A SCHOOL CUSTODIAL TRAINING PROGRAM FOR THE STATE OF OHIO

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

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CHAPTER I

INTRODUCTION

Statement of the Problem

The over-all problem of this dissertation is to formulate a policy and a plan based upon facts that will up-grade during the coming years the selection, qualifications and continued in-service education of custodians employed in the schools of Ohio and eventually lead to state-wide certification of all such employees.

Statement of Purposes

One of the most important purposes of this study is to set up principles or criteria that should govern the establishment of a functional custodial training program in the State of Ohio. These criteria are presented in Chapter V of this study as the basic principles governing the development of a more effective and efficient school custodial service.

Another purpose of equal importance is the application of such criteria in formulating a state-wide school custodial training program that can be placed in operation in a relatively easy and functional manner.

A third purpose is to determine the extent and characteristics of existing custodial training programs currently in effect in the United States and to determine how and why these programs originated and how they operate.
A fourth purpose is to point out to school and lay people the tremendous importance of the school custodian in the total educational program of any school system. This purpose includes emphasizing the role of the custodian as an educator; his role in public, staff, and pupil relations; in improving the physical and educational environment of children; and in improving the health and safety factors in our schools. The importance of the school custodian in modern public education is developed in Chapter II.

A fifth purpose, possibly a more tangible one, is to show the economies that may be affected through the use of properly trained school custodians. Economies in the use of supplies and equipment, in proper maintenance and repairs, and in efficient use of the school custodians' time can probably save millions of dollars each year in Ohio.

A sixth purpose is to suggest means whereby the state universities of Ohio may be of greater service to the various school districts by offering custodial courses to administrators, teachers, and custodians. A sincere effort on the part of teacher training institutions to professionalize the position of school custodian might ameliorate present conditions considerably.

History shows that improved qualifications of teachers did not occur voluntarily. Only as standards were raised by certificating agencies did the quality of training increase. Consequently, a seventh purpose of this study to attempt to increase interest at the State Department of Education level in certificating school
Definition of Custodian

"School janitor" is possibly the most common term applied to personnel who operate and care for school plants. A variety of other titles and classifications are attached to these employees such as: custodian, janitor-engineer, fireman, maintenance engineer, janitress, matron, and janitor helper. In the past, the main responsibilities of this group of public school employees were limited to functions of a physical and technical nature including: housekeeping, heating and ventilating, care of grounds, and repair and maintenance work, especially of a recurring nature. However, in this study these responsibilities will be broadened from purely the operation and maintenance of the school plant to include responsibilities in the total educational program of a school system.

In the eyes of many the "janitor" has been merely the sweeper of floors. The term "janitor" has as an ancestor a word meaning doorkeeper or porter and during the passage of time, the term has come to connote a rather lowly status. On the other hand, the term "custodian" refers to a guardian or keeper. Since all public school personnel, whose primary responsibilities are concerned with the operation and maintenance of school buildings are guardians of the health and safety of children and of valuable school property, they will be called school custodians in this study.
Due to the fact that the size of school districts and school buildings vary considerably, the responsibilities of custodial employees differ. In large school buildings one man is usually placed in charge of the entire school plant. One group of custodians is in charge of heating and ventilating and another group is responsible for general housekeeping and maintenance. In very large school buildings the latter group is often assisted by sweepers. For general purposes, full time employees in the various groups above will all be considered as school custodians. For classification purposes, the man in charge of the entire building will be referred to as head custodian; men responsible for heating and ventilating will be referred to as custodial engineers; men in charge of housekeeping will be referred to as custodians; and sweepers will be referred to as custodial helpers. In general, one or two men will be responsible for the total school plant since the majority of school buildings in Ohio do not need more than one or two men to effectively operate and maintain them. This study is concerned with the training of school custodians as defined above.

Justifications of the Study

The importance of the position held by the school custodian partially justifies this study. His services have evolved from comparatively simple non-skilled work to that of the skilled and technical types in such an unobtrusive manner that school authorities and lay people are as yet only partially aware of the change.
Reeder states the five-fold function of the school custodian as follows:

He is the caretaker and user of valuable school property; he is responsible for the use of thousands of dollars worth of school supplies; he determines the housekeeping standards of the school building; he has the responsibility for keeping the school building in such condition that the health and safety of pupils and teachers will not be placed in jeopardy; and finally, he exercises a great moral and educational influence in the school (ll:293-295).

To this five-fold function could well be added the following: he is an important public relations agent; he helps control the morale factor of the school; and he is a valuable educational resource person. The qualifications of the school custodian as stated by Womrath are presented to further point out the importance of the position. The school custodian must be:

1. An economist with ability to economize on the use of supplies and equipment.

2. A sanitarian with proper appreciation of the contribution of cleanliness and sanitation to the health and comfort of children.

3. A sociologist with a clear conception of his school relationships with principals, teachers, children, parents, and the community.

4. A moralist with a keen sense of what constitutes right and wrong conduct and behavior that he may assist in developing proper school attitudes and discipline.

5. An exemplar who by his deportment, disposition, character, personal appearance, patience, honesty, kindliness, and forbearance should set an example for right conduct which will be an influence for good in the lives of children.
6. A diplomat, shrewd and tactful in his contacts with children, other employees and the public.

7. An expert housekeeper who by example establishes standards of right domestic living in the school home.

8. A safety engineer familiar with the causes of accidents and their remedy.

9. An expert mechanical engineer with adequate knowledge of heating plants, plumbing and sanitary equipment, ventilation and air conditioning (65:279–281).

The American public school, one of the greatest contributors to United States and world civilisation, has constantly extolled the virtues and values of education. Paradoxically, in general, it has sought its custodial employees from the ranks of people having a relatively small amount of education. Roger's investigation in 1938 revealed that in sixty-five of the ninety-three cities having populations over 100,000, only twenty-two cities had any educational background requirement for school custodial employees. Four cities reported that applicants for custodial positions must have been able to read and write; one required completion of the sixth grade; fifteen required completion of the eighth grade; one required the completion of the ninth grade and only one progressive city school district required that applicants must have completed high school (47:8). Furthermore, custodians in general have been left to assume their responsibilities with little or no organized direction or guidance from any source. Even had they been subjected to a better general educational background, many of their duties
call for specific and detailed training as is shown in Chapter II.

Despite the recognition of his importance, relatively little has been done to prepare the school custodian to meet the tremendous responsibilities and rigorous qualifications stated by Womrath. Only a relative few of the 85,000 school districts in the United States are making provisions for formally training school custodians, and in the main, the few are limited to the larger cities. As early as 1920 Garber surveyed the training status of school custodians in 1,103 cities. He found that in only five per cent of the cities studied was there any attempt made to instruct custodians. An analysis of his study reveals that training programs consisted of no more than a one day conference or an annual lecture in the majority of the 55 cities reporting a training program. He reported as follows on the need for training school custodians.

There is probably no other governmental position of equal responsibility filled by appointees so entirely lacking in technical training and oversight as in the case of school janitors. As a consequence, most of our school janitor service is haphazard. Even among the better class of janitors, the work is usually by rule of thumb methods, and such methods are sure to break down when there is a change in conditions (14:20).

Expert opinion is that it takes from three to five years to become an efficient school custodian and in that span of years a lot of wasted time, energy, and money is expended in trial and error methods. Consequently, the financial savings that can be effected
in the care and maintenance of the school plant through properly trained school custodians demands an emphasis upon his preparation and in-service education not yet realized.

The school custodian's role in dealing with pupils, teachers, and other non-teaching personnel needs to be emphasized and clarified. His contributions to the total educational program need to be analyzed and evaluated. These activities need to be intellectualized upon for the custodian and all other school personnel.

Limitations of the Study

School administrators face the same problems in dealing with custodial employees as they face in dealing with members of the regular teaching staff. In the first place, they have the problems of selecting. Developing criteria for the selection of custodians is certainly a valuable and needed service but is not included within the scope of this dissertation. The problems connected with salary schedules, tenure, retirement, and work loads are also very important and need further study. The above problems are not entirely ignored in this study but are dealt with only as they relate to, and point out the need for, custodial training schools. It is hoped that the establishment of custodial training schools will have direct implications for improving conditions in each of the above-mentioned areas.
Since this study is primarily concerned with the organization that will facilitate custodial training programs in the State of Ohio, only secondary consideration will be given to the specific and detailed contents of the training program. In other words, it seems that establishing machinery for putting custodial training centers into operation is more important at this point than determining exactly what should be taught. Therefore, the content of the custodial training program will be treated under general headings such as heating and ventilating, plumbing, electricity, housekeeping, health and safety, and maintenance and repair. To properly develop the content of a custodial training program would involve conducting a job analysis, developing a course of study, and constructing a detailed manual on procedures.

This study is mainly concerned with establishing a school custodial training program on a state-wide basis, rather than a local custodial in-service training program, with a purpose in mind of eventually certificating all school custodians in the State of Ohio. The in-service custodial training programs in many school districts throughout the United States will be investigated to determine the extent of such programs and to utilize the valuable features of each in developing a state-wide program. However, there will be no direct attempt in this study to improve local in-service training programs although it seems imperative that they
be maintained. The proposed custodial training program might possibly supplant existing in-service programs or might possibly supplement them. As in-service education is important for the improvement of teachers, so is it important in the improvement of school custodians.

**Related Studies**

As mentioned previously, the scope of this study is limited to improving the training program of school custodians. In an attempt not to duplicate a study of a similar nature, an investigation of all doctorate dissertations since 1917 was made. The investigation revealed but six studies concerning the school custodian. The majority of these studies placed emphasis on the functions of the school custodian or, in the case of Garber's study, dealt with the total problem of school custodians. He completed a dissertation in 1920, entitled *The School Janitor* (15). His study included chapters on the importance of the school janitor's position, administration of janitor service, functions of the school janitor, and rural school janitors. In addition, he made an analysis of the training status of school custodians in 1,103 city school districts. Garber's reasons for making his study were:

1. The importance of the janitor's position in a modern school.
2. The lack of appreciation of the janitor's importance on the part of school officials and the public generally.

3. No comprehensive study of the subject has heretofore been made.

The study completed by Garber seemed significant enough at the time to be condensed and published by the United States Office of Education.

Charles E. Reeves' dissertation, *An Analysis of Janitorial Services in Elementary Schools*, was completed in 1925 (43). His study consisted mainly of making an analysis of the various jobs which comprise the work of the school custodian and to determine possible efficiencies in service and economies in time. He surveyed ninety elementary schools to determine to what extent, in what manner, and how well the school custodians were doing their different tasks.

A study completed in 1926, by H. M. Schwartz, entitled, *Improvement in the Maintenance of Public School Buildings*, dealt with the maintenance and repairs necessary in school plants (48). His primary purpose was to show the incident of repair problems that constantly crop up in school buildings. This study is important to school administrators and architects in planning school buildings. By being aware of the structural and mechanical aspects of school buildings that break down readily, adjustments can be made to improve them.
On the other hand, the study by Schwartz is important to officials responsible for planning school custodial training programs. Proper care and maintenance of structural and mechanical aspects of school buildings that are susceptible to rapid deterioration are important factors.

A comprehensive report concerning school custodians was done by J. F. Rogers, M. D., for the United States Office of Education in 1938. This report entitled, The School Custodian was mainly a status study of custodians covering the period between Garber's study in 1920 and 1938 (47). This study placed particular emphasis on the responsibility of the custodian from a health and safety viewpoint since Roger's position at the time was Consultant in Hygiene for the Office of Education.

Custodial personnel problems were critically analyzed by John E. Phay in his dissertation entitled, Emoluments of School Custodians (37). This study was completed in 1947 and included comprehensive information concerning work loads and hours; salaries and salary schedules; organized union problems; and tenure, retirement, and sick leave.

The study most nearly relating to the one presented here was done by John D. Rice. He completed a field study entitled A Proposed Certification Law For School Custodians For Nebraska in 1947 (46). A year later a second field study entitled An Analytical Survey of Training Facilities for Public School Custodians was completed (45). The former study made inquiry of certification laws
in the forty-eight states. Rice found that not one single state had provisions for certificating school custodians. He then proposed a law to be applicable in the state of Nebraska in which he considered citizenship, health, character, literacy, and examinations as being essential for certification. In his second study he evaluated thirty-four custodial training programs in twenty-eight states. These programs were sponsored by state departments of education, colleges and universities, and local school systems. A five year pattern of training school custodians was evolved from this study.

Sources of Data and Method of Investigation

Two lines of investigation have been pursued in this dissertation. First of all, thorough research was made of the literature bearing on the subject. Sources of data were books, periodicals, school survey reports, rules and regulations of boards of education, interviews, and personal observations.

The bibliography includes a complete list of all publications used. Especially valuable sources of data came from the monthly publications and annual proceedings of the National Association of Public School Business Officials. This association has made untiring efforts to improve the status and services of the school custodian.

Possibly the most voluminous data relating to this study are found in the professional magazines for school administrators.
The American School Board Journal, Nation's Schools, School Executive, and School Management have contributed many articles concerning the school custodian.

School surveys conducted by research staffs from various universities have made recommendations concerning custodial problems and are valuable sources of data. The Ohio State University, Columbia, Yale, and the University of Chicago are but a few such institutions doing this type of survey.

The writer has had the opportunity to work with the Survey Division of the Bureau of Educational Research at The Ohio State University during the past two years. This experience has been valuable in that firsthand observations of school custodians at work in approximately 125 school buildings were made possible. He was given opportunities to interview school custodians, administrators, and teachers. Consequently, the writer will draw frequently from his personal observations and interviews in substantiating statements.

The results of questionnaires were the second method of investigation. In an effort to ascertain the current status of custodial training schools in the United States, five different questionnaires were used.

A preliminary postal card questionnaire was sent to all cities in the United States having over 50,000 population in 1950, inquiring about the existence of custodial training programs of an in-service
nature. A total of 228 city school districts were contacted and
responses were received from 126 or 55 per cent.

The results of the preliminary questionnaire were tabulated
and a second questionnaire was sent to twenty-nine cities conducting
a custodial training school that provided three days or more of
organized training per year. Of the twenty-nine city school districts
contacted through the second questionnaire 16 or 55 per cent responded.
A questionnaire was also sent to the forty-eight State Vocational
Education Departments or Divisions to ascertain to what extent
custodial training schools were being sponsored by them. Thirty-
seven responses were received and twenty-five states indicated
that they were participating in custodial training programs. A
fourth questionnaire was sent to five selected colleges and
universities known to be sponsoring custodial training programs
in an effort to determine the characteristics of their training
schools and answers were received from each school.

In addition, questionnaires were sent to all Ohio city,
exempted village, and 100 local school administrative heads, totalling
300 in all. Answers were received from 217 or 72 per cent of the
number contacted. The two-fold purpose of this questionnaire was;
firstly, to determine the present status of school custodians in
terms of number, age, tenure, formal education, and welfare status;
secondly, to ascertain the opinions of school administrators concerning
the importance of custodial services, interest in training programs,
and the extent of such programs.
The questionnaires in their complete form are reproduced in the appendix of this study.

Over View of the Dissertation

The first chapter of the dissertation is introductory; it presents a statement of the problem, a statement of purposes, a definition of custodians, the justification for the dissertation, the limitations of the study, related studies, the sources of data and method of investigation, and the plan of the dissertation.

The second chapter presents in greater detail the importance of the school custodian. His responsibilities are discussed in terms of his contributions to the total educational program of the school; in terms of his contributions to the health and safety of teachers and pupils; and in terms of his contributions to effecting economies in the operation and maintenance of the school plant.

In addition, Ohio school administrators' opinions concerning the importance of the custodian in the above areas and their expression of satisfaction with his efforts in meeting his obligations are presented.

The current status of school custodial employees relative to age, experience, and formal education and the current status of board of education policies pertaining to school custodians in Ohio are presented in the third chapter.

The fourth chapter presents the opinions of Ohio School administrators and other interested agencies concerning state-wide
custodial training and state certification of school custodians.

Chapter five presents a historical development and an analysis and evaluation of school custodial training programs currently in effect in the United States including programs at the state department of education level; the college and university level; and the public school level. Chapter six lists a summary of findings and conclusions.

Chapter seven lists a set of principles or criteria governing the establishment of a custodial training program in the State of Ohio based on a survey of the literature, the results of questionnaires, and an analysis of existing programs. Chapter eight develops a proposed training program for the State of Ohio based on the established principles.
CHAPTER II

THE IMPORTANCE OF THE SCHOOL CUSTODIAN

One purpose of this chapter is to emphasize the importance of the school custodian as gathered from the literature and from the observations of the writer. Quotations from widely known educators help to establish this importance. Cubberly stated, "Outside of the principal, no one has more influence over the physical well being of the children in the school than has the janitor" (7:209). Dressler said, "The janitor of a modern school building is, next to the principal, perhaps the most important officer in the school" (11:13). Reeves and Sanders registered their opinion in the following statement:

Boards of education, superintendents of schools, principals, teachers, pupils, and the community at large have not come to the full realization of the amount of work and the technical knowledge and skill that are involved in the care of a modern building. As a consequence, schools often employ janitors who are untrained and sometimes even unfitted by physical or mental incapacity for the exacting and responsible duties which such work involves (43:1-2).

Whether the school custodian is, next to the principal, the most important officer in the school is open to question. He holds, however, a very important position. His importance will be discussed in terms of his responsibilities for the total educational program, his responsibilities for the health and safety of children, and his responsibilities for the financial economies that can be
A second purpose of this chapter is to reveal the opinions of school administrators in Ohio concerning the importance of the school custodian. Since establishing a school custodial training program in this state depends largely upon the co-operation of many agents and agencies, including school administrators, it seems important that their opinions be known. Questions concerning the importance of the school custodian were sent to all city and exempted village superintendents and 100 local school executive heads of Ohio totaling 300 in all. Of this number, 218 or 72.6 per cent responded. The discussion relative to these questions will be presented as they apply throughout this chapter.

AN EDUCATIONAL VIEWPOINT

In general, the school custodian's responsibilities in helping to achieve the educational objectives of the school have not been given serious consideration. It has often been the opinion of administrators and teachers that if school buildings were kept neat and comfortable, the custodian's responsibilities were then ended. Grieder says, "Most of our thinking in educational administration in the past, and much of it in the present, has been cast in a hierarchical mold in terms of administrators, teachers, and non-teaching personnel, with administration at the top" (17:62). The school
custodian usually occupies the lowliest station in the school hierarchy. Usually he is not recognized as a member of the school staff nor is he expected to contribute to the deliberations of the staff. The present study emphasizes the broader educational contributions that school custodian's can make.

**Teaching Responsibilities**

Modern education has made tremendous advances since 1900. Terms such as "faculty psychology" and "formal discipline" are currently treated in teacher training institutions only in terms of their historical significance. Education has ceased to be a "pouring in process." We are considering the child in terms of wholes. His emotional, physical, and social development are deemed just as important as his mental development. We now recognize that the needs, interests, and abilities of children vary and must be given primary consideration. It was once thought that children developed according to hereditary potential; on the other hand, we now recognize that environment and experience play very important roles in the total educative process.

These modern concepts of education have important implications for the school custodian. He observes practices and procedures taking place in the classroom and they differ greatly from the experiences he remembers as a student himself. He watches pupils engage in varied activities and since, perhaps, these same activities were forbidden when he was a child he becomes confused. Consequently,
it is imperative that he have at least an elementary knowledge of the philosophy and purposes of the school.

All activities included in the curriculum of the school should be made familiar to him for two reasons. In the first place, he should understand the purposes and values of these activities in order that he might interpret them in their true light and contribute to them. Secondly, he should be aware of them in order that he plan his work efficiently.

School administrators in Ohio were asked the following question, "To what extent do you think custodians are aware of the philosophy and purposes of education in your schools?" Their answers are shown in Table 1. According to the responses custodians in exempted village and local school districts are more aware of the philosophy and purposes of their schools than are the city school custodians. There is also a wider range of the extent of awareness of the custodians of the philosophy and purposes in the exempted village and local schools. The fact that these superintendents have a greater opportunity to know their custodians probably makes their responses more valid. The totals reveal that 28.1 per cent of the superintendents think that their custodians are greatly aware of the philosophy and purposes of education; 53.4 per cent are aware to some degree; and 18.5 per cent are little aware. In other words, there is definite room for improvement in helping the custodian understand the purposes for which the schools exist.
### TABLE 1

NUMBER AND PER CENT OF CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL SUPERINTENDENTS INDICATING THE EXTENT OF THE CUSTODIANS AWARENESS OF THE PHILOSOPHY AND PURPOSES OF EDUCATION IN THEIR SCHOOLS

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Very Greatly</th>
<th>Number</th>
<th>Per Cent</th>
<th>Greatly</th>
<th>Number</th>
<th>Per Cent</th>
<th>Some</th>
<th>Number</th>
<th>Per Cent</th>
<th>Very Little</th>
<th>Number</th>
<th>Per Cent</th>
<th>None</th>
<th>Number</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>77</td>
<td></td>
<td>15</td>
<td>19.5</td>
<td></td>
<td>52</td>
<td>67.5</td>
<td></td>
<td>10</td>
<td>13.0</td>
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<tr>
<td>Exempted Village</td>
<td>60</td>
<td>3</td>
<td>18</td>
<td>30.0</td>
<td></td>
<td>26</td>
<td>43.3</td>
<td></td>
<td>12</td>
<td>20.0</td>
<td>1</td>
<td></td>
<td>1.7</td>
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</tr>
<tr>
<td>Local</td>
<td>80</td>
<td>2</td>
<td>23</td>
<td>28.7</td>
<td></td>
<td>38</td>
<td>47.5</td>
<td></td>
<td>17</td>
<td>21.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>5</td>
<td>56</td>
<td>25.8</td>
<td></td>
<td>116</td>
<td>53.4</td>
<td>39</td>
<td>18.0</td>
<td>1</td>
<td>0.5</td>
<td></td>
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</tbody>
</table>
Since modern education recognizes that pupils learn from firsthand experiences, there are numerous occasions in which the well trained custodian can truly be an educator. He has direct responsibilities for many things that are learning experiences for children. For example, the heating and ventilating system of the school has many educational implications, from elementary science through high school physics. Certain cleaning compounds hold educational values for chemistry classes. Numerous other examples of instances where the school custodian could be a valuable resource person could be cited.

To ascertain to what extent school administrators believe that custodians can be educational resource persons in the school system inquiry are presented in Table 2. Here again a wide range of answers were received. In general, city school administrators see greater possibilities for using custodians as resource persons than do exempted village superintendents. The latter in turn see greater possibilities than do local school superintendents. Two and three-tenths per cent of the total number of school superintendents believe that the custodian can contribute very greatly; 14.3 per cent believe that he can contribute greatly; 52.1 per cent some, 30.4 per cent very little and .9 per cent none. It is plain that the importance of the custodian as a resource person has not been particularly recognized in Ohio. One contributing factor results
in the fact that this phase of custodial service has not been stressed. It is possible for school administrators and teachers to graduate from teacher training institutions with only passing mention being made of the school custodian. More often than not his position is entirely ignored.

Even though administrators have not indicated great possibilities for custodians as resource persons, Table 3 shows that they are even less satisfied with custodians in this respect. Only 1.4 per cent of the total number of superintendents responding to this question felt that custodians were contributing very greatly as resource persons; 6 per cent responded greatly; 46.5 some; 33.2 very little; and 12.9 per cent none.

Naturally, it is impossible for school custodians to assume the role of resource persons on their own. It will come to pass as school administrators and teachers come to the realization of the possible contributions that can be made to the total educational program through utilizing the knowledge and experience of the custodial staff. If the custodian is considered as being more than a "janitor" and is given the opportunity to be an educator, his status and services will undoubtedly improve.
<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Very greatly</th>
<th>Greatly</th>
<th>Some</th>
<th>Very Little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
</tr>
<tr>
<td>City</td>
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<td>Local</td>
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<td>2</td>
<td>2.5</td>
<td>8</td>
<td>10.0</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>5</td>
<td>2.3</td>
<td>31</td>
<td>14.3</td>
<td>113</td>
</tr>
</tbody>
</table>
Staff Responsibilities

The school custodian's relationships with teachers should be friendly and courteous. It is part of his task to serve them so that they in turn will be able to do a better job of teaching. However, teachers must realize that the custodian is not a flunky to do odd jobs at their call and beckoning. There are times when teachers may call upon the custodian to do certain approved jobs for them in connection with their school work. These jobs should be done in a pleasant and cheerful manner. The writer had the privilege of witnessing a custodian helping a kindergarten class build a Christmas tree out of large pieces of heavy cardboard, while on a recent building survey in Birmingham, Michigan. The project was so planned that the children could do as much as possible themselves in order to derive a feeling of accomplishment. The custodian helped to do only the jobs that the small children were unable to do physically, such as cutting the heavy cardboard. He, the teacher, and the pupils were very pleased with the relationship that existed.

Teaching school is a difficult tedious task even under the most favorable conditions. At the end of a hard day's work teachers are often irritable, and a kind, sympathetic bit of encouragement from a smiling custodian helps to ease the nervous tension and vice versa.
TABLE 3

NUMBER AND PER CENT OF CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL SUPERINTENDENTS EXPRESSING SATISFACTION WITH THEIR CUSTODIANS CONTRIBUTIONS AS RESOURCE PERSONS

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Very greatly Number</th>
<th>Per Cent</th>
<th>Greatly Number</th>
<th>Per Cent</th>
<th>Some Number</th>
<th>Per Cent</th>
<th>Very Little Number</th>
<th>Per Cent</th>
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<td>54.5</td>
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<td>28.6</td>
<td>11</td>
<td>14.3</td>
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<td></td>
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<td>Exempted Village</td>
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<td>1.7</td>
<td>4</td>
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<tr>
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<td>2.5</td>
<td>7</td>
<td>8.6</td>
<td>35</td>
<td>43.6</td>
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<td>33.0</td>
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<td>12.5</td>
</tr>
<tr>
<td>Total</td>
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<td>3</td>
<td>1.4</td>
<td>13</td>
<td>6.0</td>
<td>101</td>
<td>46.5</td>
<td>72</td>
<td>33.2</td>
<td>28</td>
<td>12.9</td>
</tr>
</tbody>
</table>
The custodian should not attempt to offer suggestions to teachers or criticize their methods of teaching publicly. There are many occasions in which the custodian may disagree with teachers concerning his responsibilities in the classroom. He may also disagree with methods of disciplining children or with a host of other things. He certainly never should criticize a teacher, especially in the presence of children.

Relationships with the teachers should always be co-operative. One of the most positive methods of assuring co-operation between the teaching staff and the custodial staff is to hold joint meetings in which all concerned have a part in determining school policies. Mutual problems can be discussed and aired to the satisfaction of every one. The question is often raised as to what role the school custodian plays in the supervision of children. This responsibility and others can be determined co-operatively at joint meetings.

It has been previously mentioned that school custodians are often unaware of the more modern practices and procedures in public education; therefore, by attending joint meetings the teachers and custodians can gain valuable information concerning each others tasks.

School administrators in Ohio were asked to what extent they felt there was co-operation between teachers and custodians in their
respective schools. The answers to this question are shown in Table 4. This table reveals that administrators are generally well satisfied with relationships between the teaching staff and the custodial staff since 9.2 per cent checked very greatly; 56.7 per cent checked greatly; 33.2 per cent checked some and only .9 per cent checked very little. Some qualification is necessary here and applies to answers in previous and subsequent tables. A total of twenty-seven superintendents placed a check mark on the five-point scale most nearly representing a cross section of their custodial staff; however, in side notations they remarked that certain custodians would fall in the entire range of the scale. In other words, though administrators are generally well satisfied with custodians they are by no means satisfied with all custodians in all phases of their services.

Pupil Responsibilities

It was previously pointed out that it is important for custodians and teachers to maintain friendly and co-operative relations. It is also important that custodians and pupils maintain desirable relations. Possibly the first requirement of a school custodian in this respect is that he likes children. He deals with them constantly during the school year in a less formal manner than do teachers. In many cases it is he to whom the children come for personal advice
# TABLE 4

Number and Per Cent of City, Exempted Village, and Local School Superintendents Indicating the Extent of Co-Operation Between Teachers and Custodians

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Very greatly</th>
<th>Greatly</th>
<th>Some</th>
<th>Very little</th>
<th>None</th>
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<tbody>
<tr>
<td></td>
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<td>Per Cent</td>
<td>Number</td>
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<td>Per Cent</td>
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<td>City</td>
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<td>36</td>
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<tr>
<td>Local</td>
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<td>10.0</td>
<td>40</td>
<td>50.0</td>
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<td>40.0</td>
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<tr>
<td>Total</td>
<td>217</td>
<td>9.2</td>
<td>123</td>
<td>56.7</td>
<td>72</td>
<td>33.2</td>
</tr>
</tbody>
</table>
and guidance. He must be friendly and kindly toward children, yet firm and dignified.

Since children are less inhibited than adults, it is very important that the school custodian have friendly relations with them. Otherwise they can find innumerable methods of making life miserable for him, such as writing on walls, scattering paper over the floors and playgrounds, plugging radiators, carving desks, and breaking windows.

**Educational Environment Responsibilities**

The school custodian is directly responsible for the physical environment of the school. He sets the housekeeping standards by which the rest of the school abides. He is to the school what the housekeeper is to the home. His work in setting conditions of right living is valuable as a fundamental means of education. On this subject, Womrath remarked as follows:

> Housekeeping no longer means the wielding of a corn broom and a feather duster, and the slopping about of soapsuds on a dirty floor. It means an intelligent exercise of brains in the proper directing of effort toward the accomplishment of certain objectives, among which are cleanliness, orderliness, tidiness, and sanitation (65:278).

From an educational point of view it has been assumed that learning more readily takes place in an attractive environment. Linn emphasizes this point when he says that teachers do a better job of teaching and pupils do a better job of learning when they are comfortable, happy, and generally satisfied with their
surroundings (31:3).

Children are influenced by conditions surrounding them. If they attend dirty, dingy classrooms, they will probably have very little incentive to respect school property and are apt to take a destructive attitude, or at least an attitude of indifference toward self or school pride. On the other hand, if children attend neat, cheerful classrooms, they are more apt to have a feeling of respect for school property. Since one of the school’s chief functions is to inculcate in our children a taste for neatness and cleanliness, as well as an intelligent understanding of their importance, it should be done by precept and example. Children coming from homes having high standards of neatness and cleanliness should not have to attend schools with low standards. Children coming from homes having low standards of neatness and cleanliness should be able to profit from example by attending schools having high standards.

The extent school administrators indicate the importance of the custodian on influencing housekeeping standards is shown in Table 5. An examination of the table shows that the superintendents are in general agreement that the custodian is responsible for influencing housekeeping standards. Approximately 85 per cent of the city and exempted village administrators checked this item either very greatly or greatly. More than 90 per cent of the local
Table 5

Number and per cent of city, exempted village, and local school superintendents indicating the extent of the influence of the custodian on housekeeping standards.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Very Greatly</th>
<th>Greatly</th>
<th>Some</th>
<th>Very Little</th>
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<td>11</td>
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<tr>
<td>Exempted Village</td>
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<td>13</td>
<td>21.7</td>
<td>43</td>
<td>71.7</td>
<td>4</td>
</tr>
<tr>
<td>Local</td>
<td>80</td>
<td>25</td>
<td>31.2</td>
<td>49</td>
<td>61.3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>61</td>
<td>28.1</td>
<td>134</td>
<td>61.7</td>
<td>21</td>
</tr>
</tbody>
</table>
school superintendents checked either very greatly or greatly. Only one person of the 217 responding indicated that the custodian had very little to do with the housekeeping standards of the school.

Table 6 shows the number and per cent of responding administrators expressing satisfaction with their custodians as good housekeepers. A wide range of answers were received with more indicating general satisfaction than not. However, when comparing the answers in Table 5 with those in Table 6, it is noted that satisfaction is not nearly so great as the recognized importance of the school custodian in maintaining housekeeping standards. Three and seven-tenths per cent of the superintendents indicated that they were very greatly satisfied with their custodians as housekeepers; 35 per cent indicated greatly; 47.4 per cent some; 11.1 per cent very little; and 2.8 per cent none. Here again the responses indicate a definite need to improve custodial housekeeping practices.

**Moral and Morale Responsibilities**

If the school custodian understood his tremendous task in the total educational program of the school and had desirable working relations with the teachers and pupils, it would be redundant to mention the moral and morale responsibilities he has. However, unfortunately the above is not always true.

As a moralist he should have a keen sense of what constitutes right and wrong conduct and behavior. He should help with the
# Table 6

| Type of School            | Number | Very greatly | | Greatly | | Some | | Very Little | | None | |
|---------------------------|--------|--------------|---|---------|---|------|---|---------|---|------|
|                           | Number | Number | Per Cent | Number | Per Cent | Number | Per Cent | Number | Per Cent | Number | Per Cent | Number | Per Cent |
| City                      | 77     | 2      | 2.6      |
| Exempted Village          | 60     | 2      | 3.3      |
| Local                     | 80     | 4      | 5.0      |
| Total                     | 217    | 8      | 3.7      |

Number and per cent of city, exempted village, and local school superintendents expressing satisfaction with their custodians contributions to improving housekeeping standards.
supervision of the activities and discipline of children in school corridors, toilet rooms, shower rooms, and on the playground. He should be an exemplar, since he is the only one in the school personnel who comes into continuous daily contact with every child for the full period of the child's life in the school, as well as at other times when neither principal nor teacher is present, such as before and after school, in the evening, and on Saturdays and holidays when the children are on the playground.

One of the causes of low school morale results from custodians not doing their jobs properly. If rooms are not neat and clean at the start of the school day, or are cold and dreary, the teacher is usually irritable. She, in turn, takes "it out" on the children or complains to other teachers or the principal. In fact, many teacher complaints concerning overpaid school custodians do not stem from actual overpayment but are due to the inferior work performance of the custodian.

Expediency in effecting minor repairs in the classroom, proper maintenance of floors, walls, and chalkboards, and adequate heating and ventilating can do much to boost school morale.

The extent to which Ohio school superintendents consider the custodians influence on school morale is shown in Table 7. A total of 77 per cent of the superintendents indicate that the custodian either influences the morale factor in the school very
TABLE 7

NUMBERS AND PER CENT OF CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL SUPERINTENDENTS INDICATING THE INFLUENCE OF THE CUSTODIAN ON SCHOOL MORALE

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Very greatly</th>
<th>Greatly</th>
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<td></td>
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<td>Number</td>
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<td>23.4</td>
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<td>19</td>
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<td>13</td>
<td>21.7</td>
<td>31</td>
<td>51.7</td>
<td>14</td>
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<tr>
<td>Local</td>
<td>80</td>
<td>28</td>
<td>35.0</td>
<td>37</td>
<td>46.2</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
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<td>49</td>
<td>27.2</td>
<td>108</td>
<td>49.8</td>
<td>48</td>
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</table>
greatly or greatly. Only .9 per cent of the superintendents indicate that the custodian exerts very little influence. The greatest range is revealed in exempted village schools. As for being satisfied with their custodians in this respect, a total of 43.8 per cent answer either very greatly or greatly as shown in Table 8; 51 per cent answer that they are satisfied to some degree; 4.6 per cent very little; and .5 none.

The extent to which custodians influence the moral standard of the school is shown in Table 9. Here again a total of 77 per cent of the superintendents indicate that custodians exerts either very greatly or greatly influence. Local school administrators seem to feel that custodians exert more influence on moral standards than do city or exempted village administrators and the former are generally more satisfied with their custodians in this respect than are city or exempted village superintendents as is shown in Table 10. This table reveals that superintendents in general rated satisfaction with custodial contributions to moral standards lower than they rated custodial influence on such standards, indicating some dissatisfaction in this respect.
<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Very Greatly</th>
<th>Greatly</th>
<th>Some</th>
<th>Very Little</th>
<th>None</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
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TABLE 9

NUMBER AND PER CENT OF CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL SUPERINTENDENTS INDICATING THE INFLUENCE OF THE CUSTODIANS ON MORAL STANDARDS IN THE SCHOOL

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
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<th>Number</th>
<th>Per Cent</th>
<th>Greatly</th>
<th>Number</th>
<th>Per Cent</th>
<th>Some</th>
<th>Number</th>
<th>Per Cent</th>
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<td>1.8</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
TABLE 10

NUMBER AND PER CENT OF CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL SUPERINTENDENTS EXPRESSING SATISFACTION WITH THEIR CUSTODIANS CONTRIBUTIONS TO MORAL STANDARDS

<table>
<thead>
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<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
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<tr>
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<td>7.8</td>
<td>89</td>
<td>41.0</td>
<td>95</td>
<td>43.8</td>
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</tbody>
</table>


Public Relations Responsibilities

The custodian is probably one of the most important public relation's agents in the school. As a rule, he is a native of the school district in which he is employed; consequently, he is personally acquainted with many of the pupils and adults in the community. Since the custodian has varied contacts both socially and politically, he can wield tremendous influence on the operation of the school. If he is satisfied and happy in his work and if he feels he is appreciated and belongs to the school family, his contribution as a public relations agent is apt to be positive. If he is dissatisfied in his job or is not familiar with the purposes and practices of the school, he can exert a negative value as a public relations agent. Frequently, the custodian has been influential enough or vociferous enough to cause administrators and teachers to lose their positions, or to cause operating and bond levies to fail.

The school custodian affects public relations in other ways. The gradual trend toward utilizing public school buildings for broader community use has brought more people in direct contact with the schools. Sloppy housekeeping standards have become first-hand realizations on the part of school patrons instead of hearsay in many school districts. The criticisms often heard from the public that the schools should properly care for what they already have, before asking for more, are certainly justifiable in many instances.
In the custodians relationships with the public, he should realize that many times he is the sole representative of the school district present and that the manner in which he conducts himself is important. He may be the only individual in the school system with whom some patrons come in contact, and consequently, he may be used as a gauge to judge the types of schools the districts have.

HEALTH AND SAFETY VIEWPOINT

No argument is needed to defend the proposition that schools should have a paramount concern for the safety of children while in school and for the protection of their physical well-being. School morale, personnel relations, job efficiency, economy, health, and safety must all go hand in hand in terms of custodial service. However, if any of these factors have to be sacrificed, that cannot be health or safety. This makes it all the more important that the school custodian be well trained in health and safety methods and practices.

Health

The custodian is probably more responsible for the health of the teachers and pupils in school than any other person. Health, in this case, refers to mental and emotional well being as well as physical.
In the first place, communicable disease, so prevalent in the public schools can be reduced through proper sanitary procedures. The school custodian who thoroughly cleans the classrooms, toilets, lunchrooms and gymnasium daily is an asset in this respect. On the other hand, the custodian who merely raises the dust in the classrooms and the gymnasium or hides offensive toilet room odors by the use of equally offensive deodorants is a liability.

Pupils subjected to overheating, under heating, or poor ventilation are not usually at their peaks of mental acuity. Neither are these conditions conducive to the physical well being of teachers or pupils. Those susceptible to the common cold are even more so when exposed to varying changes of temperature.

Many school buildings today still have central forced air ventilating systems in which fresh air is pulled by large fans from the outside. In many instances there are no filters provided, but even worse the fanroom is often used as a storage space by the custodian. This room has been found to serve every purpose from mop drying to food storage. Excerpts from surveys of city school buildings quoted by Rogers bear out the lack of consideration for the health of school occupants.

Janitors who push sweepings of the schoolroom under radiators, who neglect dusting and fail to scrub and clean properly, who keep dogs in basements, and who leave the building at 3:30 P.M., are not satisfactory to a principal interested in the wholesomeness of his school plant.
When fresh air inlets are clogged with dirt and dirt, and plenum chambers are used as storage rooms for mops, brooms, dust cloths, and the like, one wonders what excuse can be advanced for such misuse of the provisions that have been made for the health of school children. Dirty window panes, dust laden walls and furniture, basements stored with worn out equipment, and toilets in the most filthy and degrading conditions, cannot be excused in any school system (47:12).

In addition to the sanitary responsibilities that affect the health of school building occupants there are other considerations for which the custodian is partially responsible, for example, good visual environment. Dirty window panes and light fixtures do not allow the maximum amount of light to pass through them. Soiled ceilings, walls, and floors reduce maximum light reflection.

When considering visual environment it is necessary to have a knowledge of terms such as foot candles, brightness contrasts, and reflected glare. In many instances custodians are unaware of these considerations. Thinking in terms of saving additional washing and painting of walls, they prefer high gloss finishes preferably with dark colored dados.

All of the shortcomings attributed to the custodian are in reality not his fault. If he is not given an opportunity or encouraged to improve his services, he should not be blamed. Should the average custodian be expected to realize that pupils who must strain to overcome poor illumination or excessive brightness cannot
possibly give utmost attention to the educational task before them? Should the average custodian be expected to know that poor lighting causes nervous exhaustion, defective eyesight, eye-strain and headaches? These things he should be expected to know, but not without supervision or training.

If the custodian does all of the physical tasks for which he is responsible in an acceptable manner and with a sociological point of view, it seems that his responsibilities for the mental and emotional health of teachers and pupils will have been accomplished. Since mental and emotional health are in a sense the result of a state of mind, the school custodian should do his share to help establish good personnel relationships with teachers and pupils.

**Safety**

Safety is another of the many responsibilities of the school custodian. Exact figures of the number of deaths and injuries occurring on school property are not available and in most instances are not publicized. Such a study would be very interesting and probably most revealing.

The custodian should be aware of the many possibilities and causes of fire in a school building since it is one of the greatest safety hazards. According to figures quoted by McElroy, approximately sixty per cent of all school fires can be traced to negligence or carelessness on the part of the custodian (32:213-218). He stated
that a fire prevention engineer's judgment of school plant management is often based upon his inspection of basements, attics, and janitors' closets, which are off the beaten path.

There have been five serious school building fires in the United States since 1906, in which the total loss of life amounted to 617. This figure becomes much greater when considering other public buildings. The National Fire Protection Association estimates that during the years 1930-45, there were on the average more than 2,100 school fires a year (32:216). Possibly the greatest cause of school fires is the laxity that results from over confidence. The feeling that it can't happen here predominates in many instances.

Following are five of twenty-five headlines on school fires from a limited number of newspapers for a period of three months from January 11, 1947, to April 11, 1947:

"300 Escape School Fire at Basketball Game" - Newark, New Jersey News, January 14, 1947.


The following article, reprinted from The Ohio State University Lantern, appropriately appeared on the day the topic of fire was being written for this study. Although written in an amusing manner the article has serious implications.

MOPS ARE VICTIMS OF BLAZE

Two fire chiefs' cars, a hook-and-ladder truck, and an inhalator squad truck were only part of the fire-fighting equipment rushed to Mendenhall Laboratory at 8:20 this morning.

As the siren-wailing trucks came to a stop, firemen jumped out and hurried up the Mendenhall steps. It was too late. The charred remains had already been carried outside—the charred remains of three Mendenhall mops.

The oily mops had caught fire in a small janitor closet on the second floor. After discovering the blaze, a custodian of Mendenhall quickly carried the flaming mops outside where he extinguished them.

Firemen said the mops caught fire by "spontaneous combustion."

Overheating, defective heating plants, electrical shorts, improper storage, and inflammable decorations are only a few of the many possibilities for fire. The custodian should be so safety minded that as he walks through the building he automatically tries every exit door panic bolt, inspects every fire extinguisher, and examines every electric extension cord.
Other safety hazards in the school result from blocked corridors, broken window panes and frayed sash cord, slipping on loose flooring, loose hand railings, and poorly maintained equipment. In addition, there are many possibilities for injury outside the school building including slippery walks, obstructions on the playground and defective playground equipment.

Thus it seems imperative that school custodians be trained in safety methods and practices. Theirs is a moral responsibility to safeguard the precious lives of children and to save the taxpayers property loss.

The number and per cent of school superintendents, expressing satisfaction with their custodians contribution in promoting health and safety measures in their schools are shown in Table 11. Exempted village superintendents rated their custodians higher in this respect than did city and local superintendents. In all 44.7 per cent of the administrators ranked their custodians either very greatly or greatly; 47.9 per cent expressed some satisfaction; and 7.4 per cent very little.

FROM A FINANCIAL VIEWPOINT

The school custodian has many responsibilities that involve considerable sums of money. In these respects alone, a training program could be justified. Money saved on school plant operation could be more wisely spent for the education of children, the
<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Very Greatly</th>
<th>Greatly</th>
<th>Some</th>
<th>Very Little</th>
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<tr>
<td></td>
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<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
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<tr>
<td>Total</td>
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<td>9</td>
<td>4.1</td>
<td>88</td>
<td>40.6</td>
<td>104</td>
</tr>
</tbody>
</table>
purpose for which schools exist. Furthermore, it is possible that school administrators and the lay public might be appealed to foster custodial training programs by citing the many examples of financial economies that could be effected through proper school plant operation. Not that this phase of custodial responsibility is more important than previous ones mentioned, but because it is more tangible and also because the public, in general, is interested in saving public funds and the schools represent the one aspect of government spending in which the people still have a semblance of control.

**New Construction**

School building construction costs have risen sharply during the last decade. During the period just preceding World War II, it was not uncommon to construct school buildings at a cost of between thirty to forty cents a cubic foot. In other words, school building costs have increased from three to four times in a ten year period. These rises in costs are due in part to current inflation, and, in part to the fact that the modern school building contains many educational innovations and improvements not found in earlier buildings. For example, a new trend in elementary school buildings includes toilet and sink facilities in all primary classrooms. Naturally, this is more expensive than centralised plumbing. The size of classrooms have increased, adding both to the cubage and to the total cost of the school plant. Auditoriums, gymnasiums, cafeterias,
clinics, libraries, and other auxiliary workrooms deemed necessary in modern education have added their share to the cost of school construction.

Around 1920 educational writers spoke of the school plant investment in the United States as representing a sum well over a billion dollars. Today this figure has been increased to several billion dollars. Linn quotes a figure of eight billion in 1948 (30:11-14). In Ohio alone, the voters have indebted themselves for over a third of a billion dollars for school plant improvement since 1946 (19).

Should this tremendous investment be entrusted to untrained, unqualified custodians? This is a question that needs serious consideration and action immediately. The problem has been pointed out repeatedly to the writer during the past two years while working on school surveys with the Bureau of Educational Research at The Ohio State University. In several instances, school buildings erected previous to 1900 have been recommended for continued use. They have been excellently maintained and are in a good state of repair. Conversely, relatively recent constructed school buildings have been recommended for abandonment. In one instance a school district had four buildings constructed in 1928. However, due to poor maintenance and almost complete lack of repairs since 1928, discontinued use of two of them for educational purposes was recommended. Naturally, custodians are not fully to blame for the above conditions since administrative leadership has been entirely
Operation, Maintenance, and Repair

In the modern school building there are some two hundred constellations of duties for which the custodian is responsible. Some of these duties require technical skill such as heating, ventilating, and other mechanical equipment. Since they are the most expensive items to go into the cost of the physical plant of a school building, it is imperative that the custodian into whose hands this equipment is entrusted be well trained in this operation, care, and maintenance. He must have an elemental knowledge of the chemistry of combustion and be able to implement this knowledge through the operation of the heating and ventilating equipment efficiently, economically, and safely.

To operate efficiently and economically he must know how much air is to be admitted to the furnace in order to support complete combustion of the fuel, how to detect and remedy air leaks in boiler settings, breechings, and stacks, how to repair and adjust return water pumps, maintain thermostats, and many other things.

In the operation of a central fan ventilating system the custodian should have a working knowledge of the effect of humidity, temperature, and rate of movement of air on the comfort of the occupants of the classroom. The writer is well acquainted with one school building in which the annual cost of fire box grates was
over $500.00 through a four year period. The district was fortunate
not to have suffered fire damage and possible loss of lives since
the furnaces were fired very heavily each winter in order to heat
the building, but to no avail. Finally, a heating engineer was called
in by the superintendent of schools and the difficulty was quickly
located; the fan had been running backward. Besides the repair
costs to the furnaces, fuel consumption was more than double what
it should have been.

In such simple matters as repairing leaks in water faucets,
shower heads, and toilet bowls, it is possible to save large sums
of money. Since there are numerous water outlets in almost every
school building, it is probable that several leaking faucets could
drip away hundreds of gallons of water daily. If a hot water tap
is leading then there is also a waste in fuel.

Proper maintenance and efficient repairs to the structure of
the school building are very important. A leaking roof can cause
hundreds or even thousands of dollars worth of damage if not repaired
immediately upon discovery. The same is true for the outside walls
of a school building. Neglected or improperly treated floors
deteriorate rapidly and are expensive to replace.

In dealing with the maintenance and repairs of school plants
a stitch in time truly saves nine. Probably no other building in
the community receives harder wear or tear than does the school
building. Hundreds of feet tramp up and down the corridors and
into classrooms daily. The doors open and shut more times in a day than the doors in many homes do in a year. If a capable, willing, well trained person is not on the job, it is easy to see how the school plant can "go to seed" in a hurry.

School administrators' opinions concerning their satisfaction with custodians in regard to maintenance are shown in Table 12. The table shows that city school administrators are less satisfied than exempted village and local administrators. The totals indicate that 3.7 per cent of the total number of superintendents are very greatly satisfied; 41.9 per cent are greatly satisfied; 49.3 per cent are satisfied to some extent; 4.6 per cent are satisfied very little, and .5 per cent or only one superintendent is not satisfied at all.

Supplies and Equipment

Supplies and equipment run from several hundred to several thousand dollars a year depending on the size of a school system. With increasing school enrollments and increasing rises in price of school materials, costs have almost doubled in the past few years. The custodian has the responsibility for expending many of the supplies and equipment.

In many cases the custodian's experience with the quality of a particular supply item could be very valuable in ordering. This requires an elemental knowledge of the chemistry involved in the
| Type of School | Number | Very greatly | | Greatly | | Some | | Very Little | | None |
|---------------|--------|--------------|----------|---------|----------|---------|----------|----------|---------|
|               | Number | Number Per Cent | Number Per Cent | Number Per Cent | Number Per Cent | Number Per Cent | Number Per Cent |
| City          | 77     | 3 3.9        | 28 36.4  | 39 50.6  | 7 9.1     |         |         | |
| Exempted Village | 60     | 3 5.0        | 28 46.7  | 26 43.3  | 2 3.3     | 1 1.7   |         | |
| Local         | 80     | 2 2.5        | 35 43.7  | 42 52.5  | 1 1.3     |         |         | |
| Total         | 217    | 8 3.7        | 91 41.9  | 107 49.3 | 10 4.6    | 1 0.5   |         | |
case of floor preservatives or soaps. The cheapest purchase on
the market of a particular item is not always the most economical.
If the product does not do the work expected of it, the custodian
should make the fact known.

The proper care of brushes, brooms, and other cleaning
implements can prolong usefulness to large degrees. The proper
storage of supplies is very important. For example, if paper
towels and toilet paper are stored in damp places their usefulness
can be destroyed. The expending of towels, toilet paper, and soap
can be controlled largely by supervision in the toilet rooms.

Table 13 shows that exempted village superintendents are
generally more satisfied with their custodians efficient and
economical use of supplies and equipment than are city and local
school superintendents. In fact, responses to this question indicate
more satisfaction in this respect than was expected by the writer
by all three types of school superintendents. A total of 4.1 per
cent of the administrators expressed that they were very greatly
satisfied; 46.5 per cent greatly; 43.8 per cent some, and 5.6 per
cent very little.

The responsibilities of the school custodian discussed in this
chapter by no means exhaust his total responsibilities in the actual
school situation. They have been presented to show the important
position he holds in the modern school for a two-fold purpose. In
the first place, it is not fair to assume that he should master
TABLE 13

NUMBER AND PER CENT OF CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL SUPERINTENDENTS EXPRESSING SATISFACTION WITH THEIR CUSTODIANS EFFICIENT AND ECONOMICAL USE OF SUPPLIES AND EQUIPMENT

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Very greatly</th>
<th>Greatly</th>
<th>Some</th>
<th>Very Little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
</tr>
<tr>
<td>City</td>
<td>77</td>
<td>2</td>
<td>2.6</td>
<td>33</td>
<td>42.9</td>
<td>36</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>60</td>
<td>1</td>
<td>16.7</td>
<td>35</td>
<td>58.3</td>
<td>21</td>
</tr>
<tr>
<td>Local</td>
<td>80</td>
<td>6</td>
<td>7.5</td>
<td>33</td>
<td>41.2</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>9</td>
<td>4.1</td>
<td>101</td>
<td>46.5</td>
<td>95</td>
</tr>
</tbody>
</table>
these responsibilities without the benefit of some type of training program. There are too many duties that require skill and technical information. It is almost a fair statement to say that school superintendents and principals are not qualified to act as supervisors to custodians. In general, they have not had formal education courses that would give them the necessary knowledge about fuel consumption, heating and ventilating, and the many other specific technical duties of the custodian. In fact, there are very few colleges and universities that offer such courses. A random search through several teacher training institution bulletins revealed but one school, Teachers College, Columbia, offering a course in school plant management.

Secondly, it is hoped that by enumerating several of the more important responsibilities of the school custodian that administrators, teachers, and pupils, and the lay public will hold the position in higher esteem. The custodian must be recognised as contributing to the educational program of the school as fully as any other employee, and his services should be evaluated on a standard scale based on the contribution he makes to the over-all training of the child.

The extent to which school administrators felt that the importance of the school custodian is recognised by teachers, pupils, and lay people in the community is shown in Table 14. In general, recognition
of the importance of the custodian rated lower than did most other
questions asked superintendents. The table reveals that 3.2 per
cent of the administrators felt that the importance of the custodian
was very greatly recognised; 19.8 per cent greatly; 49.3 per cent
some; 27.2 per cent very little; and .5 per cent none. Exempted
village superintendents were more positive than were the city
or local administrators. Several answers stated that the importance
of the custodian was recognised by the school staff and pupils,
but not by the public. One superintendent stated that he had been
able to convert most everyone in the community excepting the board
of education. This important group still considered the custodians'
position of being that of an old man. As long as the opinion is
held that most anyone can be a school custodian, neither his status
nor his services are likely to be ameliorated.
### Table 14

NUMBER AND PER CENT OF CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL SUPERINTENDENTS EXPRESSING THE EXTENT TEACHERS, PUPILS, AND LAY PEOPLE RECOGNIZE THE IMPORTANCE OF THE SCHOOL CUSTODIAN

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Number</th>
<th>Very greatly</th>
<th>Greatly</th>
<th>Some</th>
<th>Very Little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
</tr>
<tr>
<td>City</td>
<td>77</td>
<td>1</td>
<td>1.3</td>
<td>14</td>
<td>18.2</td>
<td>38</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>60</td>
<td>3</td>
<td>5.0</td>
<td>15</td>
<td>25.0</td>
<td>32</td>
</tr>
<tr>
<td>Local</td>
<td>80</td>
<td>3</td>
<td>3.8</td>
<td>14</td>
<td>17.5</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>7</td>
<td>3.2</td>
<td>43</td>
<td>19.8</td>
<td>107</td>
</tr>
</tbody>
</table>
CHAPTER III

AGE, FORMAL EDUCATION, YEARS OF EXPERIENCE, AND PERSONNEL POLICIES OF SCHOOL BOARDS PERTAINING TO 2,200 OF THE 6,500 SCHOOL CUSTODIANS OF OHIO

The first purpose of this chapter is to ascertain the current status of school custodians in Ohio in terms of their personal qualifications to do the job required of them. A second purpose is to make an analysis of the policies of boards of education as they pertain to the selection of custodians, work loads, work hours, salary schedule, retirement, and tenure.

PERSONAL QUALIFICATIONS OF SCHOOL CUSTODIANS

When considering an educational program for any group of persons, whether they be children or adults, it is necessary to know something of the background of the group. The nature of an educational program depends in part upon the characteristics of the trainees. For example, one would hardly teach beginning addition to a group of atomic physicists; neither would one teach an advanced course in aeronautics to a beginning class in high school physics. The responsibilities and duties of custodians, as discussed in Chapter II, reveal that the nature of the position has changed considerably in the past five decades. Present standards for school enrollments, school building facilities, size of school sites makes the school plant too large for old-fashioned
personnel to tend it properly. In terms of intricate and technical equipment and machinery in the school plant, a rather high degree of mental competency is required for efficient operation. It has often been charged that school custodians, in general, are selected from the ranks of old men, cripples, and mental defectives. Whether this is true or not can be determined only by a study of the personal qualifications of custodians in Ohio to do the job required of them. Therefore, a questionnaire was sent to school administrators as described on page 15, Chapter I. The results obtained from this questionnaire are described in the balance of this chapter.

**Age of School Custodians**

Table 15 has been prepared to show the ages of school custodians in Ohio. Responses from school administrators include data concerning 2,200 school custodians from 77 city, 60 exempted village and 80 local school districts. This represents approximately one-third of the custodians of the State of Ohio, since there were 6,390 reported during the 1950-51 school year.* A study of the table reveals that the charge that custodians are old men is true to a large degree. Over 50 per cent of all custodians are over fifty years of age, and only 7.8 per cent of them are under thirty. The most popular age bracket is between

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* There were 6,390 school custodians in the State of Ohio during the 1950-51 school year as reported on the State Department of Education Form 5-51.
# TABLE 15

**AGES OF 2,200 CUSTODIANS IN CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL DISTRICTS IN OHIO**

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Under 20</th>
<th></th>
<th>20-25</th>
<th></th>
<th>26-30</th>
<th></th>
<th>31-35</th>
<th></th>
<th>36-40</th>
<th></th>
<th>41-50</th>
<th></th>
<th>51-60</th>
<th></th>
<th>Over 60</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
</tr>
<tr>
<td>City</td>
<td>1</td>
<td>.1</td>
<td>33</td>
<td>2.0</td>
<td>69</td>
<td>4.2</td>
<td>161</td>
<td>9.9</td>
<td>176</td>
<td>10.8</td>
<td>356</td>
<td>22.6</td>
<td>461</td>
<td>28.3</td>
<td>364</td>
<td>22.6</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>2</td>
<td>.7</td>
<td>9</td>
<td>3.3</td>
<td>15</td>
<td>5.5</td>
<td>16</td>
<td>5.9</td>
<td>31</td>
<td>11.3</td>
<td>60</td>
<td>21.9</td>
<td>76</td>
<td>27.8</td>
<td>64</td>
<td>23.4</td>
</tr>
<tr>
<td>Local</td>
<td>5</td>
<td>2.0</td>
<td>10</td>
<td>4.0</td>
<td>23</td>
<td>9.3</td>
<td>22</td>
<td>8.9</td>
<td>21</td>
<td>8.5</td>
<td>47</td>
<td>19.0</td>
<td>92</td>
<td>37.2</td>
<td>27</td>
<td>10.9</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>0.4</td>
<td>52</td>
<td>2.4</td>
<td>107</td>
<td>5.0</td>
<td>199</td>
<td>9.3</td>
<td>228</td>
<td>10.6</td>
<td>463</td>
<td>21.6</td>
<td>629</td>
<td>29.4</td>
<td>455</td>
<td>21.1</td>
</tr>
</tbody>
</table>

City median, 51.3; Exempted Village median, 51.4; Local median 50.0
fifty and sixty. In general, there are a greater number of younger men being employed by the smaller local school districts than by the exempted village and city school districts. This probably results from the fact that there are less opportunities for local employment in the smaller school districts. But the difference is scarcely significant. The median age is 51.3 years in city school districts; 51.4 years in exempted village districts; and 50 years in local school districts. Vander Meer gave the average age of custodians as being 50 in a study completed in 1926; consequently, it can be seen that in Ohio, at least, that no downward trend in age is apparent.  

Formal Education of School Custodians

The charge that schools are employing custodians having very little education is not so well founded as the one concerning ages. This is especially true if the years of formal schooling completed by custodians is used as an index. Table 16 shows that while only five, or .2 per cent, of all custodians have completed college, only 18.3 per cent have not completed the eighth grade. In other words, 81.7 per cent of all custodians have completed the eighth grade. It is interesting to note that local school districts, in general, employ custodians with more formal education than do the other two types of school districts. The median education for custodians is 8.1 grades for city school districts; 9.1 grades for exempted village; and 9.8 grades for local school districts.
### TABLE 16

**EDUCATION OF 2,200 CUSTODIANS IN CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL DISTRICTS IN OHIO**

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Less than 8th grade</th>
<th>Completed 8th grade</th>
<th>Attended high school</th>
<th>Completed high school</th>
<th>Attended college</th>
<th>Completed college</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
</tr>
<tr>
<td>City</td>
<td>283</td>
<td>19.2</td>
<td>455</td>
<td>30.1</td>
<td>402</td>
<td>27.3</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>47</td>
<td>17.2</td>
<td>66</td>
<td>24.1</td>
<td>83</td>
<td>30.4</td>
</tr>
<tr>
<td>Local</td>
<td>33</td>
<td>14.8</td>
<td>40</td>
<td>18.0</td>
<td>78</td>
<td>35.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>363</td>
<td>16.3</td>
<td>561</td>
<td>28.3</td>
<td>563</td>
<td>28.4</td>
</tr>
</tbody>
</table>

City median, 6.1; Exempted Village median, 9.1; Local median, 9.8.
City school districts employ custodians with the least formal education. This factor is significant. One prominent director of a custodial training school was of the opinion that a state-wide program would have to be developed on two educational levels. His reason for so thinking was that custodians from rural and small districts would not have the capacity for understanding the same level of training that custodians from urban districts would have.

When comparing school custodians with the entire adult population of Ohio, fewer custodians have attended or completed college but more have attended or completed high school as is shown in Table 17. A discrepancy should be pointed out in that data used for the entire adult population of Ohio were taken from 1940 Bureau of Census reports (55). On the other hand, data for school custodians were taken for the year 1952. Consequently, it seems valid to assume that data for 1950 would show larger ratios of persons having completed more formal education than in 1940; however, 1950 census figures are not available.

The formal education status of school custodians in Ohio has improved greatly since 1929 according to data revealed by Mustard (34, p.28). His survey of 333 custodians showed that only 14 per cent of the men had completed high school and the current study shows that this percentage has almost doubled. It is evident then that the educational background of custodians is increasing and that they should be more capable of profiting from a training.
TABLE 17

COMPARATIVE AMOUNTS OF FORMAL EDUCATION OF OHIO CUSTODIANS AND OF THE ADULT POPULATION OF OHIO (1940)

<table>
<thead>
<tr>
<th>Years of Schooling</th>
<th>Per Cent of Ohio Adults</th>
<th>Per Cent of City School Custodians</th>
<th>Per Cent of Exempted Village Custodians</th>
<th>Per Cent of Local School Custodians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed College</td>
<td>4.4</td>
<td>.3</td>
<td>.0</td>
<td>.0</td>
</tr>
<tr>
<td>Attended College</td>
<td>4.9</td>
<td>2.0</td>
<td>2.2</td>
<td>.9</td>
</tr>
<tr>
<td>Completed high School</td>
<td>16.8</td>
<td>21.1</td>
<td>26.0</td>
<td>31.1</td>
</tr>
<tr>
<td>Attended high School</td>
<td>16.8</td>
<td>27.3</td>
<td>30.4</td>
<td>35.1</td>
</tr>
<tr>
<td>Completed 8th grade</td>
<td>30.0</td>
<td>30.1</td>
<td>24.1</td>
<td>18.0</td>
</tr>
<tr>
<td>Did not complete 8th grade</td>
<td>27.1</td>
<td>19.2</td>
<td>17.2</td>
<td>14.8</td>
</tr>
</tbody>
</table>
program in 1950 than in 1929 if the amount of formal education is a significant factor.

**Experience of School Custodians**

Table 16 shows the years of experience that custodians have had in their respective positions. If the statement made by Linn is only partly true, that it takes from three to five years to learn the custodial trade by trial and error methods, then almost half our custodians are in the early learning stage (29:29).

Table 18 shows that 45.5 per cent of the custodians have been working five years or less. City school districts have less turnover than do exempted village and local school districts. This greater stability usually results from better salaries and better working conditions. The median length of time custodians have been in service is 7.2 years in city school districts; 5.9 years in exempted village school districts; and 5.1 years in local school districts. Since local school districts do employ younger men, it is probable that the job is regarded as only a temporary one by more than half of the custodians.

**POLICIES OF BOARDS OF EDUCATION PERTAINING TO SCHOOL CUSTODIANS**

The extent to which custodians have received consideration in the public schools of Ohio may be partly measured in terms of
**Table 18**

YEARS OF EXPERIENCE OF 2,200 CUSTODIANS IN CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL DISTRICTS IN OHIO

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Less than one year</th>
<th>1-5 years</th>
<th>6-10 years</th>
<th>11-15 years</th>
<th>16-20 years</th>
<th>Over 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
<td>Number</td>
<td>Per Cent</td>
</tr>
<tr>
<td>City</td>
<td>210</td>
<td>12.7</td>
<td>501</td>
<td>30.2</td>
<td>447</td>
<td>26.9</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>56</td>
<td>20.5</td>
<td>88</td>
<td>32.2</td>
<td>65</td>
<td>23.8</td>
</tr>
<tr>
<td>Local</td>
<td>55</td>
<td>22.3</td>
<td>82</td>
<td>33.2</td>
<td>35</td>
<td>14.2</td>
</tr>
<tr>
<td>Total</td>
<td>321</td>
<td>14.7</td>
<td>671</td>
<td>30.8</td>
<td>547</td>
<td>25.1</td>
</tr>
</tbody>
</table>

City median, 7.2 years; Exempted Village median 5.9 years; Local median 5.1 years.
policies that have been established by boards of education concerning them. Policies concerning selection, work hours, work loads, salary schedules, sick leave, retirement, and tenure, are important both to the custodian and the public school he serves. Although not directly concerned with custodial training, the extent to which these factors are operating in the schools of Ohio have implications for training programs. For example, policies concerning selection determines the initial quality of custodians. Policies concerning the welfare of custodians determines, in addition to services rendered, the morale of custodians, which in turn affects tenure. All things being equal, the better the conditions under which custodians work the greater the possibility of a training program's success. Phay claims that improving welfare conditions will improve custodial services more than training programs. In fact, he argues that training programs are just another way of increasing the amount of work and responsibilities (38:22).

Selection of Custodians

It is a well established principle that the superintendent of schools should make recommendations concerning the employment of teachers; however, there has been a reluctance on the part of boards of education to relinquish the responsibility of employing custodians in many school districts. In general, boards of education in city school systems have turned this responsibility over to the superintendent or a person designated by him. Table 19
### TABLE 19

**SCHOOL AGENTS AND AGENCIES SELECTING CUSTODIANS IN OHIO CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL DISTRICTS**

<table>
<thead>
<tr>
<th>Agent or Agency</th>
<th>City</th>
<th>Exempted Village</th>
<th>Local</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Education</td>
<td>5</td>
<td>12</td>
<td>25</td>
<td>42</td>
</tr>
<tr>
<td>Superintendent of Schools</td>
<td>17</td>
<td>25</td>
<td>12</td>
<td>54</td>
</tr>
<tr>
<td>Business Manager</td>
<td>13</td>
<td>1</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Supervisor of Custodians</td>
<td>7</td>
<td>1</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Civil Service</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Board of Education and Superintendent of schools</td>
<td>9</td>
<td>20</td>
<td>40</td>
<td>69</td>
</tr>
<tr>
<td>Superintendent and Supervisor of Education</td>
<td>10</td>
<td>2</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Business Manager and Supervisor of Custodians</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Superintendent and Business Manager</td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Director of Operation and Maintenance</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Superintendent of Buildings and Grounds</td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>77</td>
<td>60</td>
<td>80</td>
<td>217</td>
</tr>
</tbody>
</table>
shows to what extent this has taken place in Ohio; in only five of the 77 city school districts reporting has the board of education retained the responsibility of appointing school custodians. The table also reveals that there is no standardized procedure for appointing school custodians. In smaller city and in exempted village school districts the superintendent of schools is responsible for selecting custodians in the greatest number of cases; however, in local schools the superintendent and board of education have joint responsibility in the majority of cases. The smaller the school district the more likely it is that members of the board of education retains the right to select school custodians. The general condition in Ohio at the present time represents a great improvement over practices in 1929. Mustard reported that in 87 per cent of the responses to his questionnaire that custodians were selected by members of the boards of education (35:24).

In only nine out of a total of 217 reporting school districts are custodians responsible to boards of education and eight of the nine are local school districts as is shown in Table 20. Custodians are responsible to the superintendent of schools in most cases in the three different types of school districts.

Insofar as policies concerning qualifications for the selection of custodians are concerned, 62 per cent of the city school districts reported that definite policies are in effect and that definite
### Table 20

**To Whom Custodians Are Responsible in Ohio City, Exempted Village and Local School Districts**

<table>
<thead>
<tr>
<th>To Whom Responsible</th>
<th>City</th>
<th>Exempted Village</th>
<th>Local</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Education</td>
<td></td>
<td>1</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Superintendent of</td>
<td>14</td>
<td>39</td>
<td>37</td>
<td>90</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Manager</td>
<td>10</td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Supervisor of</td>
<td>9</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Custodian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Principal</td>
<td>9</td>
<td>4</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Superintendent and</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Principal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendent and</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Supervisor of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Manager</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>and Principal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendent and</td>
<td>4</td>
<td>8</td>
<td>23</td>
<td>35</td>
</tr>
<tr>
<td>Board of Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal and</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Supervisor of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Manager</td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>and Supervisor of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>77</td>
<td>60</td>
<td>80</td>
<td>217</td>
</tr>
</tbody>
</table>
Qualifications for the selection of custodians have been established; only 35 per cent of the exempted village school districts have established such qualifications; and 42.5 per cent of local school districts have established such qualifications.

Qualifications recommended by a custodial conference in Michigan included the following:

1. Qualifications for Men Entering the Occupation
   a. He must never have been convicted of a felony.
   b. He must be a citizen of the United States.
   c. He must pass a suitable examination set up by the proper authorities.
   d. He must pass a physical examination given by a competent physician.
   e. He must be between the ages of 21 and 50 at the time of selection.
   f. He must be temperate, industrious, and trustworthy.
   g. He must have satisfactory home relations and good home environment.
   h. He must have clean personal habits.
   i. He must be emotionally stable (62:2).

It is doubtful that many school districts in Ohio have established such qualifications in their policies concerning the selection of the school custodian. This conclusion is drawn from
the fact that such materials were requested from school super-
intendents but only two statements of policies were received.

Work Hours and Work Loads

Traditionally, custodians have served long hours and this
condition exists today. Phay's study in 1946 showed that less
than 10 per cent of all cities above 30,000 in population had
a 40 hour normal work week for custodians (38:21-22). The 44
hour week applied to more cities than any other work period, and
it was not uncommon for the work week to contain more than 48
hours.

Work hours and work loads have been lessened in many Ohio
school districts, especially city districts or districts where
more than one man is hired to attend a single building. Policies
determining work hours are shown in Table 21. Work hours have
been established in 92.2 per cent of the reporting city school
districts, 61.7 per cent of the exempted village school districts,
and 71.2 per cent of the local school districts. Work loads, on
the other hand, have received less consideration. Of the reporting
city school districts, 84.4 per cent claim to have established
policies concerning work loads, 58.3 of the exempted village and
62.5 of the local school districts make this same claim. The
validity of these reports are open to question since in several
instances it was disclosed upon questioning that even though
policies had been established, they were very vague. For example,
TABLE 21

NUMBER OF OHIO CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL DISTRICTS THAT HAVE ESTABLISHED PERSONNEL POLICIES PERTAINING TO SCHOOL CUSTODIANS

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Work hours</td>
</tr>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>City</td>
<td>71</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>37</td>
</tr>
<tr>
<td>Local</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>165</td>
</tr>
</tbody>
</table>
systematic procedures were not used in determining work loads, the care of an entire building whether it be an eight or twelve classroom structure constituted the work load.

Phay's recommendations concerning the work hours of custodians were:

1. The normal work day for custodians should not exceed eight hours and the normal work week should not exceed forty hours.
2. Custodians should be paid time and one-half for overtime that exceeds forty hours per week.
3. Custodians should be hired for the entire twelve months of the year.
4. Where the part-time services of a custodian are needed in several schools, "roving custodians" should be employed (38:22).

Welfare Considerations

The need for custodial training has already been discussed at length but the best organized training program cannot be effective if provisions for adequate salary, sick leave, and retirement have not been made. Schoolmen throughout the country are aware of the fact that all school employees are grossly underpaid in terms of the present cost of living. According to responses from the school administrators in Ohio, it is almost impossible to employ custodial
workers. Schools cannot compete with industry in obtaining men. Even in the face of teacher shortages, a common statement from superintendents was that, "It is more difficult to find good custodians than good teachers." For these reasons many responses indicated that, though they were favorable to training and certificating custodians, timing would be bad if such a plan were to go into effect immediately.

One thing that school boards can do is to establish definite policies concerning the welfare of custodians. Though they may not provide more remuneration, custodial welfare policies may be improved to such an extent that excellent custodians may be obtained and retained. The extent such policies have been made effective are shown in Table 21. A total of 85.2 per cent of all reporting schools indicate that policies have been established for custodial salaries.

Phay's study conducted in 1946 covered all cities having populations of 30,000; he reported that 75 per cent of the cities had salary schedules. His recommendations concerning custodial salaries were:

1. Definite salary schedules should be provided custodians.
2. Salary schedules for custodians should be made cooperatively.
3. Rules of promotion should be established and made known.
4. Salary schedules should be made that will attract "career" custodians.
5. The maximum salaries for custodians should be
determined by the amount necessary for a "health and
decency" standard of living as determined by the Heilac
Committee or by other equally reliable groups.

6. Salary schedules for custodians should have from three to
five yearly increments.

7. Increments should be large enough to be felt.

8. Salary increments should be granted annually.

9. All custodial positions should be classified and a
distinct salary scale made for each classification.

10. Salary schedules should provide for cost-of-living
adjustments (38:41-42).

Retirement and sick leave are actually in effect in all school
districts in Ohio, in accordance with State legislative enactments.
Table 22 shows that 96.3 per cent of all reporting schools have
established definite policies concerning sick leave and 88.9
per cent have established policies concerning retirement.
CHAPTER IV

CURRENT ATTITUDES IN OHIO CONCERNING CUSTODIAL TRAINING AND STATE CERTIFICATION

The success of a custodial training program in Ohio is dependent upon the co-operation of school administrators, school board members, custodians, the State Department of Education, and the general public. Therefore, one purpose of this chapter is to make an analysis of the opinions of these groups concerning the desirability of such a program.

Since one of the over-arching purposes of this dissertation is to formulate a plan of custodial training program that will eventually lead toward State Department of Education certification of custodians in Ohio, a second purpose is to ascertain the opinions of interested agents and agencies concerning certification. A final purpose of this chapter is to present briefly the trend of thought in the United States concerning the certification of school custodians.

ATTITUDES CONCERNING CUSTODIAL TRAINING

Possibly one indication of the attitude of schoolmen throughout the country concerning the training of school custodians can be gleaned from the ever-increasing number of schools being established. With reference to the questionnaire sent to all cities in the United
States having populations over 50,000, sixty-eight out of 126 or 58 per cent of the responding school administrators indicate that they favor a custodial training program on a state-wide level.

In fact, only one negative response was received. Twelve administrators indicated they were not sure and the remaining men did not respond to the question.

Further evidence in Ohio has been sought through questionnaires to school administrators and through interviews with other groups whose cooperation is necessary for a successful custodial training program.

**Attitudes of School Administrators Toward Custodial Training**

School administrators in Ohio were asked to what extent they favored a custodial training program on a state-wide basis. The answers are shown in Table 22. The distinction is small between city, exempted village, and local school administrators in their opinions concerning favoring training programs; however local school administrators seem to be most interested. The totals show that 23.5 per cent of all administrators favor a training program **very greatly**; 50.7 **greatly**; 20.8 per cent **some**; 4 per cent **very little**, and 1 per cent **none**. In other words, approximately 75 per cent of all responding school administrators favor a state-wide training program either **very greatly** or **greatly**, while only 5 per cent favor such a program **very little** or **none**.
TABLE 22

NUMBER OF SCHOOL ADMINISTRATORS EXPRESSING THE EXTENT THEY FAVOR CUSTODIAL TRAINING PROGRAMS IN OHIO

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Very greatly</th>
<th>Per Cent</th>
<th>Greatly</th>
<th>Per Cent</th>
<th>Some</th>
<th>Per Cent</th>
<th>Very Little</th>
<th>Per Cent</th>
<th>None</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>17</td>
<td>22.1</td>
<td>39</td>
<td>50.7</td>
<td>16</td>
<td>20.8</td>
<td>2</td>
<td>2.6</td>
<td>3</td>
<td>3.9</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>14</td>
<td>23.3</td>
<td>26</td>
<td>43.3</td>
<td>14</td>
<td>23.3</td>
<td>6</td>
<td>10.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>20</td>
<td>25.0</td>
<td>45</td>
<td>56.2</td>
<td>15</td>
<td>18.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>23.5</td>
<td>110</td>
<td>50.7</td>
<td>45</td>
<td>20.8</td>
<td>8</td>
<td>4.0</td>
<td>3</td>
<td>1.0</td>
</tr>
</tbody>
</table>
The question arises as to whether custodial training should be mandatory or elective if sponsored on a state-wide basis. The opinions of school administrators in Ohio relative to this question are shown in Table 23.

**TABLE 23**

**OPINIONS OF SCHOOL ADMINISTRATORS RELATIVE TO MANDATORY CUSTODIAL TRAINING**

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Training</th>
<th>Per Cent</th>
<th>Elective</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>47</td>
<td>61</td>
<td>28</td>
<td>39</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>23</td>
<td>38.6</td>
<td>35</td>
<td>61.4</td>
</tr>
<tr>
<td>Local</td>
<td>33</td>
<td>41.2</td>
<td>45</td>
<td>58.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>103</td>
<td>47.5</td>
<td>108</td>
<td>52.5</td>
</tr>
</tbody>
</table>

*Four superintendents did not answer and two were not sure.*

It is interesting to note that city schools favor mandatory custodial training more than exempted village and local school districts. This probably results from greater security on the part of city school administrators since tenure of custodians is longer.
in the city districts, salaries are higher, and personnel policies are more fully developed. In any event, it is significant to note that 47.5 per cent of all administrators indicate they feel strongly enough about custodial training that they would like it to be mandatory. However, it is difficult to determine the intensity of the desire for custodial training on the part of school administrators. Even though 75 per cent indicate they favor such a program either very greatly or greatly, and 47.5 indicate it should be mandatory, the fact remains they are doing relatively little on their own to improve custodial services. According to responses received from Ohio cities having populations over 50,000, not one large city school district has an organized formal custodial training program. A search through the records of the Trade and Industrial Education Service of the Ohio Vocational Education Division reveals that trade extension courses in custodial training have never been offered even though financial reimbursement is available for such courses.

Table 24 has been prepared to show the number of reporting Ohio schools that have established policies for in-service education of custodians. Of the reporting city school districts, 28.6 per cent indicate that policies have been adopted for in-service education. Exempted village and local school districts indicate that policies have been adopted in 20 and 18.7 per cent of the districts respectively. In other words, slightly over one-fifth of the reporting Ohio schools are making an attempt to improve
custodial services through in-service education programs.

**TABLE 24**

NUMBER OF OHIO CITY, EXEMPTED VILLAGE, AND LOCAL SCHOOL DISTRICTS IN OHIO CONDUCTING IN-SERVICE EDUCATION PROGRAMS

<table>
<thead>
<tr>
<th>Type of school</th>
<th>Total Number Reporting</th>
<th>Offering in-service education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>City</td>
<td>77</td>
<td>22</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>60</td>
<td>12</td>
</tr>
<tr>
<td>Local</td>
<td>80</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>49</td>
</tr>
</tbody>
</table>

**Attitudes of Boards of Education Concerning Custodial Training**

A questionnaire concerning the establishment of a custodial training program was not sent to representatives of boards of education; however, members of twelve different boards were asked
to what extent they favored such a program. In every instance a
positive answer was received. In fact, it was evident from
answers received that a program was needed and would be welcomed.
Further indication of board-of-education approval of custodial
training may be assumed from the favorable reaction by board-of-
education support of training programs currently in effect in
Ohio. The summer school at The Ohio State University is gaining
in attendance each year and boards of education are paying the
registration fees for custodians without charging them loss of
time while they attend. The same is true for the area schools
currently in operation. These programs sponsored by The Ohio
State University are described in Chapter V.

**Attitudes of School Custodians Toward Training**

A lead for determining the attitude of school custodians
may be taken from their desires to attend training schools. State-
ments issued by them expressing satisfaction with schools they have
attended are presented in Chapter V. Naturally, all custodians
are not enthusiastic about attending training schools. Personal
interviews with forty-five school custodians revealed that the
older the men were the less interested they were in attending
school. The leadership provided by the administrative staff seemed
to affect the attitude of the custodians. In any event, twenty-
seven custodians indicated they would like to attend a training
Attitudes of Members of the State Department of Education Concerning Custodial Training

Interviews were held with members of the State Department of Education and the Division of Vocational Education to ascertain their attitudes toward a state-wide custodial training program. Members of the State Department indicated they are very interested in such a program and expressed a desire to see a program established to the extent of co-operating within their jurisdiction.

The Vocational Education Division of the State Department of Education also expressed interest in a custodial training program. In fact, a definite move was started in 1947 to establish custodial training in the State of Ohio. This move was initiated through the Public Service Training Division of Trade and Industrial Education Service. An advisory committee was established and a conference was held in May, 1947. The objectives of the conference were to establish the needs of a custodial training program, to establish the kinds of training, and to select a working committee to study the problem further. Due to apparent lack of interest at that time by the public schools and due to the lack of funds for initiating such a program, the project was abandoned. The project did prove, however, that there was some recognition of
need at both the State and local levels. In view of data collected for this dissertation, the writer is of the opinion that the project failed because of the lack of promotion and follow through, rather than because of the lack of interest in custodial training.

**Attitudes of the General Public Concerning Custodial Training**

Insofar as the general public is concerned, practically no consideration has been given to the importance of the school custodian. Although no systematic method of determining a sampling of the public's views concerning custodial training has been used, conversation with more than fifty lay persons reveal that they would endorse such a program. Not one person interviewed was opposed to the proposal.

**Attitudes Concerning State Certification of Custodians**

Certification of school custodial personnel is a relatively new idea in America. Rice discovered in 1947 that not one state in the United States had made provisions for certificating school custodians (46:17). He developed a proposed bill for such certification in the State of Nebraska. Since that time other states have considered such a proposal. Dr. John C. Carlisle, Dean of the Utah State Agriculture College in Logan, Utah stated, in response to a questionnaire, that plans were being developed
in his state to initiate a custodial training program on a state-wide basis and to certificate custodians. The Utah program is presented in the next chapter. Mr. A. S. Lovely of Pontiac, Michigan, in a letter to the writer relating the efforts of Michigan to certificate custodians says,

Our state organization of non-teaching employees has been attempting for the past several years to get legislation enacted here in Michigan which would compel certification of non-teaching employees, but so far it has met with little success as it needs further publicity. I feel you are on the right track in the program you have underway and I hope I will see the day when all non-teaching employees are certified.

Mr. Lovely's feelings are apparently held by many other schoolmen throughout the United States since responses from 126 cities having populations over 50,000 show that ninety-four or 75 per cent of these school administrators favor custodial certification.

The attitude of schoolmen and other interested persons in Ohio are presented below as obtained from questionnaires and interviews.

Attitudes of School Administrators Concerning Certification

School administrators in Ohio were asked to indicate whether they favored certification of custodians. Their responses are shown in Table 25. Of the 205 answering yes or no, 55 per cent indicate they favor certification. Here again, as in mandatory training, city school officials indicate a higher percentage in
favor of certification. Even so, they favor certification in 60 per cent of the instances as compared to 75 per cent on a nationwide bases.

**TABLE 25**

**OPINIONS OF SCHOOL ADMINISTRATORS RELATIVE TO STATE CERTIFICATION OF SCHOOL CUSTODIANS**

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Certification</th>
<th>For</th>
<th>Per Cent</th>
<th>Against</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td></td>
<td>144</td>
<td>60</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Exempted Village</td>
<td></td>
<td>29</td>
<td>51</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Local</td>
<td></td>
<td>40</td>
<td>54</td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>113</td>
<td>55</td>
<td></td>
<td>92</td>
</tr>
</tbody>
</table>

* Five superintendents did not answer and seven were not sure.

**Attitudes of Other Interested Agencies Concerning Certification**

Members of boards of education were less sure about certificating school custodians than they were concerning the desirability of custodial training. One factor that seemed to be dominant was that requiring certification might also up the salary
demands of custodians. In any event, members from nine different boards of education stated they would favor custodial certification. Members from three other boards of education did not wish to commit themselves.

Of forty-five school custodians, twenty-one favored certification, nineteen felt certification was unnecessary, and five were not sure. Here again, most men under forty years of age were more favorable than older men to certification.

The State Department of Education has gone on record as favoring custodial certification; however, members of the State Department of Education are of the opinion that it would probably be wiser to postpone the plan until custodians are more available. Promise of full co-operation in this plan has been given by the State Department of Education.

The public, in general, seems less inclined to be actively interested in the certification of custodians than any of the above groups. Again, this probably results from the lack of full understanding on the part of the public of the tremendous responsibilities of the school custodian.

As mentioned previously, relatively little has been done in the various states of the United States to certificate school custodians other than two or three attempts to have legislation passed. To acquaint the reader with the characteristics and content of one of these attempts a copy of the proposed bill for
the certification of school custodians as submitted to the State Legislature in Nebraska in 1948 is reprinted below in its entirety.

A Proposed Bill for the Certification of School Custodians

An Act relating to the certification of public school custodial employees; defining terms; establishing qualifications; providing for examinations; providing for the issuance and revocation of certificates; and authorizing the administration of this act by the State Superintendent of Public Instruction. Be it enacted by the Legislature of the State of Nebraska.

Section 1. Name, Purpose, Jurisdiction

This act shall be known and may be cited as an act to provide for the certification of public school custodial employees and shall have for its purpose their qualification for the requirements of this occupation. It shall apply to all such employees in the public schools of Nebraska.

Section 2. Definition of Terms

The words, "custodial employees," refer to all persons employed in the public schools who are charged with the general care, maintenance, and operation of school buildings and grounds, and who are commonly known as custodians, janitors, janitor-engineers, and matrons. The words, "custodial certificates" refer to certificates issued to persons engaging in the work of a school custodian, janitor, janitor-engineer, or matron, who meet in a satisfactory manner the standards for certification as prescribed by law.

Section 3. Custodial Certificates, How Issued

The authority to issue custodial certificates shall be vested in the Office of the State Superintendent of Public Instruction. These certificates shall be issued to such persons as the State Superintendent of
Public Instruction shall find to be of sound moral character and of good reputation, and who possess the qualifications as prescribed by this act.

Section 4. Citizenship

To be eligible for certification as a custodial employee, a person shall be a natural born, or duly and fully naturalized, citizen of the United States.

Section 5. Application Forms, Fees

All certificates shall be issued by the State Superintendent of Public Instruction upon application forms to be prescribed by him and upon payment by the applicant of a fee of one dollar ($1.00) to the State Superintendent for each certificate. All medical examinations shall be submitted to the State Superintendent upon forms prescribed by the State Department of Health.

Section 6. Qualifications — Health, Physical Condition, Literacy

To be eligible for certification as a custodial employee, a person shall be of sound mental and physical health; he shall be free of serious physical defects that will hinder performance of work; shall be free of infectious diseases; and shall be required to pass a medical examination on a form prescribed by the State Department of Health and administered by the State Superintendent of Public Instruction; shall be capable of reading simple materials and writing legibly. A person now employed as a custodian, janitor, janitor-engineer, or matron shall not be dismissed for inability to read or write.

Section 7. Examinations

To be eligible for certification as a custodial employee, a person shall demonstrate fitness for the duties of the position by satisfactorily passing an examination consisting of questions pertaining to the duties to be performed in this position. Provided that a person now employed in such a position shall not be dismissed for inability to satisfactorily make such a demonstration unless opportunity for proper training has first been given.
Section 8. Certificates, Kinds, Duration, Renewals

(a) Temporary custodial certificates may be granted by the State Superintendent in those instances in which it is not feasible for the applicant to obtain the necessary training to enable him to meet the requirements for regular certification. Such certificates shall be valid for one year from the date of issuance and can be renewed once. It shall be the duty of the State Superintendent of Public Instruction to determine the eligibility of applicants for temporary certification.

(b) General custodial certificates shall be issued to those applicants who possess the qualifications prescribed by law and who satisfactorily pass an examination designed to demonstrate their fitness for the duties to be performed. This certificate shall be in force until permitted to lapse by three consecutive years of non-use. It may be renewed upon presentation of evidence by the applicant of his general fitness and ability for the requirements of the position.

(c) Master custodial certificates may be granted by the State Superintendent to such persons who can present adequate records of meritorious and efficient performance as custodians providing such applicants shall possess in good standing a general custodial certificate. This master certificate shall be in force until permitted to lapse by six consecutive years of non-use. It may be renewed by presentation of evidence of the general fitness and ability of the applicant for the requirements of this position.

Section 9.

Any certificate shall be revoked by the State Superintendent of Public Instruction for any just cause which would have authorized or required him to refuse to grant a certificate if known at the time it was granted. Proper causes are incompetence, immorality, intemperance, serious crime against the law of the state, negligence of duty or general negligence in the business of the school.
Section 10. State Superintendent, Rules and Regulations

The State Superintendent of Public Instruction shall have the authority to make such rules and regulations, and to prescribe such forms and materials as he deems necessary in the administration and enforcement of this act (46:95-99).

This certification proposal infers that custodial training will be offered to help prospective custodians to pass an examination; however, required minimum training is not a part of the certification law.

To this point an attempt has been made to establish the importance of the school custodian and to emphasize the need for giving him special training in order that he may be more qualified to assume his tremendous responsibilities. The opinions of school administrators, custodians, and other interested agencies have been sampled to ascertain attitudes toward state-wide custodial training and certification in Ohio. Responses are favorable toward such a plan. Thus Chapter V presents a status study of existing custodial training programs in effect in the United States from which principles are developed for a state-wide program in Ohio.
CHAPTER V

A SURVEY OF CURRENT SCHOOL CUSTODIAL TRAINING PROGRAMS IN THE UNITED STATES

This chapter deals with the organization and present status of custodial training programs in the United States. It is divided into five parts. Part one is concerned with custodial training programs sponsored by public schools; part two deals with custodial training programs sponsored by State Vocational Education Departments; part three deals with custodial training programs sponsored by colleges and universities. Part four covers custodial training programs in connection with civil service commissions, while part five deals briefly with labor-union sponsored custodial training.

The purposes of the chapter are to determine now and why these training programs originated and to determine what agencies promoted and fostered them during the early stages; to ascertain what agencies now control and direct them and to determine to what extent they have been standardized; to determine the advantages and disadvantages of the various types of programs; to help serve as a basis in formulating principles for a custodial training program; and to help serve as a basis for arriving at recommendations for a program in Ohio.

ORGANIZATIONS AND PERSONS INFLUENCING CUSTODIAL TRAINING

According to the literature, one does not have to go back into the past more than forty years to find the beginning of emphasis
on the training of school custodians. Jarber's dissertation points out this fact rather conclusively. He found only sixty-one references containing information of any importance on school custodial services that had been written prior to 1920 and only one of these references was written prior to 1910 (14:11). This is only natural since previous to that time, school buildings were rather small structures in most instances and often teachers doubled in the role of teacher and custodian, especially in one or two room buildings.

There were several agents and agencies that influenced and fostered the early emphasis on custodial services through speeches and articles in educational magazines. Among the most noteworthy organisations were the following: the National Education Association; the National Association of Public School Business Officials; and the U. S. Office of Education; hygienists and health agencies, city superintendents, and professional observers and critics in school surveys also influenced improved custodial services.

Thus, the National Education Association heard a report from its "Committee on Efficiency of Janitor Service" at its annual meeting held at San Francisco, California in 1911. A section of this report by W. D. Frost of the University of Wisconsin described a short course given at the University for the "janitors" working in one of the buildings on the campus (13:977-992). This short course was expanded to include all "janitors" employed by the
University and was eventually added as a curricular offering in the form of an extension course.

A year later, at the Chicago meeting, G. M. Wilson spoke of the selection of a head "janitor" who should instruct other "janitors" in details of their work with the notion of bringing the poorest up to the standards of the best (63:462-467).

Subsequently, in meetings of the National Education Association there appeared brief speeches on the importance of the school custodian and his services but no direct proposals were made for the organization of training programs on a state-wide basis. As preparation for school administration improved during the first half of the twentieth century more attention was given, especially in large city systems, to proposals for improving custodial services.

The development of custodial service to a position of major importance in the school system, and the development of training programs, closely parallel the growth of the National Association of Public School Business Officials, now in its forty-first year. There can be little doubt but that the development of the business administration of schools has greatly accelerated the improvement of custodial services. Publications of this association include a monthly bulletin and the annual proceedings. At each of the yearly conventions held in the various cities of the United States and Canada, considerable emphasis is given to the maintenance and
operation of school plants, health and safety in schools, and personnel problems of non-teaching employees. These repeated efforts have borne fruit in many cases and members of the association have gone home with a richer appreciation for custodians and a zeal to improve their services and status.

It is interesting to note that among those first interested in improving custodial services were hygienists. Naturally, the underlying purpose of this group was to ameliorate the health standards in the schools. Frost and Armstrong gave a report on the effects of different methods of cleaning on bacteria present in school buildings before the National Education Association in 1911 (13:485-992). During the same meeting Winslow reported on the scientific basis for ventilating standards (61:976-984).

Hoag and Terman emphasised the importance of the school custodian from a health standpoint and had the following to say concerning his responsibility: "The position of janitor is really a responsible one. No other individual about the school building, unless it be the principal, has so much influence over conditions which affect the health of pupils" (20:219).

The U. S. Office of Education has shown a great interest in custodial status and services in the last forty years. In 1922, Garber's dissertation was condensed and published by the then called Bureau of Education. Sixteen years later, 1938, Rogers completed a follow-up study and reported it in the U. S. Office of Education
In 1944, the U. S. Office of Education reorganized to improve its services. A Division of School Administration was created which included units in general administration, business administration, and school housing. Functions of the unit, school housing, included school plant planning and school plant management. Specialists in school plant maintenance and operation were added to the U. S. Office of Education Staff and have since rendered valuable service to the public schools in America. At the present time, N. E. Viles is the Specialist for School Plant Management. He has written several pertinent publications and has devoted considerable time to emphasizing the importance of custodial training in the United States.

Another factor influencing the training of the school custodian results from school surveys conducted throughout the country by leading men in education. Dr. Dressler suggested the following course of instruction for the Portland, Oregon schools in 1915 following a survey there:

1. Lectures by the superintendent and medical inspector on such subjects as co-operation, health, and safety.

2. Technical instruction by the school engineer.

3. Instruction by efficient custodians on "tricks of the trade."

4. Lectures on principles of custodial responsibilities.

5. Discussions of the latest literature (11:13).
Excerpts from the St. Louis Survey made in 1939 follow:

New custodial employees receive a type of apprenticeship training by working under the direction of skilled custodians. While courses are offered in night schools for those who wish to learn more about custodial activities and services, these courses are optional and only a limited number of persons take advantage of this opportunity.

In a city as large as St. Louis, there should be a definite training school for custodial-engineering employees, making it possible for the men and women engaged in these services to learn the "what," "when," "how," and "why," of these various jobs and responsibilities. This school not only should train new recruits, but also should provide training-in-service for present employees. It could render wider vocational service through the training of persons who might wish to secure employment in this field in private commercial and industrial plants.

The establishment of a custodial-engineering training school in connection with the public school promises to be a measure of genuine economy. It should lead to higher standards of efficiency and make possible the elimination of a number of positions that cannot be justified in light of the present service needs (52:434).

Holy had the following to say concerning the training of public school custodians in the Dayton Public Schools.

In order to give new employees some training in efficient workmanship, the economical and proper use of supplies and equipment, and proper understand of their important contributions to the school program, a definite in-service training program should be worked out under the direction of a well qualified supervisor (22:152).

Each of the above groups was responsible, in part, for establishing the importance of custodial services and for stressing the need for custodial training programs. However, they did not actually initiate or conduct any such course.
A thorough search through the literature and an analysis of questionnaires reveals that actual custodial training programs have been conducted by several different agencies. The most important of these agencies include local boards of education, state departments of education, colleges and universities, civil service commissions, and unions. These agencies will be discussed in terms of their present organization and status. An analysis of the methods of instruction, course content, and program of financing will also be presented briefly.

It should be pointed out that though existing custodial training schools are discussed as separate entities depending on whether they are operated by local boards of education, state departments of education, or colleges and universities, many of the custodial training schools are co-operatively sponsored. For example, the vocational education divisions in various states cooperate with local school districts and/or colleges and universities in sponsoring custodial training programs.

CUSTODIAL TRAINING PROGRAMS SPONSORED BY PUBLIC SCHOOLS

Garber's study revealed that of 1,066 cities reporting, only 51, or less than 5 per cent offered any type of instruction to school custodians in 1920 (14:21). A great variety of methods were used such as: custodial conferences, "round table" meetings, evening classes, lectures, instruction by superintendents and
head custodians, courses by university extension departments, etc. Table 26 has been reproduced from Garber's dissertation to show the various methods used (1422).

An examination of the methods used as shown by the table indicates very little standardization of practices.

Oakland, California was one of the reporting schools and its program was well in advance of the thinking at that time. The Oakland Board of Education reported that it had elevated the rank of janitor to that of "school custodian." Recognizing the broader scope of custodial employees in modern education, a series of 17 lectures were initiated in 1917. The subjects of these lectures, together with the official position of each lecturer, were as follows:

Lecture 1. Introductory lecture: What the Board of Education expects of the custodian, By the President of the Oakland Board of Education.

Lecture 2. What the superintendent expects of the custodian, By the Acting Superintendent of Schools.

Lecture 3. What the business manager expects of the custodian, By the Business Manager.

Lecture 4. Co-operation between the principal and the custodian, By the President of the Principal's Club.

Lecture 5. The custodian's relation to the pupil, By the Secretary of the Principal's Club.
TABLE 26

METHODS USED TO TRAIN CUSTODIANS IN 51 CITIES IN THE UNITED STATES
IN 1920

<table>
<thead>
<tr>
<th>Methods Used</th>
<th>Cities Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly meetings of all custodians; duties discussed by head custodians</td>
<td>1</td>
</tr>
<tr>
<td>Monthly meetings for conference; instruction and discussion of problems</td>
<td>8</td>
</tr>
<tr>
<td>Four &quot;round table&quot; meetings a year</td>
<td>2</td>
</tr>
<tr>
<td>Meetings twice a year</td>
<td>2</td>
</tr>
<tr>
<td>Meetings for conference and instruction by the superintendent</td>
<td>9</td>
</tr>
<tr>
<td>Custodial meetings; some books read</td>
<td>2</td>
</tr>
<tr>
<td>Seven or eight lectures a year</td>
<td>1</td>
</tr>
<tr>
<td>Occasional lectures</td>
<td>1</td>
</tr>
<tr>
<td>Lectures twice a year</td>
<td>1</td>
</tr>
<tr>
<td>Lectures and personal instruction</td>
<td>9</td>
</tr>
<tr>
<td>Lectures from experts from Iowa State College</td>
<td>1</td>
</tr>
<tr>
<td>Lectures from experts from University of Wisconsin</td>
<td>1</td>
</tr>
<tr>
<td>Instruction by superintendent and head custodian</td>
<td>4</td>
</tr>
<tr>
<td>Classes for custodians in evening schools</td>
<td>2</td>
</tr>
<tr>
<td>Night classes for 4 months</td>
<td>1</td>
</tr>
<tr>
<td>Evening courses on ventilation</td>
<td>1</td>
</tr>
<tr>
<td>Evening courses on fuel and combustion</td>
<td>1</td>
</tr>
<tr>
<td>Instruction in sanitation, heating, and ventilation</td>
<td>1</td>
</tr>
<tr>
<td>School conducted by building department</td>
<td>1</td>
</tr>
<tr>
<td>Method not given</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51</strong></td>
</tr>
</tbody>
</table>
Lecture 6. The custodian's relation to recreation and social
center activities, By Superintendent of
Recreation, San Francisco.

Lecture 7. The custodian's part in the wider use of the
school plant, By Principal of the High School,
Alameda.

Lecture 8. Some conditions in the school environment
which may affect the child's health, By
Assistant Professor of Epidemiology, University
of California.

Lecture 9. The use and care of the drinking fountain, By
specialists on the subject.

Lecture 10. How to treat emergencies at the school, By
Professor of Hygiene, University of California.

Lecture 11. Fire Prevention and control, By Chief of the
Oakland Fire Department.

Lecture 12. Heating and ventilating, by lecturer in
Architectural Mechanics, University of California.

Lecture 13. The operation of oil burners, By specialist on
the subject.

Lecture 14. The use and care of steam-heating apparatus,
By specialists on steam heating.

Lecture 15. Automatic temperature regulation, By specialist
on the subject.
Lecture 16. The operation and care of school electrical equipment, By Supervising Inspector, Electrical Department, City of Oakland.

Lecture 17. The oiling of floors, By specialist on the subject (14:19).

The Minneapolis School for Janitor-Engineers was established in 1919. It was probably one of the most widely known programs in the country. In the beginning, this school employed four full time instructors who had no other duties than those of teaching custodians. The average class consisted of about fifteen members. Classes met for instruction two hours each week, twelve months a year, for from three to six years.

Roger's study for the U. S. Office of Education was conducted in 1935. It showed that approximately 25 per cent of the 65 cities having over 100,000 population were furnishing formal training of more or less thoroughness to school custodians. Only 6 per cent of all cities having between 30,000 and 100,000 population were furnishing worthwhile custodial training programs. Considering all cities over 30,000, thirty schools or approximately 10 per cent out of a possible 297 were offering opportunities for formal instruction in custodial services. In reality, this 10 per cent hardly represented an increase over the 5 per cent discovered by Garber fifteen years previously, since he contacted 1088 schools instead of 297. Naturally, the schools he canvassed included many smaller schools which would tend to reduce the percentage.
In 1948, Rice completed his study of custodial training programs in the United States. However, he reported only five cities conducting such programs. This can be accounted for in part because he made his contact through state departments of education and college presidents rather than through city school officials.

Present Status of Public School Sponsored Programs

In an effort to ascertain the extent of custodial training in large cities in the United States at the present time, a card questionnaire was sent to all cities having populations over 50,000. According to U. S. Bureau of Census figures for 1950, there were 228 cities in this category. One hundred twenty-six or 55 per cent of the city schools, responded to the questionnaire. Fifty-two or 41.6 per cent of the answering schools indicated that a formalized custodial training program had been instituted. The length of the training schools are shown in Table 27. The table reveals a range in length of custodial training schools from one day a year to five days per week for three years. Twenty-seven schools indicate that even though no formal training is provided custodians that an effort is being made to aid them in assuming their responsibilities through supervision. In several instances custodians receive supervision from head custodians, others from the supervisor of custodians, and others from the superintendent of
**TABLE 27**

LENGTH OF CUSTODIAL TRAINING PROGRAMS IN CITIES HAVING POPULATIONS OVER 50,000

<table>
<thead>
<tr>
<th>Length</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>One day</td>
<td>5</td>
</tr>
<tr>
<td>Two days</td>
<td>2</td>
</tr>
<tr>
<td>Three days</td>
<td>4</td>
</tr>
<tr>
<td>Five days</td>
<td>7</td>
</tr>
<tr>
<td>Six days</td>
<td>1</td>
</tr>
<tr>
<td>Nine days</td>
<td>2</td>
</tr>
<tr>
<td>Eighteen hours</td>
<td>1</td>
</tr>
<tr>
<td>Three days plus continuous supervision</td>
<td>1</td>
</tr>
<tr>
<td>Five days plus six months supervision</td>
<td>1</td>
</tr>
<tr>
<td>One day per week for nine weeks</td>
<td>1</td>
</tr>
<tr>
<td>One evening per week for eighteen weeks</td>
<td>4</td>
</tr>
<tr>
<td>Two evenings per week for twenty weeks</td>
<td>1</td>
</tr>
<tr>
<td>One evening per week per year</td>
<td>5</td>
</tr>
<tr>
<td>In-service for four years</td>
<td>1</td>
</tr>
<tr>
<td>Four evenings per week per year</td>
<td>1</td>
</tr>
<tr>
<td>Two years</td>
<td>1</td>
</tr>
<tr>
<td>Forty-eight hours per year for three years</td>
<td>1</td>
</tr>
<tr>
<td>Five days per week for three years</td>
<td>1</td>
</tr>
<tr>
<td>Seventy-six hours per year for four years</td>
<td>1</td>
</tr>
<tr>
<td>Periodically</td>
<td>2</td>
</tr>
<tr>
<td>Continuous</td>
<td>3</td>
</tr>
<tr>
<td>Indefinite</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
</tr>
</tbody>
</table>
buildings and grounds. Another type of informal training reported is provided through apprenticeships. New custodians are employed and placed under an experienced custodian. In fact, Rice reported that 70 per cent of all cities having over 100,000 population place custodians on probation while serving their apprenticeship (46:37). This probationary period varies from two weeks to six months.

Phoenix, Arizona, reports informal lectures are held periodically. Three public school systems planning to offer custodial training in the very near future include New Orleans, Louisiana; Stockton, California; and Oakland, California. In other words, approximately 65 per cent of the reporting schools are making an effort, either through formal training or other methods, to improve custodial services.

Of the fifty-two schools answering that a formal training program is in operation, twenty-six indicate that the program is primarily of an in-service nature, eight indicate that the program is primarily for new employees, and eighteen indicate that the program serves both in-service purposes and the preparation of new employees.

In an attempt to further ascertain the extent and nature of public school custodial training programs, a more detailed questionnaire was sent to all cities that indicated the program consisted of three days or more duration. In all, twenty-nine city school
districts were sent the second questionnaire and responses were received from sixteen districts. In addition to information requested in the questionnaire, responding cities were generous in supplying courses of study and other printed materials from which data were taken.

Basic Data

Certain basic data concerning custodial training programs in the sixteen reporting schools are shown in Table 28. It is interesting to note that only three cities report that the custodian training program has been in existence more than five years. Eight schools report that the program is mandatory and ten report that it is given on school time. The number of hours per year devoted to custodial training ranges from 20 hours in East Orange, New Jersey, to 288 hours in Denver, Colorado. The training schools are so organized that all custodians submit to the same training in nine schools including Denver; however, the latter actually has established a unit program. In Denver, it is expected that each enrollee will complete each unit and the enrollees may be working on different units at the same time.

Eight schools report that the program is financed from local funds; four schools report the program is financed by vocational education funds and local funds on a matching basis; three report that the program is financed entirely by vocational education funds; and one school reports that the program is financed by vocational
<table>
<thead>
<tr>
<th>School</th>
<th>Number of years programs have been operating</th>
<th>Training program mandatory</th>
<th>Length of training program per year</th>
<th>Program given on school time</th>
<th>Training requirements identical</th>
<th>Method of Financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little Rock</td>
<td>4</td>
<td>YES</td>
<td>40 hrs.</td>
<td>YES</td>
<td>NO</td>
<td>X</td>
</tr>
<tr>
<td>San Francisco</td>
<td>5</td>
<td>YES</td>
<td>40 hrs.</td>
<td>YES</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Santa Monica</td>
<td>2</td>
<td>YES</td>
<td>48 hrs.</td>
<td>YES</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Denver</td>
<td>3</td>
<td>NO</td>
<td>288 hrs.</td>
<td>YES</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Pueblo</td>
<td>2</td>
<td>NO</td>
<td>27 hrs.</td>
<td>NO</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Miami</td>
<td>4</td>
<td>YES</td>
<td>36 hrs.</td>
<td>NO</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Cedar Rapids</td>
<td>11</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dearborn</td>
<td>4</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topeka</td>
<td>5</td>
<td>YES</td>
<td>80 hrs.</td>
<td>YES</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>1</td>
<td>NO</td>
<td>72 hrs.</td>
<td>YES</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Omaha</td>
<td>4</td>
<td>YES</td>
<td>24 hrs.</td>
<td>YES</td>
<td>NO</td>
<td>X</td>
</tr>
<tr>
<td>East Orange</td>
<td></td>
<td>NO</td>
<td>20 hrs.</td>
<td>NO</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Austin</td>
<td>1</td>
<td>YES</td>
<td>4 hrs.</td>
<td>NO</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Lubbock</td>
<td>1/2</td>
<td>YES</td>
<td></td>
<td>YES</td>
<td>NO</td>
<td>X</td>
</tr>
<tr>
<td>Seattle</td>
<td>15</td>
<td>NO</td>
<td>60 hrs.</td>
<td>YES*</td>
<td>YES</td>
<td>X</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>10</td>
<td>YES</td>
<td></td>
<td>YES*</td>
<td>YES</td>
<td>X</td>
</tr>
</tbody>
</table>

*Registration fee of $1.00 charged each custodian.
**Program originally started in 1919 but was discontinued in 1939.
\#The salary schedule of custodians is based partly on the training program.
a. Partly on school time.
funds and a registration fee from the custodians.

Source of Instructors

The source of instructors for the various custodial training schools responding are shown in Table 29. One school, San Francisco, California reports that instructors are supplied by the administrative staff of the school; two schools, Little Rock, Arkansas and Austin, Texas report the administrative staff and outside specialists as the sources of instructors; Denver, Colorado reports instructors from the custodial staff; Miami, Florida and Dearborn, Michigan report instructors from outside specialists; Cedar Rapids, Iowa from the custodial staff and outside specialist; Minneapolis, Minnesota and Omaha, Nebraska from the custodial staff, outside specialists, and manufacturing and supply companies; East Orange, New Jersey and Seattle, Washington from the custodial staff and administrative staff; Lubbock, Texas and Milwaukee, Wisconsin from the administrative staff, custodial staff, and outside specialists.

It is evident that there is no standardized practice of securing instructors for custodial training programs. The use of outside specialists and experienced members of the custodial staff seems to be most general in all programs.

Content and Characteristics of Training Courses

An analysis of the literature and bulletins from the sixteen responding cities indicate a variety of subjects taught to school
TABLE 29

SOURCE OF INSTRUCTORS FOR CUSTODIAL TRAINING PROGRAMS IN SIXTEEN CITIES HAVING POPULATIONS OVER 50,000

<table>
<thead>
<tr>
<th>School</th>
<th>Administrative Staff</th>
<th>Custodial Staff</th>
<th>Outside Specialists</th>
<th>Manufacturing and Supply Companies</th>
</tr>
</thead>
<tbody>
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<td>Little Rock</td>
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<td>Milwaukee</td>
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</table>
custodians. Three subjects common to all programs include: Housekeeping, maintenance, and engineering.

The Denver custodial training school is located at the Emily Griffith Opportunity School. The training program consists of eleven units of instruction. Classes are so organized they plan for individual instruction which makes it possible for a student to enroll in the class at any time and to progress as rapidly as he is able.

The eleven units of instruction are as follows:

1. Sweeping and Dusting
2. Floor Maintenance
3. Washing
4. Classroom Mechanics
5. Plumbing Repair and Maintenance
6. Carpentry
7. Electrical Motors, Fixtures, and Controls
8. Painting
9. Firemanship
10. Heat and Air Control
11. Novelty Hardware.

East Orange, New Jersey, reports six units of instruction of 20 hours each as follows:

1. School Housekeeping and Sanitation (Part 1)
2. School Housekeeping and Sanitation (Part 2)
3. School Housekeeping and Sanitation (Part 3)
4. Heating and Ventilation (Part 1)
5. Heating and Ventilation (Part 2)
6. Fire and Accident Prevention, Care of School Grounds; Work Planning and Job Assignments; Human Relations.

The Omaha Public School Custodial School is conducted at the end of school each year and the course content varies from year to year. However, an attempt is made to provide continuity in the program from year to year. Topics included in the 1951 summer session were:

1. Scheduling Work Assignments.
2. Steam Plant Operation
   A. Emergency Heating Plant Operation
   B. Operation Up-Draft and Down-Draft Boilers
3. Steam Plant Operation
   High-Pressure Plant Operation Problems
4. Care of Fluorescent Fixtures
5. Care of Aspalt and Rubber Tile
6. Electrical Plant Operation
7. Sanitation, Dusting, and Polishing
8. Emergency First Aid
9. Glass Installation
10. Maintenance of Old Wood Floors
11. Maintenance of Linoleum Floors
12. Maintenance of Concrete Floors, Walls, Wood Trim, Furniture, and Glass.
13. Care of Renovated Buildings.
A schedule of the program of the Omaha Custodial Training school has been included in Appendix II.

In Milwaukee, the custodial training school is scheduled annually during the first week of summer vacation. Regular sessions are held on three consecutive days. All custodians are required to attend. Housekeeping, engineering, and maintenance are emphasized. Local instructors, familiar with local problems, are used primarily. The development of building schedules is one of the unique features of the school. These include the listing of available equipment in the building to be cleaned, the number and types of rooms to be cleaned, the amount of equipment and the time required for servicing, and the special work to be done each season of the year. This programming attempts to foresee the problems involved in proper building maintenance, and to prepare a plan for their solution. Emphasis is also placed upon the perpetual care of the buildings, so they may always be in good condition.

Literature from responding schools also indicates a wide range of instructional methods. Among the most common are the lecture method, conference method, general discussion method, discussion-demonstration method, demonstration method, and job participation method. However, the latter three methods seem more nearly to characterize custodial training schools in the cities. The trend has been away from lecture and discussion toward more practical methods. Learning to do by doing, a basic principle in education,
is becoming more prominent.

The four kinds of instructional aids most commonly used include instruction or job sheets, motion pictures, exhibits of materials, and exhibits of equipment.

Values from Custodial Training in Public Schools

Proof of the values of custodial training should depend on whether or not there are valuable outcomes. Each of the responding city schools indicated that notable values were derived. Table 30 shows certain personnel relations and conditions that improved after the installation of custodial training programs in the reporting cities. Every school indicated that housekeeping standards improved; thirteen indicated that custodial-administrative relations and safety factors in the school improved; eleven indicated that custodial-teacher relations and health standards improved; ten schools noted improvement in custodial-pupil relations; and nine schools noted improvement in school morale.

To ascertain to what extent custodial training had been valuable in effecting economies in the respective schools, the question was asked and responses are shown in Table 31. Ten or more answered that there was notable savings in fuel, electricity, and water; consumable supplies, equipment and machinery, and maintenance and repairs. One school stated thus, "The yearly tonnage purchase of coal remains the same, although the district has expanded." Other statements were: "Fewer plumbing fixture problems"; "Better results
# Table 30

Items Notably Improved as a Result of the Custodial Training Program in Sixteen Cities Having Populations over 50,000

<table>
<thead>
<tr>
<th>School</th>
<th>Custodial-Administration Relations</th>
<th>Custodial-Teach. Relations</th>
<th>Custodial-Pupil Relations</th>
<th>Safety</th>
<th>House-Keeping standards</th>
<th>School Morale</th>
<th>Health Standards</th>
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with mops and brushes; "Proper use of materials has a marked savings in time"; and "Better results and much better care of floors, offering protection for them instead of rapid deterioration." Further proof of the economies that can be effected through custodial training are described by Holubowicz. He says, "Attributable to the training program, at least in part, as an example, is the decrease in the amount of coal used in the past five years" (21:26). In 1941-42, a total of 33,560 tons of coal were used during 6680 degree days. In 1942-43, only 28,753 tons were used in 7551 degree days. In 1943-44, just 27,886 tons were used in 7202 degree days. In 1944-45 the coal consumption was 25,474 tons in 7120 degree days. In other words, the City of Milwaukee used 8,094 tons less in the 1944-45 school year than it did in the 1941-42 school year even though the degree days increased considerably. At today's price of coal this approximates almost $100,000. Even at that we often hear the statement made that school districts cannot afford the cost of custodial training. An even more basic question is, can we afford not to have custodial training?

Further evidence that the Milwaukee plan is effective might well be measured by the return of the men who entered the military service. All the men, without exception, returned to work in the Milwaukee public schools upon discharge from the armed forces.
# TABLE 31

ECONOMIES RESULTING FROM CUSTODIAL TRAINING PROGRAMS IN SIXTEEN CITIES HAVING POPULATIONS OVER 50,000

<table>
<thead>
<tr>
<th>School</th>
<th>Fuel, Electricity, and Water</th>
<th>Consumable Supplies</th>
<th>Equipment and Machinery</th>
<th>Maintenance and Repair</th>
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<td>Total</td>
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Description of the Seattle, Washington
Custodial Training Program

Mention was made earlier in this chapter that custodial training programs vary in content and nature. Several of those programs are very intensive and deserve special commendation. Denver, Minneapolis, Seattle, Los Angeles, and Milwaukee are doing outstanding jobs. A detailed description of the Seattle program is given here.

It provides for both pre-employment and in-service training of custodial personnel. The pre-employment program was originated during the war and is designed to give new men an intensive period of training before they are given definite assignments as custodians. The in-service program is designed to provide on-the-job training for the regular custodial personnel.

These programs are conducted in an old school building provided for this purpose. One part of the building is described as the mechanical section. This section is equipped with all types of mechanical devices with which custodians are to become familiar. Some of these articles are boilers, steam engines, pumps, combustion recorders, electric motors, thermostats, plumbing fixtures, and other types of heating and ventilating equipment.

The other section of the building is equipped to provide instruction in the non-mechanical field of the custodian's work.
Here is taught a great variety of duties incident to the general housekeeping and building maintenance activities of the custodian. The equipment provided for this purpose includes custodial supplies and working tools; motion picture and slide projectors are provided by means of which exact procedures and methods can be shown. Facilities are also provided for demonstrations and job performance.

This instructional program is carried on under the direction of the Supervisor of Operations. The actual instruction is given by experienced and well trained custodians belonging to the system. Other professional men whose work is related to the custodial field are called in occasionally for lectures. The major part of the instruction, however, is given by experienced and well trained custodians.

The methods used by these instructors emphasize actual demonstrations and practice. Ample opportunity is given for men to actually participate in the skills being taught. This instruction is also characterized by general discussion and some lectures. Visitations to other school buildings and plants further enhance the opportunity for learning the custodian's job.

The subjects taught include the usual range of jobs and skills to be learned. These are outlined in a manual, which becomes a handbook of information for the custodian. The classes are organized for major groupings. These are elementary and advanced engineering, building heating, steam engineering, and custodial
training. The latter classification includes a great number of specific skills and jobs a custodian must know.

The cost of this instructional program is met from Smith-Hughes funds and from the regular operating budget of the school system. The pre-employment program is paid from the school budget. The in-service program is financed from Smith-Hughes funds.

The pre-employment program is an intensive program conducted eight hours a day for five days. All men new to the system are assigned to this class and are paid for their time while taking this training. This program is used only when new untrained men enter the system.

The in-service program is conducted evenings and on Saturdays. Classes are four hours in length and attendance is voluntary. No fees are charged and a custodian may earn forty credits a semester. To do so he must attend classes 80 per cent of the time during the semester. A unique feature of this in-service training program is the recognition given for this training on the salary schedule. If a custodian earns eighty hours, or credits, for two semesters, he is placed on the next step of the schedule above his present step. If, he thereafter earns two additional semesters of credit of forty hours each, he may gain two additional steps on the schedule which is the maximum.
A history of state department participation in custodial training schools is somewhat limited. Possibly the first impetus to participation at the state department level was supplied by the passage of the Smith-Hughes Bill in 1917, and one of the first schools to take advantage of federal funds for the operation of a school custodial training program was Minneapolis. Womrath stated that because this program was recognized as a part-time vocational school, as classified under the requirements of the Smith-Hughes, Smith-Sears, and Smith-Towner Bills, that the majority of the operating cost was reimbursed by federal and state aid (65:285).

The State of Iowa started a custodial training program in cooperation with local schools in 1921. The Kansas State Board for Vocational Education has been conducting custodial training schools since 1927. The first one opened at Kansas State Teachers College and was attended by thirty-three men (25:10).

The enactment of the George-Dean Act in 1936 provided additional financial means whereby state departments of education could further participate in custodial training programs. This Act provided funds for distributive and service occupations in addition to agriculture, home economics, and trades and industries.
It is interesting to note that custodians themselves have been instrumental in initiating custodial training at the state level. In the fall of 1927 a janitor wrote to President W. A. Brandenburg of Kansas State Teachers College stating that he had attended a janitor's school in Colorado and asked that a similar school be organized in Kansas. The matter was promptly checked with the Department of Smith-Hughes Vocational Education for action and on December 12th to 16th of the same year the school was underway (25:10). M. D. Whale, Supervisor, Public Service Training in Michigan related that the program originated there at the request of six leading custodians in the Michigan schools in 1938.

Present Status

In order to ascertain the present extent of custodial training programs of Vocational Education Departments in the forty-eight states, a questionnaire was sent to the Supervisor of Trades and Industries in each state. Thirty-seven, or 77 per cent answered. Only twenty-five of the responding schools indicate they are sponsoring or helping to sponsor custodial training programs. Table 32 shows the type, number, and age of these schools. According to responses there are fifty custodial training programs directed by ten State Vocational Education Departments. These training programs usually occur during the summer months and in most instances are organized on an area basis. A copy of the
<table>
<thead>
<tr>
<th>State</th>
<th>Total Schools Conducted</th>
<th>Number in Existence</th>
<th>Years in Existence</th>
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<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Washington</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wyoming</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Total number of schools conducted during the current year.
program conducted by the Connecticut State Department of Education is found in Appendix III. It shows a typical program.

Table 32 also shows that 231 custodial training schools were sponsored jointly by seventeen State Vocational Education Departments and local schools in the respective states. W. J. Flannery, Supervisor, Trade and Industrial Education, in Colorado describes this co-operative program as follows:

An itinerant instructor who has had many years training and experience as a custodian is employed by my division under provisions in the State Plan. He is provided teacher training at the Colorado A & M College at Fort Collins during the summer. He visited approximately fifty local school centers during the last year, and so far this year about the same. Some of the trainees drive a distance of fifty to seventy-five miles for training.

In September, the itinerant instructor tours the state setting up his itinerary for the entire year; he meets with superintendents and other interested persons.

In addition to the itinerant custodial training program, the Denver Opportunity School has been in operation the past several years. This school has developed a very comprehensive training course for school custodians.

Table 32 shows in addition that six State Vocational Education Departments co-operate with seven colleges and universities in conducting custodial training schools. Connecticut indicated that at one time the Vocational Education Department co-operated with three colleges but is not doing so at the present time. Responses from California and Tennessee stated they were willing to help colleges or universities establish custodial schools if the colleges or universities were interested.
When considering all types of custodial training programs in which the twenty-five different State Vocational Education Departments either conduct or assist in some way to sponsor, there are at present a total of 286 custodial schools.

In those instances where there is co-operation between public schools or university training schools for custodians and the state departments, participation by the latter takes several different forms. One common method is that of finance. Table 33 has been prepared to show the financial participation of the State Vocational Education Divisions in the various types of custodial training programs. A complete financial breakdown for the operation of these programs is not available and in many instances responses are given as approximations. In general, the training programs are financed on a matching basis, with the amount varying in the respective states. In Wisconsin the local schools conducting custodial training programs contribute 80 per cent while the remaining 20 per cent is contributed by the State Vocational Education Division. On the other hand, custodial training schools in Colorado, are operated on a local basis, and financed entirely at the State level. The only local requirement is to provide housing facilities. The most common plan is matching on a fifty-fifty basis; 50 per cent from local sources and 50 per cent from state and federal vocational education funds.
PER CENT OF FINANCIAL ASSISTANCE GIVEN BY THE STATE VOCATIONAL EDUCATION DEPARTMENTS TO THE THREE TYPES OF CUSTODIAL TRAINING PROGRAMS

<table>
<thead>
<tr>
<th>State</th>
<th>Per cent for schools conducted under direction of Vocational Education Departments</th>
<th>Per cent for schools conducted through co-operation with local schools</th>
<th>Per cent for schools conducted through co-operation with colleges and universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>100.0</td>
<td></td>
<td>50.0</td>
</tr>
<tr>
<td>Arkansas</td>
<td>100.0</td>
<td></td>
<td>50.0</td>
</tr>
<tr>
<td>California</td>
<td>100.0</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Colorado</td>
<td>100.0</td>
<td>100.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Connecticut</td>
<td>100.0</td>
<td></td>
<td>50.0</td>
</tr>
<tr>
<td>Delaware</td>
<td>100.0</td>
<td></td>
<td>50.0</td>
</tr>
<tr>
<td>Kansas</td>
<td>100.0</td>
<td></td>
<td>50.0</td>
</tr>
<tr>
<td>Iowa</td>
<td>100.0</td>
<td></td>
<td>50.0</td>
</tr>
<tr>
<td>Maine</td>
<td>50.0</td>
<td></td>
<td>50.0</td>
</tr>
<tr>
<td>Michigan</td>
<td>50.0</td>
<td>40.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Minnesota</td>
<td>50.0</td>
<td>75.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Missouri</td>
<td>50.0</td>
<td>75.0</td>
<td>40.0</td>
</tr>
<tr>
<td>New York</td>
<td>100.0</td>
<td>83.3</td>
<td>75.0</td>
</tr>
<tr>
<td>North Dakota</td>
<td>100.0</td>
<td>50.0</td>
<td>75.0</td>
</tr>
<tr>
<td>Oregon</td>
<td>100.0</td>
<td>50.0</td>
<td>75.0</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>100.0</td>
<td>50.0</td>
<td>75.0</td>
</tr>
<tr>
<td>Tennessee</td>
<td>100.0</td>
<td></td>
<td>75.0</td>
</tr>
<tr>
<td>Texas</td>
<td>100.0</td>
<td>95.0</td>
<td>75.0</td>
</tr>
<tr>
<td>Utah</td>
<td>100.0</td>
<td></td>
<td>75.0</td>
</tr>
<tr>
<td>Vermont</td>
<td>100.0</td>
<td></td>
<td>75.0</td>
</tr>
<tr>
<td>Virginia</td>
<td>100.0</td>
<td></td>
<td>75.0</td>
</tr>
<tr>
<td>Washington</td>
<td>100.0</td>
<td></td>
<td>75.0</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>100.0</td>
<td></td>
<td>75.0</td>
</tr>
<tr>
<td>Wyoming</td>
<td>100.0</td>
<td>100.0</td>
<td>50.0</td>
</tr>
</tbody>
</table>
Nine states specifically stated the amount of money expended for custodial training purposes in their respective states. Michigan ranked first, having spent $114,536.00 in 1951; New York was second, spending $10,000; Colorado and Kansas spent $6,000; Utah, $3,000; Missouri and Nebraska, $1,000; Delaware $585; and Arizona, $500.

It is interesting to note that Michigan, New York, Colorado, and Kansas account for 151 of 288 different custodial training programs discussed previously.

In other words, the more money expended at the stage level for custodial training, the greater the quantity of custodial training schools.

Another method in which the State Vocational Education Departments co-operate with local custodial training schools is through supplying instructors. Criteria for selecting instructors are set up in the State Plan for Vocational Education in thirteen states and criteria are established by the State Departments of Education in seven states. The Public Service Institute has this responsibility in Pennsylvania. The usual method of selecting instructors when they are not employed directly by the Vocational Education Departments is to choose experienced custodians at the local level who have qualifications that meet the criteria developed either by the State Plan and/or the State Department of Education. These instructors are then certified for a certain period of time, usually a year.
Thirteen states indicated that a published guide or course of study had been developed by their department of vocational education. One of the best state courses of study has been developed in Kansas. In fact, four other states responded that they were using the Kansas instruction materials. Thirteen states also indicated that they had staff members available to help local public schools organize custodial training programs.

Content of Training Programs

An analysis of courses of study and training guides shows greater standardization of training content for custodial training schools operated in co-operation with State Departments of Education. There seems to be a tendency for state Supervisors of Trades and Industry to co-operate rather closely with each other in the respective states. When one state develops a worthwhile course of study it is often borrowed by other states. Successful features developed in certain states are generally made known to neighboring states. This procedure is not always wise since borrowed materials may not have been carefully formulated. For example, a heating engineer looked over the heating and ventilating course of study developed by the State of Kansas. His comment after careful study was that the course of study was well organized but more applicable to heating plants of 1920 vintage than present day heating plants.
In general, the content of custodial training schools
include units on housekeeping, heating and ventilating, supplies
and equipment, and maintenance. Each of these major units are
usually subdivided into numerous minor units. Supplies and
equipment, for example, includes purchasing, efficiency in the use
of and the care and maintenance of all the different equipment and
tools necessary to properly maintain a school building.

The contents of the Virginia Handbook for School Building
Maintenance and Operation includes the following units:
1. Responsibilities of the Custodian
2. Tentative Work Schedules
3. Supplies and Equipment
4. Using Cleaning Supplies
5. Importance of Good Housekeeping
6. The Care and Maintenance of Floors
7. Plumbing in School Buildings
8. Septic Tanks
10. General Safety and Health Rules
11. Electricity and Its Use
12. Low Pressure Steam Heating Systems
13. Hot Water Heating Systems
14. Indirect Domestic Water Heating
15. Ventilating Systems
The Supervisor of Trades and Industries in Virginia explained that the custodial training program as sponsored by the Trade and Industrial Education Service was established primarily for rural schools. Hence, the units on Septic Tanks and Water Pumps and Systems are unique in this particular program.

Methods of instruction vary somewhat according to the type of program the State Departments of Education sponsor or co-operate in sponsoring. If an area school is conducted by the state department, it is usually held in a public school building which provides a proper environment where on-the-job training, demonstration, and discussion—demonstration procedures are applicable. However, there is a tendency for many of the area schools to be organized in such short lengths of time that these procedures cannot be effectively used.

When programs are sponsored jointly by local school districts and the state department there is more of a tendency to use on-the-job training and demonstration methods in teaching. Enrollees have greater opportunities to participate in learning situations. Programs sponsored jointly by state departments and colleges and universities tend to make more use of the lecture, conference, and discussion methods of instruction.

Values

Naturally, the same values resulting from custodial training programs that were stated for city school sponsored programs are

* Custodial training in Virginia is currently discontinued.
equally applicable to those sponsored at the state level. Further substantiating evidence can be given in the form of quotations taken from materials sent to the writer, such as that received from the State of Maine:

We are convinced of the effectiveness of our training from the fact that administrators generally are aware of considerable improvement in their custodian personnel as a direct result of attendance at these schools. I have this morning received a letter from a superintendent where a follow-up school was conducted last month. He is very high in his praise of the conduct of the school and says he is completely convinced of the value of the training course for custodians and is certain that a follow-up course will pay high dividends to any school system.

**Description of the Michigan Custodial Training Program**

The Michigan vocational training program for public school custodians is described in greater detail.

The present program originated in 1938 at the request of leading custodians from various Michigan Schools. It is organized on the basis of fourteen short unit courses, each unit complete in itself. While it is recommended that custodians complete all unit courses, the particular order in which they are taken varies. As a unit course is completed by the custodian to the satisfaction of the instructor in charge, a unit credit card is issued by the State Board of Control for Vocational Education indicating successful completion of the work. A certificate is issued to custodians who have completed the fourteen units of work which constitutes evidence that the persons holding it have attained proficiency in each phase of work covered in the course.
Classes may be organized wherever a group of ten or more men express a desire to receive vocational training in any of the listed units. Classes may meet once or twice a week for a period of two hours until the unit is completed and may be conducted at any place where facilities for instruction are available. The size of classes are not less than ten or more than twenty-five in order to permit individual instruction and participation in discussion by each enrollee. Students are either presently employed as custodians or must have been in the past. The classes are not limited to public school custodians.

The plant and equipment in rooms and laboratories are, as far as possible, a replica of the actual working environment of the custodians in order to provide actual working experiences. The conference technique of instruction, demonstrations, and individual instruction are the most common procedures used. The instructor adapts his special skills and knowledge to the needs of the students and supplements his instruction with data from reliable sources.

Illustrative materials and demonstrations are used freely and suggestions are made that in the development of lesson materials an adequate outline be prepared of each unit and its subdivisions.

Instructors must have sufficient training and experience in custodial work to insure an efficient course of instruction. The qualifications of such instructors is approved by the local
director of vocational education or the local superintendent of
schools and the State Board of Control for Vocational Education.
Upon approval of the instructor's qualifications, a special
certificate is granted. This certificate is a legal certificate
qualifying the holder to teach the specific course mentioned or
it and is valid for one year subject to renewal.

Teachers are employed and paid by the local school authorities,
usually on an hourly basis. Funds are available from the State
Board of Control for Vocational Education for the operation of a
vocational training program. These funds are used only for re-
imbursement to the local school authorities on salaries paid to
teachers.

The State Vocational Education Office also co-operates with
Michigan State College in conducting a summer custodial training
program. This college employs two full time men whose respon-
sibilities are to co-ordinate the summer custodial training con-
ference and the public school building maintenance program. One
man works primarily with instructors, co-ordinates training activities,
and does promotional work. The other man spends time on an itinerant
basis rendering services in local communities as a consultant or on
a coaching basis, and works with school custodians in his building
for more efficient operation.

M. D. Whale, Supervisor of Public Service Training, relates
that the trend in the Michigan program is toward greater use of itinerant service in which there is greater co-operation with the men on the job and decreased emphasis in formal instructional courses.

CUSTODIAL TRAINING PROGRAMS SPONSORED BY COLLEGES AND UNIVERSITIES

Possibly the first mention of college sponsored custodial training programs was made by Frost in 1911 (13:977-992). He spoke of the training school conducted at Wisconsin for the purpose of improving custodial service on the campus, later it was offered to public school custodians on an extension basis. A few years later the State Agricultural College at Ames, Iowa established a short course for custodians and like the University of Wisconsin training school it consisted of lectures and discussions conducted in the evenings at various cities and villages.

In 1924, Sanders established an effective custodial training course at Colorado State Teachers College, Greeley, Colorado (43:16). The course consisted of intensive work given to custodians in residence at the college. Experts on various phases of custodial service were brought to the institution for class lectures, discussions, demonstrations, and laboratory work.

Roger's study included the following colleges and universities offering custodial training services in 1935: Colorado State
College of Education, Purdue University, Iowa State College, Kansas State Teachers College, University of Minnesota, and the University of Nebraska (47:21). In 1941, Shuter in an investigation located eight colleges and universities sponsoring custodial training schools. His list included besides ones already mentioned the following: Michigan State College, Columbia University, Kent State University, and A. and M. College of Texas (49:50-51). Nine such schools were found to be operating in 1943 by Rice (45:21).

Current Status

Several colleges and universities currently conducting custodial training programs are doing so through co-operation with vocational education departments in the various states and have been reported by vocational education departments. However, to further ascertain the characteristics of university sponsored programs, a questionnaire was sent to five of the leading schools in the United States and responses were received from each of them. They included Columbia University, Michigan State College, The Ohio State University, Purdue University, and Utah State Agricultural College. Basic data concerning the programs sponsored by these institutions are shown in Table 34. The length of training programs vary from 12 hours at Purdue University to 30 hours at Columbia
### TABLE 34

**BASIC DATA CONCERNING SCHOOL CUSTODIAL TRAINING PROGRAMS CONDUCTED BY FIVE COLLEGES AND UNIVERSITIES**

<table>
<thead>
<tr>
<th>Colleges or Universities</th>
<th>Number of years program has been operating</th>
<th>Length of training program</th>
<th>Number of custodians attending in 1951</th>
<th>Method of Financing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tuition</td>
</tr>
<tr>
<td>Columbia University</td>
<td>12</td>
<td>30 hrs.</td>
<td>104</td>
<td>X</td>
</tr>
<tr>
<td>Michigan State College</td>
<td>22</td>
<td>30</td>
<td>700</td>
<td>X</td>
</tr>
<tr>
<td>The Ohio State University</td>
<td>6</td>
<td>24</td>
<td>199</td>
<td>X</td>
</tr>
<tr>
<td>Purdue University</td>
<td>24</td>
<td>12 hrs.</td>
<td>247</td>
<td>X</td>
</tr>
<tr>
<td>Utah State Agricultural College</td>
<td>4</td>
<td>18 hrs.</td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>
and Michigan State and the courses are offered during the summer months.

The number of custodians attending these schools range from forty-two at Utah State Agricultural College to 700 at Michigan State. It is interesting to note that enrollment increases are experienced each year at these custodial training centers and is indicative of the interest shown by school custodians. One of the most common methods of financing the programs is by charging a registration or tuition fee. The fee is twenty dollars ($20.00) per man at Columbia; fifteen dollars ($15.00) per man, including room and board, at Michigan State; five dollars ($5.00) per man at Ohio State; and two dollars ($2.00) per man at Purdue. Vocational education and college funds are also available for use at Michigan State. Advertising and the sale of exhibitors' space is an additional source of money at Purdue. The Utah State Agricultural College program is entirely financed by vocational education funds.

Source of Instruction

The source of instructors vary at the different institutions. The majority of the instructional staff for the 1951 summer session at Columbia was supplied by the university itself. In addition, guest speakers representing industrial and business organizations were used. Michigan State secures its instructional staff from the following sources: public school custodians, public school administrators, the State Department of Education, visiting
professors, public utilities representatives, business and commercial representatives, trade schools, and local staff members. In fact, there were sixty-seven members on the instructional staff at Michigan during the summer of 1951. The instructional staff at Ohio State is secured mainly from outside specialists, public school officials and university personnel, while Purdue uses superintendents of buildings and grounds from cities in the State of Indiana. Here as in other types of custodial training programs, there seems to be no standardized method of securing instructors.

Content and Characteristics of Training Courses

The content of custodial training programs in the five colleges and universities for the summer session in 1951 are shown in Table 35. Here again housekeeping, heating and ventilating, and maintenance are common to all programs. The content varies in the different schools each summer as noted by schedules received for the past three years. The fact that in most instances programs are not graded and all custodians are subjected to the same course content explains why the content changes from year to year. Otherwise custodians attending the previous year would be repeating courses. A reproduction of the custodial training program offered the past three summers at Ohio State is shown in Table 36. This table shows that something new is taught each year.

In general, custodial training programs sponsored by colleges
<table>
<thead>
<tr>
<th>College or University</th>
<th>Basic Custodianship</th>
<th>Housekeeping and Mainte</th>
<th>Heating and Ventilating Equipment</th>
<th>Mechanical Equipment</th>
<th>Supervision</th>
<th>Maintenance</th>
<th>Tools and Equipment</th>
<th>Managerial Problems</th>
<th>Fire and Accident Prevention</th>
<th>Supplies</th>
<th>Work Schedules</th>
<th>Planning</th>
<th>Staff Relations</th>
<th>Care of Grounds</th>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michigan State</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio State</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purdue</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utah State Ap. College</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
and universities treat all phases of custodial services and are commonly known as comprehensive training programs. Dr. George Bush, Director of Custodial Training at Purdue University, states that Purdue University is planning to organize courses on a unit basis rather than on a comprehensive basis.

The lecture, conference, general discussion, and discussion-demonstration methods are the most common methods of instruction used and motion pictures and exhibits are the most commonly used instruction aids.

The custodial training school at Columbia University, directed by Dr. H. H. Linn, is unique in that it is organized for business managers, superintendents of buildings and grounds, custodial supervisors, and school administrators. Dr. Linn states, "We are emphasizing leadership and management. We cannot train many men in the ranks, so we are trying to train head supervisors who can instruct their own men in turn." The course is also unique in that it is possible for men of college rank to attend and receive credit toward graduation.

Values From Custodial Training Programs Sponsored by Colleges and Universities

Statements from directors of custodial training programs and school custodians concerning the values of custodial training programs are significant enough to warrant consideration. Linn says:
### Table 36

**Custodial Training Courses Offered at the Ohio State University During the Summers of 1949, 1950, and 1951**

<table>
<thead>
<tr>
<th>Summer 1949</th>
<th>Summer 1950</th>
<th>Summer 1951</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fire Hazards in-school Buildings</td>
<td>1. Care of Floors</td>
<td>1. The Place of the Custodian in Civil Defense</td>
</tr>
<tr>
<td>2. Emergency First Aid</td>
<td>2. Brushes, Brooms, and Mops</td>
<td>2. Safety Factors in the School</td>
</tr>
<tr>
<td>5. Summer Work Programs</td>
<td>5. Care of Toilet, Shower, and Locker Rooms</td>
<td>5. Aids to Good Housekeeping</td>
</tr>
<tr>
<td>7. Parent Pupil-Teacher Relations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Training, Supervision and Ratings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. School Building Housekeeping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. The Custodian's Responsibilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. The Custodian as a Staff Member</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Letters from custodians and administrators—
Salary increases and promotions — personal school
visitation — and attendance records of men have
all indicated the value of the program.

Carlisle says:

Improved morale among custodians — higher
standards of housekeeping, better use of cleaning
materials, interest by custodians in the total school
program, better public relations, and affecting
economics are resulting from custodial training.

Quotes from custodians attending the 1951 summer custodial
school at The Ohio State University included: "I am all for this
type of school. It makes me feel I am doing an important job,"
"I've been attending this school for three years, I wouldn't
miss it for anything," "This is my fifth year at the school and
it's great. I hope I can come back again next year."

The very fact that attendance seems to increase each year
at custodial training schools that are elective to custodians
seems to point out that they are of value. Of greater significance
is the fact that once custodians have enrolled they keep coming
back. Linn reports men that have attended eight to twelve years
in a row. Several men have attended all six sessions of the Ohio
State Custodial school and the same is true at other colleges and
universities.

Because of the success of the custodial training program at
Utah State Agricultural College, plans are being contemplated to
set up a three year training and certification program for custodians,
having three general areas of study—housekeeping, maintenance, and heating and ventilating. These will probably be subdivided to give more detailed instruction in each field. The plan includes five to ten days per course and will operate at three levels (1) an inspirational and reportorial conference once a year; (2) leadership and instructor training conferences, three to five days every year; and (3) regional and district training schools for subdivisions of the state where the outlined courses will be taught. The plan is to expand this program to include eventually all non-teaching employees of Boards of Education.

Description of The Ohio State University Sponsored Custodial Training Program

Since this dissertation is concerned with custodial training in Ohio, this report would be incomplete without a description of the school for custodians conducted by the Bureau of Educational Research of The Ohio State University. Under the direction of Dr. E. B. Sessions, the first annual school for custodians was held on the campus for four days in June, 1946. A total of ninety-one public school custodians representing sixty-nine school districts attended. The school continued to grow each succeeding year until by the summer of 1951, the enrollment had increased to 200. Each year approximately one-half of the enrollees are repeaters from previous years.
The training program covers four days of six hours each and consists of six pertinent units of instruction which vary year by year. A schedule of the 1949, 1950, and 1951 program is shown in Table 36 on page 145. The assistance of experts in the field of school plant maintenance is secured to discuss special problems in the field of custodial services and methods of instruction are limited primarily to lecture and discussion.

Besides the regular instructional program an excursion is usually planned to some place of interest. Members of the 1951 school attended the General Electric School lighting display and experimental laboratory at Nela Park in Cleveland, Ohio.

The school is held during the week between the spring and summer quarters at The Ohio State University. Men may stay at one of the campus dormitories at a nominal fee if they so desire. Besides the values received from the training school, men have the opportunity to gain new acquaintances, renew old ones, and to share work experiences at informal sessions.

In general, the program is financed by charging each enrollee a five dollar ($5.00) registration fee. In many cases boards of education have borne the entire cost of the training school by paying board, room and fees for custodians and not deducting wages while in attendance.

In addition to the summer school for custodians the Bureau
of Educational Research of The Ohio State University is currently sponsoring in co-operation with the Association of Ohio Public School Business Officials, eight area training schools throughout the state. Under the leadership of Dr. E. B. Sessions these schools were started in February, 1952. Four schools are devoted to teaching Good Housekeeping and are located as follows: Canton, Elyria, New Philadelphia, and Sylvania. Heating and Ventilating is taught at the remaining four schools which are located as follows: Cleveland Heights, Cuyahoga Falls, Portsmouth, and Zanesville.

The classes at these centers consist of men living within the above cities and men from surrounding communities. The general pattern to-date is to have the business manager or some designated local public school official administer the training program. Sessions has the responsibility of promoting and co-ordinating the program and securing instructors.

The classes are so organized that each area school meets three evenings per week for three hours every other week for two months. In other words, each class meets twelve sessions for three hours each for a total of thirty-six hours.

Two special instructors are currently engaged in teaching these classes. The Good Housekeeping instructor is a permanent member of the Emily Griffith Opportunity School vocational education staff at Denver, Colorado, who has been granted a two months leave of absence to teach in Ohio. The Heating and Ventilating
instructor is a graduate heating engineer who has had considerable experience instructing school custodians.

This training program is financed through funds collected from entrance fees and subscriptions from manufacturers and supply companies. Without exception, boards of education have paid the fees assessed against custodians. The total cost of the two months training period is approximately $3,000.

The total number of school custodians currently enrolled in the eight area training centers is 265. Attendance has been excellent and reports from instructors indicate that the custodians would like to have the program expanded.

Upon satisfactory completion of the summer school session and the area schools, enrollees are given certificates of attendance which show the hours of training in the various subjects they have completed. A record of all custodians enrolled in either type school is kept on file in the offices of the Bureau of Educational Research at The Ohio State University.

CUSTODIAL TRAINING THROUGH CIVIL SERVICE

Civil service as a means of improving custodial services must be considered from two standpoints—one good, the other questionable. In the first place, requirements for passing civil service examinations increase the probability of better selection.
At least there is more assurance of obtaining personnel with higher mental capacities. On the other hand, there is no assurance that custodians will be better trained to meet their responsibilities in the school. Reeves and Sanders had the following to say concerning civil service examinations:

In many of the middle-sized and larger cities of the United States janitor-engineers must take a civil service examination. Unfortunately, such an examination is usually very superficial and bears but little relation to the work which janitor-engineers perform. Questions are usually compiled and administered, not by superintendents of buildings and grounds or other supervisors of janitor-engineering service, but by city officials, who are almost totally ignorant both of the work to be performed and of its educational significance (43:13).

Rice in his study, conducted in 1947, made inquiry of fifteen cities having populations over 100,000 concerning civil service custodial training programs (45). Civil service officials were asked whether provisions of the municipal codes included school custodians and, if they did, a request was made for a copy of this code. Although ten cities indicated that their codes did include school custodians, the only evident provisions were those which required examinations for appointments. In all instances provisions of the civil service law were administered by the municipal Civil Service Commission and local educational authorities had no jurisdiction in the administration of the law which affected school custodial employees. Each of the cities responded that the law made no provisions for the training of custodians to meet
civil service requirements.

All cities were unanimous in their response that they felt the law improved school building maintenance, attracted a better class of employees and improved salaries. These opinions, however, were from administrators of Civil Service Commissions and not from school authorities.

Custodial training programs are in effect in some cities in the United States for the sole purpose of preparing custodians to pass civil service examinations. This is especially true for men whose primary responsibility is that of heating and ventilating.

CUSTODIAL TRAINING THROUGH LABOR UNIONS

A final agency that has been found to be conducting a custodial training school is the American Federation of Labor. Cedar Rapids, Iowa reports that the custodial training school conducted in their school system is sponsored by the local union. This program cannot be considered very effective. Although training is given on school time, it is in the form of a round-table discussion. Guest specialists are called in to speak to the custodians. School authorities have no control over the training program other than preparing written examination which will qualify custodians for advancement. The program is not mandatory and custodians have shown little inclination to attend the training sessions.
Advantages of Various Types of Training Programs

Since one of the primary purposes of this chapter is to examine existing custodial training programs in order to determine features that would be valuable in a training program in Ohio, the advantages and disadvantages of each as noted by the writer are presented.

Advantages of Locally Sponsored Programs

The advantages of locally sponsored custodial training programs are:

1. The program can be adapted to the particular needs of the local school system.
2. It is possible to offer the program on school time.
3. The program is conducted in a natural school environment conducive to the "learn by doing" method.
4. Custodians do not have to travel excessive distances to attend.
5. An opportunity for a continuous training program is more available.
6. Opportunities for individual instruction are more nearly available since the classes are not too large.
7. Opportunities for on-the-job instruction are more available.
The disadvantages of locally sponsored custodial training programs are:

1. The majority of school systems are too small to warrant sponsoring custodial training programs.
2. Opportunities for adequately trained instructors are limited.
3. Programs are likely to be narrowly conceived.

State Sponsored Programs

It is difficult to consider the advantages and disadvantages of state department of vocational education sponsored programs since they take so many forms. In the first place, there are custodial training schools conducted by the various states on the local level, on a regional level, and on a state-wide level. In the second place, state vocational education departments co-operate with local schools in conducting programs, and finally they co-operate with colleges and universities. Consequently, these programs will be considered in terms of local, regional, and state-wide schools.

The advantages of the state sponsored programs on a local basis are similar to those named previously; however, the disadvantages are fewer since plans and criteria for the establishment of training schools are usually controlled at the state level.
The quality of the instructional program and the instructors is usually higher because course materials have been developed and instructors have been trained.

The advantages of the state sponsored area custodial training programs are:

1. An opportunity for training is provided for custodians from small as well as large school districts.
2. An opportunity for accommodating regions having similar needs and conditions is possible.
3. The program may be conducted in a natural school environment.
4. The instructional program is usually well planned and greater care is used in selecting instructors.

The disadvantages of state sponsored area schools are:

1. The areas are frequently so large that custodians have long distances to travel and this entails an expense beyond the resources of the district.
2. Classes are usually too large to permit individual instruction.
3. A continuous program is difficult to develop.

University Sponsored Programs

The advantages of college or university and state-wide
sponsored programs are as follows:

1. Leaders in the field of school plant maintenance are often obtainable as instructors.
2. The school serves inspirational and leadership purposes.
3. It provides opportunities for men from many localities to share experiences.
4. It provides opportunities to teach courses based on nationally recognized needs.

The disadvantages of college or university and state-wide programs are as follows:

1. Often instructors do not talk in the vernacular of the custodians.
2. Methods of teaching are usually limited to lecture and conferences.
3. Classes are too large to permit individual instruction.
4. The schools are usually great distances from the homes of custodians.
5. The program often lacks continuity from year to year.
CHAPTER VI

FINDINGS AND CONCLUSIONS UPON WHICH PRINCIPLES ARE BASED

From a survey of the literature and an analysis of questionnaires presented in previous chapters, the following findings and conclusions are presented. The purpose of this chapter is to summarize the findings and conclusions obtained from data presented in Chapters two through five in order to serve as a basis for formulating principles in the following chapter.

The Number of School Custodians in Ohio and the United States

1. There are approximately 6,500 school custodians in the State of Ohio. (See page 63)
2. There are approximately 20,000 school custodians in the United States.

During the current school year in Ohio there are 2,939 elementary school buildings and 1170 secondary school buildings being used for public school purposes.* On the basis of 6,500 custodians each building averages slightly more than one and one-half custodians per building.

It is interesting to note that a generalization can be made that there is one custodian per 1,000 persons in Ohio, which holds fairly true up to cities having populations of 30,000. As the population increases over this figure, the number of custodians decreases.

* Number of buildings as stated by the 1951-52 Ohio State Department of Education, Educational Directory.
Qualifications of the School Custodian

He must be:

3. An economist with the ability to save on the use of supplies and equipment

4. A sanitarian with proper appreciation of the contribution of cleanliness and sanitation to the health and comfort of children

5. A sociologist with a clear conception of his school relationships with principals, teachers, children, parents, and the community

6. A moralist with a keen sense of what institutes right and wrong conduct and behavior that he may assist in developing proper school attitudes and discipline

7. An exemplar who by his deportment, disposition, character, personal appearance, patience, honesty, kindliness, and forbearance should set an example for right conduct which will be an influence for good in the lives of children

8. A diplomat, shrewd and tactful in his contacts with children, other employees and the public

9. An expert housekeeper who by example establishes standards of right domestic living in the school home

10. A safety engineer familiar with the causes of accidents and their remedy
11. an expert mechanical engineer, if in charge, with adequate knowledge of heating plants, plumbing and sanitary equipment, ventilation and air conditioning. (See pages 5 and 6).

The rigorous qualifications stated above call for well selected and well trained custodians. No man can be expected to assume the role of school custodian without an educational program that will help him meet these qualifications. The personal qualifications of school custodians are so exacting as to make him as hard or harder to replace than teachers.

Opinions and reactions of Ohio School Superintendents concerning custodial Responsibilities

12. To render efficient and effective services custodians must be aware of the philosophy and purposes of education in their schools. (See page 19 and 20).

13. Custodians need help in this respect since only 2.3 per cent of 271 school administrators in Ohio indicate their custodians are very greatly aware; 25.8 per cent indicate greatly; 53.4 per cent some; 18 per cent very little, and .5 per cent none. (See page 22)

14. Generally school administrators in Ohio do not feel that custodians have a very prominent role as educational resource persons in the schools since only 2.3 per cent of them indicate he can contribute in
this manner very greatly; 14.3 per cent greatly; 52.1 per cent some; 30.4 per cent very little, and .9 per cent none. (See page 25).

15. School administrators in Ohio express even less satisfaction with their custodians contributions as resource persons since 1.4 per cent indicate they are satisfied very greatly; 6 per cent greatly; 46.5 per cent some; 33.2 per cent very little, and 12.9 per cent none. (See page 27).

16. School superintendents in Ohio are generally well satisfied with co-operation between custodians and teachers since 9.2 per cent indicated very greatly; 56.7 per cent greatly; 33.2 per cent some; and .9 per cent very little. (See page 30).

17. School superintendents in Ohio are strongly agreed that custodians have great influence on the housekeeping standards of the school since 28.1 per cent indicate very greatly; 61.7 per cent greatly; 9.7 per cent some, and .5 per cent none. (See page 33).

18. School superintendents in Ohio are considerably less satisfied with custodial contributions to good housekeeping standards since 3.7 per cent indicate they are satisfied very greatly; 35 per cent greatly; 47.4 per
sent some; 11.1 per cent **very little**, and 2.8 per cent **none**. (See page 35).

19. School superintendents in Ohio are strongly agreed that custodians influence school morale since 27.2 per cent indicate so **very greatly**; 49.8 per cent **greatly**; 22.1 per cent **some**, and .9 per cent **very little**. (See page 37).

20. School superintendents in Ohio are less satisfied with custodial contributions to school morale since 4.6 per cent indicate they are satisfied **very greatly**; 39.2 per cent **greatly**; 51.1 per cent **some**; 4.6 per cent **very little**, and .5 per cent **none**. (See page 39).

21. School superintendents in Ohio are strongly agreed that custodians influence moral standards of the school since 21.2 per cent indicate so **very greatly**; 55.8 per cent **greatly**; 21.2 per cent **some**, and 1.8 per cent **very little**. (See page 40).

22. School superintendents in Ohio are somewhat satisfied with custodial contributions to moral standards of the school since 7.8 per cent indicate they are satisfied **very greatly**; 41 per cent **greatly**; 43.8 per cent **some**; 6.5 per cent **very little**, and .9 per cent **none**. (See page 41).
23. School superintendents in Ohio are fairly well satisfied with their custodians contributions to health and safety standards in the schools; 4.1 per cent indicated very greatly; 40.6 per cent greatly; 47.9 per cent some, and 7.4 per cent very little. (See page 50).

24. They are about equally satisfied with their custodians contributions to maintenance and repair work since 3.7 indicated very greatly; 41.9 per cent greatly; 49.3 cent some; 4.6 per cent very little, and .5 per cent none. (See page 56).

25. The extent to which school superintendents think that the importance of the custodian is recognized by teachers, pupils, and the lay public is indicated thus: 3.2 per cent very greatly; 19.8 per cent greatly; 49.3 per cent some; 27.2 per cent very little, .5 per cent none. (See page 61).

Answers from school administrators concerning the importance of the school custodians indicate that the majority recognize his potential status; however, several indicate that his responsibilities should still be limited to sweeping floors and firing furnaces. There is indication also that the public, in general, is not too aware of the importance of the custodian.

Responses to questions which sought administrators' opinions concerning their satisfaction with custodial staffs in meeting
various responsibilities show that in general satisfaction rates ratherhighly; however, the writer questions the validity of these ratings. In working with the Survey Division of the Bureau of Educational Research, he had an opportunity to inspect many of the school buildings which were reported on by superintendents of schools. In each case, administrators scored custodial performance higher than the writer would have scored it.

Relatively high ratings by school administrators probably result from the following: In the first place, the availability of custodians is at a very low ebb at the present time and administrators may have lowered their standards in judging the performance of custodians. In the second place, administrators, not being fully acquainted with all of the duties of the custodian, are not in a good position to judge them critically. Finally, it has been revealed that in many instances custodians helped administrators to fill out the data requested in the questionnaires used for this study and, naturally, superintendents were not too critical of the custodians statements.

Personal conversations with superintendents, principals and teachers revealed less satisfaction with custodial performance than the responses to the questionnaire indicate.

To be more specific, a superintendent of a city school district maintained before an evaluation of his school plant was completed, that he had a superior custodial staff. An inspection of the
school buildings revealed among other things the following shortcomings: Outside exits leading to fire escapes were padlocked in one building; an outside exit from an auditorium was used for stage storage in another building, and a custodial storage room was filled with combustible materials, such as oily rags, mops, and paper; in still another building a teacher was dusting her own room. Teachers and principals were generally dissatisfied with custodial services in several of the buildings. Upon reporting these deficiencies to the superintendent he admitted that he had never made a thorough investigation but based his opinion upon the lack of complaints from other school personnel and upon a comparative basis with the school which he had formerly been associated.

In any event, administrators generally rated custodians much higher on questions concerning the importance of the school custodian in the respective areas of responsibility than they rated the performance of the custodian. They were less satisfied with custodial contributions to moral, morale, and educational standards than they were with his performance of generally recognized custodial functions.

Current Status of School Custodians in Ohio relative to Age, Education and Experience

26. Considering the ages of school custodians in Ohio only 7.2 per cent of city employed custodians are thirty
or under, while 22.6 per cent are over sixty; 9.5 per cent of exempted village employed custodians are thirty or under while 23.4 per cent are over sixty; and 15.3 per cent of the custodians employed by local school districts are thirty or under, while 10.9 per cent are over sixty. The median age for city, exempted village and local school district custodians is 51.3; 51.4 and 50.0 respectively. (See page 64).

27. Concerning the formal education of school custodians in Ohio, 19.2 per cent of city school employees have not completed 8th grade; 30.1 per cent have completed 8th grade; 27.3 per cent have attended high school; 21.1 per cent have completed high school; 2 per cent have attended college, and .3 per cent have completed college; 17.2 per cent of exempted village school custodians have not completed eighth grade; 24.1 per cent have completed 8th grade; 30.4 per cent have attended high school; 26 per cent have completed high school, and 2.2 per cent have attended college; and 14.8 per cent of local school district custodians have not completed 8th grade; 18 per cent have completed eighth grade; 35.1 per cent have attended high school; 23.6 per cent have completed high school; and 1.9 per cent have attended
college. The median number of years of completed education for city, exempted village and local school districts is 8.1; 9.1; and 9.8 years respectively. (See page 66).

28. School custodians in Ohio have more formal education than the adult population of Ohio. (See page 68).

29. Concerning the turnover of school custodial employees in the three different types of school districts in Ohio, 42.9 per cent of the custodians in city school districts are new every five years; 52.7 per cent of the custodians in exempted village school districts are new every five years; and 55.5 per cent of the custodians in local school districts are new every five years. Ten per cent of city school custodians have been on the job over twenty years, while only 4 per cent of the exempted village and 6.9 per cent of local school district custodians have been on the job over twenty years. The city, exempted village, and local school district medians are 7.2 years; 5.9 years and 5.1 years respectively. (See page 70).

It is interesting to note that the formal educational status of school custodians has increased significantly in the past twenty-five years. The implication for a custodial training program is that it can be geared at a fairly high level. The facts reveal
that the position of school custodian is top heavy with old men. The nature of custodial responsibilities require a sturdier class of employees.

An even more significant factor is the tremendous turnover of school custodians. Considering Linn's statement that it takes from three to five years to become an efficient custodian through trial and error methods, nearly half our custodians are in the learning stage.

Policies concerning selection, work loads, salary, sick leave, and retirement for custodians in Ohio Schools

30. School custodians are selected most frequently by the superintendent of schools in city and exempted village school districts but boards of education retain this responsibility in 31 per cent of the local school districts. (See page 72).

31. School custodians are responsible to persons other than the board of education in all excepting 1.6 per cent of exempted village school districts and 10 per cent of local school districts. (See page 74).

32. Qualifications for the selection of custodians have been established in 62 per cent of the city school districts, 35 per cent of the exempted village school districts, and 42.5 per cent of the local school districts. (See page 77).
33. Policies concerning custodial work loads have been established in 92.5 per cent of the city school districts; 61.7 per cent of the exempted village, and 71.2 per cent of the local school districts. (See page 83).

34. Policies concerning work hours have been established in 84.4 per cent of the city school districts; 58.3 per cent of the exempted village school districts, and 62.5 per cent of local school districts. (See page 83).

35. Policies concerning custodial salaries have been established in 90.9 per cent of the city school districts; 76.6 per cent of the exempted village school districts, and 86.2 per cent of the local school districts. (See page 83).

36. Seattle, Washington has developed a salary schedule based on experience and training. (See page 84.)

37. Policies concerning sick leave for school custodians have been established in 100 per cent of the city school districts; 90 per cent of the exempted village school districts, and 97.5 per cent of the local school districts. (See page 83).

38. Policies concerning retirement for school custodians have been established in 93.5 per cent of the city school districts; 71.7 per cent of the exempted
village school districts, and 78 per cent of the local school districts. (See page 83).

A very high percentage of administrators indicate that definite policies have been established relative to selection, work load, work hours, salary schedules, sick leave, and retirement. The writer questions the validity of many of these policies since conversations with several administrators concerning some of the items above reveal that operational policies are in effect but have never been put into writing. Even some that have been put into writing are extremely vague. The establishment of policies concerning custodians is important for improving custodial services and should be given serious consideration. Phay claims these things are even more important for improving custodial services than custodial training.

Attitudes of school administrators and other interested agencies in Ohio concerning a state-wide custodial training program and state certification of school custodians

39. Twenty-three and one-half per cent of Ohio school superintendents indicate they favor a state-wide program for school custodians very greatly; 50.7 per cent greatly; 20.8 per cent some; 4.0 per cent very little; and 1 per cent none. (See page 83).

40. Sixty-one per cent of the city superintendents believe that custodial training should be mandatory; 38.6 per cent of the exempted village superintendents believe it
should be mandatory; and 41.2 per cent of the local school superintendents believe it should be mandatory. (See page 84).

41. Relative to state certification of school custodians in Ohio, 60 per cent of the city school superintendents indicate they are favorable; 51 per cent of the exempted village superintendents indicate they are favorable, and 54 per cent of the local school district superintendents indicate they are favorable. (See page 91).

42. Members of boards of education, officials in the State Department of Education, and school custodians indicate they are favorable to a state-wide program of custodial training and state certification of school custodians. (See pages 91).

43. State certification of school custodians has not yet been realized in any state in the United States. (See page 89).

It would appear from an analysis of the findings above that superintendents in Ohio are greatly interested in seeing a custodial training program inaugurated. City school superintendents are more favorable toward mandatory training than are exempted village and local school districts.

School superintendents are less favorable to state certification of school custodians. Even so, more than half favor such a plan and seventeen responding negatively to this question favor the
plan for future action. They feel it would be unwise to consider certification at the present time because of the shortage in school custodians.

\textbf{Custodial training in Ohio}

44. Custodial in-service education programs are effective in 28.6 per cent of the reporting city school districts; in 20 per cent of the exempted village school districts, and in 18.7 per cent of the local school districts. (See page 86).

45. Approximately 6 per cent of Ohio custodians are receiving custodial training annually through The Ohio State University sponsored summer school and area school programs. (See pages 147-152).

46. Financial assistance is available to school districts for trade extension courses in custodial training through the Trade and Industrial Education Service of the Division of Vocational Education of the State Department of Education, but public schools have not availed themselves to this service. (See page 84).

In view of previous findings concerning the favorable attitudes of school superintendents concerning custodial training, it is confusing to the writer in finding an explanation as to why more custodial training programs have not been established within the schools of Ohio. Less than 25 per cent of the
reporting schools have established in-service training programs and according to records in the Trade and Industrial Education Service of the Division of Vocational Education, schools have not been offering trade extension courses to improve custodial services even though funds are available to help pay for such courses.

It is possible that school administrators in Ohio are ignorant of the fact that their schools can participate in the Vocational Education program. On the other hand, it is possible that interest expressed by school superintendents in custodial training is theoretical or passive rather than practical and active. These things are possible, but the writer is of the opinion that in view of all other problems faced by school administrators that they have not taken time to give the problem serious consideration. Findings concerning other investigated custodial training programs reveal that the most successful ones in other states are those which are promoted and encouraged by an agency other than school superintendents. This same situation has prevailed in Ohio. Dr. E. B. Sessions of the Bureau of Educational Research of The Ohio State University has voluntarily assumed the responsibility of promoting custodial training. His efforts have been rewarded by enthusiastic support by superintendents, boards of education, and custodians.
Custodial training programs currently in operation in the United States

47. Agents and agencies influencing early emphasis on custodial services were: The National Education Association; the National Association of Public School Business Officials; the United States Office of Education, hygienists and health agencies, city superintendents, and professional observers and critics in school surveys. (See pages 97-103).

48. Current organizations sponsoring custodial training include boards of education; Vocational Education Departments in the various states; colleges and universities; civil service commissions and labor unions. (See page 103).

49. Of 126 responding cities having populations over 50,000, fifty-two are offering a formal custodial training program. (See page 110).

50. Custodial training programs in cities having populations over 50,000 are increasing rapidly; twelve cities report their programs have started in the last five years and three cities report such a program is being planned. (See page 111).

51. Methods used to improve custodial services other than formal training in large cities include: on-the-job
supervision, apprenticeship training, and informal conferences. Considering all reported methods, 65 per cent of the large cities are making some type of effort to improve custodial services. (See page 108).

52. Twenty-five responding State Vocational Education Divisions in the United States are sponsoring or helping to sponsor 288 custodial training programs in the respective states. Fifty of these are operated on an area basis; 231 are operated on a local basis, and seven are operated on colleges and universities on a state-wide basis. (See page 127).

53. Custodial training programs are more numerous in states in which vocational education departments are actively promoting the program such as Colorado, Kansas, and Michigan. (See page 131).

54. Approximately fifteen to twenty colleges in the United States are sponsoring custodial training programs. (See page 139).

55. Civil service examinations are only partially effective as a means of improving custodial training programs. (See pages 150).

56. Only one city, Cedar Rapids, Iowa, reported that a labor union sponsors a custodial training program.
Types and Content of Custodial Training Programs

27. There are two general types of custodial training programs according to instructional programs: (1) comprehensive schools organized on a spiral basis in which all phases of custodial services are treated at the same time; and (2) short-term units in which one phase of custodial service is exhausted before starting another.

58. There are three general types of schools according to geographic location: local, area, and state-wide. The advantages and disadvantages of these different types of schools are discussed.

59. Courses common to all custodial training programs are sanitation and housekeeping, heating and ventilating; building repair and maintenance; and the care and operation of mechanical equipment.

60. Most custodial training programs emphasize the operational tasks and technical skills to be performed by custodians; however, in several instances stress is being placed on the problem of human relations.
The trend in the United States is toward organizing custodial training schools in terms of short-term units. All custodial training schools should be directed toward a definable end and each part of a training program should become one of the steps toward that end. Units of training can be set up in sequential steps and each course or class can either cover all or a specific part of one of these units.

Since custodial responsibilities are different according to the classification of positions held by custodians, the number and types of units they need to complete vary.

Locally sponsored custodial training programs vary in length from one day per year to a full year. Several large cities like Denver, Colorado; Minneapolis, Minnesota, and Seattle, Washington have established elaborate training centers.

**Methods of Instruction**

61. Discussion—demonstration, demonstration, and job participation are the usual methods of instructing in the locally conducted custodial training programs.

62. Lecture, conference, general discussion, and discussion—demonstration are the usual methods of instruction in area and state programs of custodial training.

63. "To learn to do by doing" is becoming generally accepted as the most effective type of instructional method.
The smaller the enrollment of custodial training schools, the more likely custodians are to receive individual instruction and job participation opportunities. In the State of Michigan during the 1951 summer school session conducted by Michigan State College, there were over 700 custodians in attendance. Naturally, methods of instruction had to be limited to lecture, conference, and general discussions. To ameliorate these weaknesses an itinerant instructor is employed by the college to visit local school districts to instruct on the job.

Source of instructors

64. In large city school districts 63 per cent of custodial instructors are experienced custodians chosen from the ranks. Members from the administrative staff and outside specialists are other common sources of instructors.

65. Custodial instructors in local and area schools conducted or co-operatively sponsored by Vocational Education Divisions are almost entirely chosen from the ranks of experienced custodians. Michigan follows this procedure exclusively.

66. Custodial instructors for college and university sponsored programs are generally selected from out-
side specialists, college faculties, and public school administrative staffs.

The trend throughout the country is to employ experienced custodians as instructors for training programs. This plan has merit and is valuable for several reasons. In the first place, there is a great storehouse of potential instructors available; in the second place, men from the ranks are more apt to be familiar with the problems of the custodian and to talk in the vernacular of the custodian; and finally it offers opportunity for improved status and recognition to worthy men in the field.

Methods of financing custodial training programs currently in existence in the United States

67. Approximately one-half of the large city school districts sponsoring custodial training programs are financed through local funds. One-half receive financial assistance from federal and state funds through the Vocational Education program. The latter school districts usually have more extensive training programs than the former.

68. Custodial training programs directed by the Trade and Industrial Education Service of the Vocational Education Divisions in the respective states are financed
entirely from vocational education funds.

69. Custodial training programs sponsored jointly by local schools and the Division of Vocational Education are usually financed on a matching basis. In most cases matching is on a fifty-fifty basis.

70. In those states where the vocational education division co-operates with colleges and universities in sponsoring custodial training programs, the State assumes between 40 and 65 per cent of the financial obligation.

71. In many instances the cost of operating a custodial training program has been offset by savings in the use of fuel and supplies, and savings in maintenance and repairs.

The one significant fact to elaborate upon at this point is that custodial training programs are more numerous and more extensive in proportion to the amount of vocational education funds available for these purposes in the various states. For example, the five states spending the greatest sum of money for custodial training of the reporting twenty-five states are operating or assisting to sponsor 61 per cent of the programs.

Values resulting from custodial training programs

72. Statements of school administrators in cities over
50,000 indicate that staff, pupil and public relations have improved as a result of custodial training programs.

73. Financial economies have been effected in school districts as a result of custodial training. Milwaukee reports that 8,094 less tons of coal were consumed in colder weather four years after the inauguration of a training program. At today's cost of coal this approximates $100,000.

74. Ever increasing attendance at custodial schools is another indication of the value of training.
CHAPTER VII

PRINCIPLES GOVERNING THE ORGANIZATION AND OPERATION OF A STATE-WIDE PROGRAM OF CUSTODIAL TRAINING

The primary purpose of this dissertation is to formulate a plan which will result ultimately in an adequate school custodial training program for the State of Ohio. Such a plan should be based upon sound principles of school administration.

The over-all or general principle to which the program should conform may be called the principle of need, adequacy, and efficiency. The need should be thoroughly established. An attempt has been made to establish the need in Chapters II through V in this study. But establishing the need is not sufficient; the program should be adequate to meet the need now and in the future, and to meet the need economically and efficiently. This is both common sense and good administration.

It will be necessary to provide adequate training for approximately 6,500 school custodians in the State of Ohio, and to recruit and to train replacements as they occur. So the approximate rate of replacement must be established and new and better methods of selection should be formulated and put into action. The present rate of turnover of school custodians in Ohio approximates 45 per cent every five years.
There are 1,408 school districts in Ohio. Some employ many custodians and others employ only one or two. Obviously, small districts cannot train custodians any more than they can train their teachers and administrators. In fact, not over a dozen school districts in the state are large enough to operate their own organized training programs without help from an outside agency. Thus we have arrived at the conclusion that a state agency is needed. Assuming the correctness of this assumption, it remains for us to describe the characteristics of this state agency and the basic principles or criteria upon which it should organize and operate a school custodial training program.

To clarify the presentation, we are setting forth at the beginning of this chapter seventeen principles or criteria gleaned from the literature on custodial training programs and from an analysis of existing programs. These principles or criteria are presented without respect to their order, and they are discussed in the order given. In addition, fourteen principles which should govern the operation of custodial training programs, once they have been established, are presented.

SEVENTEEN PRINCIPLES GOVERNING THE ORGANIZATION OF A STATE-WIDE CUSTODIAL TRAINING PROGRAM FOR OHIO

The following list of principles are presented for governing the state-wide organization for custodial training in Ohio.
1. The need for a state-wide custodial training program should be determined and verified.

2. The interest in, and desire for, a state-wide custodial training program on the part of school administrators and custodians should be determined.

3. The purposes of a state-wide custodial training program should be clearly defined.

4. Custodial training should be directed, encouraged, promoted and co-ordinated by a state agency.

5. The organization for a state-wide custodial training program should be definitely outlined to avoid instability in the conduct and operation of the program under changing administrations.

6. A state-wide program should provide an adequate staff for the efficient administration and operation of a custodial training program.

7. A state-wide program should provide for state-local participation as well as helpful working relations with other interested agencies.

8. A state-wide custodial training program should be financed from both state and local sources.

9. A state-wide program should provide for area and state custodial training as well as on-the-job instruction.
10. A state-wide program should provide that area schools be organised in short-term units.

11. A state-wide program should make an analysis of duties and responsibilities of custodians to establish standards and units of study.

12. A state-wide program should set standards for the establishment of area training centers in terms of suitable housing and equipment facilities and in terms of convenient locations.

13. A state-wide program should set standards relative to class sizes and eligibility of enrollees.

14. A state-wide program should provide qualified instructors.

15. A state-wide training program should be so organized that it may prepare for certification.

16. During the initiatory period, custodial training should be elective rather than compulsory. Ultimately it should be compulsory.

17. A state-wide training program should provide means of self evaluation in order that it may efficiently accomplish the purpose for which it is instituted.

Discussion of Principle Number 1.

The need for a state-wide custodial training program should be determined and verified.
The need for any educational program is prerequisite to organization and must be established at the level the training is to take place. These needs in Ohio, as summarized from data taken from questionnaires and from personal observations of the writer in school situations, are presented as follows:

a. Custodians are rarely employed because of special ability in custodial work or knowledge of health and safety rules. They are usually employed as the need arises.

b. Specific duties of the custodian are not known by the worker himself or very fully known by the school administrators.

c. Administrators, in general, do not have the experience or training to supervise custodians adequately.

d. Many duties are of a technical nature that require special knowledge and skill for their performance.

e. Many routine duties are performed inefficiently.

f. The custodial turnover has been so rapid in Ohio that almost one-half of the men are inexperienced. (According to experts it takes from three to five years for the average custodian to become efficient without assistance.)
g. Although the custodial training program sponsored by the Bureau of Educational Research At The Ohio State University is very valuable, it enrolls less than six per cent of the total number of custodians in Ohio each year; and there is little promise of permanency or continuity in the program.

h. Many states are making greater effort to improve custodial services than is the State of Ohio.

i. The worth of custodial training programs as a means of improving custodial services has been proven wherever tried.

Discussion of Principle Number 2.

The interest in, and desire for, a state-wide custodial training program on the part of school administrators and school custodians should be established.

The writer has surveyed the opinions of school administrators and custodians to ascertain the desirability of establishing custodial training in Ohio. According to answers received from questionnaires these personnel are eager for a state-wide custodial training program. Further discussion of these attitudes and opinions are found in Chapter IV.
Discussion of Principle Number 3.

The purposes of a state-wide custodial training program should be clearly and definitely defined.

It is important to point out that an organization is created to accomplish a purpose. The purpose should be defined before the organization is created and the purpose determines and governs the form of the organization.

A proposed statement of purpose for the custodial training program in Ohio follows:

The purpose of a custodial training program should be to offer the custodians in Ohio the opportunity to improve the quality of services rendered through greater knowledge of the total responsibility of the service, through greater skill in the performance of tasks; through greater understanding of personnel relations involved in the service; and through a greater personal sense of usefulness, belongingness, and accomplishment.

Before a state-wide custodial training program is organized there should be a clear concept of what objectives are to be accomplished. Womrath says that, "Public-school janitor-engineers are trained, in the broadest sense, for two specific purposes: to make better artisans, and to train men uniformly for the
junior-engineering service of the school system" (65:284).

Broken down, the primary purposes of custodial training might will be: to improve custodial services; to standardize custodial procedures; to improve health and safety standards; to save money; to upgrade the custodial personnel, and to increase educational opportunities of children.

Discussion of Principle Number 4.

Custodial training should be directed, encouraged, promoted and co-ordinated by a state agency.

Education is the responsibility of the various State governments in America. To insure more efficient instruction, provisions have been made for training and certificating teachers and administrators, certain regulations have been made for school control, and certain educational standards have been adopted in every state. The Ohio Department of Health has published health and sanitation standards to insure that school buildings, in which our children are required by law to attend meet certain standards. However, provisions have not been made to help school custodians live up to these standards.

His services are definitely a part of the total program. His contributions as an educator and moralist were discussed in Chapter II. His relations with pupils, teachers, administrators and the general public influence either directly or indirectly the education that goes on in the classroom. His activities in caring
for the heating, ventilating, lighting, and sanitary facilities influence the health of school occupants. He also has grave responsibility for the safety of school children. Consequently, the State has an obligation to assist in a training program for custodians that will help to insure safe, comfortable, and attractive school plant facilities for children.

State participation in custodial training is certainly not a new venture since, at the present time, some twenty-five states are participating in such programs in the United States as revealed from responses to questionnaires and presented in Chapter V.

Discussion of Principle Number 5.

The organization for a state custodial training program should be definitely outlined to avoid instability in the conduct and operation of the program under changing administrations.

Many a gainful venture has been started by some enterprising individual only to collapse once his presence or influence has vanished. The success of the venture lay in the strength of the individual. On the other hand, many a gainful venture has been started and successfully continued even after the originator moved on to other endeavors. Why? The answer is that one venture
was well organised. Organisation is the structure or framework for the accomplishment of a purpose. French says, "Making the arrangements that permit purpose realisation usually involves consideration of money, site, plant, supplies and materials, personnel, invention, and law and governmental regulations" (12:13-14). Organisation then involves co-ordinating the considerations stated above. It must be flexible to compensate for the many variables involved, yet it must be stable enough to insure permanency and continuity.

Discussion of Principle Number 6.

A state-wide program should provide an adequate staff for the efficient administration and operation of a state-wide custodial training program.

Administration is concerned with the conduct, operation, and management of an enterprise as organised so that purposes continue to be effectively realised (12:14).

It is almost needless to say that the best organization possible cannot function properly without the personnel necessary to carry out the program. This point has been brought out repeatedly in answers from the various State Departments of Education. Several states have dropped custodial training programs because of the lack of qualified personnel at the administrative level. This principle implies that the quality of the staff, as
well as the quantity, be of high caliber.

Discussion of Principle Number 7.

A state-wide program should provide for state-local participation as well as helpful working relations with other interested agencies.

Proponents of vocational education have found that one of the greatest assurances of success for their programs is to encourage the use of committees both at the state and local levels. One of their success factors is, "Helpful working relations with other agencies" (39:56).

In any endeavor co-operation is most desirable. Certainly, no one would argue that a custodial training program should be established at the state level without due consideration being given school superintendents, business managers, custodians, university personnel, manufacturers, supply salesmen, engineers and other interested persons and agencies. Before a functional training program could be initiated, these persons or agencies would have to be consulted as to the purposes, needs, and content of such programs. For example, superintendents, business managers, and custodians would be of valuable assistance in helping to determine the needs of a custodial training program. Engineers and manufacturers would be of valuable assistance in determining the content of certain technical training such as heating and
Discussion of Principal Number 8.

A state-wide program should be financed from both state and local sources.

Public education is financed at both state and local levels in Ohio as are the various vocational education programs. (The latter is also partly financed from federal funds.) Since custodial services play such an inherent part in the total education program, it seems that training for improved services should receive the same consideration. Provisions have been made by the State to pay costs of transporting pupils to school but very little consideration has been given to insuring a proper educational environment once the children are in school. In reality a custodial training program properly conceived and operated would save money. In Chapter III, the amount of money saved in one school district alone amounted to thousands of dollars and was attributed greatly to the training program. Thus savings in expenditures for maintenance, repairs, supplies, and replacement of school buildings would offset any cost of the custodial training.

It is highly inadvisable to attempt the establishment of a custodial training program unless sufficient financial support is assured from the start. Rather than inaugurate a program, doomed from the start due to the lack of funds, it would be
better never to have started. Often the failure of such a venture retards future progress.

A willingness on the part of school administrators and boards of education to help pay the cost of custodial training has already been expressed in a sense in Ohio. Enrollment fees for the summer school conducted at The Ohio State University and for the eight area schools sponsored through the University are paid almost 100 per cent by boards of education. To-date the state has not directly participated.

Various methods now in use in the United States for financing custodian schools are through federal and state vocational education funds, local funds, entrance fees, and contributions from interested agencies. There is general agreement among leaders in the field of school plant and business administration that custodians should not be charged the cost of attending school.

Discussion of Principle Number 9.

A state-wide program should provide for area and state custodial training as well as on-the-job instruction.

Custodial training programs throughout the United States are conducted locally, regionally (area schools), and on a state-wide basis with each type school having certain advantages or disadvantages. In the writer's opinion one of the most favorable organizations is that in the planning stage in the State of
Utah. Through the co-operation of the Utah State Agricultural College and the State Vocational Education Department plans are being made to conduct inspirational meetings once a year at the state level and training schools at the area level. In addition, an instructor training program is to be conducted. From an inspirational and morale standpoint there is merit in state-wide meetings. This type of school offers men the opportunity to exchange ideas and share experiences with large numbers of custodians from all over the state. For many men it is one of the few opportunities they have to get away from their local communities. This type of school provides an opportunity to hear leaders in the field of school plant management. From the functional training standpoint there is merit in area schools. Men are given the opportunity to gain custodial training near home and the training is provided in a realistic environment.

Struck in speaking of the branches of municipal services which would benefit from special training says:

Since the number of persons in some of these categories is relatively small in many communities and since there are distinct advantages in comparing experiences with others, it is often advantageous to conduct training programs for municipal employees on district, county, regional, and state-wide bases (53:61).

In addition to area and state-wide custodial training schools, there should be provided opportunities for on-the-job instruction. Attendance at the former schools will aid custodians
in recognizing problems in their own schools that need individual attention and instruction for solving. This is proving true in the currently conducted custodial training schools in Ohio. Those enrolled in heating and ventilating classes in particular are recognizing problems in their own schools that they had not even been aware of prior to attending classes. Each problem is peculiar enough to require special solution. Consequently, the training program should be comprehensive enough to cover all phases of custodial work.

Discussion of Principal Number 10.

A state-wide program should provide that area schools be organized in short-term units.

There seems to have been no standardized procedure in the past in the organization of custodial training schools. Some schools are organized on a comprehensive basis, treating all phases of custodial services, often in a haphazard fashion. In these schools custodians submit to the same program and often-times the course content is repeated. Other courses are organized on a comprehensive basis but students are classified and individual program cards are made out for each man. Each lesson covers some work in every branch of custodial service and the custodian is required to complete one lesson before starting a new one. This method of instruction is known as the spiral method.
Advantages claimed for this method are: (1) it is of greater interest to the students than the subject method; (2) it insures better service on the part of the student in the school building in which he works regularly; and (3) the student can be taught more easily the importance of correlation between all branches of custodial service.

The trend, however, has been toward organizing training in terms of short-term units. Once analyses have been made of the training to be done, units are developed to cover the services performed by custodians. This method seems best within a statewide organisation. Custodians are classified in many of the larger cities according to the type of work they perform, hence, units concerning Heating and Ventilating are not necessarily a requirement of personnel who have no responsibilities in heating. On the other hand, certain units should be required of all custodial personnel such as School Plant Safety. Advantages of the unit organisation are: Units can be offered which fulfill the greatest need; they are taught for immediate use; they are tested by the ability to use; new units can be added as needed; they are easier to organise for comprehensive treatment, and they lend themselves easily to certification.

Discussion of Principle Number 11.

A state-wide program should make an analysis of duties and responsibilities of custodians to establish standards
and units of study.

The State Department of Education has established standards for the various colleges and universities preparing teachers in Ohio. It seems necessary that such procedures should be followed for custodial training schools. If Principle 5 is accepted then several agencies would be represented in helping to formulate standards and units of study. One of the purposes of a custodial training program is to standardize custodial practices throughout the state in order to obtain greater efficiency. In general, the custodian's duties are similar enough to lend themselves to standardization practices so long as the most efficient and practical methods are used. Reeve's study was concerned with standardizing certain custodial practices and he had the following to say:

Since the school custodian's duties seem to be of growing importance to the school and to the public; since they require greater manual skill, more knowledge of complicated apparatus, increased managerial ability; and since they have increased from a few relatively simple tasks to an enormous number of duties, many of them complicated and technical; it would seem that, as a step toward standardization, it is time to make analyses of the various jobs which comprise the work of school custodians, to determine possible efficiencies in service and economies in time (42:3).

Thus, it would seem that the State-sponsored organization should assume the responsibility for making analyses of custodial duties and for developing the units of study for the training
program. These units should be comprehensive enough to cover the entire list of duties performed by custodians throughout the State of Ohio. For example, a unit on the care of septic tanks may be pertinent to many rural areas in Ohio, but not applicable to city districts. Viles has prepared an outline of eleven fairly comprehensive units which may be found in Appendix IV.

Besides determining the units for custodial training programs, the State-sponsored organization should determine the number of hours of training in each unit or area of instruction necessary for completion. From the literature, it is difficult to determine the desirable length of a training program. Womrath says of his experiences with the Minneapolis Custodial Training Program that:

It has been found that three years is the shortest period of time in which a man of average intelligence, following the vocation of a public-school custodian, can be properly trained in a part-time extension school without interfering with his regular occupational duties. The program of training-school work in Minneapolis is divided into two semesters per year, of four months each; and each month is divided into four weeks, with two hours of training per week in engineering subjects and two hours per month in housekeeping subjects, or a total of ten hours a month for each student. One month's training is devoted to each lesson; and, by dividing the training into 24 lessons, the training course may be completed in three years of eight months each (65:298-99).
In Michigan the complete custodial training program consists of fourteen units containing a total of 238 clock hours; however, the program is organized so that custodians may complete one or all of the units in varied length of time.

Discussion of Principle Number 12.

A state-wide program should set standards for the establishment of area training centers in terms of suitable housing and equipment facilities and in terms of convenient locations.

Area schools should be located in buildings that offer as many natural situations faced by custodians as possible. The buildings should have facilities that permit on-the-job demonstrations, laboratory work, conference, and lecture methods of instruction. Insofar as possible the building should contain or have access to various types of heating, ventilating, and lighting systems. It should contain different types of floors, classroom equipment, and school furniture. The care of each of the items above call for different knowledge and skill in maintaining them. It would be unwise, for example, to conduct a custodial training school in a brand new school building which contains the latest in school building design and furnishings unless all attending custodial employees actually worked in such an environment. Otherwise, over three-fourths of the
custodians would be training under situations that do not exist in their own buildings. Several of the larger cities like Minneapolis and Seattle have equipped abandoned school buildings to serve as custodial training schools. However, throughout the State of Ohio there are numerable school buildings that could be adapted for custodial training purposes with little or no expense since many have had recent additions and they contain old and new features in terms of structural materials, heating and ventilating, and other school equipment.

These area training centers should be located in accordance to population densities in the state. For example, a city may have one or more training centers while, on the other hand, an entire county may have only one center. Naturally, consideration has to be given to the distance custodians must travel to attend classes. They cannot be expected to put in a full day's work and then spend several hours in an automobile traveling to and from a training school.

Discussion of Principle Number 13.

A state-wide program should set standards relative to class sizes and eligibility of enrollees.

If the state is to assume the responsibility of helping to conduct custodial training schools in Ohio, it must also assume
the responsibility of helping to set minimum standards under which the program will operate. When custodial training schools were originally initiated in the various schools throughout the country the sizes of classes were relatively unimportant since the lecture method was the method used in the majority of cases. More recently, the theory that men learn best by doing has become more prevalent in custodial training schools. On-the-job training, individual instruction, demonstration, and conference techniques are current methods. Naturally, class sizes must be limited to get maximum benefits and participation from each enrollee.

The Official Miscellaneous Publication 2024 (Revised) of the State Vocational Education Division of Michigan states that, "Size of training classes should not be less than ten or more than twenty-five in number for any one unit course" (62:3). Viles says that instructors prefer to limit participating classes to between ten and fifteen (60:14).

Hospitals, hotels, apartments, industry and many other concerns besides the public schools are in need of well trained custodians. Consideration should be given to including these employees in custodial training schools. Eligibility to the several custodial training programs in existence sponsored at the state level usually include those who are lawfully employed as public school custodians or have been so employed and are
temporarily unemployed; or those employed as custodians in places other than public school buildings or have been so employed and are temporarily unemployed. Another common requirement for eligibility to custodial training schools is that the enrollee must be 21 years of age. In the opinion of the writer, this age limit should be lowered. Data in Chapter IV revealed that very few men under 25 years of age are employed as custodians in Ohio schools. If an age limit of 21 years is set for eligibility for custodial training classes, young men just out of high school cannot be expected to wait around for positions as custodians. They will seek jobs in industry. Consequently, a possible source of potential custodians is eliminated.

Discussion of Principle Number 14.

A state-wide program should provide qualified instructors.

The success of any teaching enterprise depends greatly upon the qualifications and effectiveness of the teacher. The qualifications of instructors for custodial training programs will be different from those of regular teachers in the public schools. By qualified instructors is meant men with practical experience and a good education, who are good teachers and who can express themselves in the vernacular of the custodian. The trend throughout the country is to promote men from the ranks who have proven
they are experts by actual performance of the various operations
and procedures necessary to carry out their responsibilities.

Prosser says,

Those who teach in an evening industrial
school must possess three indispensable assets:
(1) They must be workmen of recognized skill or
success in the thing they teach; (2) they must be
masters of the technical knowledge with which they
deal in their teaching; and (3) they must be able to
teach others what they know (39:59).

Since custodial education is similar, in a sense, in nature
to vocational education, these three assets are applicable. If
custodians are carefully chosen from the ranks as instructors it
would seem that they would already possess the first two assets;
on the other hand, to be able to teach others would require
special training. The State organization should make provisions
to provide this training. The custodian-instructor in Colorado,
for example, is sent to a regular teacher-training institution to
learn teaching methods and techniques.

Discussion of Principle Number 15.

A state-wide training program should be so organized
that it may prepare for certification.

Due to the extreme hardships that would be imposed upon
the school systems of Ohio because of the present scarcity of
custodians, due largely to the limited salaries paid them,
immediate consideration for certificating them seems unwise.
Nevertheless, to assure that schools are provided with properly
trained custodians, provisions should eventually be made to certificate them. In Principle 1, it was pointed out that the state department certifies teachers to insure better instruction and since the custodian is largely responsible for the school physical environment of the children he also should be certificated.

Present has not been established in the United States for requiring certificated custodians; however, several states are seriously considering so doing. A move requiring certification was proposed in Nebraska in 1948. Vocational education divisions sponsoring custodial training programs are certificating custodians upon completion of required courses and men attending college or university sponsored programs receive certificates of attendance in many instances. These certificates have only been honorary to date. Certain cities are requiring completion of training programs of all custodians which is a long step toward local certification.

The custodial training program should be so organized in Ohio that it will lend itself to a state department certification program. Provisions should be made to keep accurate records of custodians who have enrolled and completed any or all of the units offered in the training program in order that they may receive credit once certification becomes feasible. The issuance of credit cards for the completion of each unit and certificate for completion of all units may suffice at present.
Seattle, Washington has established a salary schedule based upon experience and training. The completion of certain units of instruction automatically places the custodian in a higher salary bracket. This system might provide incentive enough to bring the level of training high enough to consider certification at an early date than otherwise.

Discussion of Principle Number 16.

During the initiatory period custodial training should be elective rather than compulsory.

In light of the fact that there is a shortage of custodial employees at the present time, it seems unwise to require that all custodians attend training schools. In the first place, it would be almost impossible to organize a program that would immediately accommodate them. Secondly, if compulsory attendance is required, an antagonistic mental attitude is likely to be created, which would be decidedly detrimental to good results. Answers to questionnaires sent to Ohio administrators revealed that they were fairly well divided in their opinions concerning compulsory training since 51 per cent stated the program should be elective. If and when custodial training reaches the stature that it can be given on school time, then compulsory training should be considered.
Discussion of Principle Number 17.

A state-wide training program should provide means of evaluating the program.

Evaluation should be used as a means of determining the progress toward the goals for which custodial schools are working. The purpose of evaluation is to help class members and instructors to see where progress is being made and where it is not, and to point to reasons for progress or lack of progress. It is to lead to the changes which are needed to bring progress about. Evaluation should start at the beginning of the custodial training program. The purposes, themselves, should be evaluated in terms of their contribution to custodian understanding, appreciations, special abilities, and the like. And evaluation should continue as the custodial training program proceeds.

FOURTEEN PRINCIPLES GOVERNING THE OPERATION OF AREA CUSTODIAL TRAINING PROGRAMS

Previous discussion in this chapter has been concerned with the state-wide organization and operation of a state-wide custodial training program. This section is concerned with the organization and operation of custodial training programs on an area basis. The state-wide organization provides the framework in which the respective training schools may function.
The State agency in co-operation with other agencies should be responsible for making an analysis of the duties performed by custodians; for determining the units and developing a course of study for training programs; for setting certain standards which all training schools should meet; for training instructors; for certificating custodians; and for establishing means of helping to finance custodial training.

Once the above functions and procedures have been decided upon and local or area training schools may be initiated, there are other principles to be considered. In the conduct of the respective training schools the following principles developed by Viles are applicable:

1. The training must be practical and realistic, related to the type of work the custodian has to do.

2. Instruction should be in terms the learner understands.

3. Training should show the relationship of the operating and maintenance programs to the purposes and procedures of the educational program.

4. The training program should be set up in a series of attainable steps so that the learner may measure progress.

5. Instruction should be intermingled with demonstration and learner participation in discussions and in task performance. Class sizes should be limited to permit learner participation.
6. Instruction should be thorough. It should provide information on reasons and methods and the results expected. It should provide various methods of approach; complete each problem before taking up another; plan the job, practice, discuss procedures and results; and repeat to acceptable performance.

7. Training should aid the custodians in setting up work patterns and standards.

8. Each performance technique taught should become a part of a general work pattern or schedule.

9. The training program should point out additional sources of information and help the custodian to continue and extend his studies.

10. The custodian should be given a perspective of the whole maintenance and operation programs. The courses offered should have continuity, and the custodians should be assisted in planning his own training steps.

11. Training should aid the custodian in understanding his obligations and responsibilities and in correlating his work with that of his co-workers.

12. Training should assist the custodian in evaluating his work in terms of services rendered. It should lead to a fuller understanding of the whole job, competence in performance, and a pride in craftsmanship and accomplishment.

13. Training programs should standardize the physical tasks of the custodian according to best known practices and procedures.

14. Courses in the training of custodians should be based upon the elements that prove to be the most effective in practice.

The above principles should apply in any area school conducted in Ohio even though procedures may vary within the schools.
Present theories in vocational education of which custodial training is a part as stated by Prosser follow. These theories should also be used as guides in the planning, organizing, and operating custodial training schools in Ohio.

PRESENT THEORIES IN VOCATIONAL EDUCATION

1. Vocational education will be efficient in proportion as the environment in which the learner is trained is a replica of the environment in which he must subsequently work.

2. Effective vocational training can only be given where the training jobs are carried on in the same way with the same operations, the same tools and the same machines as in the occupation itself.

3. Vocational education will be effective in proportion as it trains the individual directly and specifically in the thinking habits and the manipulative habits required in the occupation itself.

4. Vocational education will be effective in proportion as it enables each individual to capitalize his interests, aptitudes and intrinsic intelligence to the highest possible degree.

5. Effective vocational education for any profession, calling, trade, occupation or job can only be given to the selected group of individuals who need it, want it and are able to profit by it.

6. Vocational training will be effective in proportion as the specific training experiences for forming right habits of doing and thinking are repeated to the point that the habits developed are those of the finished skills necessary for gainful employment.
7. Vocational education will be effective in proportion as the instructor has had successful experience in the application of skills and knowledge to the operations and processes he undertakes to teach.

8. For every occupation there is a minimum of productive ability which an individual must possess in order to secure or retain employment in that occupation. If vocational education is not carried to that point with that individual, it is neither personally nor socially effective.

9. Vocational education must recognize conditions as they are and must train individuals to meet the demands of the "market" even though it may be true that more efficient ways of conducting the occupation may be known and that better working conditions are highly desirable.

10. The effective establishment of process habits in any learner will be secured in proportion as the training is given on actual jobs and not on exercises or pseudo jobs.

11. The only reliable source of content for specific training in an occupation is in the experience of masters of that occupation.

12. For every occupation there is a body of content which is peculiar to that occupation and which practically has no functioning value in any other occupation.

13. Vocational education will render efficient social service in proportion as it meets the specific training needs of any group at the time that they need it and in such a way that they can most effectively profit by the instruction.

14. Vocational education will be socially efficient in proportion as in its methods of instruction and its personal relations with learners it takes into consideration the particular characteristics of any particular group which it serves.
15. The administration of vocational education will be efficient in proportion as it is elastic and fluid rather than rigid and standardised.

16. While every reasonable effort should be made to reduce per capita cost, there is a minimum below which effective vocational education cannot be given, and if the course does not permit of this minimum of per capita cost, vocational education should not be attempted (39:217-232).

It is upon the principles stated in this chapter that a state-wide custodial training program is proposed in the next chapter.
CHAPTER VIII

PROPOSALS REGARDING THE ESTABLISHMENT OF A STATE-WIDE CUSTODIAL TRAINING PROGRAM FOR OHIO

In Chapter VI the findings and conclusions of this dissertation are stated, and in Chapter VII principles for establishing the organisation and operation of a state-wide program are presented. The purpose of this final chapter is to formulate a definite proposal for a state-wide custodial training program for the State of Ohio based, for the most part, on the findings, conclusions, and basic principles set forth in Chapters II to VII inclusive.

Findings and conclusions do not necessarily establish the merits of one policy or program over the merits of another. In other words, there are many ways to accomplish a purpose. We learn in the study of administration that there is no one best way of doing anything. Ways and means of accomplishing purposes are not ordained; they are not absolute. Thus the writer does not claim omnipotence for the proposals here submitted. The proposals are made for the consideration of all persons interested in the inauguration of a state-wide custodial training program in Ohio. In the give and take of discussion other ideas may appear that are as good or better than those given in this chapter.
PROPOSALS

Proposal Number 1.

In line with principles governing the establishment of a state-wide custodial training program given in the previous chapter, particularly Principles 4 and 5, the first proposal is:

That the Division of Vocational Education of the State Department of Education of Ohio through its Trade and Industrial Education Service shall act as the state agency vested with the responsibility of encouraging, promoting, planning, organizing, directing, and co-ordinating the state-wide custodial training program in Ohio.

The organization at the state level to direct such a program is already in existence and was created in part to perform such a service. The Division of Vocational Education was created in 1918 in Ohio following passage of the Smith-Hughes Act in 1917. In 1951, the Federal Government, the state government, and local school districts jointly spent $3,740,953 for vocational education in Ohio. In-school youth enrolled in agriculture, distributive occupations, home economics, and trades and industries numbered 32,554 in 1951. In addition, 40,358 young and adult members of various communities were enrolled in part-time and
evening schools.

The Trade and Industrial Education Service offers many educational opportunities to youth and adults in the State of Ohio. For example, five types of classes are offered to in-school youth: (1) Full-time day vocational classes (vocational trade or high school); (2) full-time day vocational classes (vocational departments in high schools); (3) vocational trade co-operative classes; (4) vocational office practice co-operative classes; and (5) diversified occupations classes. In addition, to satisfy adult vocational education needs three types of classes are available: (1) Adult vocational pre-employment classes; (2) adult vocational extension classes; and (3) adult vocational apprentice classes.

Another important type of training, closely related to this study, in which the Trade and Industrial Education Service participates comes under the heading of Special Services and includes foreman training, apprentice training and public service training. The purpose of public service training is to offer training opportunities for employees of municipal, county, and state agencies. School custodians are within this category. At the present time in Ohio job training in rural electrification,

* Data supplied by the Division of Vocational Education of The Ohio State Department of Education.
fire fighting, and police training are being sponsored by the Public Service Training Division of the Trade and Industrial Education Service. Approximately twenty-five states previously discussed have included custodial training under public service training.

In view of this fact, the writer can see no justification for the creation of any other agency to direct a custodial training program on a state-wide basis in Ohio.

Suggested major responsibilities of the Trade and Industrial Education Service are:

a. To provide financial assistance to the state-wide custodial training program.

b. To adopt policies for training custodial instructors.

c. To approve units of study pertaining to the state-wide custodial training program.

d. To appraise results of the state-wide custodial training program.

e. To issue certificates of attendance to custodians upon successful completion of units of study.

Proposal Number 2.

That the Trade and Industrial Education Service of the Division of Vocational Education shall make contracts
with the College of Education of The Ohio State University and other publicly supported teacher training institutions whereby custodial training programs shall be promoted, encouraged, and operated.

The Trade and Industrial Education Service possesses the authority to co-operate with publicly supported institutions in fostering adult education programs of a vocational nature. Precedent has been set for co-operation between the Trade and Industrial Education Service and state and city colleges and universities. Such contracts are already established with the University of Cincinnati and Kent State University for sponsoring foreman training in the Cincinnati and Cleveland areas. Working agreements have also been established between the Trade and Industrial Education Service and the University of Toledo and Kent State University for sponsoring fire fighting training.

Since custodial training is an educational activity closely related to the total educational program in the State of Ohio, and since the College of Education of The Ohio State University is already sponsoring custodial training in a limited degree through the Bureau of Educational Research, it seems logical that a contract should be entered into between The Trade and Industrial Service and the College of Education of The Ohio State University.
In so doing, the educational facilities and services of the entire university would be made readily available to a custodial training program. This has proven successful in other instances and there seems to be no reason why it can't be equally successful in this instance. The summer custodial training program conducted by the Bureau of Educational Research of The Ohio State University has utilised university rooms and facilities for instructional purposes. Instructors from the various colleges in the university have co-operated by participating on the summer programs. University dormitory facilities have been made available to enrollees of the school.

In the opinion of the writer, the Trade and Industrial Education Service should enter into contract only with the College of Education of The Ohio State University during the initiatory period. As the program of custodial training evolves and expands to cover the entire state, consideration should be given to including other publicly supported teacher training institutions.

Suggested major responsibilities of the College of Education of The Ohio State University under such an arrangement would be:

a. To co-operate with the State Board of Vocational Education in employing a Specialist in School Plant Management to supervise the state-wide
custodial training program.
b. To supply office facilities for the Specialist.
c. To make university facilities available for custodial-instructor training and summer school custodial training programs.
d. To emphasize the importance of custodial services by offering graduate courses in school plant management open to administrators.

Proposal Number 3.

That a specialist in school plant management be employed jointly by the College of Education of The Ohio State University and the State Division of Vocational Education to administer, direct, encourage, promote and co-ordinate the state-wide custodial training program in Ohio.

Provisions in the contract between the Trade and Industrial Education Service and the College of Education should provide joint responsibility for employing a specialist in school plant management whose primary responsibility is that of administering the state-wide custodial training program. As mentioned previously, this procedure is within the jurisdiction of the co-operating agencies as determined by existing policies and precedent.

In the State of Michigan this plan is followed. Michigan
State College employs a consultant who has the responsibility of co-ordinating the summer custodial training conference and the public school building maintenance program. The consultant does the promotional work; works with custodial instructors, and co-ordinates the training activities. He is paid by Michigan State College, and the Michigan State Board of Control for Vocational Education approves a contract for reimbursement to the Michigan State College.

The qualifications of the Specialist in School Plant Management should be determined co-operatively by the College of Education and the State Board of Vocational Education. It is suggested, however, that he should have had experience in school plant management; that he have had experience in custodial training programs, and that he have had some engineering background or training. Naturally, it is essential that he have a pleasing personality, good health, and a tremendous enthusiasm for, and a firm conviction of, the worth of a custodial training program.

In the writer's opinion the success or failure of custodial training will depend upon the specialist. He will be responsible for actually administering, promoting, encouraging, and co-ordinating custodial training in Ohio.

Suggested major responsibilities of the Specialist in School
Plant Management are:

a. To administer the state-wide custodial training program at the state level.

b. To encourage and promote interest in the state-wide custodial training program.

c. To co-ordinate the efforts and energies of the various interested agencies in Ohio in arriving at a stronger state-wide custodial training program.

d. To supervise the job analysis of custodial services in order to formulate adequate units of instruction.

e. To supervise the preparation of instructional materials for the state-wide custodial training program.

f. To supervise the formulation of operational standards for the state-wide custodial training program.

g. To conduct custodial training programs on an area basis.

h. To direct the state-wide custodial summer school program.

i. To serve as an itinerant instructor for on-the-job training.
j. To direct the training of custodial instructors.

k. To keep records and reports of the state-wide custodial training program.

Proposal Number 4.

That a state-wide advisory committee composed of representative from school administrators; Ohio Association of Public School Employees; Ohio Department of Health, and related industrial and supply concerns be formed to advise in the planning of a custodial training program and to co-operate in its operation.

The Trade and Industrial Education Service has formulated a statement of policy concerning the use of advisory committees to insure that instruction may be on a sound basis. In fact, the entire field of vocational education is making wide use of advisory committees at both the state and local levels.

The nature and characteristics of custodial services are so varied and the specific responsibilities so numerous that the formulation of the state-wide custodial training program will require the assistance of many persons. The state advisory committee should be composed of members who are closely related to the custodian's work. Manufacturers of school supplies and equipment, manufacturers of heating and ventilating machinery,
and manufacturers of electrical equipment have expressed an interest and a willingness to serve in any capacity they can to help develop a custodial training program.

Suggested major responsibilities of the state-wide advisory committee are:

a. To co-operate and advise in making an analysis of custodial services in order to formulate adequate units of instruction for the state-wide custodial training program.

b. To co-operate and advise in formulating operational standards for the state-wide custodial training program.

c. To co-operate and advise in developing instructional materials for the state-wide custodial training program.

d. To further promote and encourage a state-wide custodial training program.

Proposal Number 5.

That custodial training be established on an area and state basis as well as on an on-the-job training basis; and that public school officials in whose schools training centers are established be responsible for administering
the program.

This proposal follows a general principle of vocational education that local schools shall have the responsibility of administering educational programs in their districts, thus assuring local interest and autonomy.

Area training schools should be established in Ohio according to population densities. In certain large cities several training schools might be conducted simultaneously. On the other hand, in certain counties there might be only one custodial training center. The purposes of area training centers are to provide training facilities within reach of all custodians. It is within these centers that the majority of instruction should take place. The purposes of the state training school is to provide inspirational and leadership opportunities. The purposes of on-the-job instruction is to provide custodians an opportunity to seek help on specific problems within their school buildings. It has been the experience of custodial instructors in the area custodial training schools, sponsored by the Bureau of Educational Research, that, in general, custodians are not aware of their problems until they have been exposed to them in class sessions. Once they become aware they seek and need additional help beyond what they learn in the area schools.
Suggested major responsibilities of local school districts in whose schools area training schools are held are:

a. To encourage and promote custodial training on an area basis.
b. To provide housing and equipment facilities for area schools.
c. To provide financial assistance at the area level.
d. To supervise custodial training at the area level.
e. To assist in securing prospective custodial training instructors.
f. To keep records concerning the area custodial schools and report to the state agency.
g. To appraise results at the area level.

Proposal Number 6.

That the state-wide custodial training program be financed by federal, state, and local funds.

Assuming that the proposals are followed in the order given, the Trade and Industrial Education Service will have entered into contract with the College of Education to conduct the state-wide custodial training program. Included in the contract will be an agreement for reimbursing the College of Education for the salary and, office and traveling expenses paid the Specialist in School Plant Management. Under present agreements with other
publicly supported teacher training institutions, the Trade and Industrial Education Service reimburses from 50 to 100 per cent of the salary of specialists or teacher trainers. Whatever the decision between the state and the university concerning the financial arrangements, funds from state and federal sources will have been used.

At the school level area, classes may be established on a regular adult vocational extension basis. At the present time, the Trade and Industrial Education Service reimburses boards of education that have paid instructor salaries to teachers in the various trades courses. Currently, the rate is $1.25 per hour of instruction and boards of education assume any instructional salary above this amount. Assuming the same general plan for employing custodial instructors funds from local sources would also be used to augment those supplied at the federal and state level.

Proposal Number 7.

That the state-wide custodial training program be as adequate as possible to offer all custodians in Ohio the opportunity to participate in training programs; that it be as comprehensive as possible to include all phases of custodial services; and that it be so organized to facilitate and expedite state certification of school custodial employees.
At the present time there are approximately 6,500 school custodians in Ohio. In addition, there is another estimated 5,000 persons in the state employed as custodians in hotels, apartments, post offices, and other places making a total of some 11,000 or 12,000 potential custodians to be trained.

Assuming that the state-wide custodial training program consisted of a minimum of five units as follows: sanitation and housekeeping; heating and ventilating; building maintenance and repair; care and operation of mechanical equipment; and safety, educational responsibilities, and human relations; and assuming each unit consists of thirty-six hours of training; and assuming that class sizes average twenty persons, it would task 1,750 classes to accommodate school custodians. This, in effect, amounts to 63,000 hours of training. In terms of the above standards less than one per cent of Ohio custodians were accommodated by the custodial training program sponsored by the Bureau of Educational Research during the past year.

To be as comprehensive as possible, units pertaining to all phases of custodial services should be developed. The duties and responsibilities of custodians should be analyzed in order to determine the contents of each unit. The content of units should be comprehensive to allow for flexibility in the various area schools. Custodians must be given training as it applies to their own particular school systems.
To be organized to facilitate and expedite state certification of school custodial employees, the state-wide training program should classify custodial employees. It is suggested that those in charge of school buildings be designated as head custodians; those whose primary responsibilities are heating and ventilating be designated as custodial engineers; those whose responsibilities are building and grounds care and maintenance be designated as custodians; and those whose responsibilities are sweeping and cleaning be designated as custodial helpers. Assuming, for purposes of discussion, that the training program would consist of the five units mentioned previously, head custodians should be expected to complete units on heating and ventilating; care and operation of mechanical equipment; and safety, educational responsibilities and human relations. Custodians and custodial helpers should be expected to complete units which approximately concerns their responsibilities.

Records of custodians completing units of study should be accurately recorded and reported to the state agency. Preservation of these records and constant referral to them could be a cue in determining the data for establishing laws requiring state certification of custodians.
Proposal Number 8.

That the same general policies and standards relative to eligibility of enrollees, class size, housing and equipment facilities, location of classes, time schedules, length of courses, character and content of courses, methods of instruction, selection and training of instructors, and methods of reporting be used as those developed in the Ohio Plan of Trade and Industrial Education Service (36).

Policies and standards relating to the above items should be co-operatively developed by the Trade and Industrial Education Service, The College of Education, Ohio State, and the advisory committee with the Specialist in School Plant Management acting as director and co-ordinator.

These policies and standards have already been established for vocational education trade extension classes, pre-employment classes, and apprentice classes and are outlined in the Ohio Plan referred to above.

Consideration should be given to the fact that characteristics of custodial training programs differ from characteristics of other training programs conducted through the auspices of the Trade and Industrial Education Service. Nevertheless, a commonality exists between these different training programs.
The desired outcomes of the proposed state-wide custodial training program in Ohio are:

1. Improved custodial services in all schools in Ohio.

2. Increased financial savings in the care and operation of school building and in the use of school supplies.

3. Improved methods in the selection of new custodians.

4. Improved welfare considerations for school custodians.

5. Improved human and public relations in the schools.

6. Improved educational opportunities for children in the schools.

7. Improved supervision of new custodians through greater knowledge and appreciation of custodial services on the part of administrator and custodial staff members.

8. Increased number of younger men entering into the service.
9. Decreased turnover of school custodians.

10. Ameliorated conditions to hasten state certification of custodial employees.

11. Greater awareness on the part of teachers, pupils, and the lay public relative to the importance of the school custodian.

FIVE PHASES SUGGESTED FOR INITIATING THE STATE-WIDE CUSTODIAL TRAINING PROGRAM

The eight proposals for the organization of a state-wide custodial training program described above provides training at three levels. The program must be adequate to facilitate the training of 6,500 school custodians and as many other of an estimated 5,000 custodians outside of the public schools who desire to attend. In the opinion of the writer, it seems impossible to inaugurate a plan that would realize this purpose at the onset. Rather, it seems wiser to initiate a simplified plan that is practical in application and to allow the program to expand from this pilot experiment. To illustrate how the proposed state-wide custodial training program could function through a five phase period, the following discussion is presented.
**First Phase**

Once a specialist in school plant management has been employed by the College of Education of The Ohio State University and the Division of Vocational Education, it is suggested that the program for the first few months be as follows:

a. The formation of policies and procedures; the development of units of study, and the development of instructional materials for a state-wide custodial training program.

The specialist, working in co-operation with the state agency and the advisory committee, would develop policies and operational procedures for a custodial training program. An analysis of custodial responsibilities would be made to determine the units of study which would be included in the program, and instructional materials to be used in area schools would be prepared.

b. Co-ordination of the efforts of interested agencies.

The specialist would have the responsibility of seeking the co-operation of, and co-ordinating the efforts of industry, custodial supply companies, and other interested agencies in the formulation of a state-wide custodial training program.
c. Promotion of custodial training.

The specialist would have the primary responsibility of promoting the state-wide custodial training program. He would inform administrators and custodians of the purpose and nature of the program through as many media as possible.

d. Operation of the state-wide summer custodial training school.

The specialist would have the responsibility of directing the annual summer custodial school at The Ohio State University. He should seek the co-operation of members of the Bureau of Educational Research in this endeavor to become familiar with previous summer programs and to benefit from their experience in conducting summer custodial training programs.

The first few months work would be of a developmental nature and would consume considerable time and effort on the part of the specialist in planning, promoting and co-ordinating the state-wide custodial training program.

Second Phase

a. Promotion of area training centers.

The specialist would contact school administrators to determine possible centers for establishing area schools. He would teach six or eight classes throughout the State of Ohio
during the second phase. He may or may not seek the assistance of representatives from other agencies in the instructional program. For example, the specialist may be teaching a unit in Heating and Ventilating and may desire representatives from boiler or furnace manufacturers to assist in some of the technical phases of the instruction.

b. Training custodial instructors.

While conducting custodial training programs in the various area schools, the specialist would constantly be on the lookout for prospective custodial instructors from the ranks of experienced custodians. He would also seek the assistance of superintendents in locating men from the ranks who would have desirable qualifications for custodial instructors. Upon location of qualified men interested in teaching in area schools, the specialist would conduct a short intensive instructor training course. The resources of The Ohio State University would be made available for this phase of the custodial training program.

c. Appraisal of custodial training.

Continuous appraisal and evaluation of the custodial training program would be made. The specialist, the state agency, and the advisory committee in co-operation with superintendents and custodians would constantly be seeking methods of improving the training program.
Third Phase

a. Further promotion of area schools.

The specialist again would have the responsibility of contacting school administrators to determine possible centers for establishing area schools. The instructors for these schools would be composed of experienced custodians who received special training to qualify in this capacity. The specialist would assist in a supervisory capacity during the first year custodial instructors were on the job.

b. Initiating on-the-job instruction.

The specialist would assume the responsibility of either personally being on call to school districts having special needs insofar as custodial services are concerned or dispatching any of the co-operative agencies to assist in these needs. Many custodians have special problems that cannot be satisfactorily solved in training schools, consequently they need special help. In many instances custodians are not aware of these problems, or of the fact slight changes or adjustments can frequently remedy certain adverse situations. Once they began to recognize problems as a result of training programs, then on-the-job training would be very valuable.

c. The summer state-wide custodial training program, promotional work, seeking out
potential instructors, training them, and evaluating the program would continue as described previously.

Fourth Phase

The state-wide custodial training program would be conducted on a similar basis during the fourth phase as during the third. One possible improvement would be the addition of a course in School Plant Management to the Graduate School curriculum in the College of Education of The Ohio State University. The specialist in school plant management would be responsible for teaching this course.

He would continue to encourage, promote, and improve custodial training throughout the State of Ohio. Assuming great interest and demand for such a program by superintendents and custodians consideration should be given to expanding the training program to include other state universities on a similar basis as proposed for The Ohio State University.

Fifth Phase

In addition to the custodial training program sponsored by the Trade and Industrial Education Service through the College of Education, there should be established similar programs in as many of the other four publicly supported state universities as need demands. During the first four phases the program conducted
through the College of Education of The Ohio State University would have been a pilot study. Improvements should have been made in light of constant evaluation of the program.

Thus, at the end of a few years, a state-wide program of custodial training that would meet the criteria of adequacy and permanency desired in such a program would have been established.

RECOMMENDATIONS

In light of the data presented and the proposals submitted, the following recommendations are made:

1. It is recommended that school superintendents, business managers, custodians, and/or other interested agencies through their official organizations enlist the active participation of the Trade and Industrial Education Service of the Division of Vocational Education of the State Department of Education in the inauguration of the plan for a state-wide custodial training program as proposed by this study, or in the inauguration of a suitable substitute.

2. It is recommended that once the decision is reached to include an organized custodial training
program as a definite objective of the Trade and Industrial Education Service that provisions be made to finance the program.

3. It is recommended that necessary legislative proposals, which provide for the certification of school custodians be prepared by the Superintendent of Public Instruction and presented to State Legislature; and that the qualifications for certificating custodians include recognition of training.

4. It is recommended that further research be conducted to learn more specifically the policies of boards of education concerning selection, salary schedules, tenure, retirement, sick leave, and working conditions of school custodians in Ohio.

5. It is recommended that continued efforts be made by school authorities to emphasize the importance of the school custodian in the modern school educational program.

6. It is recommended that proposals herein submitted relative to school custodians be expanded to
include the training of all non-teaching personnel in the public school system, such as bus drivers, cafeteria workers, and clerks of boards of education.
APPENDIX 1
1. Is there an organized custodial training program in your school system? yes _ no _
   Length of training program: one day _ five days _ one semester _ other _
   Name of director of program _
   Is training primarily for new custodial employees? yes _ no _
   Is training primarily for in-service purposes? yes _ no _ both _
   Do you feel the training program merits critical study? yes _ no _

2. If your school does not sponsor any type of custodial training would you favor such a program? yes _ no _
   Would you favor state department of education certification for custodial employees if an adequate training program were established? yes _ no _

3. If you know of any university, city, county, or state school agency sponsoring a custodial training program please list:
   A. _
   B. _
   C. _
   D. _

Your name and position
We are seeking information concerning the status and content of school custodial training programs in the United States. Dr. E. B. Sessions of the Bureau of Educational Research, Ohio State University, has directed a state-wide summer school for the school custodians of Ohio the past six years. We are attempting to expand this program and establish a custodial training program in centers throughout the state looking toward upgrading of custodial personnel and perhaps ultimately state certification.

An abbreviated questionnaire, designed to save your time, is found on the attached postcard. Your cooperation in spending a moment or two answering this request will greatly advance our inquiry as there seems to be no other way to collect this information.

Sincerely yours,

Research Assistant,
Bureau of Educational Research,
Ohio State University
December 12, 1951

Dear Sir:

In a preliminary questionnaire sent to all cities over 50,000 population inquiring about school custodial training programs, your program was one of the ones most frequently mentioned as being outstanding.

Since the primary purpose involved in the current study is to develop a functional custodial-training program for the state of Ohio, I am writing to you for additional information. In addition to answering the questions on the following pages would you please enclose any written materials you have available including custodial hand books, training school organization, or courses of study.

Your cooperation in this matter will be greatly appreciated. I will be glad to send you results of the study if you so indicate on the space provided in the questionnaire.

Sincerely yours,

Harold L. Nichols
Research Assistant
The Bureau of Educational Research
The Ohio State University
Columbus, Ohio
1. How long has your school district sponsored a custodial training program? __________

2. Is the training program mandatory for all school custodians? Yes____ No____

3. Is it given on school time? Yes____ No____

4. A. Do all custodians submit to the same training program or are there varying requirements for different classifications of service employees? Same____ Vary________

B. If a required number of hours of training is required of all custodians, how many? ________

C. If required numbers of hours are required of custodians in various classifications, please list the classifications and training required.

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5. How is the training program financed? Local funds _________________

Vocational Education Funds _________________ Other_________________

6. Indicate the source of instructors for the custodial program.

Administrative staff________ Custodial staff ________________

Outside specialists________ Others__________________________

7. Please check examples of tangible evidence proving the value of custodial training.

A. Savings in the use of fuel, water, electric ______________________
B. Savings in consumable supplies ______________________________
C. Savings in the use of equipment and machinery __________________
D. Savings in maintenance and repairs ______________________________
E. If you have one or two specific examples of savings that have resulted from the custodial training program, please list.

F. In your opinion have any of the following items been notably improved as a result of the training program?
   A. Custodial administration relations ____________________________
   B. Custodial-teacher relations ________________________________
   C. Custodial-pupil relations _________________________________
   D. Safety ____________________________________________
   E. Housekeeping standards _________________________________
   F. School morale _______________________________________
   G. Health standards ______________________________________

G. If you have any literature available concerning the organization, qualification, course of study or policies concerning the custodial training school, please send.
Dear Sir:

Mr. George L. Brandon, Consultant in Public Service Training in Ohio, has informed me that your public service training program includes custodial training.

I am conducting a survey of all school custodial training programs in the United States and would like to know more specifically how your program operates.

The Bureau of Educational Research at Ohio State University has conducted a summer custodial school for school service employees the past six years. There is a felt need to expand this program on a regional basis throughout the state of Ohio.

Your response to the enclosed questionnaire will be greatly appreciated.

Sincerely yours,

Harold L. Nichols
Research Assistant
The Bureau of Educational Research
The Ohio State University
Columbus, Ohio
A. 1. Does the State Department of Vocational Education actually conduct custodial schools in your state? Yes____ No____

2. From what sources are instructors obtained? __________________________

3. How many schools did you conduct this year? _________________________

B. 1. Does the State Department of Vocational Education encourage custodial schools on a local basis through reimbursing public schools? Yes____ No____

2. If so, approximately what percent of the cost is borne by your department? ______

3. Are criteria for the selection of instructors established by your department or is that a local responsibility? Please explain.

4. How many of such schools operated during the current year (January-December 1951) ______

5. Does the State Department of Vocational Education have personnel available to help organize such schools? Yes____ No____

C. 1. Does the Department of Vocational Education cooperate with state universities in sponsoring custodial training schools? Yes____ No____

2. If so, does the State Department help defray expenses of such schools? Yes_____ No____

3. Approximately what percent?______________
4. Name cooperating institutions

5. How many years have plans A, B, or C been in effect?
A______________, B______________, C______________

6. Does the State Department of Vocational Education publish a guide or course of study for custodial training schools? Yes______ No______

7. Please enclose any information relative to a custodial training program in which your Department sponsors or assists.

8. If possible would you please state approximately the amount of the total budget for custodial training in your state? ________________

Approximately what percent of the total budget is received from the federal government ________; from the state government ________; from local sources ________?
Dear Sir:

The Bureau of Educational Research has been sponsoring a school for custodians on the Ohio State University campus for a number of years. We believe these schools have been very successful and will continue them. However, we also feel that in Ohio a more specific and detailed program is needed. Approximately eighteen months ago, custodial training classes were operated in four centers throughout the state. These classes consisted of thirty hours in Heating and Ventilating.

We are currently contemplating expanding our custodial training program, but in order to make it as worthwhile as possible there are many questions we would like to have answered by men in the field.

One of the main problems faced in dealing with the school custodian is that of establishing his importance. Certain questions follow which seek your opinion concerning the custodian's responsibilities in the school. Your opinion concerning the content of a custodial training school would also be very valuable to us. In addition we would like as much information as possible concerning the formal education, tenure, age, and methods of selecting school custodians.

We realize we are seeking quite extensive information, but we feel the problem to be of enough importance to justify the questions that follow. In case you cannot readily answer certain questions, please omit them and continue to the following questions. Your cooperation in completing the questionnaire will be greatly appreciated.

Sincerely yours,

Harold L. Nichols
Research Assistant
The Bureau of Educational Research
The Ohio State University
Columbus, Ohio
A. Personnel Data

1. How many custodians are employed in your school district? _________

2. In terms of formal education, how many custodians have completed college?_____; attended college?_____; graduated from high school?_____; attended high school?_____; completed eighth grade?_____; did not complete eighth grade?________

3. In terms of length of employment, how many custodians are in their first year?_____; one to five years?_____; six to ten years?_____; eleven to fifteen years?_____; sixteen to twenty years?_____; over twenty years?_______

4. In terms of age how many custodians are under twenty?_____; twenty-one to twenty-five?_____; twenty-six to thirty?_____; thirty-one to thirty-five?_____; thirty-six to forty?_____; forty-one to fifty?_____; fifty-one to sixty?______; over sixty?______

B. Organization of Custodial Services

1. To whom are custodians responsible? The board of education_____; the superintendent_____; the business manager______; the building principal_____; supervisor of custodians_____; others________

2. Who selects the school custodian? The board of education_____; the superintendent_____; the business manager______; supervisor of custodians______; others________

3. Have policies been defined for determining each of the following?
   a. Selection of custodians  Yes______ No______
   b. Basic qualifications of custodians Yes______ No______
   c. Work hours  Yes______ No______
   d. Work loads  Yes______ No______
   e. Civil service status  Yes______ No______
   f. Salary  Yes______ No______
   g. Sick leave  Yes______ No______
   h. Retirement  Yes______ No______
   i. In-service education  Yes______ No______

4. Does the custodial staff belong to an organized labor union? Yes______; No______; A.F. of L.______; C.I.O.______; Independent________

(Please enclose any literature you might have available concerning the school custodian on any of the above mentioned questions.)
## Importance of the School Custodian

<table>
<thead>
<tr>
<th></th>
<th>Very Greatly</th>
<th>Greatly</th>
<th>Some</th>
<th>Very Little</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent do you feel custodians influence school morale? To what extent are you satisfied with your custodians in this respect?</td>
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<tr>
<td>2. To what extent do you think the custodian can help influence the moral standards of the school? To what extent are you satisfied with your custodians in this respect?</td>
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<tr>
<td>3. To what extent is there cooperation between teachers and custodians, in general, in your school district?</td>
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<tr>
<td>4. To what extent do you think custodians are aware of the philosophy and purposes of your schools?</td>
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</tr>
<tr>
<td>5. To what extent do you think custodians can contribute to the educational program acting as resource persons for the instructional program? To what extent do custodians act in this respect in your school?</td>
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<tr>
<td>6. To what extent do custodians participate in helping formulate rules and regulations that affect them directly?</td>
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<tr>
<td>7. To what extent do you think the custodians influence the housekeeping standards of your school buildings? To what extent are you satisfied with your custodians in this respect?</td>
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<tr>
<td>8. To what extent do you think custodians are promoting health and safety measures?</td>
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<tr>
<td>9. To what extent do you think your custodians utilise supplies and equipment economically?</td>
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<tr>
<td>10. To what extent do you think your custodians are properly maintaining school plants?</td>
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</tr>
</tbody>
</table>
11. To what extent do you think teachers, pupils, and lay people are aware of the importance of the custodian?

12. To what extent would you favor a custodial training program at the state level?

13. Do you think such a program should be mandatory or elective?
   Mandatory_______Elective__________

14. Would you favor certification of school custodians?
   Yes________ No_________
Dear Sirs,

I am conducting a survey of all school custodial training programs in the United States and would like to know more specifically how your program operates.

The Bureau of Educational Research at The Ohio State University has conducted a former custodial school for school service employees the past six years. There is a felt need to expand this program on a regional basis throughout the State of Ohio.

Your response to the enclosed questionnaire will be greatly appreciated.

Sincerely yours,

/"/ Harold L. Nichols

Harold L. Nichols
Research Assistant
The Bureau of Educational Research
The Ohio State University
Columbus, Ohio
1. In what year was your school custodian training program organised? __________

If you have a summary of the history of your efforts please enclose.

2. How many custodians attended during the 1951 summer session? __________

3. Is the custodial training program graded in any manner to distinguish between first year men, second year men, etc.? Yes_______ No_______

4. Does the program treat custodial problems in general or is it organized on a unit basis? (Please underscore which)

5. What type of credit is given to custodians attending your school?
   a. No credit_______
   b. Certificates of attendance_______
   c. Credit toward certification_______
   d. Other_____________________

6. What is the length of your school in terms of days?_____ Clock hours_______

7. How is your custodial school financed? University funds_______; Vocational education funds_______; Combination_______; Supported by boards of education_______; Other____________________

8. If a fee is charged for custodians attending what is the amount? __________
   Is fee paid by custodians or boards of education? Custodian_____________________
   Board of Education________________

9. Please cite any tangible evidence as to value of the custodial training program.

10. What significant changes over the present and past custodial training program do you plan for the future?

11. Please send any written information you have available concerning the organization and content of the custodial training program. A program for the 1950 and 1951 summer school sessions would be valuable.
TWO DAYS OF "DOWN TO EARTH" SCHOOL
HOUSKEEPING AND ITS PART IN THE
EDUCATIONAL PROGRAM.

DATE: June 11-12-13, 1951
TIME: 8:00 A.M. - 12:00 Noon
1:00-4:00 P.M.
PLACE: Omaha Technical High School
32nd and Cuming Streets
Omaha, Nebraska

FIRST MEETING: Small Auditorium—Room 275
Entrance—Burt Street
Omaha Technical High School
8:00 A.M. — June 11, 1951

A detailed schedule of the
three day program for the
GROUP to which you have been
assigned is herewith attached.
PLEASE KEEP AND BRING THIS
SCHEDULE WITH YOU TO THE
SCHOOL.

Enjoy a 65¢ lunch in the Main Cafeteria from
12:00 Noon - 1:00 P.M. each day with your
fellow-workers.

A banquet is planned for Tuesday, June 12, 1951,
at 6:30 P.M., Main Cafeteria, Technical High
School. All custodial workers, their wives,
husbands and sweethearts are invited. PLAN TO
ATTEND!

Sponsorship
Omaha Public Schools
Department of Vocational Education
Trade and Industrial Education
Omaha, Nebraska

BRING THIS SCHEDULE WITH YOU TO THE SCHOOL
CUSTODIAL SCHOOL STAFF

INSTRUCTIONAL STAFF

Dr. H. H. Linn  
Professor of Education  
Teachers College—Columbia University  
New York City, New York

M. Devos, Sales Engineer  
Industrial Chemical Co.  
Omaha, Nebraska

R. Wilson, Chief Engineer  
Nebraska University Hospital  
College of Medicine  
Omaha, Nebraska

Bess M. Brown, R. N.  
Professional Nurse Education  
Omaha, Nebraska

WORK SHOP INSTRUCTORS

Omaha Public School Personnel

Jack Coco  
C. A. Danhauer  
O. M. Egolf  
Durward Milton Forell  
William C. Frits  
Kenneth George

Howard Guy  
John Haney, Jr.  
Warren M. Huff  
Anthony P. Koops  
Carl L. Ramm  
Robert J. Wood

PLANNING COMMITTEE

Omaha Public Schools

Dr. Harry A. Burks  
Superintendent of Schools

E. H. Parrish, Director  
Industrial-Defense Education

J. Wilbur Wolf  
Business Manager  
Al Johnston, Supervisor  
Public School Buildings

ACKNOWLEDGMENT

Custodial Advisory Committee  
Mrs. R. Webber — Cafeteria Staff  
Entertainment Committee  
Equipment Committee

NOTE

School bus transportation will be furnished to Central Grade School, Washington School and University Hospital. Scheduled to leave at 9:00 A. M. and 1:00 P. M. from Burt Street Small Auditorium Entrance. All persons scheduled to these areas must ride buses to and return by same! NO PRIVATE CARS!
CUSTODIAL SCHOOL COURSE

PROGRAM

I. General Meetings
   A. Miscellaneous Cleaning
   B. Floor Care
   C. Economies in use of Fuels, Electricity, Steam, and Water

II. Banquet
   A. The Supervisor As An Inspector
   B. The Omaha School Custodian-Engineer

III. Scheduling Work Assignments

IV. Steam Plant Operation - Elementary Schools
   A. Emergency Heating Plant Operation
   B. Operation Up-Draft and Down-Draft Boilers

V. Steam Plant Operation - High Schools
   A. High-Pressure Plant Operation Problems
   B. Heating System Operation

VI. Care of Fluorescent Fixtures

VII. Care of Asphalt and Rubber Tile

VIII. Electrical Plant Operation

IX. Sanitation, Dusting, and Polishing

X. Emergency First Aid

XI. Glass Installation

XII. Maintenance of Old Wood Floors

XIII. Maintenance of Linoleum Floors

XIV. Maintenance of Concrete Floors, Walls, Wood Trim, Furniture, and Glass

XV. Care of Renovated Buildings

THIS IS YOUR SCHOOL—ONE OF "DEMONSTRATING AND DOING."
Our Motto for the Custodial School will be "TELLING-SHOWING-DOING." YOUR PROBLEMS ARE OUR PROBLEMS!
MONDAY — JUNE 11, 1951

8:00 - 9:00 General Meeting - Room 275 - "Miscellaneous Cleaning"
9:00 - 10:25 Room 372 - "Emergency First Aid"
10:25 - 10:35 *
10:35 - 12:00 Room 376 - "Scheduling Work Assignments"
12:00 - 1:00 Lunch
1:00 - 2:25 (All women custodians are to report to their assigned schools by 1:00 P. M.
2:25 - 2:35 each day.)
2:35 - 4:00

TUESDAY — JUNE 12, 1951

8:00 - 9:00 General Meeting - Room 275 - "Floor Care"
9:00 - 10:25 Room 374 - "Maintenance of Walls, Wood Trim, Etc."
10:25 - 10:35 *
10:35 - 12:00 Room 373 - "Sanitation, Dusting, and Polishing"
12:00 - 1:00 Lunch
1:00 - 2:25 (All women custodians are to report to their assigned schools by 1:00 P. M.
2:25 - 2:35 each day.)
2:35 - 4:00
6:30 - - BANQUET - Main Cafeteria - Technical High - 5th Floor

WEDNESDAY — JUNE 13, 1951

8:00 - 9:00 General Meeting - Room 275 - "Economies in use of Fuels, etc."
9:00 - 10:25 Room 367 - "Maintenance of Linoleum Floors"
10:25 - 10:35 *
10:35 - 12:00 Room 371 - "Maintenance of Old Wood Floors"
12:00 - 1:00 Lunch
1:00 - 2:25 (All women custodians are to report to their assigned schools by 1:00 P. M.
2:25 - 2:35 each day.)
2:35 - 4:00

*Rest Period

ALL SMOKING OUTSIDE OF BUILDING!
GUAMA PUBLIC SCHOOLS
CUSTODIAL SCHOOL

NAME ___________________________ SCHOOL ___________________________

GROUP 2

MONDAY — JUNE 11, 1951

8:00 — 9:00 General Meeting - Room 275 - "Miscellaneous Cleaning"
9:00 — 10:25 Room 397 - "Glass Installation"
10:25 — 10:35 *
10:35 — 12:00 Room 375 - "Electrical Plant Operation"
12:00 — 1:00 Lunch
1:00 — 2:25 Room 374 - "Maintenance of Walls, Wood Trim, etc."
2:25 — 2:35 *
2:35 — 4:00 Room 373 - "Sanitation, Dusting, and Polishing"

TUESDAY — JUNE 12, 1951

8:00 — 9:00 General Meeting - Room 275 - "Floor Care"
9:00 — 10:25 Room 121 - "Maintenance of Concrete Floors"
10:25 — 10:35 *
10:35 — 12:00 Room 366 - "Care of Fluorescent Fixtures"
12:00 — 1:00 Lunch
1:00 — 2:25 Room - Washington School - "Steam Plant Operation"
2:25 — 2:35 *
2:35 — 4:00 Room - Washington School - "Steam Plant Operation"
6:30 — — BANQUET - Main Cafeteria - Technical High - 5th Floor

WEDNESDAY — JUNE 13, 1951

8:00 — 9:00 General Meeting - Room 275 - "Economies in use of Fuels, Etc."
9:00 — 10:25 Room - Central Grade - "Care of Renovated Buildings"
10:25 — 10:35 *
10:35 — 12:00 Room - Central Grade - "Care of Asphalt and Rubber Tile"
12:00 — 1:00 Lunch
1:00 — 2:25 Room 372 - "Emergency First Aid"
2:25 — 2:35 *
2:35 — 4:00 Room 376 - "Scheduling Work Assignments"

*Rest Period

ALL SMOKING OUTSIDE OF BUILDING!
MONDAY — JUNE 11, 1951

8:00 - 9:00 General Meeting - Room 275 - "Miscellaneous Cleaning"
9:00 - 10:25 Room 374 - "Maintenance of Walls, Wood Trim, etc."
10:25 - 10:35 *
10:35 - 12:00 Room 373 - "Sanitation, Dusting, and Polishing"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 124 - "Maintenance of Concrete Floors"
2:25 - 2:35 *
2:35 - 4:00 Room 366 - "Care of Fluorescent Fixtures"

TUESDAY — JUNE 12, 1951

8:00 - 9:00 General Meeting - Room 275 - "Floor Care"
9:00 - 10:25 Room - Washington School - "Steam Plant Operation"
10:25 - 10:35 *
10:35 - 12:00 Room - Washington School - "Steam Plant Operation"
12:00 - 1:00 Lunch
1:00 - 2:25 Room - Central Grade - "Care of Renovated Buildings"
2:25 - 2:35 *
2:35 - 4:00 Room - Central Grade - "Care of Asphalt and Rubber Tile"
6:30 - - BANQUET - Main Cafeteria - Technical High - 5th Floor

WEDNESDAY — JUNE 13, 1951

8:00 - 9:00 General Meeting - Room 275 - "Economies in use of Fuels, etc."
9:00 - 10:25 Room 372 - "Emergency First Aid"
10:25 - 10:35 *
10:35 - 12:00 Room 376 - "Scheduling Work Assignments"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 397 - "Glass Installation"
2:25 - 2:35 *
2:35 - 4:00 Room 375 - "Electrical Plant Operation"

*Rest Period

ALL SMOKING OUTSIDE OF BUILDING
OMAHA PUBLIC SCHOOLS
CUSTODIAL SCHOOL

NAME ____________________________ SCHOOL ____________________________

GROUP 4

Monday — June 11, 1951

8:00 - 9:00 General Meeting - Room 275 - "Miscellaneous Cleaning"
9:00 - 10:25 Room 124 - "Maintenance of Concrete Floors"
10:25 - 10:35 *
10:35 - 12:00 Room 366 - "Care of Fluorescent Fixtures"
12:00 - 1:00 Lunch
1:00 - 2:25 Room - Washington School - "Steam Plant Operation"
2:25 - 2:35 *
2:35 - 4:00 Room - Washington School - "Steam Plant Operation"

Tuesday — June 12, 1951

8:00 - 9:00 General Meeting - Room 275 - "Floor Care"
9:00 - 10:25 Room - Central Grade - "Care of Renovated Buildings"
10:25 - 10:35 *
10:35 - 12:00 Room - Central Grade - "Care of Asphalt and Rubber Tile"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 372 - "Emergency First Aid"
2:25 - 2:35 *
2:35 - 4:00 Room 376 - "Scheduling Work Assignments"
6:30 - - BANQUET - Main Cafeteria - Technical High - 5th Floor

Wednesday — June 13, 1951

8:00 - 9:00 General Meeting - Room 275 - "Economies in use of Fuels, etc."
9:00 - 10:25 Room 397 - "Glass Installation"
10:25 - 10:35 *
10:35 - 12:00 Room 375 - "Electrical Plant Operation"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 374 - "Maintenance of Walls, Wood Trim, etc."
2:25 - 2:35 *
2:35 - 4:00 Room 373 - "Sanitation, Dusting, and Polishing"

Rest Period

All smoking outside of building.
OMAHA PUBLIC SCHOOLS
CUSTODIAL SCHOOL

NAME ___________________________ SCHOOL ___________________________

GROUP 5

MONDAY — JUNE 11, 1951

8:00 - 9:00 General Meeting - Room 275 - "Miscellaneous Cleaning"
9:00 - 10:25 Room - Washington School - "Steam Plant Operation"
10:25 - 10:35 *
10:35 - 12:00 Room - Washington School - "Steam Plant Operation"
12:00 - 1:00 Lunch
1:00 - 2:25 Room - Central Grade - "Care of Renovated Buildings"
2:25 - 2:35 *
2:35 - 4:00 Room - Central Grade - "Care of Asphalt and Rubber Tile"

TUESDAY — JUNE 12, 1951

8:00 - 9:00 General Meeting - Room 275 - "Floor Care"
9:00 - 10:25 Room 372 - "Emergency First Aid"
10:25 - 10:35 *
10:35 - 12:00 Room 376 - "Scheduling Work Assignments"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 397 - "Glass Installation"
2:25 - 2:35 *
2:35 - 4:00 Room 375 - "Electrical Plant Operation"
6:30 - - BANQUET - Main Cafeteria - Technical High - 5th Floor

WEDNESDAY — JUNE 13, 1951

8:00 - 9:00 General Meeting - Room 275 - "Economies in use of Fuels, etc."
9:00 - 10:25 Room 374 - "Maintenance of Walls, Wood Trim, etc."
10:25 - 10:35 *
10:35 - 12:00 Room 373 - "Sanitation, Dusting, and Polishing"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 124 - "Maintenance of Concrete Floors"
2:25 - 2:35 *
2:35 - 4:00 Room 366 - "Care of Fluorescent Fixtures"

*Rest Period

ALL SMOKING OUTSIDE OF BUILDING!
GROUP 6

MAY 11, 1951

8:00 - 9:00 General Meeting - Room 275 - "Miscellaneous Cleaning"
9:00 - 10:25 Room 367 - "Maintenance of Linoleum Floors"
10:25 - 10:35 *
10:35 - 12:00 Room 391 - "Maintenance of Old Wood Floors"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 372 - "Emergency First Aid"
2:25 - 2:35 *
2:35 - 4:00 Room 376 - "Scheduling Work Assignments"

TUESDAY — JUNE 12, 1951

8:00 - 9:00 General Meeting - Room 275 - "Floor Care"
9:00 - 10:25 Room 397 - "Glass Installation"
10:25 - 10:35 *
10:35 - 12:00 Room 375 - "Electrical Plant Operation"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 374 - "Maintenance of Walls, Wood Trim, etc."
2:25 - 2:35 *
2:35 - 4:00 Room 373 - "Sanitation, Dusting, and Polishing"
6:30 - - BANQUET - Main Cafeteria - Technical High - 5th Floor

WEDNESDAY — JUNE 13, 1951

8:00 - 9:00 General Meeting - Room 275 - "Economies in use of Fuels, etc."
9:00 - 10:25 Room 124 - "Maintenance of Concrete Floors"
10:25 - 10:35 *
10:35 - 12:00 Room 366 - "Care of Fluorescent Fixtures"
12:00 - 1:00 Lunch
1:00 - 2:25 Room - University Hospital - "Steam Plant Operation"
2:25 - 2:35 *
2:35 - 4:00 Room - University Hospital - "Steam Plant Operation"

Rest Period

ALL SMOKING OUTSIDE OF BUILDING!
OMAHA PUBLIC SCHOOLS
CUSTODIAL SCHOOL

GROUP 7

MONDAY — JUNE 11, 1951

8:00 - 9:00 General Meeting - Room 275 - "Miscellaneous Cleaning"
9:00 - 10:25 Room 376 - "Scheduling Work Assignments"
10:25 - 10:35 *
10:35 - 12:00 Room 397 - "Glass Installation"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 375 - "Electrical Plant Operation"
2:25 - 2:35 *
2:35 - 4:00 Room 374 - "Maintenance of Walls, Wood Trim, etc."

TUESDAY — JUNE 12, 1951

8:00 - 9:00 General Meeting - Room 275 - "Floor Care"
9:00 - 10:25 Room 373 - "Sanitation, Dusting, and Polishing"
10:25 - 10:35 *
10:35 - 12:00 Room 124 - "Maintenance of Concrete Floors"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 366 - "Care of Fluorescent Fixtures"
2:25 - 2:35 *
2:35 - 4:00 Room 367 - "Maintenance of Linoleum Floors"
6:30 - - BANQUET - Main Cafeteria - Technical High - 5th Floor

WEDNESDAY — JUNE 13, 1951

8:00 - 9:00 General Meeting - Room 275 - "Economies in use of Fuels, etc."
9:00 - 10:25 Room - Washington School - "Steam Plant Operation"
10:25 - 10:35 *
10:35 - 12:00 Room Washington School - "Steam Plant Operation"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 371 - "Maintenance of Old Wood Floors"
2:25 - 2:35 *
2:35 - 4:00 Room 372 - "Emergency First Aid"

*Rest Period

ALL SMOKING OUTSIDE OF BUILDING!
OMAHA PUBLIC SCHOOLS
CUSTODIAL SCHOOL

GROUP 8

MONDAY — JUNE 11, 1951

8:00 - 9:00 General Meeting - Room 275 - "Miscellaneous Cleaning"
9:00 - 10:25 Room 375 - "Electrical Plant Operation"
10:25 - 10:35 *
10:35 - 12:00 Room 374 - "Maintenance of Walls, Wood Trim, etc."
12:00 - 1:00 Lunch
1:00 - 2:25 Room 373 - "Sanitation, Dusting, and Polishing"
2:25 - 2:35 *
2:35 - 4:00 Room 124 - "Maintenance of Concrete Floors"

TUESDAY — JUNE 12, 1951

6:00 - 9:00 General Meeting - Room 275 - "Floor Care"
9:00 - 10:25 Room 366 - "Care of Fluorescent Fixtures"
10:25 - 10:35 *
10:35 - 12:00 Room 367 - "Maintenance of Linoleum Floors"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 367 - "Maintenance of Linoleum Floors"
2:25 - 2:35 *
2:35 - 4:00 Room 371 - "Maintenance of Old Wood Floors"
6:30 - - BANQUET - Main Cafeteria - Technical High - 5th Floor

WEDNESDAY — JUNE 13, 1951

8:00 - 9:00 General Meeting - Room 275 - "Economies in use of Fuels, etc."
9:00 - 10:25 Room 371 - "Maintenance of Old Wood Floors"
10:25 - 10:35 *
10:35 - 12:00 Room 372 - "Emergency First Aid"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 376 - "Scheduling Work Assignments"
2:25 - 2:35 *
2:35 - 4:00 Room 397 - "Glass Installation"

*Rest Period

ALL SMOKING OUTSIDE OF BUILDING!
OMAHA PUBLIC SCHOOLS
CUSTODIAL SCHOOL

NAME ___________________________ SCHOOL ___________________________

GROUP 9

MONDAY -- JUNE 11, 1951

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:00</td>
<td>General Meeting - Room 275 - &quot;Miscellaneous Cleaning&quot;</td>
</tr>
<tr>
<td>9:00</td>
<td>Room 376 - &quot;Sanitation, Dusting, and Polishing&quot;</td>
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<tr>
<td>10:25</td>
<td>10:35 *</td>
</tr>
<tr>
<td>10:35</td>
<td>12:00 Room 12 - &quot;Maintenance of Concrete Floors&quot;</td>
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<tr>
<td>12:00</td>
<td>1:00 Lunch</td>
</tr>
<tr>
<td>1:00</td>
<td>2:25 Room 366 - &quot;Care of Fluorescent Fixtures&quot;</td>
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<td>2:25</td>
<td>2:35 *</td>
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<tr>
<td>2:35</td>
<td>4:00 Room 367 - &quot;Maintenance of Linoleum Floors&quot;</td>
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TUESDAY -- JUNE 12, 1951

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</tr>
<tr>
<td>10:25</td>
<td>10:35 *</td>
</tr>
<tr>
<td>10:35</td>
<td>12:00 Room 371 - &quot;Maintenance of Old Wood Floors&quot;</td>
</tr>
<tr>
<td>12:00</td>
<td>1:00 Lunch</td>
</tr>
<tr>
<td>1:00</td>
<td>2:25 Room 371 - &quot;Maintenance of Old Wood Floors&quot;</td>
</tr>
<tr>
<td>2:25</td>
<td>2:35 *</td>
</tr>
<tr>
<td>2:35</td>
<td>4:00 Room 372 - &quot;Emergency First Aid&quot;</td>
</tr>
<tr>
<td>6:30</td>
<td>BANQUET - Main Cafeteria - Technical High - 5th Floor</td>
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WEDNESDAY -- JUNE 13, 1951

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<td>8:00</td>
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<tr>
<td>9:00</td>
<td>Room 376 - &quot;Scheduling Work Assignments&quot;</td>
</tr>
<tr>
<td>10:25</td>
<td>10:35 *</td>
</tr>
<tr>
<td>10:35</td>
<td>12:00 Room 397 - &quot;Glass Installation&quot;</td>
</tr>
<tr>
<td>12:00</td>
<td>1:00 Lunch</td>
</tr>
<tr>
<td>1:00</td>
<td>2:25 Room 375 - &quot;Electrical Plant Operation&quot;</td>
</tr>
<tr>
<td>2:25</td>
<td>2:35 *</td>
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<tr>
<td>2:35</td>
<td>4:00 Room 374 - &quot;Maintenance of Walls, Wood Trim, etc.&quot;</td>
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*Rest Period

ALL SMOKING OUTSIDE OF BUILDING.
OMAHA PUBLIC SCHOOLS
CUSTODIAL SCHOOL

NAME ___________________________ SCHOOL ___________________________

GROUP 10

MONDAY — JUNE 11, 1951

8:00 - 9:00 General Meeting - Room 275 - "Miscellaneous Cleaning"
9:00 - 10:25 Room 366 - "Care of Fluorescent Fixtures"
10:25 - 10:35 *
10:35 - 12:00 Room 367 - "Maintenance of Linoleum Floors"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 367 - "Maintenance of Linoleum Floors"
2:25 - 2:35 *
2:35 - 4:00 Room 371 - "Maintenance of Old Wood Floors"

TUESDAY — JUNE 12, 1951

8:00 - 9:00 General Meeting - Room 275 - "Floor Care"
9:00 - 10:25 Room 371 - "Maintenance of Old Wood Floors"
10:25 - 10:35 *
10:35 - 12:00 Room 372 - "Emergency First Aid"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 376 - "Scheduling Work Assignments"
2:25 - 2:35 *
2:35 - 4:00 Room 397 - "Glass Installation"
6:30 - - BANQUET - Main Cafeteria - Technical High - 5th Floor

WEDNESDAY — JUNE 13, 1951

8:00 - 9:00 General Meeting - Room 275 - "Economies in use of Fuels, etc."
9:00 - 10:25 Room 375 - "Electrical Plant Operation"
10:25 - 10:35 *
10:35 - 12:00 Room 374 - "Maintenance of Walls, Wood Trim, etc."
12:00 - 1:00 Lunch
1:00 - 2:25 Room 373 - "Sanitation, Dusting, and Polishing"
2:25 - 2:35 *
2:35 - 4:00 Room 124 - "Maintenance of Concrete Floors"

*Rest Period

ALL SMOKING OUTSIDE OF BUILDING!
OMAHA PUBLIC SCHOOLS
CUSTODIAL SCHOOL

NAME _____________________________ SCHOOL _____________________________

GROUP 11

MONDAY -- JUNE 11, 1951

8:00 - 9:00 General Meeting - Room 275 - "Miscellaneous Cleaning"
9:00 - 10:25 Room - Central Grade - "Care of Renovated Buildings"
10:25 - 10:35 *
10:35 - 12:00 Room - Central Grade - "Care of Asphalt and Rubber Tile"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 371 - "Maintenance of Old Wood Floors"
2:25 - 2:35 *
2:35 - 4:00 Room 372 - "Emergency First Aid"

TUESDAY -- JUNE 12, 1951

8:00 - 9:00 General Meeting - Room 275 - "Floor Care"
9:00 - 10:25 Room 376 - "Scheduling Work Assignments"
10:25 - 10:35 *
10:35 - 12:00 Room 397 - "Glass Installation"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 375 - "Electrical Plant Operation"
2:25 - 2:35 *
2:35 - 4:00 Room 374 - "Maintenance of Walls, Wood Trim, etc."
6:30 - BANQUET - Main Cafeteria - Technical High - 5th Floor

WEDNESDAY -- JUNE 13, 1951

8:00 - 9:00 General Meeting - Room 275 - "Economies in use of Fuels, etc."
9:00 - 10:25 Room 373 - "Sanitation, Dusting, and Polishing"
10:25 - 10:35 *
10:35 - 12:00 Room 124 - "Maintenance of Concrete Floors"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 366 - "Care of Fluorescent Fixtures"
2:25 - 2:35 *
2:35 - 4:00 Room 367 - "Maintenance of Linoleum Floors"

*Rest Period

ALL SMOKING OUTSIDE OF BUILDING!

ALL SMOKING OUTSIDE OF BUILDING!
OMAHA PUBLIC SCHOOLS
CUSTODIAL SCHOOL

GROUP 12

SUNDAY - JUNE 11, 1951

8:00 - 9:00 General Meeting - Room 275 - "Miscellaneous"
9:00 - 10:25 Room 371 - "Maintenance of Old Wood Floors"
10:25 - 10:35 *
10:35 - 12:00 Room 372 - "Emergency First Aid"
12:00 - 1:00 Lunch
1:00 - 2:25 Room 376 - "Scheduling Work Assignments"
2:25 - 2:35 *
2:35 - 4:00 Room 397 - "Glass Installation"

TUESDAY - JUNE 12, 1951

8:00 - 9:00 General Meeting - Room 275 - "Floor Care"
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12:00 - 1:00 Lunch
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2:25 - 2:35 *
2:35 - 4:00 Room - Central Grade - "Care of Asphalt and Rubber Tile"

*Rest Period

ALL SMOKING OUTSIDE OF BUILDING
APPENDIX 3
1951 TRAINING PROGRAM

For

SCHOOL CUSTODIANS

Conducted by

THE CONNECTICUT STATE
DEPARTMENT OF EDUCATION

DOMINIC F. BURNS SCHOOL
HARTFORD
JUNE 25 TO JUNE 29

STRATFORD HIGH SCHOOL
STRATFORD
JUNE 25 TO JUNE 29

LEAVENWORTH HIGH SCHOOL
WATERBURY
JULY 2, 3, 5, 6, 7
THE PURPOSE
OF THE TRAINING PROGRAM

The increased load on present school buildings and the large investment in those being built places more importance than ever on efficiency and economy in maintaining the school plant. This in turn depends in large measure on the skill and technical knowledge of the school custodian.

The health and safety of pupils, the attitudes they develop and their educational progress are all affected by the atmosphere which their school building creates. Proper care not only preserves the community investment, but also builds pride in the schools.

It is the purpose of the Custodial Training Program to help the custodians of the state to improve their skill and technical knowledge so that they can carry out their many duties and responsibilities.

The program offers four annual courses to provide progressive training in five major fields: Cleaning, Heating and Ventilating, Grounds, Building Maintenance and Personal Protection. The fourth year course is at an advanced level for Head Custodians which will include Supervision and Training, Public Relations and Management Problems.

SCHEDULE FOR 1991 (continued)

This year’s program continues the policy of instructing small groups in workshops in the latest technique and materials for operation and maintenance of school plants. In addition a number of special speakers and activities have been arranged.

REGISTRATION

Registration should be by mail as soon as possible to L. W. Eddy, Supervisor, Service Training, 490 Capitol Avenue, Hartford, Connecticut.

Opening day registration may be made at the first session of each school.

CERTIFICATES

The custodians who demonstrate proficiency in the various areas covered by the program will be awarded certificates by the State Department of Education. A minimum of 80% attendance is required for a certificate. Graduates of the Fourth Year receive a Diploma.

COST

This training is presented without cost to interested custodians and others whose work includes responsibility for school plant maintenance. The only expense is that of transportation and meals.

CLOTHING

As the course includes actual work on the facilities of a school plant, each custodian should wear suitable working clothes throughout the week.
TRAINING AREAS for this year as follows:

First Year Groups
- Cleaning Wood Floors
- Maintenance of Floors
- Heating System, Types and Principles
- Electrical—Fuses, Safety, Care of Motors
- Carpenter—Care and Use of Tools
- Plumbing—Maintenance
- Furnace Operation—Coal

Second Year Groups
- Cleaning Floors—Other than Wood
- Cleaning—Walls, Porcelain, Toilets
- Heating Systems—Distribution and Control
- Plumbing—Minor repairs, sprinkler systems
- Electrical—Lighting Systems, fixtures, maintenance
- Carpenter—Doors and Locks
- Furnace Operation—Oil

Third Year Groups
- Cleaning Problems—Hardware, Furniture
- Building Maintenance—Outside
- Heating—Temperature Controls
- Electrical—Signal systems
- Care of Grounds
- Making and using work schedules
- Public Relations—Conference

Fourth Year Groups
- Using Check Lists
- Fuel Management
- Supervision of others
- Training Men on-the-job
- Lighting Standards
- Sprinkler Systems
- Temperature Controls

SPECIAL ACTIVITIES FOR ALL GROUPS

HARTFORD

June
25 8:30 A.M. Registration
9:00 A.M. Opening Assembly — ROBERT H. BLACK, Assistant Superintendent of Schools, Hartford
9:30 A.M. The Importance of the Custodian to the School. EDWIN R. JUDD, Principal, Burns School
10:30 A.M. Fire Prevention in Schools. THOMAS LEE, Fire Marshal, Hartford
11:30 A.M. Cleaning Equipment. FRED BEYER, Fuller Brush Company
26 11:30 A.M. The Custodian and School Health — DR. ALFRED L. BERGDOFF, Director of Health, Hartford
1:30 P.M. Work Methods for the Custodian, J. C. STOV, Superintendent of Buildings and Grounds, Columbia University
27 11:30 A.M. Sprinkler Systems, J. B. CULLEN, Department Manager, Grinnell Company
28 11:30 A.M. Civil Defense in Schools. LEONARDO W. JOLL, Coordinator of Civil Defense for State Department of Education
1:30 P.M. Cleaning Materials and their uses. R. C. MERRITT, Sanitation and Maintenance Department, Cudahy Packing Company
29 10:30 A.M. Using Vacuum Cleaning Equipment. R. W. RICHARDO, Sales Engineer, Spencer Turbine Company
1:30 P.M. Final Assembly, Award of Certificates
STRATFORD

June
25 8:30 A.M. Registration and Opening Remarks

9:30 A.M. The Importance of the Custodian. DR. CHARLES E. CHAPNER, Superintendent of Schools, Stratford

25 10:30 A.M. Housekeeping Methods. PHILIP E. SAUER, Service Bureau, Yale University

1:30 P.M. Work Methods and Materials. J. C. STOY, Superintendent of Buildings and Grounds, Columbia University

25 11:30 A.M. Cleaning Equipment. FRED BEIBER, Fuller Brush Company

1:30 P.M. Economy in Building Maintenance. JOHN M. GINZ, Tremco Mfg. Co.


1:30 P.M. Cleaning Materials and their uses. R. C. MERRITT, Sanitation and Maintenance Department, Cudahy Packing Company

26 11:30 A.M. School Health and the Custodian. CHARLES J. PROBASKA, M.D., State Department of Education

3:30 P.M. Civil Defense in Schools. LEONARD W. JOLL, Coordinator of Civil Defense for State Department of Education

29 11:30 A.M. Final Assembly — Award of Certificates

WATERBURY

July
2 8:30 A.M. Registration and Opening Assembly

9:00 A.M. The Value of the Custodian. JOHN G. GILMARTIN, Superintendent of Schools, Waterbury

11:30 A.M. Cleaning Materials and their uses. R. C. MERRITT, Sanitation and Maintenance Department, Cudahy Packing Company

1:30 P.M. Effective Work Methods. J. C. STOY, Superintendent of Buildings and Grounds, Columbia University

3 11:30 A.M. Civil Defense in Schools. LEONARD W. JOLL, Coordinator of Civil Defense for State Department of Education.


6 11:30 A.M. Sprinkler Systems. J. B. CULLEN, Department Manager, Grinnell Co.

7 11:30 A.M. Closing Assembly. Award of Certificates.
INSTRUCTORS FOR WORKSHOP PERIODS

EDWARD BAILEY, Custodian, Jones Junior High School, Hartford
FRANK BASCOME, Savin Fuel Company
HENRY BEUTTEL, Standard Electric Time Company
HOWARD BISHOP, Department Head, Bullard-Havens Technical School
CLARENCE E. BRANNAN, Engineer, Hartford Athenaeum
J. B. CULLEN, Department Manager, Grunel Company
H. R. FINNEY, District Engineer, Westinghouse Electric Corporation
JAMES FLEMING, Engineer, Troup Junior High School
JOHN M. GINZ and F. J. SHEA, Tremco Mfg. Company
E. J. DALY, 3rd and M. J. DALY, 3rd, M. S. Daly Company
JOHN HOAGLUND, Manager, Johnson Service Company
FRANK HOMANS, Custodian, Fairfield
JAY HOYT, Carpentry Instructor, State Department of Education
KENNETH HUDSON, Electrical Department, Howel Cheney Technical School
V. F. JORGENSON, Director of Custodial Training, Education Department, Hartford
EDWARD KISLUK, Plumbing Instructor, Bullard-Havens Technical School
RAY LEWIS, Service Engineer, Savin Fuel Company
RAY MILLS, Lighting Engineer, Connecticut Light and Power Company
JOSEPH MORAVEK, Custodian, Fairfield
PETER MURRAY, Building Supervisor, Education Department, Windsor
EVERETT A. PIESTER, Assistant Superintendent of Parks, Hartford
HAROLD POST, Electrical Instructor, Boardman Trade School
JOEL E. RAMETTE, Fuel Engineer, Pittsburg Consolidation Coal Company
R. W. RICHARDSON, Sales Engineer, Spencer Turbine Company
URWIN ROWNTREE, Consultant Teacher Training, State Department of Education
W. A. SHAPERS, Maintenance Engineer, Hillyard Sales Company
SCHUYLER Y. SPAULDING, Consultant, Supervisory Training State Department of Education
JESSE J. ZIEHTNER, Walter C. Legge Company
UNIT 1

THE CUSTODIAL PROGRAM, ORGANIZATION, AND ADMINISTRATION

1. The school plant and the educational program —
   Importance of custodial service in safety, health protection, and to educational program
   School housekeeping a co-operative undertaking

2. The school custodian —
   Qualifications, age, physical ability, character, education and specialized training, skills and abilities, dress and appearance, responsibilities and obligations

3. Public relations with —
   Teachers, pupils, the public

4. Custodial employment —
   Basis for selection, promotion, tenure, hours of work, salary scales

5. Organization for custodial service —
   Line of authority, supervision, work load assignments

6. Rules and regulations for custodial service —
   Custodial co-operation, codes of ethics

7. Control of supplies and equipment

8. Custodial service and care of the plant —
   Care of the plant for special events, school and non-school Week end, holiday, and summer protection of plant

9. Supervision of toilet rooms, playgrounds

10. Evaluating custodial services —
    Use of a rating scale

* Proposed Units for a Custodial Training Program by Miles.
UNIT 2

HOUSEKEEPING I

**General Housekeeping Problems**

1. **Principles of school housekeeping** —
   - Effects on pupils, on morale
   - Importance of sanitation

2. **Use of housekeeping and cleaning tools** —
   - Brooms, brushes, mops, dusters, pans, pails, wringers

3. **Using cleaning supplies** —
   - Soaps, acids, caustics, abrasives, special cleaners

4. **Care and storage of supplies and equipment**

5. **Cleaning glass**

6. **Cleaning blackboards, erasers**

7. **Use of disinfectants, deodorants, and fumigants**

8. **Cleaning floors** —
   - Sweeping, brushing, using dust mops, wet mopping, vacuum cleaning

9. **Cleaning walls**

10. **Developing school co-operation in housekeeping**
UNIT 3

HOUSEKEEPING II

Floor and Special Area Cleaning

1. Cleaning methods and tools for —
   Floors of various types and conditions

2. Cleaning classrooms —
   With fixed seats, loose seats, tables and chairs

3. Cleaning corridors

4. Cleaning gymnasium floors

5. Cleaning dressing rooms

6. Cleaning auditoriums

7. Care of toilet rooms —
   Control, cleaning fixtures

8. Cleaning swimming pools

9. Cleaning shops, homemaking units, cafeterias, and laboratories

10. Mopping floors —
    Methods, frequency
UNIT 4

HEATING AND VENTILATION I

HEATING AND VENTILATING Systems,

1. Heating —
   Principles of transfer, diffusion, temperature ranges

2. Heating system types —
   Steam air pipe, two pipe, vapor vacuum, fan blast, split, hot water, radiant, hot air

3. Heat generators —
   Hot air furnaces, steam boilers (low, high pressure), updraft and downdraft

4. Factors in heating efficiency —
   Temperature control, diffusion, humidity, heat loss, radiators, location, types

5. Ventilation —
   Principles, types of systems, air flow, conductors, controls

6. Combustion —
   Principles, requirements for, products of, control, nature of fuels

7. Fuels —
   Coal: types grading, rating, moisture, burning tendencies
   Other fuels, ratings

8. Temperature control —
   Central systems, zone, local

9. Heating plant efficiency —
   Demands, loading, rating in E.D.R. or B.T.U. output

10. Miscellaneous items —
    Degree day, sensible heat, stoking systems, etc.
UNIT 5

HEATING AND VENTILATION II

Operation and Care of Heating and Ventilating Plants

1. Firing the furnace —
   Problems, temperature variations, fuel variation, school needs, types of fuels

2. Firing methods —
   Hand tools, fuel bred
   Stoker feeds, control, oil, and gas firing

3. Control of draft; dampers (type and use)

4. Control of various firing problems —
   Ash bed, ash removal, clinkers, smoke control, starting fires, banking

5. Controlling temperature regulators —
   Operating ventilating fans and dampers

6. Care of flues, grates, draft intakes, combustion chamber airflow, chimney draft, breechings

7. Control of boiler water —
   Forming, priming, testing, treating water level

8. Care of distribution system —
   Radiators, unit heaters, traps, pumps, fans, ducts

9. General care of heating system —
   Putting into service, laying up furnace and boiler repairing

10. Care of hot water heaters, of incinerators
UNIT 6

SCHOOL PLANT SAFETY AND FIRE PROTECTION

1. The schools' responsibility for pupils and property protection

2. The custodian's obligations and responsibilities in safety and fire protection —
   Keeper of the keys, in charge of service facilities, custodian of property

3. Custodian's safety —
   Ladders, window belt, around machinery, electric service, handling heavy objects, handling tools, in furnace room, suitable clothing for job

4. Improving pupil safety —
   Slick floors, corridor blocks, exits, stairways, playground equipment and surfaces, walks and fences, in shops

5. Classes of school fires —
   Fire losses, nature of fire, obligations to control

6. Controlling specific hazards and hot spots —
   Electric hazards, spontaneous combustion, exposure, trash
   Furnace rooms, basements, attics, roofs, laboratories, shops, kitchens, auditoriums, store, and supply rooms

7. Housekeeping practices and fire prevention

8. Custodial participation in pupil evacuation —
   Fire alarms, exits, clearing building, stopping motors

9. Fire extinguishment —
   Types of extinguishing agents and extinguishers, location, use of sprinkler heads, location, care

10. Custodial inspection of fire hazards —
    Daily and periodic checks, use of check list
UNIT 7

SPECIAL PROBLEMS IN PLANT CARE

1. Planting, protecting, trimming and summer care of trees, shrubs, and hedges

2. Seeding, watering, mowing, protecting lawns

3. General care of yards —
   Surfacing, leveling, drains, fences, care of yard tools

4. Care of electric and lighting services —
   Wiring, extension cords, motors, heaters, fusing
   Lighting service, care of lamps
   Current consumption

5. Care of window shades —
   Hanging, cleaning, control, roll shades and Venetians

6. Care of the flag

7. Care of furniture —
   Tightening seats, removal of splinters, polishing, furniture arrangement in rooms

8. Caring for statuary, pictures, trophy cases

9. Removal of ice and snow on walks

10. Miscellaneous helps —
   Strain removal, glass breakage, paint removers
   Grease spots, gums, paste on blackboards
UNIT 8

SCHOOL FLOORS, TREATMENT, REJUVENATION

1. School floors, desirable characteristics

2. Types of school floors —
   - Wood types, patterns
   - Masonry — natural stone, manufactured stone, concrete, terrazzo, magnesite, tile
   - Composition — rubber, linoleum, cork, asphalt
   - Rugs and carpets

3. Cleaning floors —
   - Scrubbing — tools, materials, methods
   - Dry cleaning — steel wool, scrapers

4. Conditioning and reconditioning wood floors —
   - Smoothing surface — sanding, scraping, buffing
   - Filling — pores, cracks
   - Use of floor oils
   - Floor seals — penetrating, surface, methods of applying
   - Application and care of various types of floor waxes

5. Maintaining masonry floors —
   - Concrete
     - Resurfacing, hardening, sealing
   - Terrazzo
     - Sealing, protection
   - Tile floors
     - Treatment

6. Maintaining composition floors —
   - Linoleum, cork, rubber, asphalt, other

7. Care of built up gymnasium floor surfaces —
   - Lining, sealing, preparing for other than gymnasium use, removing rubber burns

8. Care of special floor surfaces —
   - Kindergarten, stairs, ramps

9. Maintenance standards for school floors
PLANNING THE WORK PROGRAM

1. The importance of a work program —
   Job planning, economical use of time

2. Responsibility for program planning —
   Custodian, principal, superintendent (of buildings)

3. Listing tasks on basis of —
   Frequency of performance, seasonal, time of day or week if fixed

4. Establishing time requirements for various tasks —
   Each performance, or per day or week for recurring tasks

5. Preparation of trial schedule —
   Intermingling of daily and periodic tasks
   Routine per day, per week

6. Revising work program schedule —
   Get approval
   Allow for variations

7. Keeping custodial work records —
   Job repair
   Job time records

8. Maintaining general records on —
   Utility layouts, utilities consumption
   Stock inventory, requisitions, goods received
   Heat records, fuel consumption

9. Preparing reports on —
   Breakage, repairs needed and made
UNIT 10

MAINTENANCE AND REPAIRS I

Interior Repairs

1. Scheduling the repair program —
   Determining need, establishing priority and time schedules
   Assembling tools and materials needed

2. Repairing furniture —
   Replacing parts, resurfacing, refinishing

3. Repairing floors, windows, doors —
   Floors
   Wood, masonry, composition
   Windows and doors
   Adjustment, replacement, weather stripping, calking, storm, screens

4. Retreading and resetting stair nosings, banisters, handrails

5. Painting —
   Schedules, types of paints used, methods of applying

6. Controlling termites —
   Detection, controls, prevention, extermination

7. Repairing interior walls and ceilings —
   Plaster, fiber and acoustical tile boards

8. Repairing building hardware —
   Closers, stops, locks, latches, panic hardware

9. Making tools, cases, equipment —
   Saws, window jacks, scooters

10. Miscellaneous repairs —
    Charging fire extinguishers, state equipment
UNIT II

MAINTENANCE AND REPAIRS II

1. Exterior, mechanical repairs, shop controls
   a. Painting, waterproofing, underpinning foundations
   b. Repairing walls —
      • Eliminating leakage spots, waterproofing, pointing, resetting copings
   c. Miscellaneous exterior masonry repairs or replacements, walks, curbs, gutters, setting flag pole, incinerators
   d. Repairing roofs, gutters, downspouts —
      • Setting flashing, painting parapets
   e. Plumbing repairs —
      • Drains, repairing or resetting fixtures, setting valves
   f. Electrical repairs —
      • Auxiliary wiring, trouble lamps, clocks, bells
   g. Heating and ventilating repairs —
      • Furnaces, replacing boiler flues, pumps, leveling lines, pumps, fans
   h. Breeching, repairing playground equipment, setting fences, backstops
   i. Surfacing playground areas
   j. Administering the repair program —
      • Central shops, roving crew vs. use of local building men
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38. Phay, John, E. *“Custodial Personal Administration,”* American School Board Journal, CXVI (March, 1941), 21-22; (April, 1941), 21-27; (May, 1941), 21-26; (June, 1941), 21-20; (July, 1941), 41-42; (August, 1941), 41-42.


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AUTHOR BIOGRAPHY

I, Harold Leroy Nichols, was born in Flushing, Ohio, June 12, 1917. My public school education was received in the Flushing Elementary and Minerva High School. After graduating from high school in 1935, I attended Mount Union College at Alliance, Ohio. My very early desire was to enter into public education. Upon graduation from Mount Union College in 1939, I was employed as the industrial arts teacher and coach of athletics of the Berghols Village School in Jefferson County. In 1941, I was employed in the same capacity at the Cadis High School in Harrison County. In 1942, I accepted a similar position at Wintersville High School in Jefferson County. In July, 1943, I received a commission as Ensign in the United States Navy and was called to active duty October 29, 1943. I served in the amphibious forces as a Commanding Office of an L.S.T. until February 22, 1926, the date I was released to inactive duty. In 1947, I was employed as the Executive Head of the Jefferson Local Schools, West Jefferson, Ohio, which position I held until entering The Ohio State University in June, 1950.

My graduate study began in the summer of 1941 at the University of Pittsburgh; however, following my release from the
United States Navy in 1946, I enrolled at The Ohio State University where I received the Master of Arts degree in 1947. Graduate study toward the degree of Doctor of Philosophy was started at The Ohio State University in 1947, and I was admitted to candidacy in August of 1951.

In 1940, I was married to Dorothy Harry of Alliance, Ohio, and have two children: Robert David and Beth.