research of the American Public Health Association prepared a list of problems, issues, and questions in the school health field needing research (American Public Health Association, 1952b). Research questions were asked regarding the planning of the school health program, health education, environment, health services, emergency care, and physical education.

Yankauer (1952) offered new approaches for evaluative studies in school health services. Yankauer stated that current studies did not measure results and, therefore, were not adequate. The new approaches he suggested were: using routine physical examinations findings in conjunction with school records, using Selective Service examination findings, using school absenteeism data, using hospital and physician reports, and analyzing referrals made by the school nurse. Yankauer contended that the most important need in school health services was for objective studies to compare effectiveness with different types and degrees of service.

Following Yankauer's (1952) suggestions for measuring results was a report of the Joint Committee on Evaluation of School Health Programs (American Public Health Association, 1956). The Joint Committee discussed the two commonly used approaches to appraising school health programs: (a) the degree to which a program meets currently recommended practices and (b) measuring the outcomes of the program in terms of objectives. The Joint Committee recommended Yankauer's suggestions for measuring results.

Further studies of components of school health programs proliferated. Thirty-nine studies of the health program (education, health services, environment, and coordination) were conducted over a 5-year period in the Los Angeles City Schools (Sellery & Bobbitt, 1960). In order to modify an existing school health services program and introduce new concepts to improve health services, a 3-year study (1955-1958) was undertaken in Brookline, Massachusetts (Young, 1961). An analytical study of school health services practices in the United States covered in detail the components of school health services programs (Neilson, 1960). Further, studies by Watters (1960) and

Trausneck (1963) produced criteria in the form of instruments to be used in assessing school health services.

Wallace (1963) presented examples of evaluative studies which provided evidence contrary to accepted practices. The studies were in areas of periodic school medical examinations, utilization of nursing personnel, dental and speech screening, inaccuracy in audiometer and vision screening, measuring height and weight, and the necessity of rescreening. These studies indicated the type of research needed by health services to verify accepted practices as to maximum use of funds and personnel (Wallace, 1963).

The theme of verifying through studies accepted practices to maximize funds and personnel continues (Battenfield, 1980; Coleman & Hawkins, 1970; Jenne, 1970; Newman, 1982; Newman, Newman, & Martin, 1981; Silver, 1981). Pigg (1976) referred to several studies conducted on the activities of school nurses: Bland (1956), Netcher (1956), and Poe and Irwin (1959). The American Nurses' Association in 1960 and the National League for Nursing (Florentine, 1962) conducted studies to define and clarify the role of the

school nurse. Even today, studies demonstrate that the perception of the school nurse's role and services provided as perceived by school personnel and the community is still ambiguous (Greenhill, 1979; Mariner, 1971; Shepard, 1979; Skersaa, 1979; Williams, 1981). New approaches for improvement of school health services are also the subject of many studies (Bourne, 1971; Buser, 1980; Hausen & Levine, 1980; Lombard, 1980; Nadar, 1978; Robert Wood Johnson Foundation, 1979; Rustia, 1982; Warren, 1980).

As observed, these studies were massive indepth surveys involving considerable time (years), money, and professional time. Studies of this nature are important in generating and synthesizing information and in the defining and refining of the essential components in school health services. However, for the school health administrator in the local school system, the type of research just described is well beyond the scope of the local practitioners. Emanating from these studies over the years, however, has been the concept of the need for assessment at the local level. With rising costs of education, all public school personnel and services not demonstratively

beneficial to the student are suspect and subject to elimination (Coleman & Hawkins, 1970; Miller, 1970; Newman, 1982; Ozias, 1982; Shell & Thompson, 1982; Silver, 1981; Steenson, 1982). Assessment provides a means of accountability in health services programs (Anderson & Creswell, 1980; Arndt & Huckabay, 1975; Aroskar, 1980; Braden & Herban, 1976; Dickinson, 1971). Hence, the need for a self-assessment instrument that can be utilized by the local school nurse practitioner.

Devices of Measurement

The purpose(s) of and the particular method chosen by the evaluator will determine the instrument to be utilized. An instrument is merely a device for obtaining evidence and a human being must interpret and weigh the evidence (Anderson & Creswell, 1980). Methods utilized to measure school health services include both objective and subjective means of measurement. Rigorous analysis of hard data to document effectiveness is often difficult to obtain in social service programs, mainly due to the lack of pre-existing baseline data (Anderson & Creswell, 1980; Komaroff & Duffell, 1976). A variety of devices for appraising

school health services are: observations, interviews and conferences, self-appraisals, questionnaires, checklists, surveys, records, reports, and achievement tests (Anderson & Creswell, 1980; Bryan, 1973; Haag, 1972). In health education, many tools have been developed for determining the effectiveness of instruction, but one of the most effective tools is the behavioral objective (Mager, 1975). A checklist can be used to evaluate the school health environment. However, health services with its varied components often becomes subjective or generalized when one tries to assess a total health services program. The following discussion of specific instruments for measurement in school health services demonstrates this concept.

The Michigan School Health Association (1948) developed an appraisal form for evaluating school health services. This early appraisal form provided a base line of data for a total health program, and by virtue of the questions asked, deficiencies could be noted. However, objectivity and the means of comparison of status are lacking. Although several items on the form are outdated, this Michigan model covers the important aspects of a school health program.

Watters' A Scorecard for Appraising the School Health Services Programs provided a tool for school health administrators to evaluate their overall program with accepted practices (reproduced in Mayshark et al., 1977). The significance of Watters' scorecard is in its objectivity through its scoring mechanism. The scorecard weighs each criteria and a summary score may be obtained; moreover, the score card may be utilized to compose total numerical improvement in component areas. The introduction to the scorecard suggests devising methods to improve the health services program determined from the score results. The instrument developed in the present study is similar in design to Watters' scorecard (Mayshark et al., 1977).

Anderson and Creswell (1980) provided a school health program evaluation scale developed at Oregon State University in 1959. The instrument stated the recognized procedures, practices, standard facilities, and activities. The scale is fairly objective in that it permits numerical scoring; furthermore, each criteria is weighed and counts varying points. Nevertheless, there is no range provided to determine one's standing below the maximum score and space for planning

of future improvements is lacking. As this scale was developed in 1959, several items are now obsolete and at variance with Texas laws. As a model, however, the criteria specification and the numerical scoring of the instrument are of value.

"A Self-Appraisal Checklist for School Health Programs" was developed by the various state education and health departments of Ohio in 1966 (Ohio Department of Education, 1966). The Ohio Self-Appraisal Checklist's format provided: (a) a statement of standards and recommended practices, (b) criteria which evaluates the standards, and (c) space designated for future planning. The Ohio Self-Appraisal Checklist (Ohio Department of Education, 1966) is an excellent source for standards, recommended practices, and criteria to measure each component. The Checklist is fairly subjective in that no numerical scoring is involved, but the introduction to the Checklist does recommend that an evaluation team be utilized to appraise the health program. Follow-up is encouraged to determine if corrections were made according to the written plan of action. The recommended utilization of an evaluation team of experts would offer more objectivity

to the instrument. This researcher utilized the Ohio Checklist as a source for the instrument developed by the present study.

Several instruments have been developed which assess specific aspects of school health services programs. Since screening for defects, referral, and follow-up are major components in school health services programs, tools for objective assessment of screening programs logically followed. Grant (1974) has provided a means of quantitative evaluation of screening programs. Through record keeping of students passed, referrals and follow-up, the administrator can evaluate the screening program in terms of acceptance, effectiveness, appropriateness, and efficiency.

A similar tool is provided by Eisner and Oglesby (1971). This evaluation tool concerns sensitivity, specificity, over-referrals, and under-referrals. Bay (1976) applied a statistical decision model to determine the benefits of screening projects. Upper and lower limits for average benefits (dollars) in terms of prevalence rates of screen positives and negatives and the average cost of screening and referral can be

determined. These procedures provide the administrator with an excellent means of assessing the screening program component of health services.

Several instruments for specifically assessing the school nurse's performance have been developed. In 1961, the American Nurses' Association (ANA) developed a guide for evaluating, implementing, and improving the functions of school nurses. The evaluation instrument developed by the ANA Committee was based on the Functions and Qualifications for School Nurses statement (American Nurses' Association, 1960) and basically converts statements into questions. The instrument titled Evaluating Nursing Aspects of the School Health Program (American Nurses' Association, 1961) is a checklist which states the function (standard) and lists the criteria in the form of questions under each function. The scale is subjective and does not present objective data. Determining one's overall performance for the total program from checkmarks presents difficulties as there is no summary of data. As part of the guide, an outline is provided for reporting to school administrators the purposes, strengths, and weaknesses of the present program. Immediate needs, long-range program plans, resources, and budget are also included.

The Department of School Nurses, National Commission on Standards of National Education Association of the United States developed the Evaluation Instruments for School Nursing Services (National Education Association, 1972). Two forms are provided: one for administrators and school nurse supervisors; the second for school nurse self-evaluation. The administrators' evaluation lists the components of school health with related criteria and provides a space listed as "comments" after each area. There is no scale or requirement for listing needed improvements. The school nurse self-evaluation form lists components and related criteria and offers only the dichotomy of "satisfactory" or "needs improvement." The only virtue these instruments have is a detailed listing of the numerous functions of school nursing and, thus, a stimulus to thinking and possible improvement.

The National Study of School Evaluation developed and revised evaluation instruments for elementary, junior high, and senior high schools. The National Study of School Evaluation's most recent efforts have produced the Elementary School Evaluation Criteria (1973) the Junior High School/Middle School Evaluative Criteria (1970), and Evaluative Criteria for the Evaluation of

Secondary Schools (1975). The designs of the three instruments are basically the same. The tools are comprised of sections covering all aspects of the educational process. The school health services section follows a 5-point format: principles, nature of the program, evaluation, plans for improvement, and current status scale. The principles (components) of health services are subject to scale evaluation. With open-ended questions, the rest of the questionnaire is subjective; however, when combined with visiting experts, the instrument becomes highly effective. As a school representative in health services subject to the Elementary School Evaluation Criteria (National Study of School Evaluation (1973) and conducted in this researcher's own school district, the results and ensuing corrections and improvements were evident.

Summary

Thus, instrument development for measuring the components of school health services continues to be a rich area for research. Development of tools for specific purposes and needs in the multi-faceted field of school health services is as varied as the components themselves. This review of literature of component measurement in

school health services programs provides an understanding of the phenomenon of school health services.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

This study was concerned with the practical problem of constructing a measuring instrument which will identify and measure variables utilized in school health services programs. As such, it fits into the category of methodological research, which is defined by Kerlinger (1973) as

the controlled investigation of the theoretical and applied aspects of measurement, mathematics, and statistics, and ways of obtaining and analyzing data. (p. 703)

This instrument will provide a means for school nurses and administrators to clarify and understand the phenomena of school nursing.

Development of the Instrument

A doctoral dissertation presented to the Graduate School of Education, University of Virginia, by Jeanne Elizabeth Martin in May 1977, provided the initial concepts for this study. The original concepts were Martin's 17 objectives for school health services programs and her questionnaire designed to determine

if school districts were meeting the 17 objectives. These 17 objectives of Martin's study were derived from internal sources such as Virginia state law, rules, regulations, and guidelines, and from external sources, mainly the literature policy statements of the Journal of School Health. From these sources, policy statements related to school health services were collected and analyzed for intent, summarized, and translated into the 17 measurable objectives which are listed in Table 1. Permission to utilize the dissertation for the purposes of the present study was obtained from Martin (Appendix A).

In adapting the objectives to Texas schools, the external sources derived from the Journal of School Health remained the same. After analyzing the internal sources of Virginia state laws, rules, regulations, and guidelines as presented in Martin's dissertation, and comparing them with Texas state laws, rules, regulations, and guidelines, the objectives were adopted as presented by Martin (1977).

The purpose of this study was to determine the components utilized in school health services programs based on the objectives. As Martin's questionnaire

Table 1
Martin's 17 Objectives Derived from Internal and
External Policy Statements

1. There should be provision for a health service program in each school.
2. Policies governing school health services should be set forth in writing.
3. The written policies should be available to all school personnel involved in the health service program.
4. The guidelines governing school health services should be predicted upon statements of objectives found in the professional literature and should take into consideration the philosophy and objectives of the local district.
5. A school nurse should be available in each school to assist pupils, parents, and teachers to understand individual pupil health problems in order to provide proper care for the pupil.
6. The service of a physician as medical advisor should be available to personnel of each school in order to assist with student health problems.

Table 1 (continued)

-
7. Each school should require health examinations of all pupils upon school entrance and periodically thereafter as necessary, dependent upon the student's physical condition.
 8. Schools should employ screening devices and techniques on a continuous basis to determine the status of each pupil's health.
 9. Each school should follow established disease control procedures.
 10. Each school should provide for the emergency care of pupils who become ill or injured while under school jurisdiction.
 11. Provision should be made for the care of the handicapped child who is able to benefit from regular classroom instruction but who requires special consideration because of his/her condition.
 12. Each school should utilize a standard permanent pupil health record form.
 13. The school health service program should include referral procedures.
 14. Each school should establish follow-up procedures to assure that pupils receive examination for suspected health problems and treatment for identified health problems.

Table 1 (continued)

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15. Teacher training should include a basic health science course, as well as human development course including the physiological aspects of human growth and development.
 16. Preparation for school nursing should include education courses as well as those required for an R.N. leading towards a state certification in school nursing and a B.A. degree.
 17. The school health service program should be evaluated periodically to determine strengths and weaknesses, to make improvements and update procedures in line with medical advancement.
-

was a "needs" study based on the objectives, only Martin's questions relating to actual practice were used. Modification of Martin's questionnaire has been in the form of: (a) combining Part I (for principal) and Part II (for school personnel most responsible for school health services) into one questionnaire; (b) identifying questions as related to objectives; (c) regrouping of questions with each objective; (d) adding and deleting questions as pertaining to standards of expectation under each objective; (e) weighing questions to obtain a measurable score for each objective.

To Martin's modified questionnaire were added questions adapted from the Ohio Department of Education (1966) Self-Appraisal Checklist (Appendix B). The Self-Appraisal Checklist instrument was designed to compare actual school health practices with the standards and recommended practices. The standards and recommended practices coincided with Martin's 17 objectives and enhanced the means of measurement under each component of the developing instrument.

In addition to the above two major sources, questions developed by the researcher were added. The

researcher's questions were related to state legislation specific to Texas law.

Specifications were established by which each criterion in the questionnaire was determined. The following specifications provided a guideline for the researcher in determining the merit of each question:

1. Does this question relate to and is the question exclusive for the objective (component) designated?
2. Is the question dictated by state law/regulations/school board policy or recommended in the literature?
3. Does this question relate directly or indirectly to student health care?
4. Would exclusion of this question affect the health care of students either directly or indirectly?

A variety of responses was utilized in the questionnaire (Appendix C). These responses included dichotomous, multiple choice, rank-order, checklists, and matrix. Each question was weighted as to desirability of response.

The questions were grouped so as to follow the sequence of component 1 through component 17. Headings were provided in the questionnaire which oriented and

directed the participant as to the subject under consideration (such as funding, personnel, space and facilities, governing policies and community needs, health examinations, etc.). In Appendix C, the weighting of each response is shown on the right hand column of the questionnaire; the key to the scoring mechanism is shown in the left hand column of the questionnaire. The key identifies the questions relating to each component. Since each question is weighted, a composite score relating to each of the components is obtainable. The resulting researcher-developed score for each component and the composite score for all 17 components will not be in terms of an absolute (100%), but in terms of an acceptable percentage of the absolute as determined by the panel of experts.

First Panel of Experts

A panel of experts was selected to review the instrument. Of the panel of experts, two held master's degrees, and one held a doctorate degree. State certification in school nursing, counseling, and teaching was held among the members. All were members of the American School Health Association and various nursing associations on the state and as well as national

level. One member has published articles in the Journal of School Health and another had been active in the organizational work of the state School Health Association in the past. All three were acknowledged and active leaders in the field of school health.

The following explanation was given to each of the members of the panel upon delivery of the instrument:

1. Rating Scale (Appendix C). The rating scale lists Martin's objectives of what a school health services program should show evidence of if it is to be considered a comprehensive school health services program. An explanation of how Martin obtained the 17 objectives was given: from internal sources (policy recommendations incorporated in materials published by state organizations--rules, regulations, legislation) and from external sources (policy recommendations due primarily from the Journal of School Health). On Part I of the rating scale, the members of the panel were requested to rate each objective on its own merit from the "number 10" absolutely essential to the "number one" least essential for a school health services program. It was explained that by rating each

objective, the panel would be determining how important they considered each objective to a comprehensive school health program.

In Part II of the rating scale, the panel of experts was requested to determine the percentage of the absolute score (total score) that they would consider an acceptable score from a school district in meeting each objective. The members were shown how the scale would determine the researcher developed derived scores for each objective. The scale was set at 75% for number 10 absolutely essential downward in increments of 5% to 30% for number one. If the members did not agree with the scale, they were provided with a scale where they could write in the percentage they would consider an acceptable score. Objective 1 on the instrument was given as an example of how the rating (Part I) tied into the acceptable score (Part II) which was as follows: the total possible score for Objective 1 in the questionnaire is 93 and if two of three panel members rate Objective 1 as a number 10, then 75% would be the acceptable percentage for Objective 1. Thus, 75% times 93 yields 70 as the researcher developed derived score for

Objective 1. However, for example, if the panel marks number 9 in rating the objective, then 70% times 93 yields 65 as the researcher developed derived score.

2. Questionnaire with Scoring. It was explained to the panel of experts that the questionnaire was based on Martin's (1977) 17 objectives of what a school health services program should demonstrate to be considered a comprehensive program. The panel was shown how the objectives, the total possible scores, and the derived standard scores were listed on the left side of the questionnaire. The weight given to each question was shown as listed on the right hand side of each page. The members of the panel were requested to examine and make comments on (a) the content and clarity of each question and its relationship to the objective it was listed under, and (b) the weight (scoring) given to each question.

A self-addressed, stamped envelope was provided to each panel member. The researcher's telephone number was given in the event that questions should arise.

The panel of experts submitted comments and recommendations on the questionnaire and also reviewed and rated the 17 objectives. Agreement on content

validity by two of the three experts on each item was the criterion for acceptance of the instrument and the rated objectives.

In viewing the objectives as listed in the rating scale, the panel members recommended the following changes. The addition of the statements "should be in compliance with education/child health legislation and regulations" and consideration of "student needs" was added to Objective 4. Objective 5 was changed from a "school nurse should be available in each school" to "to each school." In Objective 6, the panel recommended that a physician should be available to "the health professional servicing each school" instead of "the personnel of each school." All three experts recommended these changes in the objectives.

On the revised rating scale (Appendix C), which rated each objective on its own merit from absolutely essential to least essential for a school health services program to have, the panel agreed on number 10 for all objectives except for numbers 6, 7, 15, 16, and 17. Since two of three was the established criterion for acceptance, the following scale numbers were established:

1. Objective 6--items 10, 8, and 1 on the scale were designated for Objective 6 by the panel. As two members designated a high score, the number 9 was accepted as the average.

2. Objective 7--items 8, 7, and 6 on the scale were designated for Objective 7 by the panel. Number 7 was accepted as the average.

3. Objective 15--items 8, 7, and 5 on the scale were designated for Objective 15 by the panel. Number 7 was accepted as the average.

4. Objective 16--items 10 and 7 on the scale were designated for Objective 16 by the panel. As two members designated number 10, number 10 was accepted as the average.

5. Objective 17--items 10 and 9 on the scale were designated for Objective 17 by the panel. As two members designated number 10, number 10 was accepted as the average.

On Part II of the revised rating scale, two of the three panel members designated the acceptable percentage of the total score for meeting each objective as 75% for number 10 with decreasing 5% increments down to 30% for number 1. This was the accepted scale for scoring.

Thus, with the rating of each objective and with 75% for number 10 with decreasing 5% increments down to 30% for number 1 as the acceptable percentage of the total score for each objective, the panel of experts has provided the researcher with the following scoring mechanism for the instrument.

Objective 1 -- 75% of the total possible score

Objective 2 -- 75% of the total possible score

Objective 3 -- 75% of the total possible score

Objective 4 -- 75% of the total possible score

Objective 5 -- 75% of the total possible score

Objective 6 -- 70% of the total possible score

Objective 7 -- 60% of the total possible score

Objective 8 -- 75% of the total possible score

Objective 9 -- 75% of the total possible score

Objective 10-- 75% of the total possible score

Objective 11-- 75% of the total possible score

Objective 12-- 75% of the total possible score

Objective 13-- 75% of the total possible score

Objective 14-- 75% of the total possible score

Objective 15-- 60% of the total possible score

Objective 16-- 75% of the total possible score

Objective 17-- 75% of the total possible score

Of the questionnaire itself, the following changes were incurred as a result of comments by at least two of the experts:

1. Original items replaced with more accurate criteria--items 4, 11, and 30.

2. Revision and clarification of items occurred in 15(q), 43, 63, 76, and 93.

3. Choices to items were clarified in items 3, 22, 24, 78, 79, 80, and 82.

Three items were added to item 15--(n, o, and p).

For uniformity, the researcher revised the questionnaire to a single scale. The revised instrument (Appendix D) was composed of closed-ended questions with a scale of graded alternatives provided for the response options. The definitions that were given to the participants for the graded alternatives were as follows:

Always -- a constant (100%)

Usually -- almost always a constant, but with a few exceptions

Sometimes--occurs upon occasion, but not regularly

Rarely -- an unusual circumstance.

Never -- does not occur

The level of measurement used in this study was interval scale of 4 points for always, 3 points for usually, 2 points for sometimes, 1 point for rarely, and 0 points for never. The participants were requested to respond to each question by writing in the number for the alternative which most closely corresponds to the existing condition in their school district.

As a single scale was incorporated in the revised tool and the panel of experts determined the acceptable percentage of the total possible score for each component, the scoring mechanism was adjusted accordingly as indicated in the left hand column of the revised instrument. Further, as a single researcher derived score for each component would not indicate to the participants how far on the plus or minus side of the derived score is acceptable, the researcher utilized 10% on the plus and minus side of the acceptable percentage of the total possible score as a temporary guide, thus, providing a range of acceptability.

Further development of the revised instrument provided an introduction informing the participants of the usage of the tool at the beginning of the

questionnaire and a Key to Self-Scoring at the end of the questionnaire (Appendix D). The Key to Self-Scoring identified the questions relating to each component and provided instructions in the self-scoring and what the results indicated.

Second Panel of Experts

Due to extensive revision of the tool, the researcher selected a second panel of experts to review the instrument. Of this second panel of experts, two held master's degrees and one held a bachelor's degree. State certification in school nursing, counseling, elementary and secondary teaching, health educator, supervision, and administration were held among the members. All were members of the American School Health Association and various nursing associations on the state as well as local level and have served in office holding positions within one or more of the associations. The members were active on advisory boards or as consultants in various health related organizations within the local area. One member was one of the original founding organizers of a local school health association, and another member was one of the original founding organizers of a school nurse

administrators' organization. All three members were acknowledged and active leaders in the field of school health.

A cover letter, instructions, and the revised questionnaire were mailed to the second panel of experts (Appendix D). Phone contact was made to insure understanding of the instructions.

The instructions explained how the 93 questions written to measure essential components utilized in school health services programs correlate with each component in the Key to Self-scoring. A brief explanation of the scoring mechanism as listed on the left hand side of the questionnaire was presented. The second panel was instructed to read each item and answer the following questions:

1. Is the question written clearly and concisely and without ambiguous words or meanings.
2. Do you consider each question an important criterion for the component it is listed under in the Key to Self-Scoring?

The right hand column of the questionnaire provided two columns marked "A" and "B". Question A was to be answered with a "yes" or "no" response under Column A; Question B was to be answered with a "yes"

or "no" response under Column B. The "yes" or "no" response would indicate whether the panel member agreed or disagreed with the item presented. Comments and suggestions on the instrument were requested from the members. A self-addressed, stamped envelope was provided to each panel member and the researcher's telephone number was stated for questions that might arise.

The second panel of experts marked the designated responses of "yes" or "no" under Columns A and B of the questionnaire and submitted comments and recommendations on the questionnaire and the Key to Self-Scoring. Agreement on content validity by two of the three experts on each item was the criterion for acceptance of the instrument.

The responses of the second panel of experts to Questions A and B for each item are presented in Appendix D. Concerning Question A, "Is the question written clearly and concisely and without ambiguous words or meanings?", the following changes were incurred as a result of comments by at least two of the three experts:

1. Clarification occurred in Items 3, 6, 8, 9, 15 (c, e, and f), 18, 23, 30, 34, 35, 44, 52, 65, 69, and 82 (c).

2. Original items condensed into one item occurred by combining Items 1, 2, and 14. A panel member's comment on Item 14 that the school board does not provide the equipment but provides the funds through budget approval initiated the combining of the three items into one.

3. The introductory explanation to Item 15 presented difficulty to all three panel members. The introduction to Item 15 was rewritten with specific instructions to the participants on how to proceed in answering Item 15.

The items listed under the second part of Item 15 (b) "are the listed aspects governed by written policy/procedure?" was also problematic. Items 15 (a-u) were fundamentally "yes" or "no" type answers and difficult to mark according to the answering scale of 4-0. By a minor revision, Item 16 was utilized in place of the above original question. The second part read "are written policies and procedures governing school health services program available

to principals, health personnel, office personnel, teachers, and other support personnel for reference?" The rationale behind this change was that written policies/procedures are of little value unless personnel concerned with the health care of children have access to the information.

4. Since Item 29 demonstrated two separate questions in one item, it was separated into two separate items.

5. Elimination of Item 40 occurred as a result of comments from panel members concerning the scoring of Item 40 and also the kind of screening being requested.

Items 50, 59, 78 (a and b), 79, and 91 were eliminated from the questionnaire as not relative to the assigned component in the Key to Self-Scoring. The rationale for the elimination of the above items is as follows:

1. Item 50--school health services programs in Texas do not administer immunizations. The exception to this would be a new vaccine or emergency situation as directed by the State Department of Health. Item 50 would penalize Texas school districts

for a non-existent entity.

2. Item 59--school nursing is not responsible for the safety devices required in school athletic programs.

3. Items 78 (a and b) and 79--all three panel members commented that the school health services program has no control over the teacher's academic preparation.

4. Item 91--penalizes a school district for not having a comprehensive instrument to assess their total school health services program. After all, the purpose of this study is to provide the school districts with a self-assessment tool.

As a result of the comments and recommendations of the second panel to Questions A and B in the instructions, several of the 17 components were changed.

1. Component 2 and Component 3 were combined to read "the written policies/procedures governing school health services should be available to all school personnel involved in the health services programs."

2. Component 8 changed "employee screening devices on a continuous basis" to "employ screening devices on a periodic set basis."

3. Component 10 was changed from "the handicapped child" to "the student with special problems."

4. As Items 78 (a and b) and 79 were eliminated due to panel agreement that academic teacher preparation is not under the control of health services, the following teacher related component was devised:

"Health information should be made available to the classroom teacher which will prepare the teacher in observations for referrals, emergency and first aid procedures, and adapting the classroom for students with special problems." Items throughout the instrument which related to Component 15 were listed under the Related Questions section in the Key to Self-Scoring. All three experts recommended these changes in the components.

One panel member suggested not using the word "inadequate" in the introduction to the Key to Self-Scoring and also commented on the sentence length in the concluding statement in the key. Changes were made to eliminate the usage of the word "inadequate" and present a more simplified concluding statement.

At a later date, a worksheet titled Plans for Improvement was mailed to the second panel of experts. The worksheet (Appendix D) follows the Key to Self-Scoring and provides a guide for planning based upon the results of the questionnaire. The panel was requested to comment and provide recommendations on the worksheet.

The second revision of the instrument (Appendix E) and the Key to Self-Scoring (Appendix E) were prepared according to the recommended changes of the second panel of experts. With only minor revisions in word usage and length, the Plans for Improvement Worksheet was also accepted by the second panel of expert members (Appendix E).

Setting

A pilot study to determine reliability was conducted in 32 public school districts which were located in or near a large metropolitan area located in the Southwestern United States. Enrollment ranged from approximately 700 to 34,000 per school district.

All of the public school districts have easy access via major inter-connecting highways to health and educational resources within the metropolitan

area. An increase in public enrollment due to overall industrial and population expansion is occurring within the school districts.

Population and Sample

The population for the pilot study included a convenience sample of members of a metroplex school health administrator's organization. The member of this organization was composed of the school district employee each school district had hired and designated as the person most responsible for the school health services program. To the researcher's knowledge, the 32 health services programs represented were conducted by registered nurses with varying educational backgrounds (associate, diploma, bachelor's, and master's degrees). The study was limited to the persons in charge of the health services programs currently employed at the time of the study and it was controlled for variables such as education. Twenty-two of the 32 members of the sample responded to the questionnaire.

Protection of Human Subjects

A cover letter and the questionnaire (Appendix F) were mailed to the members of a metroplex school health administrators' organization participating in the pilot study. Permission to conduct the study was obtained from

the Human Research Review Committee and from the Graduate School of Texas Woman's University (Appendix G). The questionnaire had the statement "Completion of this questionnaire signifies consent to participate in the study" indicated on the front page of the instrument.

A cover letter which was attached to each of the questionnaires explained the pilot study and its purpose. The letter stated that participation in the study was voluntary and that completion of the questionnaire indicated consent to participate in the study. The letter explained that all information provided by the subject would be kept anonymous, confidential, and would be used only for the purpose of the study. To protect the participant's anonymity, the subject's name, school district, and other identifying information were not requested on the questionnaire. The participants were asked to identify and comment on any item on the questionnaire that was unclear or ambiguous. In the letter, subjects were informed that study results would be sent to them upon request.

Data Collection

The questionnaire with attached cover letter was mailed to the members of a metroplex school health administrator's organization selected to be in the pilot study. A 2-week response time was requested. As 70% of the questionnaires were returned within the 2-week period, a follow-up letter was not necessary. Results of the study along with a note of appreciation for participation were mailed to the subjects upon completion of the project.

Treatment of Data

The usefulness of a measuring tool is determined by its validity and reliability. "Validity refers to the degree to which an instrument measures what it is suppose to be measuring" (Polit & Hungler, 1978, p. 424). Reliability is the degree of consistency with which the instrument measures the attribute it is supposed to be measuring (Polit & Hungler, 1978).

As this study was designed to measure a specific area (school health services), the sampling adequacy of the content area being measured was determined.

Content validity was established through the two panels of experts and the table of specifications was discussed in the section titled Development of the Instrument of this chapter. Reliability was established through utilization of the coefficient alpha statistical measurement on the questionnaires from the pilot study.

CHAPTER 4

ANALYSIS OF DATA

This study was concerned with the development of an instrument to measure essential components utilized in school health services programs. Such an instrument was developed and a pilot study was conducted. Also, the validity of the instrument was established in Chapter 3 through utilization of two panels of experts and the table of specifications. The reliability of the measuring device was established and is discussed in this chapter.

Description of Sample

The sample in the pilot study included a convenience group of members of a metroplex school health administrators' organization. The participating members were composed of the school district employee currently employed in each school district and designated as the person most responsible for the school health services program within each school district. Thirty-two questionnaires were mailed to the convenience sample; 22 participants responded.

Reliability of the Instrument

The reliability of the instrument was established by measuring the internal consistency of the questionnaire. The statistical measurement utilized to measure reliability was the coefficient alpha. Kerlinger (1973) described the coefficient alpha as treating random samples of items as separate subtests correlated indefinitely in a continuous process. The instrument's internal consistency is shown by the average inter-correlation of the subsamples (Kerlinger, 1973).

As an introduction to the data results on reliability, Table 2 presents basic characteristics of each component. For a full description of each component and the specific items which comprise each component, the Key to Self-Scoring in Appendix E provides this information. Table 2 provides a short description and the number of questions comprising each component. In order to understand the scale mean of the population sample for each component, the maximum possible score for each component is provided as a means of measurement. Also provided is the acceptable percentage of the maximum score for each component determined by the first panel of experts.

Table 2
Characteristics of Components

Component	Short Description	Number of Questions	Maximum Score	Acceptable Score and Percentage Determined by Panel of Experts (I)
1	Provision for SHS program	11	44	33 (75%)
2	Availability of written policies/procedures	21	84	63 (75%)
3	Guidelines governing SHS	24	96	72 (75%)
4	Availability of school nurse	3	12	9 (75%)
5	Availability of physician	3	12	8 (70%)
6	Required health examinations	13	40	24 (60%)
7	Periodic screening	23	92	69 (75%)
8	Disease control	9	36	27 (75%)

Table 2 (continued)

Component	Short Description	Number of Questions	Maximum Score	Acceptable Score and Percentage Determined by Panel of Experts (I)
9	Emergency care	15	60	45 (75%)
10	Provision for students with special problems	7	28	21 (75%)
11	Permanent health record	6	24	18 (75%)
12	Referral procedures	8	32	24 (75%)
13	Follow-up procedures	5	20	15 (75%)
14	Availability of health information for teacher	19	76	46 (60%)
15	School nurse preparation	23	92	69 (75%)
16	Evaluation of program	7	28	21 (75%)

Table 3 presents the data results of the study.

The reliability coefficient was determined for each component of the instrument. A reliability coefficient less than .50 is considered a low reliability and greater than .75 is considered a good reliability for this study. The acceptable score percentage as determined by the first panel of experts is provided as a means of comparison with the scale mean of the sample population. Note that Component 6 is listed twice. Component 6(a) includes Item 20 a, b, and c and excludes Item 21 a, b, and c. Component 6(b) includes Item 21 a, b, and c and excludes Item 20 a, b, and c. Further, each component was not answered by all 22 respondents consistently, thus giving a fluctuation in the number of cases.

On Component 1, which consisted of 11 questions pertaining to provisions for a school health services program, the 22 respondents had a mean of 31.86. This mean is 97% of the acceptable score as determined by the panel of experts. The reliability coefficient was found to be .54, which is moderate reliability.

On Component 2, which consisted of 21 questions pertaining to availability of written policies and procedures which govern school health services, the 19 respondents had a mean of 57.47. This mean is 91% of

Table 3

Reliability Results of the Pilot Study

Component	Acceptable Score as Determined by Panel of Experts (I)	Scale Mean of Sample	<u>SD</u>	Coefficient alpha reliability	Number of cases
1	33	31.86	4.31	.54	22
2	63	57.47	24.73	.97	19
3	72	75.60	10.78	.92	20
4	9	7.55	2.34	.25	22
5	8	5.50	3.20	.51	14
6 (a) *	24	16.83	6.01	.58	6
6 (b) **	24	17.43	4.20	.25	7
7	69	69.93	11.70	.80	14
8	27	28.89	3.90	.72	19
9	45	42.62	6.14	.72	21

Table 3 (continued)

Component	Acceptable Score as Determined by Panel of Experts (I)	Scale Mean of Sample	<u>SD</u>	Coefficient alpha reliability	Number of cases
10	21	21.64	3.39	.69	22
11	18	18.59	3.14	.60	17
12	24	26.05	4.09	.76	21
13	15	16.10	3.03	.88	21
14	46	56.47	8.23	.84	19
15	69	45.50	13.20	.83	14
16	21	17.12	6.33	.76	17

*Component 16(a) includes item 20 a, b, and c and excludes item 21 a, b, and c.

**Component 16(b) includes item 21 a, b, and c and excludes item 20 a, b, and c.

the acceptable score, and the reliability coefficient was found to be .97, which is good reliability.

On Component 3, which consisted of 24 questions pertaining to guidelines governing school health services programs, the 20 respondents had a mean of 75.60. This mean is 5% above the acceptable score. The reliability coefficient was found to be .92; again, a good reliability.

On Component 4, which consisted of three questions pertaining to the availability of a school nurse to each school, the 22 respondents had a mean of 7.55. This mean is 84% of the acceptable score. The reliability coefficient was found to be .25, a low reliability. Information obtained from the data demonstrated that Component 4 presented problems in determining reliability due to the small number of items. Additional items could improve this component. However, the interaction of this component seems to embody the entire questionnaire. Therefore, the total score for the questionnaire may be more representative. Elimination of this component is also an option.

On Component 5, which consisted of three questions pertaining to the availability of a physician, the 14

respondents had a mean of 5.50, 69% of the acceptable score. The reliability coefficient was found to be .51, which is moderate.

Component 6 consisted of 13 questions pertaining to required health examinations of students. A selection between either Question 20 a, b, and c or Question 21 a, b, and c was to be made by the respondents. Three of the 22 participants responded to both items.

Of the six participants responding to Question 20 a, b, and c within Component 6, a mean of 16.83 was obtained, 70% of the acceptable score. The reliability coefficient was found to be .58, which is moderate reliability.

Of the seven participants responding to Question 21 a, b, and c within Component 6, a mean of 17.43 was obtained. This mean is 73% of the acceptable score. The reliability coefficient was found to be .25, a low reliability. Item 21 a, b, and c also demonstrated three inverse correlations. The instructions to "check any that apply" (an undetected leftover from the original questionnaire) on Item 21 further created problems. The data suggested that if Item 21 a, b, and c were removed from this component, the reliability would

be the .58 of Component 6 which incorporates Question 20 a, b, and c.

On Component 7, which consisted of 23 questions pertaining to periodic screening, the 14 respondents had a mean of 69.93. This mean is 1% above the acceptable score, and the reliability coefficient was found to be .80, good reliability.

On Component 8, which consisted of nine questions pertaining to disease control, the 19 respondents had a mean score of 28.89. This mean is 7% above the acceptable score; reliability coefficient was found to be .72, which is moderate reliability.

On Component 9, which consisted of 15 items pertaining to emergency care, the 21 respondents had a mean of 42.62; this mean is 95% of the acceptable score; the reliability coefficient was found to be .72, moderate reliability.

On Component 10, which consisted of seven items pertaining to the provision for students with special problems, the 22 respondents had a mean of 21.64, 3% above the acceptable score. The moderate reliability coefficient was found to be .69.

On Component 11, which consisted of six items pertaining to the permanent health record, the 17 respondents had a mean of 18.59, 3% above the acceptable score. Again, the moderate reliability coefficient was found to be .60.

On Component 12, which consisted of eight items pertaining to referral procedures, the 21 respondents had a mean of 26.05, 9% above the acceptable score. This reliability coefficient was found to be .76, a good reliability.

On Component 13, which consisted of five items pertaining to follow-up procedures, the 21 respondents had a mean of 16.10. This mean is 7% above the acceptable score. The reliability coefficient was found to be .88, a good reliability.

On Component 14, which consisted of 19 items pertaining to availability of health information for the teacher, the 19 respondents had a mean of 56.47, 23% above the acceptable score. The reliability coefficient was found to be a good .84.

On Component 15, which consisted of 23 items pertaining to school nurse preparation, 14 respondents

had a mean of 45.50, 66% of the acceptable score. This good reliability coefficient was found to be .83.

On Component 16, which consisted of seven items pertaining to evaluation of school health services programs, 17 respondents had a mean of 17.12. This mean is 82% of the acceptable score, and the reliability coefficient was found to be .76, a good reliability.

Items 18 and 63 also instructed the participants to "check the appropriate answer" (an undetected left-over from the original questionnaire). Several participants responded with a checkmark instead of the provided scale. The results suggested that the instructions to check the items be eliminated from items 18 and 63.

Comparison of the Reliability of the
Pilot study and the Suggested
Final Instrument

As a result of the previously mentioned suggestions regarding Component 6, a revision was given. By comparing the revised data with the original data, one can observe the increase in reliability due to Component 6 (Table 4). The total scale mean of the sample and acceptable score percentage as determined by the panel of experts for the entire questionnaire are presented (Table 4).

Table 4
Revision of Reliability Results

Component	Acceptable Score as Determined by Panel of Experts (I)	Scale Mean of Sample	<u>SD</u>	Coefficient alpha reliability	Number of Cases
1	33	31.86	4.31	.54	22
2	63	57.47	24.73	.97	19
3	72	75.60	10.78	.92	20
4	9	7.55	2.34	.25	22
5	8	5.50	3.20	.51	14
6	24	16.83	6.01	.58	6
7	69	69.93	11.70	.80	14
8	27	28.89	3.90	.72	19
9	45	42.62	6.14	.72	21

Table 4 (continued)

Component	Acceptable Score as Determined by Panel of Experts (I)	Scale Mean of Sample	<u>SD</u>	Coefficient alpha reliability	Number of Cases
10	21	21.64	3.39	.69	22
11	18	18.59	3.14	.60	17
12	24	26.05	4.09	.76	21
13	15	16.10	3.03	.88	21
14	46	56.47	8.23	.84	19
15	69	45.50	13.20	.83	14
16	<u>21</u>	<u>17.12</u>	6.33	.76	17
Total	564	537.72			

Revision of the Score Range

Using the sample mean and standard deviation as the "true" measures, the 25% and 75% (mean \pm .7 SD) cut-off values were obtained according to Table 4 and are presented in Table 5. With the final instrument (Appendix H) is the Key to Self-Scoring reflecting the revised score range.

Summary of Findings

Based on the data analysis, the following revisions were made:

1. Items 18 and 63--the instructions to "check" the appropriate answer in Items 18 and 63 were eliminated.
2. Component 6--the elimination of Item 21 a, b, and c would be reflected in the final questionnaire with an increase in reliability to .58. This provided a moderate reliability for Component 6.
3. Component 4--several alternatives were possible for Component 4. They were as follows:
 - (a) Leave Component 4 with a low reliability, since it provided an attempt to determine nurse availability at the local school.
 - (b) Add more questions in this area and conduct another pilot study to determine reliability. In reviewing

Table 5

Revised Score Range Using Sample Means and Sample
Standard Deviation as "True" Measures
(25% and 75% cut-off values)

Component	Acceptable Score Determined by Panel of Experts (I)	50% (Mean of Sample)	Range of Scores	
			25% ($\bar{X} - .7 \text{ SD}$)	75% ($\bar{X} + .7 \text{ SD}$)
1	33	31.36	28.84	34.87
2	63	57.47	40.16	74.78
3	72	75.60	68.05	83.15
4	9	7.55	5.91	9.19
5	8	5.50	3.26	7.74
6	24	16.83	12.62	21.04
7	69	69.93	61.74	78.12
8	27	28.39	26.16	31.62
9	45	42.62	38.32	46.92

Table 5 (continued)

Component	Acceptable Score Determined by Panel of Experts (I)	50% (Mean of Sample)	Range of Scores	
			25% ($\bar{X} - .7 \text{ SD}$)	75% ($\bar{X} + .7 \text{ SD}$)
10	21	21.64	19.27	24.01
11	18	18.59	16.39	20.79
12	24	26.05	23.19	28.91
13	15	16.10	13.98	18.22
14	46	56.47	50.71	62.23
15	69	45.50	36.26	54.74
16	21	17.12	12.69	21.55

the literature on this component, several areas for deriving items for improvement emerged. They were in the areas of: nurse hired by the board of education, professional preparation, the nurse as an integral part of the school team, time for counseling and teacher-nurse conferences, the school nurse identifying health needs of target population, utilization of community resources, school nurse teaching professional skills and knowledge, and follow-up activities.

(c) Look at the total score for the questionnaire as reflected in Table 4 as the indicator for Component 4. This component could then be stated with the total score as an encompassing theme for the health services program. It is not within the scope of this study to determine a score range for the total questionnaire. Therefore, only the population mean and acceptable score percentage as determined by the panel of experts would provide a means of comparison for Component 4 at the present time.

(d) Delete Component 4. This would eliminate the specification of the nurse as provider of health services. Enhancing the word "administrator" in the introduction to the questionnaire to "nurse administrator" would clarify the assumption of school nurse as

provider. Items 2-4 which comprise Component 4 would still remain in the questionnaire since they are incorporated in Component 1. However, the Key to Self-Scoring would be affected along with Table 4.

(e) Combine the suggestions offered in (c) and (d).

4. Key to Self-Scoring--revision of the Key to Self-Scoring to incorporate the "true" measures of score range as provided by the sample mean and sample standard deviation.

This researcher elected to place Component 4 as a comprehensive statement with the total score in the Key to Self-Scoring. As a result, the number of components was reduced from 16 to 15 and, consequently, the total score was also reduced due to component deletion. Further, the word "administrator" was augmented to "nurse administrator" in the introduction to the instrument.

The final instrument was developed and the validity and reliability were established. Appendix H is an example of the final instrument.

CHAPTER 5

SUMMARY OF THE STUDY

The problem of this study was to develop an instrument to measure essential components utilized in school health services programs. This chapter provides a summary of the instrument development, conclusions and implications, and recommendations for further study devised from this research.

Summary

This study was conducted to develop a new instrument to measure essential components utilized in school health services programs. Fifteen components which are essential to school health services were extrapolated from the literature. The two panels of experts and the table of specifications provided validity for the instrument. The first panel of experts determined the scoring mechanism to be utilized for the tool.

The revised questionnaire resulting from the recommendations of the two panels of experts was given to a convenience sampling of members of a metroplex school health administrators' organization to determine

reliability. The questionnaire reliability was established utilizing their results.

The final questionnaire was developed by eliminating items which lowered the reliability rating, by suggesting items to enhance the reliability, and by correcting previously undetected errors. The reliability of the final instrument demonstrated moderate reliability (.50 to .74) on 7 of the 15 components; good reliability (.75 to 1.0) on the remaining 8 components. A revised score range based on sample mean and sample standard deviation as "true" measures established a score range for each component between the 25% and 75% cutoff values.

The scoring of the instrument was based on 4 points for "always" and 0 points for "never." An example of the final instrument for administrators of school health services programs is shown in Appendix H. Also provided with the instrument is the Key to Self-Scoring and the worksheet for improvement. Thus, the instrument was developed and the validity and reliability were established.

Conclusions and Implications

Based on the findings of the present study, the conclusion was made that the instrument is a relatively valid

and reliable device and is ready for use by the school health services administrator who wishes to assess and improve services to students. The true value of this instrument is in its ability to: provide the school health administrator with an understanding of the phenomena of school nursing, supply information that facilitates effective nursing, foster decisions, aid in accountability to clients, and clarify the forms and functions of the profession in meeting the health needs of society (Polit & Hungler, 1978). A further step could lead to improvement changes of health services through utilization by the school health administrator.

Based upon the findings of this study, several implications were made concerning the use of the "Self-Assessment Tool for Measuring Essential Components Utilized in School Health Services Programs." As school nursing is fraught with many variables which may fragment a health service's program, this instrument was developed as a means of uniting the variables into a cohesive program. By identifying the essential components and the recommended practices and standards, this instrument will provide the school nurse administrator with an overall view of his/her program.

The scoring mechanism for each component provides the administrator with objective data to identify components needing improvement. A means of comparison within a score range enables the administrator to determine present status, and an overall score may be utilized to compare a total health services program with the acceptable score as determined by the panel of experts.

The implications for school nursing derived from utilization of this developed instrument were as follows:

1. Objective data to assess a total health services program.
2. Objective data to assess each component individually within a health services program.
3. A means of determining missing variables within a health services program.
4. A means of determining areas of needed improvement.
5. A guide for standards and recommended practices.
6. A tool for determining present status, for forecasting problem areas, and for setting future directions (goals and objectives).

7. An instrument to be utilized at periodic intervals to assess progress in school health services.

8. Finally, and most importantly, the instrument provides a means for possibly improving health care to students.

The administrator has a guide to help her assess, plan, implement, and evaluate her school health services program. This information can help the school nursing administrator improve the overall services provided in meeting the health needs of students.

Recommendations for Further Study

Based on the findings of this study, the following recommendations were made:

1. More research on similar and different types of instruments for measuring essential components utilized in school health services programs.

2. Further testing of the instrument for reliability on a larger population.

3. Further research to determine if this instrument assists the school health services administration in improving health services.

4. Further research to determine the effects of measurement as it relates to school personnel, increased visibility, and accountability for school health services.

5. Utilization of this instrument as a means of comparison among similar school districts.

APPENDIX A

708 Northfield Ct.
Harrisonburg, VA 22801
August 12, 1981

Ms. Ann Eastman
2003 Inverness
Carrollton, Texas 75007

Dear Ms. Eastman,

In reference to our telephone conversation of August 11, 1981 I extend to you permission to use information in my doctoral dissertation (1977) for your masters thesis. Since the dissertation is under copyright 1977, I anticipate that you shall abide by the copyright laws; i.e., appropriate footnoting and bibliographical information shall be included for each reference from this dissertation.

It is my sincere hope that all will progress satisfactorily with your thesis. I am pleased that my dissertation, "Needs Assessment: School Health Services, Virginia" (paraphrased title) has provided some helpful material for your use. When your work is completed I should like very much to see a copy. Thank you for taking the appropriate steps in consulting with me re. this matter. I am sorry that you had so much difficulty locating me.

Sincerely,

Jeanne E. Martin

Jeanne E. Martin, EdD

P.S. If I can be of any further assistance please do not hesitate to contact me. I shall be glad to help you any way I can.

APPENDIX B



STATE OF OHIO
DEPARTMENT OF EDUCATION
COLUMBUS
43215

FRANKLIN B. WALTER
SUPERINTENDENT
PUBLIC INSTRUCTION

MARY J. POSTON
DIRECTOR
DIVISION OF ELEMENTARY
AND SECONDARY EDUCATION

November 18, 1981

Ms. Ann Eastman
2003 Inverness Drive
Carrollton, Texas 75007

Dear Ms. Eastman:

Thank you for your follow-up letter of September 24, 1981 requesting permission to incorporate elements of our publication titled "A Self-Appraisal Checklist for School Health Programs" published by the Ohio Department of Education. We feel complimented that you are desirous of using or modifying our document in the questionnaire you are developing for your study. Please accept this as a written permission statement for you to use and/or refer to our publication as long as the appropriate reference is made to the Ohio Department of Education, Division of Elementary and Secondary Education, Health and Human Affairs Section, Columbus, Ohio.

You indicated in your correspondence that the aforementioned "appropriate reference" would be provided.

Thank you once again and if we can be of service to you in any other way, please feel free to contact us.

Sincerely,

Robert L. Holland

Robert L. Holland, Chief
Health and Human Affairs Section

RLH:kb

APPENDIX C

SCHOOL HEALTH SERVICES QUESTIONNAIRE *

Objective 1		<u>Health Services Program Funding</u>						
Total possible score	Acceptable Score	(4)	1. Are funds appropriated for a School Health Service (SHS) Program	Always	Almost always	Usually	Sometimes	Rarely
5	(4)	2. In your opinion, are these funds adequate to conduct a good SHS program in your community?	_____	_____	_____	_____	_____	5 4 3 2 1
				Adequate		Inadequate		5 4 3 2 1
5	(3)	3. The person most responsible for conducting the SHS program at the individual school level is: (check one)	_____	School Nurse	5			
			_____	Public Health Nurse	3			
			_____	Red Cross Health Room Volunteer	1			
			_____	Nurse Aide	1			
			_____	Health, Safety, P.E. teacher	1			
			_____	Principal	0			
			_____	Classroom teacher	0			
			_____	Secretary	0			
			_____	None available	0			
15	(10)	4. What is the average nurse/pupil ratio in your school district?	Under 1:1000		15			
			1:1001 to 1:1500		10			
			1:1501 to 1:2000		5			
			Over 1:2001		0			

5	(4)	5. In your opinion, is the amount of time you or your personnel spend in each school conducting the SHS program adequate to meet the needs of your community.	Adequate	Inadequate		5 4 3 2 1		
			— — — — —					
		<u>Space and Facilities</u>						
4	(3)	6. Do your schools have a room especially designated for taking care of sick or injured students?	All Schools	Most	Some	Few	Not available	4 3 2 1 0
			—	—	—	—	—	
4	(3)	7. Is there adequate space for students who are injured or ill to wait until transportation home or to a doctor?	All Schools	Most	Some	Few	Not available	4 3 2 1 0
			—	—	—	—	—	
20	(15)	8. Is there a separate room or adequate space where the school physician, nurse, and other specialist can perform:	All Schools	Most	Some	Few	Not available	
		Health examinations	—	—	—	—	—	4 3 2 1 0
		Vision testing	—	—	—	—	—	4 3 2 1 0
		Hearing testing	—	—	—	—	—	4 3 2 1 0
		Counseling	—	—	—	—	—	4 3 2 1 0
		Hold private conference or small group conference	—	—	—	—	—	4 3 2 1 0
5	(4)	9. How adequate are facilities for handling health emergencies (i.e., diabetic coma, epileptic seizures, etc.), and serious injuries?	Adequate	Inadequate				5 4 3 2 1
			— — — — —					

5	(4)	10. Is there adequate equipment available for use in medical and emergency care and screening?	Adequate	Inadequate	5 4 3 2 1
5	(3)	11. Are the number of cots per clinic adequate to meet student needs?			5 4 3 2 1
5	(4)	12. Is there adequate provision in the school budget for replenishing supplies as needed during the school year?	Adequate	Inadequate	5 4 3 2 1
5	(4)	13. Is there adequate space for storing supplies, equipment, records, etc?	Adequate	Inadequate	5 4 3 2 1
5	(5)	14. Who provides most equipment for medical care and screening:	___ Local Board of Education ___ Public Health Service ___ Other (specify) _____		5 3 1
Accept- (70) able score Total possible score 93 Acceptable 75 Norm score for Objective 1 = 70					
Objective 2		<u>Governing Policies and Community Needs</u> 15. Is the following list of aspects of school health services governed by written or unwritten policy? Check only those aspects applicable to your school district:			

"Service available" 85		Service Available	Policy		
			Written	Unwritten	None
"Policy" 85	(a) Requirements for physical examinations upon school entrance and thereafter as needed.	Yes ___ No ___	___	___	___
	(b) Health observation by teachers.	Yes ___ No ___	___	___	___
	(c) Screening by health personnel.	Yes ___ No ___	___	___	___
	(d) Procedures to refer students to medical personnel.	Yes ___ No ___	___	___	___
	(e) Notification of findings to parents or guardian.	Yes ___ No ___	___	___	___
	(f) Notification of findings to appropriate school personnel.	Yes ___ No ___	___	___	___
	(g) Follow-up procedures.	Yes ___ No ___	___	___	___
	(h) Cumulative health records.	Yes ___ No ___	___	___	___
	(i) Control of communicable diseases.	Yes ___ No ___	___	___	___
	(j) Provision for physically handicapped and special ed. students.	Yes ___ No ___	___	___	___
	(k) Emergency care for illness or injury while student is at school.	Yes ___ No ___	___	___	___
	(l) Role of the school nurse in the school health service program.	Yes ___ No ___	___	___	___

		Service Available		Policy			
		Yes	No	Written	Unwritten	None	
Count "Policy" Only Total Possible Score 85 Acceptable 75 Norm. Score for Objective 2 = 64	(m) Role of the teacher in the school health service program.	Yes	No				
	(n) Reporting child abuse.	Yes	No				
	(o) Administration of medication by school personnel.	Yes	No				
	(p) Eye-injury reporting and eye-protective devices.	Yes	No				
	(q) Evaluation of the school health services program.	Yes	No				
Objective 3	16. If written policies and procedures governing the SHS program have been prepared, which members of the school personnel have access to copies for reference?	Principal/Asst. Principal 1 Office Personnel 1 Health personnel 1 Selected teachers 1 All teachers 1 Other support personnel 1 None 0					
Total possible score 6 Acceptable 75 Norm score for Objective 3 = 4	17. Is there joint planning between your school district, health department, educational agency, health professional associations, and community groups as to policies and guidelines for the SHS program?	Always	Almost always	Usually	Sometimes	Rarely	5 4 3 2 1
Objective 4							
5							

4	18. In what way are school health concerns relayed to the community?	<input type="checkbox"/> School communications <input type="checkbox"/> Health Advisory Committee <input type="checkbox"/> PTA <input type="checkbox"/> Local newspapers	1 1 1 1
5	19. Is there an established means of receiving community concerns?	<div> <div>Always</div> <div>Almost Always</div> <div>Usually</div> <div>Sometimes</div> <div>Rarely</div> </div> <div> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>	5 4 3 2 1
5	20. In your opinion, is your school health program meeting the needs of your community adequately?	<div>Adequate Inadequate</div> <div> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>	5 4 3 2 1
Total possible score 19 Acceptable 75% Norm Score 14 Plus Question 15 "Service Available only" Norm score (75%) 64 Norm score for Objective 4= 78 Objective 5 Count questions 3 through 5 Total possible score 25 Acceptable 75% Norm Score for Objective 5 =19			

Objective 6		Health Examinations					
		Always	Almost Always	Sometimes	Rarely	Never	
4	21. Is a physician available to your school district in the capacity of medical consultant as needed?	—	—	—	—	—	4 3 2 1 0
7	22. For what purposes is the physician available (check any that apply):	—	—	—	—	—	
	Consultant for individual children	—	—	—	—	—	1
	Health appraisal consultant	—	—	—	—	—	1
	Screening consultant	—	—	—	—	—	1
	General advisor to health personnel on conducting the SHS program	—	—	—	—	—	1
	Communicable disease	—	—	—	—	—	1
	Inservice programs	—	—	—	—	—	1
	Other (specify) _____	—	—	—	—	—	1
Total possible score 11							
Acceptable 55+							
Norm score for Objective 6 = 6							
Objective 7		Always	Almost Always	Sometimes	Rarely	Never	
16	23. Does your school district require children to have a comprehensive health examination:	—	—	—	—	—	
	(a) upon entrance to school?	—	—	—	—	—	4 3 2 1 0
	(b) at mid-school (6-7 grades)	—	—	—	—	—	4 3 2 1 0
	(c) before leaving school (11-12 grades)?	—	—	—	—	—	4 3 2 1 0
	(d) upon identification of problems?	—	—	—	—	—	4 3 2 1 0
16	24. Under what conditions are routine health examinations given to children through your SHS program:	—	—	—	—	—	
	(a) as periodic screening	—	—	—	—	—	4 3 2 1 0
	(b) as part of health referral	—	—	—	—	—	4 3 2 1 0
	(c) special education candidates	—	—	—	—	—	4 3 2 1 0
	(d) Other (specify) _____	—	—	—	—	—	4 3 2 1 0

		Always	Almost Always	Some- times	Rarely	Never	
20	25. If health examinations are not provided through the SHS program for low income families, what means are utilized? (a) Health Department (b) Hospital Outpatient (c) Voluntary Agencies (d) Civic Groups (e) Other (specify) _____ (f) No means available	—	—	—	—	—	4 3 2 1 0 4 3 2 1 0 4 3 2 1 0 4 3 2 1 0 4 3 2 1 0 0
4	26. Are health histories routinely obtained on new students to the school district?	—	—	—	—	—	4 3 2 1 0
4	27. Are students enrolled in athletic programs required to have health examinations?	—	—	—	—	—	4 3 2 1 0
4	28. Are children identified who are enrolled in the EPSDT program (Early Periodic Screening Diagnosis and Treatment) and is screening information shared on identified EPSDT students between your school district and the Department of Welfare?	—	—	—	—	—	4 3 2 1 0
4	29. Are dental examinations recommended upon entrance to school?	—	—	—	—	—	4 3 2 1 0
Total possible score 68							
Acceptable 60%							
Norm score for Objective 7 = 41							

Objective 8	Screening																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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		Always	Almost Always	Usually	Some- times	Rarely	
20	35. Do you screen children in the primary grades for:						
	(a) eye imbalance?	—	—	—	—	—	5 4 3 2 1
	(b) farsightedness?	—	—	—	—	—	5 4 3 2 1
	(c) nearsightedness?	—	—	—	—	—	5 4 3 2 1
	(d) color discrimination?	—	—	—	—	—	5 4 3 2 1
5	36. Are students who fail the first screening on vision and hearing rechecked within a 2-4 week period?	—	—	—	—	—	5 4 3 2 1
5	37. Do your nurses provide direct or indirect health education for students related to the specific screening being offered (care of eyes, ears, dental, growth, and development, etc.)?	—	—	—	—	—	5 4 3 2 1
Total possible score 317							
Acceptable 75%							
Norm score for Objective 8 = 238							
Objective 9	<u>Communicable Disease Control</u>						
4	38. How are parents and teachers informed of communicable disease control policies.	—	—	—	—	—	
	Person-to-person						1
	Meetings						1
	Newletters						1
	Notices						1

		Always	Almost Always	Usually	Some- times	Rarely	
5	39. Do you have a system for reporting children with suspected communicable diseases to the health department?	—	—	—	—	—	5 4 3 2 1
5	40. Are children with symptoms of communicable disease isolated from other children in the clinic?	—	—	—	—	—	5 4 3 2 1
5	41. Are children with symptoms of communicable disease sent home?	—	—	—	—	—	5 4 3 2 1
5	42. Do teachers inspect students for communicable disease on a periodic basis?	—	—	—	—	—	5 4 3 2 1
5	43. When pupils are absent from school because of communicable disease, they are readmitted (select one answer):						
	(a) only with release from physician or health department?	—	—	—	—	—	5 4 3 2 1
	(b) only after being checked by the school nurse or school administrator?	—	—	—	—	—	4 3 2 1 0
	(c) only after being checked by the teacher for signs and symptoms?	—	—	—	—	—	3 2 1 0 0
	(d) without any readmittance requirements?	—	—	—	—	—	0
5	44. Does your school district have a formal plan for enforcing Texas State Immunization laws?	—	—	—	—	—	5 4 3 2 1

4	45. If children are not immunized by a private physician, do you have community resources available to ensure compliance with state law?	Always —	Almost —	Always —	Some- times —	Rarely —	Never —	4 3 2 1 0
4	46. Is immunization ever administered through the SHS program?	—	—	—	—	—	—	4 3 2 1 0
4	47. Do your nurses provide direct or indirect health education to students, teachers, and the community concerning communicable disease control?	—	—	—	—	—	—	4 3 2 1 0
Total possible score 46								
Acceptable 75%								
Norm score for Objective 9 = 34								
Objective 10								
		<u>Emergency Care</u>						
6	48. If written directives concerning emergency care for students who become seriously ill or injured while at school have been prepared, which of the school personnel have them on hand for immediate use?	—	—	—	—	—	—	
		All classroom teachers						
		Selected teachers						
		Principal/Assistant Principal						
		Health Personnel						
		Office Personnel						
		Other						
		No such directives are available						
								1
								1
								1
								1
								1
								0

6	49. Check the areas in your school where emergency directives are posted:	<input type="checkbox"/> School office <input type="checkbox"/> Health clinic <input type="checkbox"/> Science lab <input type="checkbox"/> Shops <input type="checkbox"/> Home economics room <input type="checkbox"/> Physical education <input type="checkbox"/> Not posted	1 1 1 1 1 1 0
4	50. Are emergency medical treatment authorization forms renewed annually on all students and on file in each school?	<div> <div>At all schools</div> <div>Most</div> <div>Some</div> <div>Few</div> <div>Not Available</div> </div>	4 3 2 1 0
4	51. Are there designated persons (other than nurses) with current first aid preparation available for administering first aid or providing direction in emergency cases in each school?	<div> <div>At all schools</div> <div>Most</div> <div>Some</div> <div>Few</div> <div>Not Available</div> </div>	4 3 2 1 0
4	52. Is there a designated person (other than nurse) with a current cardiopulmonary resuscitation certificate in each school?	<div> <div>At all schools</div> <div>Most</div> <div>Some</div> <div>Few</div> <div>Not Available</div> </div>	4 3 2 1 0
5	53. Are there written procedures regarding a system for reporting school accidents.	<div> <div>Yes</div> <div>No</div> <div>Don't know</div> </div>	5 0 0
5	54. Do you have a safety committee which plans a safety education program after reviewing the accident report data in your school district?	<div> <div>Yes</div> <div>No</div> <div>Don't know</div> </div>	5 0 0

5	55. Are students in interscholastic contact athletics required to have mouth protectors?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	5 0 0
5	56. Are there emergency disaster plans developed between your school district and the community authorities.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	5 0 0
Total possible score 44 Acceptable 75% Norm score 33 Plus questions 6-14 norm score 43 Total norm score for Obj. 10 = 76			
Objective 11			
55	Provision for the Underpar or Physically Handicapped 57. Are provisions made for the student who has a physical health problem that permits him/her to benefit from regular class attendance but who requires special care? (e.g., rest periods, reduced amount of physical exercise, increased opportunity for physical exercise, extra meals, shortened school day, lightened work load, or other provisions)?		

		Always	Almost Always	Usually	Some- times	Rarely	
	(a) Cardiac conditions	—	—	—	—	—	5 4 3 2 1
	(b) Cancer	—	—	—	—	—	5 4 3 2 1
	(c) Diabetes	—	—	—	—	—	5 4 3 2 1
	(d) Epilepsy	—	—	—	—	—	5 4 3 2 1
	(e) Anemia	—	—	—	—	—	5 4 3 2 1
	(f) Thyroid or other endocrine deficiencies	—	—	—	—	—	5 4 3 2 1
	(g) Orthopedic problems	—	—	—	—	—	5 4 3 2 1
	(h) Malnutrition	—	—	—	—	—	5 4 3 2 1
	(i) Asthma, chronic bronchitis, or respiratory problems	—	—	—	—	—	5 4 3 2 1
	(j) Rheumatic Fever	—	—	—	—	—	5 4 3 2 1
	(k) Student who is convalescing from illness	—	—	—	—	—	5 4 3 2 1
5	58. In your opinion, to what degree do most teachers in your school dis- trict appear to be prepared to assume responsibility for health observation for detection of signs of deviation from normal among their pupils?	Well Prepared	—	—	—	Poorly Prepared	5 4 3 2 1
5	59. Are the regular classroom teachers in your school district provided inservice programs to improve their observation and referral skills? (nurse/staff presentations; work- shops; college credit).	Always	Almost Always	Usually	Some- times	Rarely	5 4 3 2 1

11	60. What provision is made for children with special problems? Check:	<div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div><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9	64. Check the following information that is recorded on your permanent health records	<input type="checkbox"/> Health history <input type="checkbox"/> Immunizations <input type="checkbox"/> Screening results (vision, hearing, etc.) <input type="checkbox"/> Referral information <input type="checkbox"/> Follow-up information <input type="checkbox"/> Health problems <input type="checkbox"/> Physical exam <input type="checkbox"/> Conferences held <input type="checkbox"/> Nursing plans	1 1 1 1 1 1 1 1 1
5	65. Is a copy of the permanent health record transferred when a child changes schools?	Always Almost Always Usually Some- times Rarely	5 4 3 2 1
Total possible score 24 Acceptable 75% Norm score for Objective 12 = 18 Objective 13			
	<u>Referral Procedure</u>		
5	66. Is there a specific procedure consistently followed in referral of children with suspected health problems?	_____ _____ _____ _____ _____	5 4 3 2 1
5	67. To what extent are the following procedures followed in health problem referrals? (a) parents are notified of child's suspected health problem by school personnel.	_____ _____ _____ _____ _____	5 4 3 2 1

5	(b) Parents are expected to assume responsibility for taking child to family physician or pediatrician	Always Almost Always Usually Some- times Rarely	5 4 3 2 1
7	68. How does the nurse communicate with parents concerning health defects and needed action?	written telephone conference at school home visit	1 2 2 2
5	69. Is the nurse given time for counseling?	Always Almost Always Usually Some- times Rarely	5 4 3 2 1
5	70. Is your community directory of health services readily available to your nurses?		5 4 3 2 1
8	71. Check the following community resources that your school district utilizes for referral of students with suspected health problems:	Private physician Local clinics Health Department Medical society/auxiliary Dental society/auxiliary Voluntary agencies Civic groups Other official agencies	1 1 1 1 1 1 1 1

5	72. Are teacher-nurse conferences scheduled to discuss health defects discovered during screening?	Always	Almost	Always	Usually	Some- times	Rarely	5 4 3 2 1
Total Possible score 45		---	---	---	---	---	---	
Acceptable 75%								
Norm Score for Objective 13 = 34								
Objective 14	<u>Follow-up Procedures</u>							
	73. If a student has been referred for examination after a health problem has been suspected, what steps are taken to insure that medical care is received and physician's instructions are followed?							
5	(a) Contact the parents to learn if the child has been examined by a physician and what the findings and prescribed treatment were.	---	---	---	---	---	---	5 4 3 2 1
25	(b) Arrangements are made through community resources for children whose parents cannot afford such services as:							
	(1) Vision	---	---	---	---	---	---	5 4 3 2 1
	(2) hearing	---	---	---	---	---	---	5 4 3 2 1

		Always	Almost Always	Usually	Some- times	Rarely	
	(3) dental	—	—	—	—	—	5 4 3 2 1
	(4) orthopedic	—	—	—	—	—	5 4 3 2 1
	(5) medical problems	—	—	—	—	—	5 4 3 2 1
5	(c) Arrange a nurse-parent-teacher conference to discuss the child's health problem(s) and evaluate progress as needed.	—	—	—	—	—	5 4 3 2 1
5	(d) Make arrangements for treatment or medication if prescribed and consented to by parents in the school setting.	—	—	—	—	—	5 4 3 2 1
5	(e) Classroom adjustments are made as indicated.	—	—	—	—	—	5 4 3 2 1
Total possible score 45							
Acceptable 75%							
Norm score for Objective 14 = 34							
Objective 15	<u>Teacher Preparation</u>						
	74. Do your elementary teachers have background education in:						

4	(a) Health education and/or health science	All	Most	Some	Few	None	4	3	2	1	0
4	(b) Human growth and development (include physiological aspects)	—	—	—	—	—	4	3	2	1	0
4	75. Are your secondary teachers who teach health certified in health education?	—	—	—	—	—	4	3	2	1	0
Total possible score 12 Acceptable 60% Norm score 7 Plus questions 57 through 61 - norm score (75%) 61 Norm score for Objective 15 = 68											
Objective 16		<u>Nurse Preparation</u>									
3	76. The person responsible for the coordination and administration of the school health service program district wide is: (check one)	—	Superintendent				1				
		—	School nurse (Director, Supervisor, Coordinator, etc.)				3				
		—	School medical advisor				3				
		—	Health, safety, and physical education teacher				1				
		—	Other (please specify)				1				

5	77. What is the highest certification or degree that you have?	RN: <input type="checkbox"/> AD <input type="checkbox"/> Diploma <input type="checkbox"/> BS <input type="checkbox"/> MS <input type="checkbox"/> Ph.D. <input type="checkbox"/> Other degree (please specify) _____	2 3 5 5 5 5
20	78. Check the qualifications and experience you have:	<input type="checkbox"/> Texas School Nurse Certificate <input type="checkbox"/> Minimum of 3 years experience in school health programs <input type="checkbox"/> A course or workshop within the past year related to school health <input type="checkbox"/> Read two or more nursing and school health journals regularly	5 5 5 5
9	79. If you have had any of the courses on the adjacent list, rank in order from most helpful (1) to least helpful in conducting school health services.	<input type="checkbox"/> Community health <input type="checkbox"/> Community disease <input type="checkbox"/> Health sciences <input type="checkbox"/> Mental health <input type="checkbox"/> School administration <input type="checkbox"/> Human development <input type="checkbox"/> Health counseling <input type="checkbox"/> School health education <input type="checkbox"/> Physical assessment	1 1 1 1 1 1 1 1
5	80. What is the lowest degree of preparation acceptable for hiring staff nurses in your school district according to the job description?	RN: <input type="checkbox"/> AD <input type="checkbox"/> Diploma <input type="checkbox"/> BS <input type="checkbox"/> MS <input type="checkbox"/> Other (specify) _____	2 3 5 5 0

40	81. What percentage of your nurses (estimate to the closest percentage):	100%	75%	50%	25%	None	
	(a) are registered as RN's in the state of Texas?	—	—	—	—	—	5 4 3 2 1
	(b) are state certified in school nursing?	—	—	—	—	—	5 4 3 2 1
	(c) are holders of a BS degree or higher?	—	—	—	—	—	5 4 3 2 1
	(d) have had post-baccalaureate courses in school health?	—	—	—	—	—	5 4 3 2 1
	(e) have had a course in physical assessment?	—	—	—	—	—	5 4 3 2 1
	(f) are currently certified in CPR?	—	—	—	—	—	5 4 3 2 1
	(g) who do vision screening, are state certified vision screeners?	—	—	—	—	—	5 4 3 2 1
	(h) who do hearing screening, are state certified hearing screeners?	—	—	—	—	—	5 4 3 2 1
		Always	Almost Always	Usually	Sometimes	Rarely	
	82. Does the school district provide:						
5	(a) inservice education programs for nurses?	—	—	—	—	—	5 4 3 2 1
5	(b) funds designated for nurses to attend workshops during school time?	—	—	—	—	—	5 4 3 2 1

5	83. What means are utilized to evaluate nursing personnel for updating and improving professionalism?	<input type="checkbox"/> Self-evaluation <input type="checkbox"/> Coordinator, principal, nurse evaluation <input type="checkbox"/> Observation checklists <input type="checkbox"/> Performance reports <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> None	1 1 1 1 1 0
7	84. What means are utilized to keep nurses current and improve their professionalism?	<input type="checkbox"/> Coordinator-nurse conferences <input type="checkbox"/> Assistance on-site <input type="checkbox"/> Providing current information <input type="checkbox"/> Inservice programs <input type="checkbox"/> Workshops <input type="checkbox"/> College courses <input type="checkbox"/> Professional organizational meetings	1 1 1 1 1 1 1
5	85. Do you have a prepared orientation for new nurses to your district?	<div> <div>Always</div> <div>Almost Always</div> <div>Usually</div> <div>Sometimes</div> <div>Rarely</div> </div> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	5 4 3 2 1
Total possible score 109 Acceptable 75 Norm score for Objective 16 = 82			

Objective 17		Evaluation					
		Always	Almost Always	Usually	Some- times	Rarely	
5	86. Is provision made for periodic evaluation to update and make improvements in the school health service program?	—	—	—	—	—	5 4 3 2 1
5	87. Does your SHS program have written goals and objectives?	—	—	—	—	—	5 4 3 2 1
5	88. Do you have a means of measurement to determine when you have obtained your goals and objectives?	—	—	—	—	—	5 4 3 2 1
5	89. How often is evaluation of your overall health service program done? (check one)	— annually					5
		— Every 2-3 years					5
		— Every 4-5 years					5
		— Not done					0
9	90. By what means is your school health service program evaluated?	— (1) a comprehensive model					1
		— (2) specific program evaluation (vision, hearing, etc.)					1
		— (3) in-house evaluation					1
		— (4) outside auditing					1
		— (5) research evaluation					1
		— (6) data collection and analysis					1
		— (7) nursing meetings					1
		— (8) community advisory committee					1
		— (9) inter-school evaluation committee					1

5	91. Does your nursing staff provide input for inservice program topics and are the nurses provided with a means of evaluating the inservice programs?	Always	Almost Always	Usually	Some-times	Rarely	5 4 3 2 1
5	92. Is your nursing staff involved in nursing research to improve health services?	—	—	—	—	—	5 4 3 2 1
Total possible score 39							
Acceptable 75%							
Norm score for Objective 17 =29							

Sources: Martin, J. E. Needs assessment of school health services programs in the Commonwealth of Virginia. Unpublished manuscript, University of Virginia, 1977.

Ohio Department of Education, Health, Physical Education and Recreation Section: Self-appraisal checklist, Columbus, Ohio, 1966.

RATING SCALE FOR SCHOOL HEALTH SERVICE QUESTIONNAIRE

In order to help me determine if I have correctly assessed the percentage of the total score necessary to obtain the norm, I would appreciate the following:

- I. Rating each objective on its own merit from absolutely essential for a school health service program to have to least essential for a school health service program to have.
- II. The percentage of the absolute (total score) that you would consider an acceptable score from a school district in meeting each objective.

-
- I. Rating each objective on its own merit from absolutely essential for a school health service program to have to least essential for a school health service program to have (please circle).

Objective 1

There should be provision for a health service program in each school.

Absolutely essential	10	9	8	7	6	5	4	3	2	1	Least essential
-------------------------	----	---	---	---	---	---	---	---	---	---	--------------------

Objective 2

Policies governing school health services should be set forth in writing.

Absolutely essential	10	9	8	7	6	5	4	3	2	1	Least essential
-------------------------	----	---	---	---	---	---	---	---	---	---	--------------------

Objective 3

The written policies should be available to all school personnel involved in the health service program.

Absolutely essential	10	9	8	7	6	5	4	3	2	1	Least essential
-------------------------	----	---	---	---	---	---	---	---	---	---	--------------------

Objective 4

The guidelines governing school health services should be predicated upon statements of objectives found in the professional literature and should take into consideration the philosophy and objectives of the local district.

Absolutely essential	10	9	8	7	6	5	4	3	2	1	Least essential
-------------------------	----	---	---	---	---	---	---	---	---	---	--------------------

Objective 5

A school nurse should be available in each school to assist pupils, parents, and teachers to understand individual pupil health problems in order to provide proper care for the pupil.

Absolutely essential 10 9 8 7 6 5 4 3 2 1 Least essential

Objective 6

The service of a physician as medical advisor should be available to personnel of each school in order to assist with student health problems.

Absolutely essential 10 9 8 7 6 5 4 3 2 1 Least essential

Objective 7

Each school should require health examinations of all pupils upon school entrance and periodically thereafter as necessary, dependent upon the student's physical condition.

Absolutely essential 10 9 8 7 6 5 4 3 2 1 Least essential

Objective 8

Schools should employ screening devices on a continuous basis to determine the status of each pupil's health.

Absolutely essential 10 9 8 7 6 5 4 3 2 1 Least essential

Objective 9

Each school should follow established disease control procedures.

Absolutely essential 10 9 8 7 6 5 4 3 2 1 Least essential

Objective 10

Each school should provide for the emergency care of pupils who become ill or injured while under school jurisdiction.

Absolutely essential 10 9 8 7 6 5 4 3 2 1 Least essential

Objective 11

Provision should be made for the care of the handicapped child who is able to benefit from regular classroom instruction but who requires special consideration because of his/her condition.

Absolutely
essential 10 9 8 7 6 5 4 3 2 1 Least
essential

Objective 12

Each school should utilize a standard permanent pupil health record form.

Absolutely
essential 10 9 8 7 6 5 4 3 2 1 Least
essential

Objective 13

The school health service program should include referral procedures.

Absolutely
essential 10 9 8 7 6 5 4 3 2 1 Least
essential

Objective 14

Each school should establish follow-up procedures to assure that pupils receive examination for suspected health problems and treatment for identified health problems.

Absolutely
essential 10 9 8 7 6 5 4 3 2 1 Least
essential

Objective 15

Teacher training should include a basic health science course, as well as a human development course including the physiological aspects of human growth and development.

Absolutely
essential 10 9 8 7 6 5 4 3 2 1 Least
essential

Objective 16

Preparation for school nursing should include academic courses in education as well as nursing leading towards a baccalaureate degree in nursing and a state certification in school nursing.

Absolutely
essential 10 9 8 7 6 5 4 3 2 1 Least
essential

Objective 17

The school health service program should be evaluated periodically to determine strengths and weaknesses, to make improvements and update procedures in line with medical advancement.

Absolutely essential 10 9 8 7 6 5 4 3 2 1 Least essential

II. The percentage of the absolute (total score) that you would consider an acceptable score from a school district in meeting each objective.

If you deem an objective as a #10 (absolutely essential) would the adjacent scale indicating the percentage of the absolute (total score) be considered by you as an acceptable score from a school district in meeting each objective? Refer to Objective 1 scoring column in the questionnaire for clarification.

Acceptable percentage of total score for meeting each objective

75%	70%	65%	60%	55%	50%	45%	40%	35%	30%
10	9	8	7	6	5	4	3	2	1

Absolutely essential

Least essential

If this scale is unacceptable to you, would you please designate the percentage of the absolute (total score) that would be acceptable to you from a school district in meeting each objective.

Acceptable percentage of total score for meeting this objective

10	9	8	7	6	5	4	3	2	1

Absolutely essential

Least essential

Revised Rating Scale according to First Panel of Experts' Recommendations and
Tabulations of Panel Responses and Acceptable Average according to
Criterion for Acceptance

RATING SCALE FOR SCHOOL HEALTH SERVICE QUESTIONNAIRE

In order to help me determine if I have correctly assessed the percentage of the total score necessary to obtain the norm, I would appreciate the following:

- I. Rating each objective on its own merit from absolutely essential for a school health service program to have to least essential for a school health service program to have.
- II. The percentage of the absolute (total score) that you would consider an acceptable score from a school district in meeting each objective.

-
- I. Rating each objective on its own merit from absolutely essential for a school health service program to have to least essential for a school health service program to have. (please circle).

Objective 1

There should be provision for a health service program in each school.

Absolutely essential X
 ⑩ 9 8 7 6 5 4 3 2 1 Least essential

Objective 2

Policies governing school health services should be set forth in writing.

Absolutely essential X
 ⑩ 9 8 7 6 5 4 3 2 1 Least essential

Objective 3

The written policies should be available to all school personnel involved in the health service program.

Absolutely essential X
 ⑩ 9 8 7 6 5 4 3 2 1 Least essential

Objective 4

The guidelines governing school health services should be predicated upon statements of objectives found in the professional literature, should be in compliance with education/child health legislation and regulations, and should take into consideration the philosophy, objectives, and student needs of the local district.

Absolutely essential X
 ⑩ 9 8 7 6 5 4 3 2 1 Least essential

Objective 5

A school nurse should be available to each school to assist pupils, parents, and teachers to understand individual pupil health problems in order to provide proper care for the pupil.

A horizontal line with a vertical tick mark at the left end. Above the tick mark is a small 'X'. Below the line, from left to right, are the numbers 10, 9, 8, 7, 6, 5, 4, 3, 2, 1. To the left of the line is the text "Absolutely essential" and to the right is the text "Least essential".

Objective 6

The service of a physician as medical advisor should be available to the health professional servicing each school in order to assist with student health problems.

Absolutely	x	x							x	Least
essential	10	(9)	8	7	6	5	4	3	2	1 essential

Objective 7

Each school should require health examinations of all pupils upon school entrance and periodically thereafter as necessary, dependent upon the student's physical condition.

Absolutely			X	X	X							Least
essential	10	9	8	(7)	6	5	4	3	2	1		essential

Objective 8

Schools should employ screening devices on a continuous basis to determine the status of each pupil's health.

Absolutely essential (10) 9 8 7 6 5 4 3 2 1 Least essential

Objective 9

Each school should follow established disease control procedures.

Absolutely essential (10) 9 8 7 6 5 4 3 2 1 Least essential

Objective 10

Each school should provide for the emergency care of pupils who become ill or injured while under school jurisdiction.

Absolutely essential (10) 9 8 7 6 5 4 3 2 1 least essential

Objective 11

Provision should be made for the care of the handicapped child who is able to benefit from regular classroom instruction but who requires special consideration because of his/her condition.

A horizontal line with a vertical tick mark at the left end labeled 'X'. Below the line, the numbers 9, 8, 7, 6, 5, 4, 3, 2, 1 are written from left to right. To the left of the line is the text 'Absolutely essential' and to the right is 'Least essential'. A small circle containing the number 10 is positioned at the left end of the line, corresponding to the 'X' tick mark.

Objective 12

Each school should utilize a standard permanent pupil health record form.

A horizontal line with a vertical tick mark at the left end and a vertical line at the right end. Above the left tick mark is a small 'x' and the word 'Least'. Below the left tick mark is the word 'essential'. Above the right tick mark is the word 'Least'. Below the right tick mark is the word 'essential'. The line is divided into segments by vertical tick marks. The segments are labeled with numbers 1 through 10 from right to left. The segment between the rightmost tick mark and the next one to the left is labeled '1'. The segment between the next tick mark to the left and the next one to the left is labeled '2'. The segment between the next tick mark to the left and the next one to the left is labeled '3'. The segment between the next tick mark to the left and the next one to the left is labeled '4'. The segment between the next tick mark to the left and the next one to the left is labeled '5'. The segment between the next tick mark to the left and the next one to the left is labeled '6'. The segment between the next tick mark to the left and the next one to the left is labeled '7'. The segment between the next tick mark to the left and the next one to the left is labeled '8'. The segment between the next tick mark to the left and the next one to the left is labeled '9'. The segment between the next tick mark to the left and the leftmost tick mark is labeled '10'.

Objective 13

The school health service program should include referral procedures.

Absolutely essential (10) 9 8 7 6 5 4 3 2 1 Least essential

Objective 14

Each school should establish follow-up procedures to assure that pupils receive examination for suspected health problems and treatment for identified health problems.

Absolutely essential 10 9 8 7 6 5 4 3 2 1 Least essential

Objective 15

Teacher training should include a basic health science course, as well as a human development course including the physiological aspects of human growth and development.

Absolutely				X	X		X							Least
essential	10	9	8	(7)	6	5	4	3	2	1				essential

Objective 16

Preparation for school nursing should include academic courses in education as well as nursing leading towards a baccalaureate degree in nursing and a state certification in school nursing.

Absolutely	x													Least
essential	(10)	9	8	7	6	5	4	3	2	1				essential

Objective 17

The school health service program should be evaluated periodically to determine strengths and weaknesses, to make improvements and update procedures in line with medical advancement.

Absolutely essential 10 9 8 7 6 5 4 3 2 1 Least essential

- II. The percentage of the absolute (total score) that you would consider an acceptable score from a school district in meeting each objective.

If you deem an objective as a #10 (absolutely essential) would the adjacent scale indicating the percentage of the absolute (total score) be considered by you as an acceptable score from a school district in meeting each objective? Refer to Objective 1 scoring column in the questionnaire for clarification.

Acceptable percentage of total score for meeting each objective

XX										
75%	70%	65%	60%	55%	50%	45%	40%	35%	30%	
10	9	8	7	6	5	4	3	2	1	

Absolutely essential

Least essential

If this scale is unacceptable to you, would you please designate the percentage of the absolute (total score) that would be acceptable to you from a school district in meeting each objective.

Acceptable percentage of total score for meeting this objective

X										
90%										10%
10	9	8	7	6	5	4	3	2	1	

Absolutely essential

Least essential

Note. Underlined sections in objectives represent panel revisions.

The X's mark panel responses.

The circled numbers on the rating scale per objective represent the acceptable average of two of three of the panel of experts as the criterion for acceptance.

APPENDIX D

REVISED QUESTIONNAIRE FOR SECOND PANEL OF EXPERTS AND
PANEL RESPONSES TO INSTRUCTIONS

A SELF-ASSESSMENT TOOL FOR MEASURING ESSENTIAL COMPONENTS UTILIZED
IN SCHOOL HEALTH SERVICES PROGRAMS

Introduction: The purpose of this instrument is to provide the administrator with a tool to measure essential components utilized in school health services programs. Through usage of this tool, discrepancies may be identified and the administrator of a school health services program may then engage in the process of planned changes for the improvement of health care for their students.

The scale used in the questionnaire is as follows:

- 4 -- Always (a constant 100%)
- 3 -- Usually (almost always a constant 100% but with a few exceptions)
- 2 -- Sometimes (occurs upon occasion but not regularly)
- 1 -- Rarely (an unusual circumstance)
- 0 -- Never (does not occur)

When answering the questionnaire, please use the designated number. Upon completion, you will find the key to the scoring and instructions on the last page.

		Panel of Expert Responses				
		Answer	A		B	
			yes	no	yes	no
<u>Component 1</u>						
<u>Health Services Program</u>						
Total Possible Score	4	1. Are funds appropriated for a School Health Services(SHS) Program?	---	3		3
	4	2. Are these funds adequate to conduct a good SHS program in your community?	---	3		3
<u>Health Service Personnel</u>						
	4	1. Is the person most responsible for conducting the SHS program at the individual school level a school nurse (R.N.)?	---	2		3

		Panel of Expert Responses				
		Answer	A		B	
			yes	no	yes	no
4	4. Is the average nurse/pupil ratio in your school district below 1:1500?	—	3		3	
4	5. In your opinion, is the amount of time you or your personnel spend in each school conducting the SHS program adequate to meet the needs of your community?	—	3		3	
<u>Space and Facilities</u>						
4	6. Do your schools have a room especially designated for taking care of sick or injured students?	—	2	1	3	
4	7. Is there adequate space for students who are injured or ill to wait until transportation home or to a doctor?	—	3		3	
4	8. Is there a separate room or adequate space where the school physician, nurse, and other specialist can perform health examinations, vision and hearing testing, counseling, and hold private conferences or small group conferences?	—	2	1	3	
4	9. Are facilities adequate for handling health emergencies (i.e., diabetic coma, epileptic seizures, etc.), and serious injuries?	—	2	1	3	
4	10. Is adequate equipment available for use in medical and emergency care and screening?	—	3		3	
4	11. Are the number of cots per clinic adequate to meet student needs?	—	3		3	
4	12. Is there adequate provision in the school budget for replenishing supplies as needed during the school year?	—	3		3	
4	13. Is there adequate space for storing supplies, equipment, records, etc.?	—	3		3	
4	14. Does your local School Board of Education provide most of the equipment for medical care and screening?	—	2	1	3	

		Panel of Expert Responses			
		A		B	
		yes	no	yes	no
Total possible score (TPS)	56				
Acceptable	75%				
Derived score (DS) for Component (Comp.) 1	= 42				
10% range	36.4 to 47.6				
Component 2					
<u>Governing Policies and Community Needs</u>					
15. Are the following aspects of school health services (a) available in your school district, and (b) are the listed aspects governed by <u>written</u> policy procedure?		3		3	
Check only those aspects applicable to your school district					
	Service Available Answer			Written Policy Procedure Answer	
(a) Requirements for physical examinations upon school entrance and thereafter as needed.	---	3		3	
(b) Health observation by teachers.	---	3		3	
(c) Screening by health personnel.	---	2	1	3	
(d) Procedures to refer students to medical personnel.	---	3		3	
(e) Notification of findings to parents or guardian.	---	2	1	3	
(f) Notification of findings to appropriate school personnel.	---	2	1	3	

		Panel of Expert Responses			
		A		B	
		yes	no	yes	no
	Service Available Answer				
	Written Policy Procedure Answer				
(g) Established liaison with community health resources.	---	---	3	3	
(h) Follow-up procedures.	---	---	3	3	
(i) Health counseling.	---	---	3	3	
(j) Cumulative health records.	---	---	3	3	
(k) Control of communicable diseases.	---	---	3	3	
(l) Provision for physically handicapped and special ed. students.	---	---	3	3	
(m) Emergency care for illness or injury while student is at school.	---	---	3	3	
(n) Role of the school nurse in the school health service program.	---	---	3	3	
(o) Role of the teacher in the school health services program.	---	---	3	3	
(p) Reporting child abuse.	---	---	3	3	
(q) Administration of medication by school personnel.	---	---	3	3	
(r) Eye-injury reporting and eye-protective devices.	---	---	3	3	

				Panel of Expert Responses				
				Answer	A		B	
					yes	no	yes	no
				Service Available Answer	Written Policy Procedures Answer			
				(s) Consultation and coordination with other student services and related instructional programs.	---	---	3	3
				(t) Planning and development of health program.	---	---	3	3
				(u) Evaluation of the school health services program.	---	---	3	3
Count "Written Policy" only - TPS				84				
Acceptable				75%				
DS for Comp. 2				= 63				
10% range 54.6 to 71.4								
Component 1								
TPS				4				
Acceptable				75%				
DS for Comp. 3				= 3				
10% Range 2.6 to 3.4								
Component 4								
4								
				16. If written policies and procedures governing the SHS program have been prepared, do the principals, health personnel, office personnel, teachers, and other support personnel have access to copies for reference?				
				3				
				3				
				17. Is there a joint planning or sharing of ideas between your school district, health department, educational agency, health professional associations, and community groups as to policies and guidelines for the SHS program?				
				3				
				3				

		Panel of Expert Responses				
		Answer	A		B	
			yes	no	yes	no
4	18. Is there an established means of relaying and receiving school health concerns to and from your community?	—	2	1	3	
4	19. In your opinion, is your school health program meeting the needs of your community?	—	3		3	
TPS	12					
Plus Question 15						
"Service Available only" TPS						
	84					
Total TPS	96					
Acceptable	75%					
DS for Comp. 4	= 72					
10% Range 62.4 to 81.6						
Component 5						
Count question 3 through 5						
TPS	12					
Acceptable	75%					
DS for Comp. 5	9					
10% Range 7.8 to 10.2						
Component 6						
<u>Health Examinations</u>						
4	20. Is a physician available to your school district in the capacity of medical consultant as needed?		3		3	

		Panel of Expert Responses			
	Answer	A		B	
		yes	no	yes	no
8	21. For what purposes is the physician available (check any that apply): ___ (a) Consultant for individual children. ___ (b) General advisor to health personnel on conducting the SHS program.	3 3		3 3	
12	22. Does your school district require children to have a comprehensive health examination: (a) Upon entrance to school? (b) At mid-school (6-7 grades) and before leaving school (11-12 grades)? (c) Upon identification of problems?	3 3 3		3 3 3	
	Answer either question 23 or 24 (not both).				
12	23. Under what conditions are routine health examinations given to children through your SHS program: (a) as periodic screening (b) as part of health referral (c) special education candidates or: 24. If health examinations are not provided through the SHS program, what means are utilized for children needing examinations? (check any that apply) (a) private physician (b) clinics/health department (c) voluntary agencies/civic groups providing payment for examinations	2 2 2 3 3 3	1 1 1	3 3 3	

TPS 12
 Acceptable 70%
 DS for Comp. 8
 10% Range 7.2 to 9.6

Component 7

		Answer	Panel of Expert Responses			
			A		B	
			yes	no	yes	no
4	25. Are health histories routinely obtained on new students to the school district?	—	3		3	
4	26. Are students enrolled in athletic programs required to have health examinations?	—	3		3	
4	27. Are children identified who are enrolled in the EPSDT program (Early Periodic Screening Diagnosis and Treatment) and is screening information shared on identified EPSDT students between your school district and the Department of Welfare?	—	2	1	3	
4	28. Are dental examinations recommended upon entrance to school?	—	3		3	
<div> <div>TFS</div> <div>Acceptable</div> <div>DS for Comp. 7</div> <div>10% Range 20 to 28</div> </div> <div> <div>40</div> <div>60%</div> <div>= 24</div> </div>						
Component 8						
<u>Screening</u>						
4	29. Is your equipment in optimum working order at all times and are procedures and criteria for screening periodically reviewed with your staff?	—	2	1	3	
4	30. Do teachers use a worksheet for student health observation for screening referral?	—	2	1	3	
4	31. Are specialists available to your screening program for technical assistance?	—	3		3	
12	32. Is vision screening done:					
	(a) on a periodic set schedule?	—	3		3	
	(b) on all new students?	—	3		3	
	(c) on referrals?	—	3		3	

		Panel of Experts				
		Answer	Response			
			A	B		
			yes	no	yes	no
4	33. Are all new students to your school district screened for vision within a 90-day period?	—	3		3	
4	34. Do you screen children in the primary grades for eye imbalance, farsightedness, nearsightedness, and color discrimination?	—	2	1	3	
12	35. Is hearing screening done:					
	on a periodic set schedule?	—	2	1	3	
	on all students?	—	2	1	3	
	on referrals?	—	2	1	3	
4	36. Are students who fail the first screening on vision and hearing rechecked within a 2-4 week period?	—	3		3	
12	37. Is dental screening done:					
	on a periodic set schedule?	—	3		3	
	on all new students?	—	3		3	
	on referrals?	—	3		3	
12	38. Is height and weight screening done:					
	on a periodic set schedule?	—	3		3	
	on all new students?	—	3		3	
	on referrals?	—	3		3	
12	39. Is orthopedic/scoliosis screening done (at appropriate age levels):					
	on a periodic set schedule?	—	3		3	
	on all new students?	—	3		3	
	on referrals?	—	3		3	
12	40. Other screening provided (please specify): _____					
	on a periodic set schedule?	—	1	2	3	
	on all new students?	—	1	2	3	
	on referrals?	—	1	2	3	

TPS 100
 Acceptable 75
 DS for Comp. B 75
 10% Range 65 to 85

Component 9

Communicable Disease Control

		Answer	Panel of Experts Responses			
			A		B	
			yes	no	yes	no
4	41. Do your nurses provide direct or indirect health education for students related to the specific screening being offered (care of eyes, ears, dental, growth, and development, etc.)?	—	3		3	
4	42. Do you have an established means of informing parents and teachers of communicable disease control policies?	—	3		3	
4	43. Do you have a system for reporting children with suspected communicable diseases to the health department?	—	3		3	
4	44. Are children with symptoms of communicable disease isolated from other children in the clinic?	—	2	1	3	
4	45. Are children with symptoms of communicable disease sent home?	—	3		3	
4	46. Do teachers inspect students for communicable disease on a periodic basis?	—	2	1	3	
4	47. When pupils are absent from school because of communicable disease, are they readmitted only with release from physician or health department or upon verification for readmittance by the school nurse?	—	3		3	
4	48. Does your school district have a formal plan for enforcing Texas State Immunization laws?	—	3		3	

TPS 40
 Acceptable 75%
 DS for Comp. 9 = 30
 10% Range 26 to 34

Component 10

			Answer	Panel of Experts Responses			
				A		B	
				yes	no	yes	no
4	49.	If children are not immunized by a private physician, do you have community resources available to ensure compliance with state law?	---	3		3	
4	50.	Are immunizations ever administered through the SIS program?	---	2	1	2	1
4	51.	Do your nurses provide direct or indirect health education to students, teachers, and the community concerning communicable disease control?	---	2	1	3	
Emergency Care							
4	52.	If written directives concerning emergency care for students who become seriously ill or injured while at school have been prepared, do your principals, teachers, health personnel, and office personnel have them on hand for immediate use?	---	2	1	3	
4	53.	Are emergency directives posted on the appropriate areas in your schools? (school office, clinic, science lab, shops, P.E., home economics room, etc.).	---	3		3	
4	54.	Are emergency medical treatment authorization forms renewed annually on all students and on file in each school?	---	3		3	
4	55.	Are there designated persons (other than nurses) with current first aid preparation available for administering first aid or providing direction in emergency cases in each school?	---	3		3	

		Panel of Experts Responses				
		Answer	A		B	
			yes	no	yes	no
4	56. Is there a designated person (other than nurse) with a current cardiopulmonary resuscitation certificate in each school?	—	3		3	
4	57. Are there procedures regarding a system for reporting school accidents in effect at each school?	—	3		3	
4	58. Do you have a safety committee which plans a safety education program after reviewing the accident report data in your school district?	—	3		3	
4	59. Are students in interscholastic contact athletics required to have mouth protectors?	—	3	2	1	
4	60. Are there emergency disaster plans developed between your school district and the community authorities?	—	3		3	
TPS		36				
Plus Questions 6-14						
Total TPS		36				
		72				
Acceptable		75				
DS for Comp. 10		54				
10% Range 46.8 to 61.2						

Component 11		<u>Provision for the Underpar or Physically Handicapped</u>				
4	61. Are provisions made for the student who has a physical health problem that permits him/her to benefit from regular class attendance but who requires special care (e.g., rest periods, reduced amount of physical exercise, increased opportunity for physical exercise, extra meals, shortened school day, lightened work load, or other provisions)?	—	2	1	3	

		Answer	Panel of Experts Responses			
			A		B	
			yes	no	yes	no
4	62. In your opinion, do most teachers in your school district appear to be prepared to assume responsibility for health observation for detection of signs of deviation from normal among their pupils?	—	2	1	3	
4	63. Are the regular classroom teachers in your school district provided inservice programs to improve their health observation and referral skills (nurse/staff presentations; work shops; etc.)?	—	3		3	
12	64. Are the following provisions made for children with special problems:					
	(a) physical facilities (ramps, special toilets, rest areas, bus transportation)?	—	3		3	
	(b) special services (O.T., P.T., speech therapy, psychological services, homebound)?	—	3		3	
	(c) inservice education for teachers and auxillary personnel?	—	3		3	
4	65. Does the SHS program have a system for identifying students with chronic health problems and seeing that appropriate school personnel are informed?	—	2	1	3	
TPS 28 Acceptable 75% DS for Comp. 11 = 21 10% Range 18.2 to 23.8						
Component 12						
Pupil Health Record						
4	66. Is a standard permanent health record form utilized for each child in school?	—	3		3	
4	67. Do your nurses utilize health records during conferences with other authorized school personnel?	—	3		3	

		Panel of Experts Responses				
		Answer	A		B	
			yes	no	yes	no
12	68. Check the following information that is recorded on your permanent health records: (a) Past (health history, immunizations, physical examinations) (b) Present (screening results, referral and follow-up information, current health problems, conferences held) (c) Future (nursing plans).	— — —	3 3 3		3 3 3	
4	69. Is a copy of the permanent health record transferred when a child changes schools?	—	2	1	2	1
TPS 24 Acceptable 75% DS for Comp. 12 = 18 10% Range 15.6 to 20.4						
Component 13						
<u>Referral Procedure</u>						
4	70. Is there a specific procedure consistently followed in referral of children with suspected health problems?	—	3		3	
4	71. To what extent are the following procedures followed in health problem referrals? (a) parents are notified of child's suspected health problem by school personnel. (b) Parents are expected to assume responsibility for taking child to family physician or pediatrician.	— —	3 3		3 3	
4	72. Besides written communication, does the nurse communicate with parents concerning health defects and needed action by telephone, conferences at school, and home visits?	—	3		3	
4	73. Is the nurse given time for counseling?	—	3		3	

TFS 12
 Acceptable 75
 DS for Comp. 13 = 24
 10x range 20.8 to 27.2

Component 14

			Answer	Panel of Experts Responses			
				A		B	
				yes	no	yes	no
4	74.	Is your community directory of health services readily available to your nurses?	—	3		3	
4	75.	Do you have an established list of community resources utilized for referral of students with suspected health problems who are unable to afford a private physician (hospital clinics, health department, voluntary agencies, civic groups, etc.)?	—	3		3	
4	76.	Are teacher-nurse conferences scheduled to discuss health defects discovered during screening?	—	3		3	
<u>Follow-up Procedures</u>							
	77.	If a student has been referred for examination after a health problem has been suspected, what steps are taken to insure that medical care is received and physician's instructions are followed:					
4	(a)	Contact the parents to learn if the child has been examined by a physician and what the findings and prescribed treatment were.	—	3		3	
4	(b)	Arrangements are made through community resources for children whose parents cannot afford such services as vision, hearing, dental, orthopedic, medical problems, etc.	—	3		3	
4	(c)	Arrange a nurse-parent-teacher conference to discuss the child's health problem(s) and evaluate progress as needed.	—	3		3	
4	(d)	Make arrangements for treatment or medication if prescribed and consented to by parents in the school setting.	—	3		3	
4	(e)	Classroom adjustments are made as indicated.	—	3		3	

		Answer	Panel of Experts Responses	
			A yes no	B yes no
TPS	20			
Acceptable	75%			
DS for Comp. 14	15			
10% Range 13 to 17				
<hr/>				
Component 15				
	<u>Teacher Preparation</u>			
	78. Do your elementary teachers have background education in:			
4	(a) Health education and/or health science?	—	3	3
4	(b) Human growth and development (include physiological aspects)?	—	3	3
4	79. Are your secondary teachers who teach health certified in health education?	—	3	3
TPS	12			
Plus questions 61 through 65 TPS	28			
Total TPS	40			
Acceptable	60%			
DS for Comp. 15	24			
10% Range 20 to 28				
<hr/>				
Component 16				
	<u>Nurse Preparation</u>			
4	80. Is the person responsible for the coordination and administration of the school health service program district wide a registered nurse employed by the school district?	—	3	3
16	81. As the designated person most responsible for conducting the school district, are you required by job description to:			
	(a) be a registered nurse?	—	3	3
	(b) hold a B.S. degree or higher?	—	3	3

		Panel of Experts Responses			
		Answer	A yes no	B yes no	
12	(c) hold a Texas School Nurse Certificate?	—	3	3	
	(d) have had a minimum of 3 years experience in school health programs before being employed?	—	3	3	
	82. Do you as the person most responsible for health services:				
	(a) attend workshops or enroll in courses related to school health annually?	—	3	3	
	(b) read two or more nursing and/or school health journals regularly?	—	3	3	
36	(c) hold membership and attend a professional school health organization?	—	2	1	3
	83. Are or have the majority (75% or over) of your staff nurses:				
	(a) registered as RN's in the state of Texas?	—	3	3	
	(b) state certified in school nursing?	—	3	3	
	(c) holders of a BS degree or higher?	—	3	3	
20	(d) had academic courses in school health?	—	3	3	
	(e) had academic courses in education?	—	3	3	
	(f) had a course in physical assessment?	—	3	3	
	(g) currently certified in CPR?	—	3	3	
	(h) who do vision screening, state certified vision screeners?	—	3	3	
	(i) who do hearing screening, state certified hearing screeners?	—	3	3	
	84. Does the school district provide:				
	(a) time for the coordinator to hold scheduled staff meetings individual coordinator-nurse conferences, and provide assistance-on-site in order to keep staff nurses current and improve their professionalism?	—	3	3	
	(b) inservice education programs for nurses?	—	3	3	
	(c) funds designated for nurses to attend workshops during school time?	—	3	3	
	(d) for attendance at professional organizational meetings during schooltime?	—	3	3	
	(e) for arrangements to be made in order that nurses may enroll in academic courses?	—	3	3	

TPS 92
 Acceptable 75
 DS for Comp. 16 69
 10% Range 59.8 to 78.2

Component 17

		Panel of Experts Response			
		A		B	
		yes	no	yes	no
Answer					
4	85. Do you have a prepared orientation for new nurses to your district?	—	3		3
4	86. Is a means consistently utilized to evaluate your nursing personnel for updating and improving professionalism (such as self-evaluation, principal/nurse/co-ordinator evaluation observation checklists, performance reports, etc.)?	—	3		3
4	87. Does your SHS program have written goals and objectives?	—	3		3
4	88. Do you have a means of measurement to determine when you have obtained your goals and objectives?	—	3		3
4	89. Do you have means or tools established to determine the effectiveness and efficiency of the specific components (screening programs, emergency/first-aid care, C.D. control, recording system, etc.) of your SHS program?	—	3		3
4	90. Is evaluation of your overall health service program done on a periodic set schedule (at least every 5 years)?	—	2	1	3
4	91. Before this questionnaire, have you ever utilized a comprehensive instrument to assess your total SHS program?	—	2	1	3
4	92. Does your nursing staff provide input for inservice program topics and are the nurses provided with a means of evaluating the inservice programs?	—	3		3

TPS 32
 Acceptable 75%
 DS for Comp. 17 = 24
 10% Range 20.8 to 27.2

		Answer	Panel of Experts Responses			
			A		B	
			yes	no	yes	no
4	91. Is your nursing staff involved in nursing research to improve health services?	—	2	1	3	
	Source: Martin, J. E. <u>Needs assessment of school health services programs in the Commonwealth of Virginia</u> . Unpublished manuscript, University of Virginia, 1977.					
	Ohio Department of Education, Health, Physical Education, and Recreation Section. <u>Self-appraisal checklist</u> , Columbus, Ohio, 1966.					

Key to Self-Scoring

In order to determine your score for the essential components existing in your school health services program, the following key is provided. By totaling the numbers by which you answered each question according to the key used below, you will obtain a score for each component.

You may then compare your score to the researcher derived score in order to determine where your health services program stands on that particular component. If your score falls within the range as listed, you are meeting that component adequately; if your score is higher than the range, you are more than adequate; if your score is below the range, your score is inadequate and you may wish to examine that component more closely to plan for improvement in your school health services program.

	Related Questions	Your Score	Derived Score Range
<u>Component 1</u>			
There should be provision for a health service program in each school.	Includes questions 1-14	___	36.4 to 47.6
<u>Component 2</u>			
Policies governing school health services should be set forth in writing.	Includes questions 15-the "Written Policy/Procedure" only	___	54.6 to 71.4
<u>Component 3</u>			
The written policies should be available to all school personnel involved in the health services program.	Question 16	___	2.6 to 3.4
<u>Component 4</u>			
The guidelines governing school health services should be predicated upon statements of objectives found in the professional literature, should be in compliance with education/child health regulation and regulations, and should take into consideration the philosophy, objectives, and student needs of the local district.	Includes questions 17-19, plus question 15, "Service Available" only	___	62.4 to 81.6

	Related Questions	Your Score	Derived Score Range
<u>Component 5</u> A school nurse should be available to each school to assist pupils, parents, and teachers to understand individual pupil health problems in order to provide proper care for the pupil.	Includes questions 1-5	—	7.8 to 10.2
<u>Component 6</u> The service of a physician as medical advisor should be available to the health professional servicing each school in order to assist with student health problems.	Questions 20 and 21	—	7.2 to 9.6
<u>Component 7</u> Each school should require health examinations of all pupils upon school entrance and periodically thereafter as necessary, dependent upon the student's physical condition.	Questions 22-28	—	20 to 28
<u>Component 8</u> Schools should employ screening devices on a continuous basis to determine the status of each pupil's health.	Questions 29-41	—	65 to 85
<u>Component 9</u> Each school should follow established disease control procedures.	Questions 42-51	—	26 to 34
<u>Component 10</u> Each school should provide for the emergency care of pupils who become ill or injured while under school jurisdiction.	Questions 52-60, plus questions 6-14	—	46.8 to 61.2

	Related Questions	Your Score	Derived Score Range
<u>Component 11</u> Provision should be made for the care of the handicapped child who is able to benefit from regular classroom instruction but who requires special consideration because of his/her condition.	Questions 61-65	—	18.2 to 23.8
<u>Component 12</u> Each school should utilize a standard permanent pupil health record form.	Questions 66-69.	—	15.6 to 20.4
<u>Component 13</u> The school health services program should include referral procedures.	Questions 70-76	—	20.8 to 27.2
<u>Component 14</u> Each school should establish follow-up procedures to assure that pupils receive examination for suspected health problems and treatment for identified health problems.	Question 77	—	13 to 17
<u>Component 15</u> Teacher training should include a basic health science course, as well as a human development course including the physiological aspects of human growth and development.	Questions 78 and 79, plus questions 61-65	—	20 to 28
<u>Component 16</u> Preparation for school nursing should include academic courses in education as well as nursing leading towards a baccalaureate degree in nursing and a state certification in school nursing.	Questions 80-85	—	59.8 to 78.2

	Related Questions	Your Score	Derived Score Range
<u>Component 17</u>			
The school health services program should be evaluated periodically to determine strengths and weaknesses, to make improvements, and update procedures in line with medical advancement.	Questions 86-		
	93	_____	20.8 to 27.2
		Your Total Score	Total SHS Derived Score
		_____	<u>509.6 to 666.4</u>

By totaling the scores you obtained for each component, you will obtain a total composite score which indicates your total school health services program score. Thus, in addition to assessing your total SHS program this tool also identifies for you any of the existing components that may indicate a need for planned improvement in your health services program according to the feasibility and the requisites inherent in your individual school district.

Further Comments and Suggestions by Panel of Experts:

Dear _____:

I would like to thank you for consenting to be on the panel of experts necessary for the development of the self-assessment tool for administrators to measure the essential components utilized in their school health services programs. Enclosed are the instructions and the questionnaire presented for your consideration.

I would appreciate having your responses to the instrument by _____. If this is not possible for you, please contact me at 242-3739. A self-addressed envelope is enclosed for the return of the tool.

Thank you again for your time and help in developing this instrument.

Sincerely,

Ann H. Eastman
Texas Woman's University
College of Nursing
Graduate Student

Instructions

Enclosed are 93 questions written to measure essential components utilized in school health services programs. The Key to Self-Scoring at the end of the questionnaire shows how the questions tie into each component.

The researcher derived score by which the participants' score is compared was determined by the first panel of experts. The first panel of experts rated each component individually and also determined the percentage acceptable of the total possible score for each component. The scoring mechanism is listed on the left hand side of the questionnaire. Presently, I have taken 10% of the plus and minus side of the acceptable percentage of the total possible score for each component in order to provide a range. This may be adjusted following the pilot study if the 10% range is unacceptable.

Please read each item and answer the following questions:

- A. Is the question written clearly and concisely and without ambiguous words or meanings?
- B. Do you consider each question an important criterion for the component it is listed under in the Key to Self-Scoring?

I would appreciate any comments or suggestions you may have concerning the instrument.

Plans for Improvement

The purpose of the Self-Assessment Tool for Measuring Essential Components Utilized in School Health Services Programs is to assist the school health services administrator in detecting areas of needed improvement. Emphasis is to be placed on detecting areas that may be adversely affecting your program and not on the score obtained. The score is simply an indicator. The following format is offered as a guideline for planning improvement in specific components of your school health services program.

Component _____ has been indicated as needing improvement.

1. Is this a desirable and/or needed component for our school district and community? Yes No
2. Will improvement of this component benefit and students and/or staff in my school district? Yes No
3. Is this component attainable in terms of present or anticipated future resources? Yes No

A "no" answer to any of the above questions eliminates the need for future planning.

List below goals needing immediate attention (prioritize). Completion
Date

1. _____
2. _____

List below objectives for meeting goals.

Goal 1 Objectives:

- (a) _____
- (b) _____

Goal 2 Objectives:

- (a) _____
- (b) _____

List below resources needed to meet goals (money, manpower, material).

Date obtained
by

Resources needed for Goal 1:

(a) _____

(b) _____

Resources needed for Goal 2.

(a) _____

(b) _____

List below goals for future (long range) improvement (prioritize)

Completion
Date

Goals:

1. _____

2. _____

List below objectives for meeting goals.

Goal 1 Objectives:

(a) _____

(b) _____

Goal 2 Objectives:

(a) _____

(b) _____

List below resources needed to meet goals.

Date obtained
by

Resources needed for Goal 1:

(a) _____

(b) _____

Resources needed for Goal 2:

(a) _____

(b) _____

Subsequent administration of the Self-Assessment Tool after improvement implementation should provide the administrator with a means of demonstrating improvement.

APPENDIX E

COMPLETION AND RETURN OF THIS QUESTIONNAIRE WILL BE CONSIDERED AS INFORMED CONSENT

A SELF-ASSESSMENT TOOL FOR MEASURING ESSENTIAL COMPONENTS UTILIZED
IN SCHOOL HEALTH SERVICES PROGRAMS

	<p><u>Introduction:</u> The purpose of this instrument is to provide the administrator with a tool to measure essential components utilized in school health services programs. Through usage of this tool, discrepancies may be identified and the administrator of a school health services program may then engage in the process of planned changes for the improvement of health care for their students.</p> <p>The scale used in the questionnaire is as follows:</p> <p>4 -- Always (a constant 100%) 3 -- Usually (almost always a constant 100% but with a few exceptions) 2 -- Sometimes (occurs upon occasion but not regularly) 1 -- Rarely (an unusual circumstance) 0 -- Never (does not occur)</p> <p>When answering the questionnaire, please use the designated number. Upon completion you will find the key to the scoring and instructions on the last page.</p>	
<p><u>Component 1</u></p> <p>Total Possible Score</p>	<p><u>Health Services Program</u></p> <p>1. Are adequate funds appropriated by your local School Board of Education for your School Health Services (SHS) Program?</p> <p>4</p> <p><u>Health Service Personnel</u></p> <p>2. Is the person most responsible for conducting the SHS program at the individual school level a Registered Nurse?</p> <p>4</p>	<p>Answer</p> <p>—</p> <p>—</p>

-
- 4 3. Is the average nurse/pupil ratio in your school district below 1:1500? _____
- 4 4. In your opinion, is the amount of time you or your personnel spend in each school conducting the SHS program adequate to meet the needs of your community? _____

Space and Facilities

- 4 5. Does each school have a room especially designated for taking care of sick or injured students? _____
- 4 6. Is there adequate space for handling health emergencies and serious injuries? _____
- 4 7. Are the number of cots per clinic adequate to meet student needs? _____
- 4 8. Is there a separate room or adequate space where the school physician, nurse, and/or other specialist can perform indicated physical examinations, vision and hearing testing, counseling, and hold private conferences or small group conferences? _____
- 4 9. Is adequate equipment available for use in medical and emergency care and screening? _____
- 4 10. Is there adequate provision in the school budget for replenishing supplies as needed during the school year? _____
- 4 11. Is there adequate space for storing supplies, equipment, records, etc.? _____

Total possible
score (TPS) 44
Acceptable 75%
Derived score (DS)
for Component
(Comp.) 1 33

10% range 28.6 to 37.4

Component 2

Governing Policies and Community Needs

There are two separate questions to be answered in this section--Question #12 and #13. They are as follows:

- | | | |
|---------------------|----|---|
| "Service Available" | 84 | 12. Does your SHS program provide the following service for your school district? |
| "Written Policy" | 84 | 13. Are written policies and procedures governing the SHS program available to principals, health personnel, office personnel, teachers, and other support personnel for reference? |

Please answer Question 12 first by indicating your answers under the column marked "Question 12, Service Available." Answer items a-u utilizing the Scale 4-0. When you have completed the Service Available column, please return to item (a) under the column marked "Question 13, Available by Written Policy/Procedures." Answer items a-u, utilizing the Scale 4-0.

Question #12
Service
Available
(Answer)

Question #13
Available by
Written Policy/
Procedure
(Answer)

- (a) Physical examinations
of students upon school
entrance and thereafter
as needed.

	Question #12 Service Available (Answer)	Question #13 Available by Written Policy/ Procedure (Answer)
(b) Health observation by teachers.	—	—
(c) Screening (vision, hearing, etc.) by health personnel.	—	—
(d) Procedures to refer students to medical personnel.	—	—
(e) Notification of findings to parents or guardian of suspected health problems.	—	—
(f) Notification of findings to appropriate school personnel of health problems.	—	—
(g) Established liaison with community health resources.	—	—
(h) Follow-up procedures.	—	—
(i) Health counseling.	—	—

	Question #12 Service Available (Answer)	Question #13 Available by Written Policy/ Procedure (Answer)
(j) Cumulative health records.	___	___
(k) Control of communicable diseases.	___	___
(l) Provision for physically handicapped and special education students.	___	___
(m) Emergency care for illness or injury while student is at school.	___	___
(n) Role of the school nurse in the school health services program.	___	___
(o) Role of the teacher in the school health services program.	___	___
(p) Reporting child abuse.	___	___
(q) Administration of medication by school personnel.	___	___
(r) Eye-injury reporting and eye-protective devices.	___	___

		Answer	
		Question #12 Service Available (Answer)	Question #13 Available by Written Policy Procedure (Answer)
Count "Available by Written Policy Procedure" only - TPS 84 Acceptable 75% Do for Comp. 2 = 63 10% range 54.6 to 71.4	(s) Consultation and coordination with other student services and related instructional pro- grams.	---	---
	(t) Planning and development of health program.	---	---
	(u) Evaluation of the school health services program.	---	---
Component 3	4	14. Is there a joint planning or sharing of ideas between your school district, health department, educational agency, health professional associations, and community groups as to policies and guidelines for the SHS program?	

		Answer
4	15. Is there an established means of relaying and receiving school health concerns to and from your community (PTA, Health Advisory Committee, school communications, local newspapers)?	—
4	16. In your opinion, is your school health program meeting the needs of your community?	—
TPS	12	
Plus Question 12		
"Service Available"		
only TPS	84	
Total TPS	96	
Acceptable	75%	
DS for Comp. 3	= 72	
10% Range 62.4 to 81.6		
Component 4		
Count question 2 through 4		
TPS	12	
Acceptable	75%	
DS for Comp. 4	9	
10% Range 7.8 to 10.2		
Component 5		
<u>Health Examinations</u>		
4	17. Is a physician available to your school district in the capacity of medical consultant as needed?	—

		Answer
	8	16. For what purposes is the physician available (check any that apply): <input type="checkbox"/> (a) Consultant for individual children. <input type="checkbox"/> (b) General advisor to health personnel on conducting the SHS program.
TPS	12	
Acceptable	70%	
DS for Comp. 5	8	
10% Range 7.2 to 9.6		
<hr/>		
Component 6	12	19. Does your school district require children to have a comprehensive health examination: <input type="checkbox"/> (a) Upon entrance to school? <input type="checkbox"/> (b) At mid-school (6-7 grades) and before leaving school (11-12 grades)? <input type="checkbox"/> (c) Upon identification of problems?
		Answer either question 20 or 21 (not both).
	12	20. Under what conditions are routine health examinations given to children through your SHS program either by school physician or school nurse: <input type="checkbox"/> (a) as periodic screening <input type="checkbox"/> (b) as part of health referral <input type="checkbox"/> (c) special education candidates or: 21. If health examinations are not provided through the SHS program, what means are utilized for children needing examinations? (check any that apply) <input type="checkbox"/> (a) private physician <input type="checkbox"/> (b) clinics/health department <input type="checkbox"/> (c) voluntary agencies/civic groups providing payment for examinations.

		Answer
4	22. Are health histories routinely obtained on new students to the school district?	—
4	23. Are students enrolled in athletic programs required to have health examinations?	—
4	24. Are children identified who are enrolled in the EPSDT program (Early Periodic Screening Diagnosis and Treatment) and is screening information shared on identified EPSDT students between your school district and the Department of Welfare?	—
4	25. Are dental examinations recommended upon entrance to school?	—
TPS	40	
Acceptable	60%	
DS for Comp. 6	= 24	
10% Range 20 to 28		
Component 7		
<u>Screening</u>		
4	26. Is your equipment in optimum working order at all times?	—
4	27. Are procedures and criteria for screening periodically reviewed with your staff?	—
4	28. Is there an established procedure for teacher referral to the nurse of those students who need screening?	—
	29. Are specialists available to your screening program for technical assistance?	—
	30. Is vision screening done:	—
	(a) on a periodic set schedule?	—
	(b) on all new students?	—
	(c) on referrals?	—

		Answer
4	31. Are all new students to your school district screened for vision within a 90-day period?	---
4	32. Do you screen children in the primary grades (K-3) for eye imbalance, farsightedness, nearsightedness, and color discrimination?	---
12	33. Is hearing screening done: on a periodic set schedule? on all new students? on referrals?	--- --- ---
4	34. Are students who fail the first screening on vision and hearing rechecked within a 2-4 week period?	---
12	35. Is dental screening done: on a periodic set schedule? on all new students? on referrals?	--- --- ---
12	36. Is height and weight screening done: on a periodic set schedule? on all new students? on referrals?	--- --- ---
12	37. Is orthopedic/scoliosis screening done (at appropriate age levels): on a periodic set schedule? on all new students? on referrals?	--- --- ---

		Answer
4	38. Do your nurses provide direct or indirect health education for students related to the specific screening being offered (care of eyes, ears, dental, growth, and development, etc.)?	—
TPS	88	
Acceptable	74.8	
DS for Comp. 7	66	
10% Range 57.2 to 74.8		
Component 8		
<u>Communicable Disease Control</u>		
4	39. Do you have an established means of informing parents and teachers of communicable disease control policies?	—
4	40. Do you have a system for reporting children with suspected communicable diseases to the health department?	—
4	41. Are children with symptoms of communicable diseases sent home?	—
4	42. Are children with symptoms of communicable disease isolated from other children in the clinic while waiting transportation home?	—
4	43. Do teachers inspect students for communicable disease on a periodic basis?	—
4	44. When pupils are absent from school because of communicable disease, are they readmitted only with release from physician or health department or upon verification for readmittance by the school nurse?	—
4	45. Does your school district have a formal plan for enforcing Texas State Immunization laws?	—

	4	46. If children are not immunized by a private physician, do you have community resources available to ensure compliance with state law?	
	4	47. Do your nurses provide direct or indirect health education to students, teachers, and the community concerning communicable disease control?	
TPS	36		
Acceptable	75%		
DS for Comp. 8	= 27		
10% Range 23.4 to 30.6			
<hr/>			
Component 9		<u>Emergency Care</u>	
	4	48. Do your principals, teachers, health personnel, and office personnel have written directives readily available concerning emergency care for students who become seriously ill or injured while at school?	
	4	49. Are emergency directives posted on the appropriate areas in your schools? (school office, clinic science lab, shops, P.E., home economics room, etc.).	
	4	50. Are emergency medical treatment authorization forms renewed annually on all students and on file in each school?	
	4	51. Are there designated persons (other than nurses) with current first aid preparation available for administering first aid or providing direction in emergency cases in each school?	

	4	52. Is there a designated person (other than nurse) with a current cardiopulmonary resuscitation certificate in each school?	---
	4	53. Are there procedures regarding a system for reporting school accidents in effect at each school?	---
	4	54. Do you have a safety committee which plans a safety education program after reviewing the accident report data in your school district?	---
	4	55. Are there emergency disaster plans developed between your school district and the community authorities?	---
TPS	32		
Plus Questions 5-11	28		
Total TPS	60		
Acceptable	75%		
DS for Comp. 9	45		
10% Range 39 to 51			
<hr/>			
Component 10		<u>Provision for Students with Special Problems</u>	
	4	56. Are provisions made for the student who has a physical health problem that permits him/her to benefit from regular class attendance but who requires special care (e.g., rest periods, reduced amount of physical exercise, increased opportunity for physical exercise, extra meals, shortened school day, lightened work load, or other provisions)?	---

		Answer
4	57. In your opinion, do most teachers in your school district appear to be prepared to assume responsibility for health observation for detection of signs of deviation from normal among their pupils?	---
4	58. Are the regular classroom teachers in your school district provided inservice programs to improve their health observation and referral skills (nurse/staff presentations; work shops; etc.)?	---
12	59. Are the following provisions made for children with special problems: (a) physical facilities (ramps, special toilets, rest areas, bus transportation)? (b) special services (O.T., P.T., speech therapy, psychological services, homebound)? (c) inservice education for teachers and auxiliary personnel?	--- --- ---
4	60. Does the SHS program have a system for the identification of students with chronic health problems and notification of appropriate school personnel?	---
TPS	28	
Acceptable	75%	
DS for Comp. 10	= 21	
10% Range 18.2 to 23.8		
Component 11		<u>Pupil Health Record</u>
4	61. Is a standard permanent health record form utilized for each child in school?	---
4	62. Do your nurses utilize health records during conferences with other authorized school personnel?	---

		Answer
12	63. Check the following information that is recorded on your permanent health records: (a) Past (health history, immunizations, physical examinations) (b) Present (screening results, referral and follow-up information, current health problems, conferences held) (c) Future (nursing plans).	_____ _____ _____
4	64. Upon obtaining legal parental release, is a copy of the cumulative health record sent to the receiving school when a student leaves your school district?	_____
TPS	24	
Acceptable	75%	
DS for Comp. 11	= 18	
10% Range 15.6 to 20.4		
Component 12		
<u>Referral Procedure</u>		
4	65. Is there a specific procedure consistently followed in referral of children with suspected health problems?	_____
8	66. To what extent are the following procedures followed in health problem referrals? (a) parents are notified of child's suspected health problem by school personnel. (b) Parents are expected to assume responsibility for taking child to family physician or pediatrician.	_____ _____ _____
4	67. Besides written communication, does the nurse communicate with parents concerning health defects and needed action by telephone, conferences at school, and home visits?	_____
4	68. Is the nurse given time for counseling?	_____

		Answer
4	69. Is your community directory of health services readily available to your nurses?	---
4	70. Do you have an established list of community resources utilized for referral of students with suspected health problems who are unable to afford a private physician (hospital clinics, health department, voluntary agencies, civic groups, etc.)?	---
4	71. Are teacher-nurse conferences scheduled to discuss health defects discovered during screening?	---
TPS	32	
Acceptable	75%	
DS for Comp. 12	= 24	
10% Range	20.8 to 27.2	
Component 13		
<u>Follow-up Procedures</u>		
	72. If a student has been referred for examination after a health problem has been suspected, what steps are taken to insure that medical care is received and physician's instructions are followed:	
4	(a) Contact the parents to learn if the child has been examined by a physician and what the findings and prescribed treatment were.	---
4	(b) Arrangements are made through community resources for children whose parents cannot afford such services as vision, hearing, dental, orthopedic, medical problems, etc.	---
1	(c) Arrange a nurse-parent-teacher conference to discuss the child's health problem(s) and evaluate progress as needed.	---
4	(d) Make arrangements for treatment or medication if prescribed and consented to by parents in the school setting.	---
4	(e) Classroom adjustments are made as indicated.	---

Answer:

TPS 20
 Acceptable 75%
 DS for Comp. 13 = 15
 10% Range 13 to 17

Component 14

Includes questions 28,
 39, 43, 47 through 52,
 56 through 60, 71, &
 72 (c and e).

TPS 76
 Acceptable 60%
 DS for Comp. 14 46
 10% Range 38.4 to 53.6

Component 15

Nurse Preparation

- | | | |
|----|--|-------------------|
| 4 | 73. Is the person responsible for the coordination and administration of the school health service program district wide a registered nurse employed by the school district? | --- |
| 16 | 74. As the designated person most responsible for conducting the school district's health services program, are you required by job description to:
(a) be a registered nurse?
(b) hold a B.S. degree or higher? | ---

--- |

		Answer
	(c) hold a Texas School Nurse Certificate?	---
	(d) have had a minimum of 3 years experience in school health programs before being employed?	---
12	75. Do you as the person most responsible for health services:	
	(a) attend workshops or enroll in courses related to school health annually?	---
	(b) read two or more nursing and/or school health journals regularly?	---
	(c) hold membership and attend meetings of a professional school health organization?	---
36	76. Are or have the majority (75% or over) of your staff nurses:	
	(a) registered as RN's in the state of Texas?	---
	(b) state certified in school nursing?	---
	(c) holders of a BS degree or higher?	---
	(d) had academic courses in school health?	---
	(e) had academic courses in education?	---
	(f) had a course in physical assessment?	---
	(g) currently certified in CPR?	---
	(h) who do vision screening, state certified vision screeners?	---
	(i) who do hearing screening, state certified hearing screeners?	---
20	77. Does the school district provide:	
	(a) time for the coordinator to hold scheduled staff meetings, individual coordinator-nurse conferences, and provide assistance-on-site in order to keep staff nurses current and improve their professionalism?	---
	(b) inservice education programs for nurses?	---
	(c) funds designated for nurses to attend workshops during school time?	---
	(d) for attendance at professional organizational meetings during school time?	---
	(e) for arrangements to be made in order that nurses may enroll in academic courses?	---

		Answer
4	78. Do you have a prepared orientation for new nurses to your district?	—
TFS	92	
Acceptable	75%	
DS for Comp. 15	69	
10% Range 59.8 to 78.2		
Component 16		
<u>Evaluation</u>		
4	79. Is a means consistently utilized to evaluate your nursing personnel for updating and improving professionalism (such as self-evaluation, principal/nurse/co-ordinator evaluation, observation checklists, performance reports, etc.)?	—
4	80. Does your SHS program have written goals and objectives?	—
4	81. Do you have a means of measurement to determine when you have obtained your goals and objectives?	—
4	82. Do you have means or tools established to determine the effectiveness and efficiency of the <u>specific</u> components (screening programs, emergency/first-aid care, C.D. control, recording system, etc.) of your SHS program?	—
4	83. Is evaluation of your <u>overall</u> health services program done on a periodic set schedule (at least every 5 years)?	—
4	84. Does your nursing staff provide input for inservice program topics and are the nurses provided with a means of evaluating the inservice programs?	—

		Answer
4	85. Is your nursing staff involved in nursing research to improve health services?	—
TPE 28 Acceptable 75% LS for Comp. 16 = 21 10% Range 18.2 to 23.8		
Source: Martin, J. E. <u>Needs assessment of school health services programs in the Commonwealth of Virginia</u> . Unpublished manuscript, University of Virginia, 1977. Ohio Department of Education, Health, Physical Education, and Recreation Section. <u>Self-appraisal checklist</u> , Columbus, Ohio, 1966.		

Key to Self-Scoring

In order to determine your score for the essential components existing in your school health services program, the following key is provided. By totaling the numbers by which you answered each question according to the key used below, you will obtain a score for each component.

You may then compare your score to the researcher derived score in order to determine where your health services program stands on that particular component. If your score falls within or above the range as listed, you are sufficiently meeting that component; if your score is below that range, you may wish to examine that component more closely to plan for improvement in your school health services program.

	<u>Related Questions</u>	<u>Your Score</u>	<u>Derived Score Range</u>
<u>Component 1</u>			
There should be provision for a health service program in each school.	Includes questions 1-11	_____	28.6 to 37.4
<u>Component 2</u>			
The written policies/procedures governing school health services should be available to all school personnel involved in the health services program.	Includes question 13--"Available Written Policy/Procedure" <u>only</u>	_____	54.6 to 71.4
<u>Component 3</u>			
The guidelines governing school health services should be predicated upon statements of objectives found in the professional literature, should be in compliance with education/child health legislation and regulations, and should take into consideration the philosophy, objectives, and student needs of the local district.	Includes questions 14-16, plus question 12 "Service Available" <u>only</u>	_____	62.4 to 81.4

	<u>Related Questions</u>	<u>Your Score</u>	<u>Desired Score Range</u>
<u>Component 4</u> A school nurse should be available to each school to assist pupils, parents, and teachers to understand individual pupil health problems in order to provide proper care for the pupil.	Includes questions 2-4	—	7.8 to 10.2
<u>Component 5</u> The service of a physician as medical advisor should be available to the health professional servicing each school in order to assist with student health problems.	Questions 17 and 18	—	7.2 to 9.6
<u>Component 6</u> Each school should require health examinations of all pupils upon school entrance and periodically thereafter as necessary, dependent upon the student's physical condition.	Questions 19-25	—	20 to 28
<u>Component 7</u> Schools should employ screening devices on a periodic set basis to determine the status of each pupil's health.	Questions 26-38	—	57.2 to 74.8
<u>Component 8</u> Each school should follow established disease control procedures.	Questions 39-47	—	23.4 to 30.6
<u>Component 9</u> Each school should provide for the emergency care of pupils who become ill or injured while under school jurisdiction.	Questions 48-55, plus questions 5-11	—	39 to 51

	<u>Related Questions</u>	<u>Your Score</u>	<u>Derived Score Range</u>
<u>Component 10</u> Provision should be made for the care of the student with special problems who is able to benefit from regular classroom instruction, but who requires special consideration because of his/her condition.	Questions 56-60	—	18.2 to 23.8
<u>Component 11</u> Each school should utilize a standard permanent pupil health record form.	Questions 61-64	—	15.6 to 20.4
<u>Component 12</u> The school health services program should include referral procedures.	Questions 65-71	—	20.8 to 27.2
<u>Component 13</u> Each school should establish follow-up procedures to assure that pupils receive examination for suspected health problems and treatment for identified health problems.	Question 72	—	13 to 17
<u>Component 14</u> Health information should be made available to the classroom teacher which will prepare the teacher in observations for referrals, emergency and first aid procedures and adapting the classroom for students with special problems.	Includes questions 28, 39, 43, 47 through 52, 56 through 60, 71, and 72 (c & e).	—	38.4 to 53.6
<u>Component 15</u> Preparation for school nursing should include academic courses in education as well as nursing leading towards a baccalaureate degree in nursing and a state certification in school nursing.	Questions 73-78	—	59.8 to 78.2

	<u>Related Questions</u>	<u>Your Score</u>	<u>Derived Score Range</u>
<u>Component 16</u>			
The school health services program should be evaluated periodically to determine strengths and weaknesses, to make improvements, and update procedures in line with medical advancement.	Questions 79-85	_____	18.2 to 23.8
		<u>Your total Score</u>	<u>Total SHS Derived Score</u>
		_____	<u>501.8 to 650.2</u>

This tool should identify for you any of the existing components that may indicate a need for planned improvement in your health services program. Further, by totaling the 16 component scores, you will obtain a total school health services program score which will be indicative of your overall program. It is recognized that your school health services programs must be developed to meet your particular community needs.

Plans for Improvement

The purpose of the Self-Assessment Tool for Measuring Essential Components Utilized by School Health Services Programs is to assist the school health services administrator in detecting areas of needed improvement. Emphasis is to be placed on discovering areas that may be adversely affecting your program and not on the score obtained. The rating score is simply an indicator. The following format is offered as a guideline for planning.

Component _____ has been indicated as needing improvement.

1. Is this a desirable and/or needed component for our school district and community?
Yes No
2. Will improvement of this component benefit the students and/or staff in my school district?
Yes No
3. Is this component attainable in terms of present or anticipated future resources?
Yes No

A "no" to any of the above questions eliminates the need for future planning in this specified area.

List below goals needing attention (prioritize)

Projected
Completion Data

1. _____
2. _____

List below objectives for meeting goals.

Goal 1 Objectives:

- (a) _____
- (b) _____

Goal 2 Objectives:

- (a) _____
- (b) _____

List below resources needed to meet goals (money, manpower, material).

Date Obtained by

Resources needed for Goal 1:

- (a) _____
- (b) _____

Resources needed for Goal 2:

- (a) _____
- (b) _____

Subsequent administration of the Self-Assessment Tool after goal implementation should provide the administrator with a means of demonstrating growth.

APPENDIX F

Dear _____:

As partial completion of the requirements leading to a Master of Science Degree from Texas Woman's University, I am conducting a pilot study to determine the reliability of the instrument I have developed. The instrument is a self-assessment tool for administrators to measure the essential components utilized in their school health services programs. Through usage of this tool, discrepancies may be identified and the administrators of school health services programs may then engage in the process of planned change for the improvement of health care for their students.

As a member of the Metroplex School Health Administrators Organization, I am requesting that you be a participant in my pilot study. Participation is voluntary and completion of the questionnaire indicates consent to participate in the study. All information will be kept anonymous and confidential and will be used only for the purposes of this study. At no time will your school district be identified in any way. Your comments and identification of any item on the questionnaire that is unclear or ambiguous will be greatly appreciated.

If this meets with your approval, please complete the questionnaire and return in the self-addressed envelope enclosed. If possible, please return by _____. The Key to Self-Scoring will be mailed to you upon completion of the pilot study; therefore, you may desire to make a copy of your completed questionnaire.

Thank you for your time and I shall look forward to hearing from you soon.

Sincerely,

Ann H. Eastman, R.N., B.S.N.

COMPLETION AND RETURN OF THIS QUESTIONNAIRE WILL BE CONSTRUED AS INFORMED CONSENT

A SELF-ASSESSMENT TOOL FOR MEASURING ESSENTIAL COMPONENTS UTILIZED
IN SCHOOL HEALTH SERVICES PROGRAMS

Introduction: The purpose of this instrument is to provide the administrator with a tool to measure essential components utilized in school health services programs. Through usage of this tool, discrepancies may be identified and the administrator of a school health services program may then engage in the process of planned changes for the improvement of health care for their students.

The scale used in the questionnaire is as follows:

- 4 -- Always (a constant 100%)
- 3 -- Usually (almost always a constant 100% but with a few exceptions)
- 2 -- Sometimes (occurs upon occasion but not regularly)
- 1 -- Rarely (an unusual circumstance)
- 0 -- Never (does not occur)

When answering the questionnaire, please use the designated number.

Health Services Program

1. Are adequate funds appropriated by your local School Board of Education for your School Health Services (SHS) Program?

Health Service Personnel

2. Is the person most responsible for conducting the SHS program at the individual school level a Registered Nurse?
3. Is the average nurse/pupil ratio in your school district below 1:1500?
4. In your opinion, is the amount of time you or your personnel spend in each school conducting the SHS program adequate to meet the needs of your community?

Space and Facilities

5. Does each school have a room especially designated for taking care of sick or injured students?
6. Is there adequate space for handling health emergencies and serious injuries?
7. Are the number of cots per clinic adequate to meet student needs?

Answer

8. Is there a separate room or adequate space where the school physician, nurse, and/or other specialist can perform indicated physical examinations, vision and hearing testing, counseling, and hold private conferences or small group conferences?
9. Is adequate equipment available for use in medical and emergency care and screening?
10. Is there adequate provision in the school budget for replenishing supplies as needed during the school year?
11. Is there adequate space for storing supplies, equipment, records, etc.?

Answer

Governing Policies and Community Needs

There are two separate questions to be answered in this section--Question #12 and #13. They are as follows:

12. Does your SHS program provide the following service for your school district?
13. Are written policies and procedures governing the SHS program available to principals, health personnel, office personnel, teachers, and other support personnel for reference?

Please answer Question 12 first by indicating your answers under the column marked "Question 12, Service Available." Answer items a-u utilizing the Scale 4-0. When you have completed the Service Available column, please return to item (a) under the column marked "Question 13, Available by Written Policy/Procedures." Answer items a-u, utilizing the Scale 4-0.

	Question #12 Service Available (Answer)	Question #13 Available by Written Policy/ Procedure (Answer)
(a) Physical examinations of students upon school entrance and thereafter as needed.	<hr/>	<hr/>
(b) Health observation by teachers.	<hr/>	<hr/>
(c) Screening (vision, hearing, etc.) by health personnel.	<hr/>	<hr/>
(d) Procedures to refer students to medical personnel.	<hr/>	<hr/>
(e) Notification of findings to parents or guardian of suspected health problems.	<hr/>	<hr/>

	Question #12 Service Available (Answer)	Question #13 Available by Written Policy/ Procedure (Answer)
(f) Notification of findings to appropriate school personnel of health problems.	—	—
(g) Established liaison with community health resources.	—	—
(h) Follow-up procedures.	—	—
(i) Health counseling.	—	—
(j) Cumulative health records.	—	—
(k) Control of communicable diseases.	—	—
(l) Provision for physically handicapped and special education students.	—	—
(m) Emergency care for illness or injury while student is at school.	—	—
(n) Role of the school nurse in the school health services program.	—	—
(o) Role of the teacher in the school health services program.	—	—
(p) Reporting child abuse.	—	—
(q) Administration of medication by school personnel.	—	—
(r) Eye-injury reporting and eye-protective devices.	—	—
(s) Consultation and coordination with other student services and related instructional programs.	—	—
(t) Planning and development of health program.	—	—
(u) Evaluation of the school health services program.	—	—

14. Is there a joint planning or sharing of ideas between your school district, health department, educational agency, health professional associations, and community groups as to policies and guidelines for the SHS program?
15. Is there an established means of relaying and receiving school health concerns to and from your community (PTA, Health Advisory Committee, school communications, local newspapers)?
16. In your opinion, is your school health program meeting the needs of your community?

Health Examinations

17. Is a physician available to your school district in the capacity of medical consultant as needed?
18. For what purposes is the physician available (check any that apply):
- (a) Consultant for individual children.
 - (b) General advisor to health personnel on conducting the SHS program.
19. Does your school district require children to have a comprehensive health examination:
- (a) Upon entrance to school?
 - (b) At mid-school (6-7 grades) and before leaving school (11-12 grades)?
 - (c) Upon identification of problems?

Answer either question 20 or 21 (not both).

20. Under what conditions are routine health examinations given to children through your SHS program either by school physician or school nurse:
- (a) as periodic screening
 - (b) as part of health referral
 - (c) special education candidates
- or:
21. If health examinations are not provided through the SHS program, what means are utilized for children needing examinations? (check any that apply)
- (a) private physician
 - (b) clinics/health department
 - (c) voluntary agencies/civic groups providing payment for examinations
22. Are health histories routinely obtained on new students to the school district?
23. Are students enrolled in athletic programs required to have health examinations?
24. Are children identified who are enrolled in the EPSDT program (Early Periodic Screening Diagnosis and Treatment) and is screening information shared on identified EPSDT students between your school district and the Department of Welfare?
25. Are dental examinations recommended upon entrance to school?

Screening

26. Is your equipment in optimum working order at all times? _____
27. Are procedures and criteria for screening periodically reviewed with your staff? _____
28. Is there an established procedure for teacher referral to the nurse of those students who need screening? _____
29. Are specialists available to your screening program for technical assistance? _____
30. Is vision screening done:
 - (a) on a periodic set schedule? _____
 - (b) on all new students? _____
 - (c) on referrals? _____
31. Are all new students to your school district screened for vision within a 90-day period? _____
32. Do you screen children in the primary grades (K-3) for eye imbalance, farsightedness, nearsightedness, and color discrimination? _____
33. Is hearing screening done:
 - on a periodic set schedule? _____
 - on all new students? _____
 - on referrals? _____
34. Are students who fail the first screening on vision and hearing rechecked within a 2-4 week period? _____
35. Is dental screening done:
 - on a periodic set schedule? _____
 - on all new students? _____
 - on referrals? _____
36. Is height and weight screening done:
 - on a periodic set schedule? _____
 - on all new students? _____
 - on referrals? _____
37. Is orthopedic/scoliosis screening done (at appropriate age levels):
 - on a periodic set schedule? _____
 - on all new students? _____
 - on referrals? _____
38. Do your nurses provide direct or indirect health education for students related to the specific screening being offered (care of eyes, ears, dental, growth, and development, etc.)? _____

Communicable Disease Control

39. Do you have an established means of informing parents and teachers of communicable disease control policies? _____
40. Do you have a system for reporting children with suspected communicable diseases to the health department? _____

41. Are children with symptoms of communicable diseases sent home?
42. Are children with symptoms of communicable disease isolated from other children in the clinic while waiting transportation home?
43. Do teachers inspect students for communicable disease on a periodic basis?
44. When pupils are absent from school because of communicable disease, are they readmitted only with release from physician or health department or upon verification for readmittance by the school nurse?
45. Does your school district have a formal plan for enforcing Texas State Immunization laws?
46. If children are not immunized by a private physician, do you have community resources available to ensure compliance with state law?
47. Do your nurses provide direct or indirect health education to students, teachers, and the community concerning communicable disease control?

Emergency Care

48. Do your principals, teachers, health personnel, and office personnel have written directives readily available concerning emergency care for students who become seriously ill or injured while at school?
49. Are emergency directives posted on the appropriate areas in your schools? (school office, clinic, science lab, shops, P.E., home economics room, etc.).
50. Are emergency medical treatment authorization forms renewed annually on all students and on file in each school?
51. Are there designated persons (other than nurses) with current first aid preparation available for administering first aid or providing direction in emergency cases in each school?
52. Is there a designated person (other than nurse) with a current cardiopulmonary resuscitation certificate in each school?
53. Are there procedures regarding a system for reporting school accidents in effect at each school?
54. Do you have a safety committee which plans a safety education program after reviewing the accident report data in your school district?
55. Are there emergency disaster plans developed between your school district and the community authorities?

Answer

Provision for Students with Special Problems

Answer

56. Are provisions made for the student who has a physical health problem that permits him/her to benefit from regular class attendance but who requires special care (e.g., test periods, reduced amount of physical exercise, increased opportunity for physical exercise, extra meals, shortened school day, lightened work load, or other provisions)?
57. In your opinion, do most teachers in your school district appear to be prepared to assume responsibility for health observation for detection of signs of deviation from normal among their pupils?
58. Are the regular classroom teachers in your school district provided inservice programs to improve their health observation and referral skills (nurse/staff presentations; work shops; etc.)?
59. Are the following provisions made for children with special problems:
 (a) physical facilities (ramps, special toilets, rest areas, bus transportation)?
 (b) special services (O.T., P.T., speech therapy, psychological services, homebound)?
 (c) inservice education for teachers and auxiliary personnel?
60. Does the SHS program have a system for the identification of students with chronic health problems and notification of appropriate school personnel?

Pupil Health Record

61. Is a standard permanent health record form utilized for each child in school?
62. Do your nurses utilize health records during conferences with other authorized school personnel?
63. Check the following information that is recorded on your permanent health records:
 (a) Past (health history, immunizations, physical examinations)
 (b) Present (screening results, referral and follow-up information, current health problems, conferences held)
 (c) Future (nursing plans).
64. Upon obtaining legal parental release, is a copy of the cumulative health record sent to the receiving school when a student leaves your school district?

Referral Procedure

65. Is there a specific procedure consistently followed in referral of children with suspected health problems?

66. To what extent are the following procedures followed in health problem referrals?
- (a) Parents are notified of child's suspected health problem by school personnel.
 - (b) Parents are expected to assume responsibility for taking child to family physician or pediatrician.
67. Besides written communication, does the nurse communicate with parents concerning health defects and needed action by telephone, conferences at school, and home visits?
68. Is the nurse given time for counseling?
69. Is your community directory of health services readily available to your nurses?
70. Do you have an established list of community resources utilized for referral of students with suspected health problems who are unable to afford a private physician (hospital clinics, health department, voluntary agencies, civic groups, etc.)?
71. Are teacher-nurse conferences scheduled to discuss health defects discovered during screening?

Follow-up Procedures

72. If a student has been referred for examination after a health problem has been suspected, what steps are taken to insure that medical care is received and physician's instructions are followed:
- (a) Contact the parents to learn if the child has been examined by a physician and what the findings and prescribed treatment were.
 - (b) Arrangements are made through community resources for children whose parents cannot afford such services as vision, hearing, dental, orthopedic, medical problems, etc.
 - (c) Arrange a nurse-parent-teacher conference to discuss the child's health problem(s) and evaluate progress as needed.
 - (d) Make arrangements for treatment or medication if prescribed and consented to by parents in the school setting.
 - (e) Classroom adjustments are made as indicated.

Nurse Preparation

73. Is the person responsible for the coordination and administration of the school health service program district wide a registered nurse employed by the school district?
74. As the designated person most responsible for conducting the school district's health services program, are you required by job description to:
- (a) be a registered nurse?
 - (b) hold a B.S. degree or higher?
 - (c) hold a Texas School Nurse Certificate?
 - (d) have had a minimum of 3 years experience in school health programs before being employed?

75. Do you as the person most responsible for health services:
- (a) attend workshops or enroll in courses related to school health annually?
 - (b) read two or more nursing and/or school health journals regularly?
 - (c) hold membership and attend meetings of a professional school health organization?
76. Are or have the majority (75% or over) of your staff nurses:
- (a) registered as RN's in the state of Texas?
 - (b) state certified in school nursing?
 - (c) holders of a BS degree or higher?
 - (d) had academic courses in school health?
 - (e) had academic courses in education?
 - (f) had a course in physical assessment?
 - (g) currently certified in CPR?
 - (h) who do vision screening, state certified vision screeners?
 - (i) who do hearing screening, state certified hearing screeners?
77. Does the school district provide:
- (a) time for the coordinator to hold scheduled staff meetings, individual coordinator-nurse conferences, and provide assistance-on-site in order to keep staff nurses current and improve their professionalism?
 - (b) inservice education programs for nurses?
 - (c) funds designated for nurses to attend workshops during school time?
 - (d) for attendance at professional organizational meetings during school time?
 - (e) for arrangements to be made in order that nurses may enroll in academic courses?
78. Do you have a prepared orientation for new nurses to your district?

Evaluation

79. Is a means consistently utilized to evaluate your nursing personnel for updating and improving professionalism (such as self-evaluation, principal/nurse/co-ordinator evaluation, observation checklists, performance reports, etc.)?
80. Does your SHS program have written goals and objectives?
81. Do you have a means of measurement to determine when you have obtained your goals and objectives?
82. Do you have means or tools established to determine the effectiveness and efficiency of the specific components (screening programs, emergency/first-aid care, C.D. control, recording system, etc.) of your SHS program?
83. Is evaluation of your overall health services program done on a periodic set schedule (at least every 5 years)?

	Answer
84. Does your nursing staff provide input for inservice program topics and are the nurses provided with a means of evaluating the inservice programs?	<hr/>
85. Is your nursing staff involved in nursing research to improve health services?	<hr/>

Source: Martin, J. E. Needs assessment of school health services programs in the Commonwealth of Virginia. Unpublished manuscript, University of Virginia, 1977.

Ohio Department of Education, Health, Physical Education, and Recreation Section. Self-appraisal checklist. Columbus, Ohio, 1966.

APPENDIX G

Prospectus for Thesis
Approval Form

This proposal for a thesis by Ann L. Balthus

and entitled ESSENTIAL COMPONENTS UTILIZED IN SCHOOL HEALTH SERVICES

PROGRAMS: DEVELOPMENT OF AN INSTRUMENT

has been successfully defended and approved by the members
of the Thesis Committee.

This research is XX is not _____ exempt from approval
by the Human Subjects Review Committee. If the research
is exempt, the reason for its exemption is: _____

Falls under Category I research

Thesis Committee: Sandra Finkert, Chairperson

Bob Chapman, Member

Robert A. Bueh, Member

Date: _____

Dean, College of Nursing

Date: _____

193^F



Texas Woman's University

P.O. Box 22479, Denton, Texas 76204 (817) 383-2302, Metro 434-1757 Tex-An 834-2133

THE GRADUATE SCHOOL

November 2, 1982

Mrs. Matilda Ann Eastman
2003 Inverness
Carrollton, TX 75006

Dear Mrs. Eastman:

I have received and approved the Prospectus for your research project. Best wishes to you in the research and writing of your project.

Sincerely yours,

Robert S. Pawlowski
Provost

ap

cc Dr. Anne Gudmundsen
Dr. Sandra Strickland

APPENDIX H

**A SELF-ASSESSMENT TOOL FOR MEASURING ESSENTIAL COMPONENTS UTILIZED
IN SCHOOL HEALTH SERVICES PROGRAMS**

Introduction: The purpose of this instrument is to provide the nurse administrator with a tool to measure essential components utilized in school health services programs. Through usage of this tool, discrepancies may be identified and the administrator of a school health services program may then engage in the process of planned changes for the improvement of health care for their students.

The scale used in the questionnaire is as follows:

- 4 -- Always (a constant 100%)
- 3 -- Usually (almost always a constant 100% but with a few exceptions)
- 2 -- Sometimes (occurs upon occasion but not regularly)
- 1 -- Rarely (an unusual circumstance)
- 0 -- Never (does not occur)

When answering the questionnaire, please use the designated number. Upon completion you will find the key to the scoring and a worksheet for planning.

Health Services Program

1. Are adequate funds appropriated by your local School Board of Education for your School Health Services (SHS) Program?

Health Service Personnel

2. Is the person most responsible for conducting the SHS program at the individual school level a Registered Nurse?
3. Is the average nurse/pupil ratio in your school district below 1:1500?
4. In your opinion, is the amount of time you or your personnel spend in each school conducting the SHS program adequate to meet the needs of your community?

Space and Facilities

5. Does each school have a room especially designated for taking care of sick or injured students?
6. Is there adequate space for handling health emergencies and serious injuries?
7. Are the number of cots per clinic adequate to meet student needs?

Answer

8. Is there a separate room or adequate space where the school physician, nurse, and/or other specialist can perform indicated physical examinations, vision and hearing testing, counseling, and hold private conferences or small group conferences?
9. Is adequate equipment available for use in medical and emergency care and screening?
10. Is there adequate provision in the school budget for replenishing supplies as needed during the school year?
11. Is there adequate space for storing supplies, equipment, records, etc.?

Answer

Governing Policies and Community Needs

There are two separate questions to be answered in this section--Question #12 and #13. They are as follows:

12. Does your SHS program provide the following service for your school district?
13. Are written policies and procedures governing the SHS program available to principals, health personnel, office personnel, teachers, and other support personnel for reference?

Please answer Question 12 first by indicating your answers under the column marked "Question 12, Service Available." Answer items a-u utilizing the Scale 4-0. When you have completed the Service Available column, please return to item (a) under the column marked "Question 13, Available by Written Policy/Procedures." Answer items a-u, utilizing the Scale 4-0.

	Question #12 Service Available (Answer)	Question #13 Available by Written Policy/ Procedure (Answer)
(a) Physical examinations of students upon school entrance and thereafter as needed.	_____	_____
(b) Health observation by teachers.	_____	_____
(c) Screening (vision, hearing, etc.) by health personnel.	_____	_____
(d) Procedures to refer students to medical personnel.	_____	_____
(e) Notification of findings to parents or guardian of suspected health problems.	_____	_____

	Question #12 Service Available (Answer)	Question #13 Available by Written Policy/ Procedure (Answer)
(f) Notification of findings to appropriate school personnel of health problems.	—	—
(g) Established liaison with community health resources.	—	—
(h) Follow-up procedures.	—	—
(i) Health counseling.	—	—
(j) Cumulative health records.	—	—
(k) Control of communicable diseases.	—	—
(l) Provision for physically handicapped and special education students.	—	—
(m) Emergency care for illness or injury while student is at school.	—	—
(n) Role of the school nurse in the school health services program.	—	—
(o) Role of the teacher in the school health services program.	—	—
(p) Reporting child abuse.	—	—
(q) Administration of medication by school personnel.	—	—
(r) Eye-injury reporting and eye-protective devices.	—	—
(s) Consultation and coordination with other student services and related instructional programs.	—	—
(t) Planning and development of health program.	—	—
(u) Evaluation of the school health services program.	—	—

14. Is there a joint planning or sharing of ideas between your school district, health department, educational agency, health professional associations, and community groups as to policies and guidelines for the SHS program?
15. Is there an established means of relaying and receiving school health concerns to and from your community (PTA, Health Advisory Committee, school communications, local newspapers)?
16. In your opinion, is your school health program meeting the needs of your community?

Health Examinations

17. Is a physician available to your school district in the capacity of medical consultant as needed?
18. For what purposes is the physician available (check any that apply):
 (a) Consultant for individual children.
 (b) General advisor to health personnel on conducting the SHS program.
19. Does your school district require children to have a comprehensive health examination:
 (a) Upon entrance to school?
 (b) At mid-school (6-7 grades) and before leaving school (11-12 grades)?
 (c) Upon identification of problems?
20. Under what conditions are routine health examinations given to children through your SHS program either by school physician or school nurse:
 (a) as periodic screening
 (b) as part of health referral
 (c) special education candidates
21. Are health histories routinely obtained on new students to the school district?
22. Are students enrolled in athletic programs required to have health examinations?
23. Are children identified who are enrolled in the EPSDT program (Early Periodic Screening Diagnosis and Treatment) and is screening information shared on identified EPSDT students between your school district and the Department of Welfare?
24. Are dental examinations recommended upon entrance to school?

Answer

Screening	Answer
25. Is your equipment in optimum working order at all times?	_____
26. Are procedures and criteria for screening periodically reviewed with your staff?	_____
27. Is there an established procedure for teacher referral to the nurse of those students who need screening?	_____
28. Are specialists available to your screening program for technical assistance?	_____
29. Is vision screening done:	_____
(a) on a periodic set schedule?	_____
(b) on all new students?	_____
(c) on referrals?	_____
30. Are all new students to your school district screened for vision within a 90-day period?	_____
31. Do you screen children in the primary grades (K-3) for eye imbalance, farsightedness, nearsightedness, and color discrimination?	_____
32. Is hearing screening done:	_____
on a periodic set schedule?	_____
on all new students?	_____
on referrals?	_____
33. Are students who fail the first screening on vision and hearing rechecked within a 2-4 week period?	_____
34. Is dental screening done:	_____
on a periodic set schedule?	_____
on all new students?	_____
on referrals?	_____
35. Is height and weight screening done:	_____
on a periodic set schedule?	_____
on all new students?	_____
on referrals?	_____
36. Is orthopedic/scoliosis screening done (at appropriate age levels):	_____
on a periodic set schedule?	_____
on all new students?	_____
on referrals?	_____
37. Do your nurses provide direct or indirect health education for students related to the specific screening being offered (care of eyes, ears, dental, growth, and development, etc.)?	_____
<u>Communicable Disease Control</u>	
38. Do you have an established means of informing parents and teachers of communicable disease control policies?	_____
39. Do you have a system for reporting children with suspected communicable diseases to the health department?	_____

- | | Answer |
|--|--------|
| 40. Are children with symptoms of communicable diseases sent home? | _____ |
| 41. Are children with symptoms of communicable disease isolated from other children in the clinic while waiting transportation home? | _____ |
| 42. Do teachers inspect students for communicable disease on a periodic basis? | _____ |
| 43. When pupils are absent from school because of communicable disease, are they readmitted only with release from physician or health department or upon verification for readmittance by the school nurse? | _____ |
| 44. Does your school district have a formal plan for enforcing Texas State Immunization laws? | _____ |
| 45. If children are not immunized by a private physician, do you have community resources available to ensure compliance with state law? | _____ |
| 46. Do your nurses provide direct or indirect health education to students, teachers, and the community concerning communicable disease control? | _____ |

Emergency Care

- | | |
|--|-------|
| 47. Do your principals, teachers, health personnel, and office personnel have written directives readily available concerning emergency care for students who become seriously ill or injured while at school? | _____ |
| 48. Are emergency directives posted on the appropriate areas in your schools? (school office, clinic, science lab, shops, P.E., home economics room, etc.). | _____ |
| 49. Are emergency medical treatment authorization forms renewed annually on all students and on file in each school? | _____ |
| 50. Are there designated persons (other than nurses) with current first aid preparation available for administering first aid or providing direction in emergency cases in each school? | _____ |
| 51. Is there a designated person (other than nurse) with a current cardiopulmonary resuscitation certificate in each school? | _____ |
| 52. Are there procedures regarding a system for reporting school accidents in effect at each school? | _____ |
| 53. Do you have a safety committee which plans a safety education program after reviewing the accident report data in your school district? | _____ |
| 54. Are there emergency disaster plans developed between your school district and the community authorities? | _____ |

Provision for Students with Special Problems

Answer

55. Are provisions made for the student who has a physical health problem that permits him/her to benefit from regular class attendance but who requires special care (e.g., rest periods, reduced amount of physical exercise, increased opportunity for physical exercise, extra meals, shortened school day, lightened work load, or other provisions)?
56. In your opinion, do most teachers in your school district appear to be prepared to assume responsibility for health observation for detection of signs of deviation from normal among their pupils?
57. Are the regular classroom teachers in your school district provided inservice programs to improve their health observation and referral skills (nurse/staff presentations; work shops; etc.)?
58. Are the following provisions made for children with special problems:
 (a) physical facilities (ramps, special toilets, rest areas, bus transportation)?
 (b) special services (O.T., P.T., speech therapy, psychological services, homebound)?
 (c) inservice education for teachers and auxillary personnel?
59. Does the SHS program have a system for the identification of students with chronic health problems and notification of appropriate school personnel?

Pupil Health Record

60. Is a standard permanent health record form utilized for each child in school?
61. Do your nurses utilize health records during conferences with other authorized school personnel?
62. Check the following information that is recorded on your permanent health records:
 (a) Past (health history, immunizations, physical examinations)
 (b) Present (screening results, referral and follow-up information, current health problems, conferences held)
 (c) Future (nursing plans).
63. Upon obtaining legal parental release, is a copy of the cumulative health record sent to the receiving school when a student leaves your school district?

Referral Procedure

64. Is there a specific procedure consistently followed in referral of children with suspected health problems?

Answer

65. To what extent are the following procedures followed in health problem referrals?
- (a) parents are notified of child's suspected health problem by school personnel.
 - (b) Parents are expected to assume responsibility for taking child to family physician or pediatrician.
66. Besides written communication, does the nurse communicate with parents concerning health defects and needed action by telephone, conferences at school, and home visits?
67. Is the nurse given time for counseling?
68. Is your community directory of health services readily available to your nurses?
69. Do you have an established list of community resources utilized for referral of students with suspected health problems who are unable to afford a private physician (hospital clinics, health department, voluntary agencies, civic groups, etc.)?
70. Are teacher-nurse conferences scheduled to discuss health defects discovered during screening?

Follow-up Procedures

71. If a student has been referred for examination after a health problem has been suspected, what steps are taken to insure that medical care is received and physician's instructions are followed:
- (a) Contact the parents to learn if the child has been examined by a physician and what the findings and prescribed treatment were.
 - (b) Arrangements are made through community resources for children whose parents cannot afford such services as vision, hearing, dental, orthopedic, medical problems, etc.
 - (c) Arrange a nurse-parent-teacher conference to discuss the child's health problem(s) and evaluate progress as needed.
 - (d) Make arrangements for treatment or medication if prescribed and consented to by parents in the school setting.
 - (e) Classroom adjustments are made as indicated.

Nurse Preparation

72. Is the person responsible for the coordination and administration of the school health service program district wide a registered nurse employed by the school district?
73. As the designated person most responsible for conducting the school district's health services program, are you required by job description to:
- (a) be a registered nurse?
 - (b) hold a B.S. degree or higher?
 - (c) hold a Texas School Nurse Certificate?
 - (d) have had a minimum of 3 years experience in school health programs before being employed?

Answer

74. Do you as the person most responsible for health services:
- (a) attend workshops or enroll in courses related to school health annually? _____
 - (b) read two or more nursing and/or school health journals regularly? _____
 - (c) hold membership and attend meetings of a professional school health organization? _____
75. Are or have the majority (75% or over) of your staff nurses:
- (a) registered as RN's in the state of Texas? _____
 - (b) state certified in school nursing? _____
 - (c) holders of a BS degree or higher? _____
 - (d) had academic courses in school health? _____
 - (e) had academic courses in education? _____
 - (f) had a course in physical assessment? _____
 - (g) currently certified in CPR? _____
 - (h) who do vision screening, state certified vision screeners? _____
 - (i) who do hearing screening, state certified hearing screeners? _____
76. Does the school district provide:
- (a) time for the coordinator to hold scheduled staff meetings, individual coordinator-nurse conferences, and provide assistance-on-site in order to keep staff nurses current and improve their professionalism? _____
 - (b) inservice education programs for nurses? _____
 - (c) funds designated for nurses to attend workshops during school time? _____
 - (d) for attendance at professional organizational meetings during school time? _____
 - (e) for arrangements to be made in order that nurses may enroll in academic courses? _____
77. Do you have a prepared orientation for new nurses to your district? _____

Evaluation

78. Is a means consistently utilized to evaluate your nursing personnel for updating and improving professionalism (such as self-evaluation, principal/nurse/co-ordinator evaluation, observation checklists, performance reports, etc.)? _____
79. Does your SHS program have written goals and objectives? _____
80. Do you have a means of measurement to determine when you have obtained your goals and objectives? _____
81. Do you have means or tools established to determine the effectiveness and efficiency of the specific components (screening programs, emergency/first-aid care, C.D. control, recording system, etc.) of your SHS program? _____
82. Is evaluation of your overall health services program done on a periodic set schedule (at least every 5 years)? _____

	Answer
83. Does your nursing staff provide input for inservice program topics and are the nurses provided with a means of evaluating the inservice programs?	_____
84. Is your nursing staff involved in nursing research to improve health services?	_____

Source: Martin, J. E. Needs assessment of school health services programs in the Commonwealth of Virginia. Unpublished manuscript, University of Virginia, 1977.

Ohio Department of Education, Health, Physical Education, and Recreation Section. Self-appraisal checklist, Columbus, Ohio, 1966.

Key to Self-Scoring

In order to determine your score for the essential components existing in your school health services program, the following key is provided. By totaling the numbers by which you answered each question according to the key used below, you will obtain a score for each component.

You may then compare your score to a sample population on score ranges and also to an acceptable score as determined by a panel of experts. By comparison you may determine where your health services program stands on that particular component and plan for improvement in your school health services program. Accordingly, please note that on several items the panel of experts' score falls outside (+) the sample population range.

	<u>Related Questions</u>	<u>Your Score</u>	<u>Sample Score Range</u> (mean \pm .7 SD)	<u>Acceptable Score</u> (Panel of Experts)
<u>Component 1</u>				
There should be provision for a health services program in each school.	Includes questions 1-11	___	28.8 to 34.9	33
<u>Component 2</u>				
The written policies/procedures governing school health services should be available to all school personnel involved in the health services program.	Includes question 13--"Available Written Policy/Procedure" <u>only</u>	___	40.2 to 74.8	63
<u>Component 3</u>				
The guidelines governing school health services should be predicated upon statements of objectives found in the professional literature, should be in compliance with education/child health legislation and regulations, and should take into consideration the philosophy, objectives, and student needs of the local district.	Includes questions 14-16, plus question 12 "Service Available" <u>only</u>	___	68.0 to 83.1	72
<u>Component 4</u>				
The service of a physician as medical advisor should be available to the health professional servicing each school in order to assist with student health problems.	Questions 17 and 18	___	3.3 to 7.7	8
<u>Component 5</u>				
Each school should require health examinations of all pupils upon school entrance and periodically thereafter as necessary, dependent upon the student's physical condition.	Questions 19-24	___	12.6 to 21.0	24

	<u>Related Questions</u>	<u>Your Score</u>	<u>Sample Score Range</u> (mean \pm .75D)	<u>Acceptable Score</u> (Panel of Experts)
<u>Component 6</u> Schools should employ screening devices on a periodic set basis to determine the status of each pupil's health.	Questions 25-37	—	61.7 to 78.1	69
<u>Component 7</u> Each school should follow established disease control procedures.	Questions 38-46	—	26.2 to 31.6	27
<u>Component 8</u> Each school should provide for the emergency care of pupils who become ill or injured while under school jurisdiction.	Questions 47-54, plus Questions 5-11	—	38.3 to 46.9	45
<u>Component 9</u> Provision should be made for the care of the student with special problems who is able to benefit from regular classroom instruction, but who requires special consideration because of his/her condition.	Questions 55-59	—	19.3 to 24.0	21
<u>Component 10</u> Each school should utilize a standard permanent pupil health record form.	Questions 60-63	—	16.4 to 20.8	18
<u>Component 11</u> The school health services program should include referral procedures.	Questions 64-70	—	23.2 to 28.9	24
<u>Component 12</u> Each school should establish follow-up procedures to assure that pupils receive examination for suspected health problems and treatment for identified health problems.	Question 71	—	14.0 to 18.2	15
<u>Component 13</u> Health information should be made available to the classroom teacher which will prepare the teacher in observations for referrals, emergency and first aid procedures and adapting the classroom for students with special problems.	Includes Questions 27, 38, 42, 46-51, 55-59, 70, and 71 (c and e)	—	50.7 to 62.2	46

	<u>Related Questions</u>	<u>Your Score</u>	<u>Sample Score Range</u> (mean \pm .75SD)	<u>Acceptable Score</u> (Panel of Experts)
<u>Component 14</u>				
Preparation for school nursing should include academic courses in education as well as nursing leading towards a baccalaureate degree in nursing and a state certification in school nursing.	Questions 72-77	—	36.3 to 54.7	69
<u>Component 15</u>				
The school health services program should be evaluated periodically to determine strengths and weaknesses, to make improvements, and update procedures in line with medical advancement.	Questions 78-84	—	12.7 to 21.5	21

A school nurse should be available to each school to assist pupils, parents, and teachers to understand individual pupil health problems in order to provide proper care for the pupil.		<u>Your Total Score</u>	<u>Total Scale Mean of Sample Population</u>	<u>Total Acceptable Score as Determined by Panel of Experts</u>
		—	530.17	555

This tool should identify for you any of the existing components that may indicate a need for planned improvement in your health services program. Further, by totaling the 15 component scores, you will obtain a total school health services program score which will be indicative of your overall program. Your total score may then be compared with the total scale mean of the sample population and also the total acceptable score as determined by a panel of experts. It is recognized that your school health services program must be developed to meet your particular community needs.

Note. Components adapted from Martin, J.E., Needs assessment of school health services programs in the Commonwealth of Virginia. Unpublished manuscript, University of Virginia, 1977.

Plans for Improvement

The purpose of the Self-Assessment Tool for Measuring Essential Components Utilized in School Health Services Programs is to assist the school health services administrator in detecting areas of needed improvement. Emphasis is to be placed on discovering areas that may be adversely affecting your program and not on the score obtained. The rating score is simply an indicator. The following format is offered as a guideline for planning.

Component _____ has been indicated as needing improvement.

1. Is this a desirable and/or needed component for our school district and community?
Yes No
2. Will improvement of this component benefit the students and/or staff in my school district?
Yes No
3. Is this component attainable in terms of present or anticipated future resources?
Yes No

A "no" to any of the above questions eliminates the need for future planning in this specified area.

<u>List below goals needing attention (prioritize)</u>	<u>Projected Completion Data</u>
1. _____	_____
2. _____	_____
<u>List below objectives for meeting goals.</u>	
<u>Goal 1 Objectives:</u>	
(a) _____	_____
(b) _____	_____
<u>Goal 2 Objectives:</u>	
(a) _____	_____
(b) _____	_____
<u>List below resources needed to meet goals (money, manpower, material).</u>	
<u>Resources needed for Goal 1:</u>	
(a) _____	_____
(b) _____	_____
<u>Resources needed for Goal 2:</u>	
(a) _____	_____
(b) _____	_____

Subsequent administration of the Self-Assessment Tool after goal implementation should provide the administrator with a means of demonstrating growth.

REFERENCES CITED

- American Academy of Pediatrics. Report of the committee on school health of the American Academy of Pediatrics. Evanston, Illinois: Author, 1966.
- American Academy of Pediatrics. School health: A guide for health professionals. Evanston, Illinois: Author, 1977.
- American Nurses' Association. Functions and qualifications for school nurses employed in staff positions. New York: Author, 1960.
- American Nurses' Association. School nursing practice: A guide for evaluating, implementing, and improving the functions of school nurses. Evaluating nursing aspects of the school health program. New York: Author, 1961.
- American Nurses' Association. Functions and qualifications for school nurses. New York: Author, 1966.
- American Nurses' Association. Guidelines for certification of school nurse practitioners. New York: Author, 1979.
- American Public Health Association. Evaluation studies which have contributed to school health services and education (Part II). American Journal of Public Health Yearbook, School Health Section, 1952, 42, (5), 125-129. (a)
- American Public Health Association. Research needs in school health (Part II). American Journal of Public Health Yearbook, School Health Section, 1952, 42(5), 133-137. (b)
- American Public Health Association. Suggested standards for health services in secondary schools (Part II). American Journal of Public Health Yearbook, School Health Section, 1952, 42(5), 139-147. (c)

- American Public Health Association. Evaluate your school health program: A report of the joint committee on evaluation of school health programs. Journal of School Health, 1956, 26, 167-173.
- American School Health Association. Recommended policies and practices for school nursing. Journal of School Health, 1957, 27, 4-11.
- American School Health Association. Guidelines for the school nurse in the school health program. Kent, Ohio: Author, 1974.
- Anderson, C. L., & Creswell, W. H. School health practice (7th ed.). St. Louis: C. V. Mosby Co., 1980.
- Arndt, C., & Huckabay, L. M. D. Nursing administration for practice with a systems approach. St. Louis: C. V. Mosby Co., 1975.
- Aroskar, M. A. Establishing limits to professional autonomy: Whose responsibility? Nursing Law and Ethics, 1980, 1(5), 1-2.
- Battenfield, B. L. Acceptance of advanced school health service models by public school administrators in Arkansas. Unpublished doctoral dissertation, The University of Arkansas, 1980.
- Bay, K. S. The worth of a screening program: An application of a statistical decision model for the benefit evaluation of screening projects. American Journal of Public Health, 1976, 66(2), 145-150.
- Bland, H. B. An analysis of the activities of Indiana school nurses employed by boards of education. Unpublished doctoral dissertation, Indiana University, Bloomington, Indiana, 1956.
- Blum, H. L. Planning for health: Development and application of social change theory. New York: Human Sciences Press, 1974.
- Bourne, I. B. A pilot project for improvement of school health services. The Journal of School Health, 1971, 41, 288-292.

- Braden, C. J., & Herban, N. L. Community health: A systems approach. New York: Appleton-Century-Crofts, 1976.
- Bryan, D. S. School nursing in transition. St. Louis: The C. V. Mosby Co., 1973.
- Buser, B. N. The evolution of school health services: New York and nationwide. The Journal of School Health, 1980, 50(8), 475-477.
- Carter, J. H. Standards of nursing care: A guide for evaluation (2nd ed.). New York: Springer Publishing Co., 1976.
- Coleman, J., & Hawkins, W. The changing role of the nurse: An alternative to elimination. The Journal of School health, 1970, 40(3), 121-122.
- Dickinson, D. J. School nursing becomes accountable in education through behavioral objectives. The Journal of School Health, 1971, 41(12), 533-537.
- Eisner, V., & Oglesby, A. Health assessment of school children, II--screening tests. The Journal of School Health, 1971, 41, 344-346.
- Florentine, H. G. The preparation and the role of school nurses in school health programs: Guidelines for the use of administrators, educators, and students. New York: National League of Nursing, 1962.
- Franzen, R. An evaluation of school health procedures. New York: American Child Health Association, 1933. (School Health Research Monograph No. 5).
- Grant, J. A. Quantitative evaluation of a screening program. American Journal of Public Health, 1974, 64(1), 66-71.
- Greenhill, E. D. Perceptions of the school nurse's role. The Journal of School Health, 1979, 49(7), 368-371.

- Haag, J. H. School health program (3rd ed.). Philadelphia: Lea & Febiger, 1972.
- Haro, M. S. School health revisited. The Journal of School Health, 1974, 64(7), 363-365.
- Hansen, M. A., & Levine, M. D. Early school health: An analysis of its impact on primary care. The Journal of School Health, 1980, 70(12), 577-580.
- Howell, K. A., & Martin, J. E. An evaluation model for school health services. The Journal of School Health, 1978, 48(7), 433-442.
- Jenne, F. H. Variables in nursing service characteristics and teachers' health observation practices. The Journal of School Health, 1970, 40(5), 248-250.
- Kerlinger, F. N. Foundations of behavioral research (2nd ed.). New York: Holt, Rinehart, and Winston, Inc., 1973.
- Komaroff, A. L., & Duffell, P. J. An evaluation of selected federal categorical health programs for the poor. American Journal of Public Health, 1976, 66(3), 255-261.
- Lombard, T. J. A lesson for every state from Minnesota's preschool screening program. The Journal of School Health, 1980, 50(8), 459-462.
- Mager, R. F. Preparing instructional objectives (2nd ed.). Belmont, CA.: Fearon Inc., 1975.
- Marriner, A. Opinions of school nurses about the preparation and practice of school nurses. The Journal of School Health, 1971, 41(8), 417-420.
- Martin, J. E. Needs assessment of school health services programs in the Commonwealth of Virginia. Unpublished doctoral dissertation, University of Virginia, 1977.

- Mayshark, C., Shaw, D. D., & Best, W. H. Administration of school health programs: Its theory and practice (2nd ed.). St. Louis: C. V. Mosby Co., 1977.
- Meredith, J. Program evaluation techniques in the health services. American Journal of Public Health, 1976, 66(11), 1069-1073.
- Michigan School Health Association. Appraisal form for evaluating school health services. Journal of School Health, 1948, 18, 1-12.
- Miller, D. F. Legal bases for school health practices in Indiana. The Journal of School Health, 1970, 40(8), 446-450.
- Nadar, P. R. Options for school health: Meeting community needs. Germantown, Maryland: Aspen Systems Corp., 1978.
- National Education Association. Evaluation instruments for school nursing services. Washington, D.C. Author, 1972.
- National Education Association and American Medical Association Joint Committee. Health education. Chicago: Author, 1941.
- National Education Association and American Medical Association Joint Committee. Health services. Chicago: Author, 1953.
- National Education Association and American Medical Association Joint Committee. Suggested school health policies (3rd ed.). Chicago: Author, 1958.
- National Education Association and American Medical Association Joint Committee. Suggested school health policies (4th ed.). Chicago: Author, 1966.
- National Education Association and American Medical Association Joint Committee. Health appraisal of school children. Chicago: Author, 1969.
- National Study of School Evaluation. Junior high school/middle school evaluative criteria (3rd ed.). Arlington, Virginia: Author, 1970.

- National Study of School Evaluation. Elementary school evaluation criteria. Arlington, Virginia: Author, 1973.
- National Study of School Evaluation. Secondary school evaluation criteria. Arlington, Virginia: Author, 1975.
- Neilson, E. A. Analytical study of school health service practices in the United States. The Journal of School Health, 1960, 30, 353-359.
- Netcher, J. R. Recommended activities of public school nurses employed by boards of education in Indiana. Unpublished doctoral dissertation, Indiana University, Bloomington, 1956.
- Newman, I. M. Integrating health services and health education: Seeking a balance. The Journal of School Health, 1982, 52(8), 498-501.
- Newman, I. M., Newman, E., & Martin, G. L. School health services: What costs? What benefits? The Journal of School Health, 1981, 51(6), 423-427.
- Nyswander, D. B. Solving school health problems. New York: The Commonwealth Fund, 1942.
- Ohio Department of Education. A self-appraisal checklist for school health programs. Columbus, Ohio: Author, 1966.
- Ozias, J. Health services in the capitol city. Texas School Board Journal, 1982, 28(1), 32-33.
- Pigg, R. M. A history of school health program evaluation in the United States. The Journal of School Health, 1976, 46, 583-589.
- Poe, N. A., & Irwin, L. W. Functions of a school nurse. Research Quarterly American Association of Health and Physical Education, 1959, 30, 452-464.
- Polit, D. F., & Hungler, B. P. Nursing research: Principles and methods. Philadelphia: J. B. Lippincott Co., 1978.

- Robert Wood Johnson Foundation. Special report, I.
Princeton, N.J.: Author, 1979.
- Rustia, J. Rustia school health promotion model.
The Journal of School Health, 1982, 52(2),
108-114.
- Sellery, C. M., & Bobbitt, B. G. Evaluation of health
education and health services in the Los Angeles
city schools (Part I & II). The Journal of School
Health, 1960, 30, 81-85; 113-118.
- Shell, P. M., & Thompson, V. Can you afford school
health services. Texas School Board Journal, 1982,
28(1), 28-29.
- Shepard, P. A. Attitudes of school personnel regarding
collaborative activities of the school nurse. Un-
published master's thesis, Texas Woman's University,
College of Nursing, 1979.
- Silver, G. A. Redefining school health services:
Comprehensive child health care as the framework.
The Journal of School health, 1981, 51(3), 157-
162.
- Skersaa, H. L. School health service needs discrepancies
as perceived by central Florida public school prin-
ciples and public health nurses. Unpublished doctoral
dissertation, University of Florida, 1979.
- Smith, L. M. An evaluation of school health service
in public health. The Journal of School Health,
1948, 18(1), 20-25.
- Steenson, C. School health services: An investment.
Texas School Board Journal, 1982, 28(1), 30-31.
- Strobo, E. C. Findings of a study designed to assist
in the development of guidelines for the preparation
of nurses for school health work. New York: National
League for Nursing, 1961.
- Suchman, E. A. Evaluative research: Principals and
practice in public service and social action pro-
grams. New York: Russell Sage Foundation, 1967.

- Swanson, M. School nursing in the community program. New York: The Macmillan Co., 1958.
- Texas Education Agency. Guide for administrators and school nurses in the school health program. Austin, Texas: Author, 1975.
- Texas Education Agency. School health Services. Texas Register (3584), Subchapter C. Health Services, 1981, 6(72), 666-697.
- Tinkham, C. W., & Voorhies, E. F. Community health nursing: Evaluation and process. New York: Appleton-Century-Crofts, 1972.
- Trausneck, W. M. Development of an instrument for the self-evaluation of school health services programs. Unpublished doctoral dissertation, University of Virginia, 1963.
- Walker, W. F., & Randolph, C. R. School health services: A study of the programs developed by the health department in six Tennessee counties. New York: The Commonwealth Fund, 1941.
- Wallace, H. M. Evaluation of school health services. The Journal of School Health, 1963, 33, 171-175.
- Warren, R. C. A community approach: School-based health care delivery. The Journal of School Health, 1980, 50(8), 463-466.
- Waters, W. J. State level comprehensive health planning: A retrospect. American Journal of Public Health, 1976, 66(2), 139-144.
- Watters, R. An evaluation instrument for the school health services program. Unpublished doctoral dissertation, Indiana University, 1960.
- Williams, B. The role of the school nurse as perceived by school principal, classroom teachers, and school nurse. Unpublished master's thesis, Texas Woman's University, 1981.

Winslow, C. E. A. The school health program (the regent's inquiry). New York: McGraw-Hill Book Co., 1938.

Yankauer, A. An evaluation of the effectiveness of the Astoria plan for medical service in two New York City elementary schools. American Journal of Public Health, 1947, 47, 853-859.

Yankauer, A. Designs for evaluation needed in the school health services field. American Journal of Public Health, 1952, 52(6), 655-660.

Young, M. A. C. The Brookline school health study. The Journal of School Health, 1961, 31, 47-55.