A SURVEY TO DETERMINE WHETHER ADDITIONAL INDUSTRIAL

ARTS TEACHERS ARE NEEDED FOR WORK IN INSTITUTIONS

FOR PHYSICALLY AND MENTALLY HANDICAPPED CHILDREN

AND TO SUGGEST SPECIAL PREPARATION

FOR THESE TEACHERS

APPROVED:

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THESIS

Presented to the Graduate Council of the North
Texas State Teachers College in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

Dy

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CHAPTER I

INTRODUCTION

Statement of Problem

The purpose of this study was to collect and present data relative to the teaching of industrial arts in certain special institutions for physically and mentally handicapped children with a view to ascertaining (1) the need for additional industrial arts teachers, and (2), the needs of such teachers for special preparation.

In making this study, data were sought which would assist in answering the following questions:

- 1. What courses of an industrial arts nature are offered in these institutions?
- 2. What courses of an industrial arts nature do these institutions plan to add to their present offerings?
- 3. What are the opinions of directors of these institutions relative to the values of craft work in their institutions?
- 4. To what extent do these institutions employ special teachers for industrial arts work?
- 5. To what extent do these institutions plan to employ special teachers for industrial arts work?
- 6. What special training is needed by teachers of industrial arts in these institutions?

7. What conclusions and recommendations can be drawn from an analysis and interpretation of the data presented?

Delimitations of Survey

The survey is limited to certain special institutions in Texas and certain other special institutions selected in Virginia, Iowa, Pennsylvania, New York, Alabama, Minnesota, Oklahoma, California, Florida, Illinois, Indiana, Maryland, New Hampshire, Connecticut, Wisconsin, Michigan, New Mexico and Arizona. An attempt was made to obtain a cross section of the entire country.

Twenty-six special institutions and agencies for handicapped children in Texas were included in the survey, and thirty out-of-state institutions and agencies were also included.

Of the fifty-six questionnaires sent out, thirty-eight were returned completed. These included fourteen from institutions in Texas and twenty-four from out-of-state institutions. Also, letters were received from officials of agencies concerned with helping handicapped children but not maintaining actual institutions for their care.

Definitions of Terms

The term "special institutions" is meant to designate those institutions which are either state-supported or are supported by charity organizations, or by other

means. No common or independent public schools or schools aided by the state are included.

The term 'exceptional children' is defined by law to include any child of educable mind whose bodily functions or members are so impaired that he cannot be safely or adequately educated in the regular classes of public schools without the provision of special services.

This survey is concerned with those children who are impaired beyond the point of being educated in the regular public schools under any conditions, and shall be referred to as "handicapped children" throughout this work.

"Physically handicapped children" are those who are crippled by infantile paralysis or other causes. The deaf, the blind, the tubercular, the hard of hearing, those with impaired vision, those with nutritional deficiencies, and those with a combination of two or more of the abovementioned handicaps are in this class.

"Mentally handicapped children" are those whose mentality is lower than that necessary for learning in a public
school in their respective age groups. This class, for
the purposes of this study, shall include epileptics, the
various levels of the feeble-minded, and in some cases, the
delinquent or maladjusted children who have not fitted into

Teachers Guide to Special Education for Exceptional Children, Bulletin of the Texas State Department of Education, p. 1.

society and who have been committed to institutions for reform or readjustment.

Procedure

Questionnaires were sent to the directors of fiftysix special institutions and agencies. Twenty-six of these institutions are located in the State of Texas, and the remaining thirty are located in nineteen other states.

The list of institutions in Texas was secured from a handbook compiled by the Texas State Department of Health under the direction of Dr. George W. Cox, State Health Officer.

The list of institutions in other states was secured from a bulletin published by the United States Office of Education under the direction of Dr. Elise H. Martens, Senior Specialist in the Education of Exceptional Children.

A letter was included with each questionnaire, requesting that the director of each institution, or someone he
might designate, include additional remarks and recommendations for special preparation of industrial arts teachers
for work with handicapped children.

Handbook on Agencies and Organizations Concerned with Care, Education, Training, and Treatment of Handicapped and Crippled Children, Bulletin of the Texas State Department of Health.

Elise H. Martens, Residential Schools for Handicapped Children, Bulletin No. 9 (1939) Of the United States Department of the Interior, Office of Education.

pared by the United States Office of Education and the Texas State Departments of Health and Education, from articles pertinent to the problem in recent periodicals and books, and from letters from officials of certain agencies concerned with helping handicapped children but not actually maintaining institutions for their treatment and education.

Related Studies

The Texas State Department of Education has made a recent study in the field of education for exceptional children. A report on this study says in part:

A classroom environment that will educate children, whether they be normal or exceptional, results from definite planning that is based upon a teacher philosophy concerning what constitutes real education.

The report further concludes:

Education is what remains after one has forgotten what was learned from books. After one has forgotten what was learned from books, there should remain a balanced combination of:

- 1. A skill in expressing oneself effectively and in doing some desirable job.
- 2. A knowledge of self and how to find and use materials.
- 3. The habit of good judgment in use of leisure time and freedom.
- 4. A desirable attitude toward the home, other races and nations.

Teachers Guide to Special Education for Exceptional Children, op. cit., p. 15.

5. An appreciation for the good, the beautiful and the true.

Whether this is an accurate definition of education or not may be a matter of opinion, but the point that the report is attempting to make is that no matter where or among whom learning is taking place, it is necessary to have a worthy end in view. That end must be a definite one, and no effort should be spared in attempting to accomplish it.

The report explains what constitutes good teaching, and discusses classroom environment, mental hygiene, testing, vocational guidance and counseling, the attitude of pupils, parents, and teachers, and child psychology and case studies.

The report then discusses the various aspects of the different handicaps such as symptoms, testing devices, special materials and equipment, and curriculum and teaching programs. In the discussion of each handicap a list of sources for materials and studies is included. It also includes definitions of terms peculiar to each type of handicap.

In 1940, a study of residential schools for handicapped children was made by the United States Office of Education. This study included a survey of every known residential school for blind, deaf, socially maladjusted,

⁵ <u>Ibid.</u>, pp. 15-16.

or mentally deficient children in the United States. Material and information from this survey was compiled and published in a bulletin.

The report defines four types of residential schools for handicapped children. These are the schools for the blind, the schools for the deaf, the schools for the mentally deficient, and the schools for the socially maladjusted or juvenile delinquents.

Two other groups of handicapped children are found in a type of residential institution which has the double function of providing both hospitalization and education. These are (1) crippled children who are in need of hospital care, and (2) epileptics for whom long-continued treatment is necessary. Institutions of these types are much fewer in number than those properly designated as 'schools' for handicapped children.

This survey gathered reports from fifty-eight residential schools for the blind, from eighty-two schools for the deaf, from one hundred thirty schools for the mentally deficient, and from one hundred fifty-five schools for juvenile delinquents.

The purpose of the bulletin published from the findings of the survey is to acquaint workers in the various day schools with the work that is being done in the residential schools and to acquaint the general public with the advantages of the residential schools.

Martens, op. cit., p. 2.

In May, 1938, representatives of residential schools for the deaf, the blind, and the socially maladjusted met in Washington for a two-day conference. The objectives of the conference were stated by the Office of Education as follows:

- l. To consider some of the general problems of an educational nature related to the administration and curriculum of residential schools for handicapped children.
- 2. To study the possibilities for extending the program of vocational education in these schools through use of State and Federal funds.
 - 3. To determine the spheres in which the Office of

Education can be of service to such schools.

4. To assist in improving the technique used by the Office of Education for gathering statistical and other data furnished by residential schools.7

The conference discussed public attitude, administrative problems, needed studies, and services desired of the Office of Education.

The conclusion reached in the conference was as follows:

Whether blind or deaf or socially maladjusted, handicapped children in residential schools are no less in need of education than those in day schools. Both types of institutions exist to serve the children, and only insofar as they render service can their presence in the community be justified. There seems to be no reason why, through a common devotion to a common cause, they should not work side by side to achieve a common goal, namely, the development, in every handicapped boy or girl, of those latent abilities and attitudes through which he or she may be able to face the world unafraid.

<u>Ibid.</u>, p. 7.

chapter III of the bulletin discusses the residential schools for the blind. It also takes up the problems of educating the blind, the partially blind and those children with double handicaps such as blindness and deafness. It discusses technically the varying degrees of impaired vision and suggests the type of training for the needs of each. In general, the course of study in schools for the blind includes a variety of handicrafts and some types of vocational training along the regular academic work comparable to that used in the regular public schools.

Chapter IV of the bulletin is concerned with schools for the deaf and the hard-of-hearing. It states that, as in the case of the blind children, deaf children must have much individual attention. It is necessary that they have experience-learning because they are not able to listen to lectures or reading. They must be shown how to do things and be able to practice those things themselves. They must learn to do things through vocational training so that they will be able to meet the conditions of life prepared to make their own way.

Chapter V of the bulletin is a report on schools for the socially maladjusted. It is the champion of the idea that boys and girls who have not fitted into society should be given the opportunity to make something of themselves rather than be punished in a prison-like atmosphere. The report emphasizes the use of handicrafts and vocational training, not only to give the children an outlet for energy and interest, but also to fit them for a worthwhile and profitable occupation upon returning to society.

Chapter VI of the bulletin, in discussing the schools for the mentally deficient, calls attention to the importance of arts and crafts in such schools. While it is difficult or impossible in many cases for the mentally deficient to grasp the regular academic courses, many of them have become skilled in some hand crafts and have found happiness in this way.

In conclusion, the report stresses the need for cooperation of the state departments of education with the various schools for the handicapped. The following statement was made by Dr. Edgar A. Doll of the Training School at Vineland, New Jersey:

There is a tendency also for the state institutions to fall outside the usual supervisory agencies which state departments of education may provide. Some state schools or institutions are in welfare departments; others are in educational departments. In any case, these public institutions provide school departments that often operate without state supervision. The experiences of the public school system ought to be carried over into the educational department of public institutions, and this should be provided by empowering the state departments of education to supervise all state institutions, or at least the educational departments of such institutions.

⁹ <u>Ibid., p. 193.</u>

An interesting experiment has been tried at the Baldy School for Boys in Los Angeles County, California. This school does not take the serious delinquents, but those boys who are showing signs of becoming maladjusted through truency, petty misdemeanors, and so forth. When boys are put on probation for minor infractions of the law, they may be sent to the Baldy School where they must remain for the duration of one regular school semester.

Baldy School has no walls and no fences. It depends upon its program of activities to keep the boys there. A prison atmosphere is strictly avoided, and an attempt is made to make the boys happy by satisfying their interests and by keeping them occupied at all times.

Every minuse of the pupil's day is filled with activity. He arises at 7 A.M., and by 8:30 he is ready for school or work. Half of the student body is engaged in academic school work during the morning while the other half is busy with a laboratory work program. Included in the latter are masonry, landscaping, gardening, kitchen duties, and plant maintenance. During the afternoon session the two groups replace each other.

In addition to this program, an extensive sports and recreation program is maintained. It is attempted to further the education of each boy by one semester, which is quite an accomplishment, since the majority of the boys sent

W. Norman Wampler, "Experimental School for Delinquent Boys in Los Angeles County," Nations Schools, XXVI (July, 1935), pp. 22-23.

there are somewhat retarded in school work.

The results of this experiment have been gratifying. Healthier and happier boys leave the school to lead a better, more nearly normal life. The waiting list of candidates for admission to the school is much greater than it can accommodate.

A report on a survey of educational facilities for handicapped children shows that the number of institutions for the handicapped has shown a steady increase during the last forty or fifty years. These figures were compiled from information secured from the United States Office of Education and from national organizations for the handicapped:

Before 1900 there were in the United States fiftyseven residential institutions for the deaf, forty-one
for the blind, and nineteen for the feeble-minded. From
1900 to 1909 there were sixty-one for the deaf, fortyfive for the blind, and twenty-six for the feebleminded. From 1910 to 1919 there were sixty-four institutions for the deaf, forty-seven for the blind, and
forty-three for the feeble-minded. During the period from
1920 to 1929, the number of institutions for the deaf remained at sixty-four, for the blind the number was
forty-nine, and for the feeble-minded, the number had increased to fifty-one. From 1930 to 1940 the schools for
the deaf numbered seventy-nine, for the blind, fortynine, and for the feeble-minded, sixty-two.

Although this report seems to be incomplete as compared with figures of the United States Office of Education, which are listed on page 7 of this study, it does have some

¹¹

Christine P. Ingram, "Changing Concepts in Education for Children with Handicaps," Educational Administration and Supervision, XXX (October, 1944), p. 390.

significance. Also, the report had as its purpose the furthering of the idea of the advantages of day schools over residential schools and included figures to show a more rapid increase in the number of day schools.

However, the significance of the report here is to show that schools and institutions for the handicapped are steadily increasing in numbers. If this increase continues, surely there will be more opportunities for teachers in that field.

Many other studies concerning handicapped children have been made, but of those available none has been directed toward surveying the craft work in special institutions for physically and mentally handicapped children.

CHAPTER II

VALUE OF CRAFT WORK IN INSTITUTIONS FOR HANDICAPPED CHILDREN

Opinions of Educators Relative to the Value of Craft Work

The value of learning hand skills and crafts has been recognized and championed by many famous educators. Pestalozzi, Froebel, Fellenberg, Wehrli, and many others who lived in the time when education for the lower classes was becoming popular, carried out the manual training idea in their schools. The students of Fellenberg's schools, for example, were mainly wayward boys and girls who were without homes and means of support, and who were socially maladjusted. These children were taken into the schools to live and to work. They were taught how to use their hands in learning trades and crafts. Also, they were given a small amount of instruction in the academic subjects and the fine arts. The fact that there was always a greater demand for students who finished one of Fellenberg's schools than he could supply shows the value of their learning hand skills, when, if they had not attended one of the schools, they would probably have become delinquents.

Dr. George Kerschenstiener, then superintendent of public schools in Munich, in an address given in America

in 1911, had the following to say about the value of learn-ing hand skills:

Everyone must be able to do some good and thorough work though it be of the simplest kind, of one sort or another. Not till then will he be able not only to satisfy his fellow men, and be of use to his country, but also to make his own life of value to himself. And in the same measure as our lives gain value for ourselves, do we attain power to reach a higher stage of culture.

He stated, in effect, that it is of little matter what position in life that a person occupies, but that what he is able to do to help others and attain happiness is the important thing. For instance, if a person is talented in music, and is absorbed in his work, then music is his calling. Likewise, if a person should become skilled in some type of craft work, and if it brings him happiness and success, he should pursue that work. In the institutions for the handicapped there are children who are so impaired physically or mentally that they are not capable of doing much besides craft work. So, according to Dr. Kerschenstiener's way of thinking, if they can learn to do even the smallest thing effectively and be happy in knowing how to do that one thing, their lives have been enriched.

John Dewey was aware of the value of the learning of hand skills as a part of the educative process. In the Elementary School Record of December, 1940, he wrote the

Charles A. Bennett, <u>History of Manual and Industrial</u>
Education 1870 to 1917, p. 199.

following:

The more direct modes of activity, constructive and occupational work, scientific observation, experimentation, and so forth, present plenty of opportunities and occasions for the necessary use of reading, writing, and number work. These things may be introduced, then, not as isolated studies, but as organic outgrowths of the child's experience.

Dr. Felix Adler of New York submitted a paper at the meeting of the National Education Association meeting in Madison, Wisconsin, in 1884. In the paper he stated the following:

It is the purpose of this paper to advance the claim that tool instruction, workshop lessons in a word, technical training and artistic modeling are essential elements of general culture. Leave the direct material applications entirely out of account; suppose that there were no factories in the world; suppose that all the millions of children educated in our public schools were to be gentlemen and ladies of leisure; I should, in that case, plead none the less strenuously for the introduction of technical and art work as an indispensable feature of the school system. I should plead for it then, as now, simply because of its broadening, humanizing effect; because it quickens into activity certain faculties of human nature which too commonly lie dormant; because instead of the present one-sided development, it is a step further in the direction of that all-sided development which is the ideal in education. The cry for 'industrial education', in the ordinary acceptance of the term, is a false cry. It gives rise to the suspicion that the school is to be debased into a mere training place for the material interest of life. At the very antipodes of such a system stands the reform that I would urge. I wish to insist strongly upon this radical distinction, and to set sharply and clearly before the mind of all the fundamental proposition that, though the busy hum of every workshop should be hushed into silence, though

²

the earth nourished her children without requiring their labor, still, technical and art instruction would be as vitally important as ever, simply as elements of mind culture.3

Dr. Adler's ideas, as presented above, need very little if any, clarification. It can be seen that he thinks of craft work as being more important in the development of a well-rounded life than as an opportunity for learning a trade. He stresses the idea that knowing how to use the hands is a very valuable asset to happiness, and also concedes that in some cases craft work does offer a means of livelihood.

In explaining the values and advantages in an institution for mentally deficient children, a United States Office of Education bulletin states the following:

The results of handwork are heralded far and wide. In fact, persons visiting a residential school for the first time are frequently amazed at what they see being accomplished through the educational program. If mentally deficient children can do that, one hears a visitor say, 'what should we expect of normal children?' Another says, 'I don't believe these children are feebleminded. No feeble-minded child could do that. I could not do it myself.'

It is true that some routine mechanical skills are mastered by mentally deficient persons through persistent practice to a degree seemingly inconsistent with their mental ages. But no one yet knows what the limits of achievement for particular mental ages are in many directions other than the academic. And again let it be said that the members of residential schools for the mentally deficient are not all of extremely low intelligence. Many of them approximate in academic capacity some of the retarded pupils enrolled in day schools. To these

³ <u>Ibid.</u>, p. 364.

--and to all--every opportunity should be given to develop creative ability in whatever direction it can find expression.

From the opinions of eminent educators as quoted above, it can be seen that for many years craft work has been considered valuable for children in many walks of life and with many levels of capability. Craft work is used with different aims in different types of institutions and schools, but wherever it has been used and whatever aims have been set, it has shown its value to children in a great majority of instances. It should be reasonable to assume, then, that children in institutions for the handicapped should be no exception, but should derive benefit and happiness from learning hand skills through doing craft work. There is a great possibility that children with handicaps will derive a great deal more benefit than normal children from craft work, due to the fact that their impairments may prevent them from engaging in many activities which normal children enjoy.

Opinions of Directors of Institutions Relative to the Value of Craft Work

The value of craft work to handicapped children, according to the opinions of the directors of the institutions, is shown in Table 1. Of the directors of all

⁴ Elise H. Martens, op. cit., p. 93.

institutions studied, 89.4 per cent think that students benefit by doing craft work. The remaining 2.8 per cent who answered "no," and the 7.8 per cent who offered no opinion, include directors of the tuberculosis sanatoriums and other institutions which do not keep children in residence long enough to give them educational training.

Following is an excerpt from a letter received from an educational director of a hospital and school for epileptics:

Our school is 100 per cent epileptic. We have the problems of both the physically and mentally handicapped. Our ideas are new yet, but we think we see great progress. Our school is half academic and half handicraft. We have followed this program for three years and our students are happier and less emotional and are doing much better in every way than three years ago.

In answering the question in the questionnaire shown in the Appendix concerning the progress in physical and mental well-being of the children, 81.5 per cent of the directors of institutions answered "yes," and 18.5 per cent offered no opinion. This question is closely related to the question concerning benefits received by students doing craft work. However, it was designed to attempt to determine the long range value of craft work for handicapped children, rather than the immediate benefits received by them.

A large majority of the institutions have other types of programs, mostly academic, resembling closely those of-fered in regular public schools. Of the institutions studied,

7.8 per cent have no program other than craft work. Included in this group are the special institutions caring for children so impaired mentally that they cannot possibly learn regular academic subject matter.

OPINIONS OF DIRECTORS OF INSTITUTIONS CONCERNING
BENEFITS RECEIVED BY CHILDREN FROM
LEARNING CRAFT WORK

	Total Control of the		
	Yes	No	No opinion
Students benefit by doing craft work	89.4 %	2.8 %	7.8 %
Progress in physical and mental welfare by doing craft work	81.5 %		18.5 %
Substitution of crafts program an improvement	5 . 2 %	28.9 %	65.9 %
Hope to equip some of the children for useful employment	71.0 %	21.2 %	7.8 %
Greatest chance for happiness from learning hand skills *	63.0 %	18.5 %	18.5 %

^{*} This includes those who offered no opinion and those who prefer a combination program.

The directors of only 5. 2 per cent of the institutions thought that the substitution of craft work for their present programs would be an improvement. This probably indicates that among the institutions studied the educational programs are already permanently established to a large extent.

Most of the 28.9 per cent of the directors who do not think that the substitution of a crafts program would be an improvement, and the remaining number who did not answer definitely, included remarks to indicate that they think a combination of handicraft and academic work would be the most satisfactory program. In some cases handicrafts comprise the core curriculums, and in other cases more emphasis is placed on academic work, dependent upon the capabilities of the students and the aims of the programs. Examples of the combination type of program are explained in the letter above from the director of a hospital for epileptics and in the following excerpt from a letter written by the director of a hospital caring for victims of infantile paralysis:

Our school program is an adjunct to our principal function, i. e., treatment of chronic and convalescent polio patients. Its purpose is twofold:

1. To keep school patients in step academically.

- To keep school patients in step academically.
 To provide occupational type therapy (handicrafts) which will:
 - a. Assist in return to use of crippled areas.
 - b. Assist patient in his adjustment to life of handicap.
 - c. Help provide a useful occupation.

Of the institutions studied, seventy-one per cent hope to equip some of their students for useful employment as shown in Table 1, page 20 of this study. Among the remaining institutions are those whose students are so

impaired that they will never be able to be self-supporting, and those institutions who discharge children at an age too young for them to seek employment.

The directors of sixty-three per cent of the institutions studied think that their students' greatest chance for happiness will come from learning hand skills. is a rather high percentage and seems to be an indication, at least among the institutions studied, that craft work ranks high in determining the future happiness of children in these institutions. Included in the 18.5 per cent who do not think hand skills will provide the greatest amount of happiness, and the 18.5 per cent who offered no opinion are the directors of institutions caring for crippled children whose areas of handicap will not prevent them from pursuing a normal educational program. Also included in this group are directors of institutions for delinquent girls. Most of these directors predict that their students, when discharged, will be employed either as domestics or will marry and be concerned with maintaining homes. directors of other types of institutions state that children do not remain in their institutions long enough for them to make an accurate prediction relative to their future happiness.

It can be seen by facts and opinions gathered by the survey that craft work is an important part of the

educational programs of most of the institutions studied.

Of course each institution has a different aim for its
educational program, and the types of craft work offered
are influenced to a great extent by this fact. Some of the
institutions hope to equip students for employment, some of
them use handicrafts as therapy for crippled areas, and
some of them use handicrafts as an outlet for use of leisure
time and as a means of happiness, especially for those
patients who will spend the remainder of their lives in
mental institutions.

CHAPTER III

OFFERINGS IN HANDICRAFTS IN INSTITUTIONS FOR HANDICAPPED CHILDREN

Courses Now Offered

The importance of handicrafts in the education and rehabilitation of physically and mentally handicapped children is emphasized by the fact that all but three of the institutions studied have some type of crafts program in operation at the present time. The three exceptions are sanatoriums for tubercular children, and their methods of treatment sanction very little physical activity of any type, since rest and quiet have been found to be the best therapy for tuberculosis. However, two of the three tuberculosis sanatoriums plan to inaugurate crafts programs on a small scale as diversional and recreational therapy in out-of-school hours.

Some of the crafts are, obviously, more popular than others. In the first column of Table 2 there are evident three distinct groupings of craft work according to the percentages of institutions offering them. In fifty per cent or more institutions, woodwork, weaving, art leather-craft, painting and crocheting are offered. From twenty-five to fifty per cent of the institutions offer basket

weaving, printing, beadwork, wood carving, ceramics, and plastics. The remaining courses listed in the Table are offered in less than twenty-five per cent of the institutions.

PERCENTAGE OF INSTITUTIONS OFFERING THE VARIOUS CRAFTS COURSES, THOSE PLANNING TO OFFER THEM, AND TOTAL POTENTIAL PROGRAMS OF THE INSTITUTIONS

***	· in and in the second		
Course	Now offered	Plan to offer	Potential Programs
Woodwork Weaving	68.4 %	5.1 % 7.5	73.5 % 73.3 "
Art Leather	60.5 "	10.2	70.7 "
craft Painting Crocheting Basket	57.8 " 57.8 " 54.6 "	13.0 7.6 0.0	70.8 " 65.4 " 54.6 "
weaving Printing Beadwork Wood carv-	44.7 " 42.1 " 42.1 "	10.2 21.0 2.7	54.9 " 63.1 " 44.8 "
ing Ceramics Plastics Mechanical	39.4. " 26.3 26.3 "	0.0 13.0 21.0	39.4 " 39.3 " 47.3 "
drawing Bookbinding Auto	18.4 " 15.7."	13.0. 15.7.	31.4 " 31.4 "
mechanics Jewelry Bench metal Art metal	15.7 " 13.1 " 13.0 " 13.0 "	5.1 7.6 21.0 28.9	20.8 " 20.7 " 34.0 "
Archery Stone setting	7.6 "	18.4	41.9 " 26.0 " 7.7 "

It can be seen in Table 2 that woodwork, weaving, art,

leather craft, painting and crocheting seem to be the most important, indicating, from the standpoint of the percentages of institutions offering them, that these crafts are the most important ones on which to plan in setting up a program or in preparation of teachers for work in such a program. Woodwork is offered in the highest percentage of institutions. This fact would seem to denote that it will continue to be popular because it lends itself to so many different applications.

Of the group of crafts offered in more than fifty per cent of the institutions studied, crocheting is shown by Table 2 to be the least popular and to have no additional prospect of being offered. Since crocheting is of interest mostly to women and girls, and to them mostly as a hobby or pastime, it seems that its importance is not really so great as its rank on the Table indicates.

The courses listed on the Table between woodwork and crocheting seem to be important enough now and show evidences of increasing popularity to the extent that they will remain important in crafts programs in the future.

of the group of crafts being offered in twenty-five per cent to fifty per cent of the institutions, basket weaving is the most popular. It is valuable in that it requires little physical exertion other than that of using the hands and fingers. Children whose lower members are

impaired or who are in a weakened physical condition are able to learn basket weaving in many cases where other crafts would not be feasible.

Plastic work is offered in the smallest percentage of institutions in the middle section of Table 2. This is probably due to the fact that it is a relatively new craft and that teachers for plastic work have not been readily available. Printing, beadwork, woodcarving, and ceramics also fall into the classification of being important but not among the most important offerings.

At the present time, mechanical drawing, bookbinding, auto mechanics, jewelry, bench metal, art metal, archery, and stone setting are offered in the least percentage of institutions surveyed, indicating, perhaps, that their importance is not so great as that of the others mentioned above.

Courses Institutions Plan to Offer

The second column of Table 2 shows the percentages of institutions planning to add the various crafts to their already existing programs. All of the craft courses, with the exception of crocheting and wood carving, are in the plans of some of the institutions for adding to their present programs.

The greatest percentage of institutions plan to add art

Only thirteen per cent of the institutions now offer metal. work in art metal, but with the addition of art metal in 28.9 per cent of the institutions as shown by the Table. it will rise considerably in importance. These additions will put it definitely into the class with basket weaving, printing, and weaving. Likewise the addition of plastic work in twenty-one per cent of the institutions will make that craft rank high in the middle group. If plans for additions of archery and bench metal materialize, they will also fall within the middle group but will not be as significant as art metal and plastics. Of the institutions centemplating expansion of their crafts work, twenty-one per cent plan to add printing to their programs, which along with the 42.1 per cent now offering the course, will put it into the group of those of first importance.

The addition of woodwork, weaving, art leather craft, and painting are included in the plans of some of the institutions, and show a trend toward maintaining an important place in the over-all crafts program. The Table does not show as large a percentage of institutions planning to add the crafts mentioned above as some of the others, but that is probably because of the fact that these are already offered in such a great percentage of the institutions.

Such a small percentage of institutions plan to add

auto mechanics, jewelry, and stone setting that the importance of these courses will be changed very little.

When all of these additions have been made, the potential programs will be somewhat different from the present offerings. Woodwork will rank first in importance, while weaving, leather craft, art, and painting will come next in importance, respectively. Printing will be sixth in importance rather than eighth as it is now under present offerings. Basket weaving will rank seventh, and crocheting, which is not included in plans for addition in any of the institutions, will remain the least significant of the crafts being offered in fifty per cent or more of the institutions.

In a recapitulation of the remainder of the Table, the planned gain in plastic work will put that craft high in the middle group, and the potential gain in bench metal, art metal, and archery will move them from the group of least importance to the middle group. Plans for the addition of bookbinding and ceramics are also significantly important. As mentioned above, plans for the addition of auto mechanics, jewelry, and stone setting represent such a small percentage of the institutions that they are not of too much significance.

Potential Offerings of Institutions Classified According to Sex of Students

In Table 3 the special institutions have been classified

into three divisions: those maintained for both sexes, those maintained for boys only, and those maintained for girls only.

TABLE 3

POTENTIAL OFFERINGS IN PERCENTAGES OF INSTITUTIONS CLASSIFIED FOR BOYS, FOR GIRLS, AND FOR BOTH SEXES AND RANK OF THE VARIOUS CRAFTS COURSES IN THEIR POTENTIAL PROGRAMS

Course	Both Sex	ces	Boys	Girls		
	Potential*	ii ank	Potential**	Rank	Poten- tial***	Rank
Woodwork	80.0	1	30.0	13	67.0	2
Art	80.0	1	40.0	9	100.0	1
Weaving	76.0	3	60.0	3	67.0	2
Crocheting	72.0	11345	10.0	9 3 17 3	67.0	2 2 2
Painting	62.0	5	60.0	3	67.0	2
Leather				_		-
craft	60.0	6	90.0	, · · · 1		į
Basket			, ,			
weaving	48.0	7	60.0	3	34.0	6
Printing	48.0	7	80.0	5	34.0	6
Beadwork	44.0	7 7 9	30.0	13	J	"
Plastics	40.0	ıó	60.0	3 2 13 3	34.0	6
Wood				υ,	3	i. Č
carving	36.0	11	60.0	3	34.0	6
Jewelry	28.0	12		~		-
Art metal	28.0	12	40.0	g.		
Ceramics	24.0	14	20.0	9 16		
Bookbind-						
ing	24.0	14				
Bench		-				
metal	20.0	16	40.0	9		
Mechanical		-				-
drawing	16.0	17	40.0	9		2
Auto		,		1		
mechanics	12.0	18	50.0	8		
Archery	12.0	18	30.0	13		
Stone set-			-J			
ting.	4.0	20 '				

^{*} Percentages of 25 institutions for both sexes
** Percentages of 10 institutions for boys only

^{***} Percentages of 3 institutions for girls only

Each craft course has been considered relative to the percentages of these classified institutions potentially offering it in their programs. The phrase "potential offerings" is used to designate those crafts which are now offered and those which the institutions plan to offer in the near future. The institutions for both sexes include hospitals for crippled children, schools for the deaf and blind, institutions for the mentally deficient, hospitals for epileptics, and tuberculosis sanatoriums. The institutions for boys and also those for girls include only correctional and reform schools for the delinquent and socially maladjusted.

Since the greatest majority of institutions studied maintain facilities for both boys and girls, the potential programs which they will offer are the most significant in planning for the training of special teachers.

The first column of Table 3 indicates that woodwork, weaving, art, leather craft, painting, and crocheting are included in the planned programs of more than fifty per cent of the institutions for both sexes. This is similar to the evidence that was gathered from Table 2 concerning the potential offering of all the institutions studied. Woodwork and art rank first among the crafts as shown by Table 3, and weaving and crocheting rank third and fourth, respectively. Leather craft and painting also rank high

in importance. Basket weaving and printing fall just a very little short of being among the crafts offered in fifty per cent or more of the institutions for both sexes.

Beadwork, wood carving, plastic and art metal also fall within the twenty-five to fifty per cent grouping, as in Table 2. However, jewelry ranks among the courses in the middle group in the first column of Table 3, while it falls within the lowest group in Table 2. In contrast to this, ceramics, mechanical drawing, bench metal, and archery rank in the middle group of total potential offerings in all institutions, but they do not show evidence of being that important in the institutions classified for both sexes, as shown in Table 2.

The above-mentioned facts serve to indicate that although the institutions caring for one sex only are fewer in number, the courses that they offer do have a definite influence on the craft courses offered in relative total percentages of institutions. For example, the second and third columns of Table 3 indicate that ninety per cent of the institutions for boys include leather craft, while none of the girls' institutions have this craft in their plans, and sixty per cent of the institutions for both sexes will offer it. Likewise, printing and auto mechanics rank high in institutions for boys, while less than fifty per cent of the institutions for both sexes include it in their

potential programs; the percentage of girls' institutions offering printing is even lower, and, of course, none of them offers or plans to offer auto mechanics.

The percentages of girls' institutions offering or planning to offer the six highest ranking courses with the exception of leather work, correspond rather closely with the percentages as found among the sum total percentages of all institutions. In other words, the tables indicate that the most important courses in the potential programs of all institutions would serve about as well as in imstitutions for girls only.

Table 3 also indicates that the situation in institutions maintained solely for boys is different in some respects from the general trend. This can be explained by the fact that some courses are better adapted to the needs of boys. Since boys are able to acquire some degree of skill in most types of craft work, it goes without saying that this fact causes the first six courses listed on the table to continue in high rank, since both sexes are included among students who take them.

CHAPTER IV

PROSPECTS FOR INDUSTRIAL ARTS TEACHERS IN THE INSTITUTIONS STUDIED AND TYPE OF TRAINING NEEDED TO PREPARE THESE TEACHERS

Prospects for Industrial Arts Teachers

Craft work is an important part of the educational and rehabilitation programs of most of the institutions studied, as shown by Table 2 of this study. Industrial arts teachers are trained in several different craft fields, and seem to be the logical ones to teach craft work in the institutions for physically and mentally handicapped children. Teachers who are not specially trained in craft work or industrial arts likely do not have a suitable background for maintaining a satisfactory program of handicrafts.

The tabulation of the answers received from the institutions studied indicates a strong trend toward employing special teachers for craft work. Table 4 shows that 89.4 per cent of the institutions employ special teachers for craft work. Among the 2.8 per cent who do not employ special teachers and among the 7.8 per cent whose directors did not answer that question are the tuberculosis sanatoriums which have no crafts program. Also included in the group not

not answering are the hospitals maintained only for medical treatment of crippled children and which do not have educational programs of any type.

TABLE 4

PERCENTAGES OF INSTITUTIONS EMPLOYING SPECIAL TEACHERS AND PLANNING TO EMPLOY SPECIAL TEACHERS FOR CRAFT WORK

Institutions em-	ÿ es	No	No answer
teachers for craft work	89.4 %	2.8 %	7.8 %
Institutions planning to employ special			
teachers for craft work	34.2 %	60.5 %	5-3 %

The assumption can be made, then, according to this survey, that a very high percentage of the institutions for physically and mentally handicapped children employ special teachers for craft work. Also, as shown by Table 4, 34.2 per cent of the institutions studied plan to add additional special teachers. This is a rather significant percentage in that the institutions surveyed comprise only a small percentage of those operated in the United States. Also it is significant because of the fact that some of the

See Chapter I, page 7, of this study.

institutions indicating plans for employing special teachers plan to add as many as four to six in one institution. The 60.5 per cent of the institutions not planning to add additional teachers at the present time may have need for them in the future.

The outlook on prospects for industrial arts teachers in special institutions can be seen by the following excerpt from a letter written by an executive of the Texas State Board for Vocational Education:

We believe that we will have rehabilitation centers where much craft work will be taught. Furthermore, we believe that our own division here in Austin will begin paying for more and more craft courses, especially for the severely handicapped. May we state here that the State Commission for the Blind will eventually employ more industrial arts teachers for their large work shops such as they maintain here in Austin, Dallas, Fort Worth, San Antonio, and El Paso, especially in the fields of basket weaving, ceramics, beadwork, weaving, and crocheting. We sincerely believe that our teacher training institutions should encourage and expand all of their departments of industrial arts. You will find outside of Texas that many of the large rehabilitation centers, especially for the tuberculous, are employing industrial arts teachers.

From this letter it would seem that there is a very definite trend toward the initiation and expansion of industrial arts programs in more and more institutions in Texas and throughout the United States.

Letter from J. J. Brown, Director of Vocational Rehabilitation, Texas State Board for Vocational Education, Austin, Texas, May 1, 1947.

The directors of 84.2 per cent of the institutions think that teacher training institutions should specially prepare teachers for craft instruction in the special institutions. Following are some typical statements made by these administrators:

Most crafts teachers are too dependent upon securing new materials and expensive ones. They lack the initiative and should be taught to utilize whatever is available. They need also to build up a high standard of workmanship for themselves and then to transfer that standard to pupils rather than to excuse poor workmanship as an indication of the pupils lack.

They should have training in psychology, general education, special education, mental deficiency, and subject matter.

We need teachers with more self-control... We strive for perfection of workmanship, but I had rather have a teacher who could make a student happy in making a fair piece of goods rather than one who creates discontent while doing an excellent job.

We need regular industrial arts training so vocational work can be taught as it is in the schools for normal children. Handicraft occupies a secondary position in our school. It is secondary to vocational training for job placement after school.

Understanding of delinquency -- social competence.

The director of a state school and hospital for epileptics had the following to say about special training for teachers:

It is not so much the special training a teacher has that makes him a good teacher here. Personality is the important thing. A good teacher should be able to understand these students and be able to understand and give them what they need. Child psychology and sociology are needed in teaching here. Preparation

along this line is more important than specialized handicrafts. Skills may be acquired, but the teacher must be able to understand the child. Teach the teachers to love the students, accept their faults, and make them happy in a moral way, and our problems would be few.

Directors of other institutions recommended that basic psychology, problems of the handicapped, arts and crafts, group work, use of community resources, public relations, and sociology be included in the training program of teachers who plan to work in special institutions for handicapped children.

None of the directors of the institutions studied set forth definitely any complete suggested program for the training of teachers. Most of the suggestions received on the questionnaires were somewhat vague. Differences of opinion were evident in a number of cases. Some of the directors would place the emphasis on craft work itself and have their teachers strive for a high degree of workmanship among the students, while others would stress a psychological and sociological background and pay little attention to the degree of skill attained among the It is possible, also, that some of the opinions students. offered are biased to a certain extent because of such things as lack of funds, politics, and other outside influences.

In institutions maintained by state governments, the qualifications for teachers are dictated by law. Following

are the qualifications for teachers in the various types of institutions for the handicapped, as required by law in the State of Texas:

The law provides that the teacher of exceptional children must have 'a valid teacher's certificate and, in addition, such training as the division of Special Education may require. In compliance with the law, the Division of Special Education has adopted the following regulations:

Teachers of exceptional children shall be chosen on the basis of sound physical and mental health, teaching skill, adaptability, and a sympathetic under-standing of the purposes of special education as related to the exceptional child.

b. It is preferable, but not required, that the teacher have teaching experience with normal children.

The teacher must have a degree from an approved college.

Such college training shall include as a minimum:

General Courses

1. A survey course in the education of exceptional children and any three of the remaining seven:

Psychology of the handicapped child

Intelligence tests and individual differences 4. Mental hygiene

5. Educational tests, including those of aptitude, achievement, and personality

6. Clinical psychology

7. Counseling and vocational guidance 8. Abnormal psychology

Special Courses

If children with orthopedic handicaps are in the class,

9. The technique of teaching physically handicapped children and one of the following:

10. Home nursing and child care

Therapeutic care of crippled children One of the following if children with deficient vision are in the class:

12. Sight conservation

13. Diagnostic and remedial reading

14. Anatomy, physiology, and hygiene of the eye.

One of the following if children with deficient hearing are in the class:

15. Anatomy, physiology, and hygiene of the ear

16. Hearing conservation and pathology

17. Lip reading, including clinical practice.

- If children with speech disorders are in the class:
- 18. Technique of speech correction, and the follow-ing:
- 19. Anatomy, physiology, and hygiene of the vocal mechanism

20. Phonetics

21. One hundred fifty clock hours of clinical practice in speech correction.

If children with lowered vitality or nervous disorders are in the class:

22. Nutrition, including school and home care for frail and nervous children.

Type of Training Needed

There were so many different and varied opinions offered on the questionnaires that it is rather difficult to
ascertain accurately the exact training needed in preparing
teachers for work in institutions for physically and mentally handicapped children.

Chapter III contains an analysis of the various craft courses relative to the percentages of institutions now offering them and planning to offer them. Those that rank highest in that they are offered or will be offered in more than fifty per cent of the institutions studied are woodwork, art, weaving, leather craft, painting, crocheting,

Teachers Guide to Special Education for Exceptional, Bulletin of the Texas State Department of Education, pp. 4-5.

basket weaving and printing. In institutions for girls only, the percentages are also high in these crafts, with the exception of printing, basket weaving, and leather craft. In the institutions for boys only, plastics, wood carving, and auto mechanics also rank in the group offered in fifty per cent or more of that type of institution.

Woodwork, leather craft, printing, plastics, mechanical drawing, bench metal and art metal fall into the category of industrial arts in most teacher-training institutions in Texas. These courses include only seven of the crafts listed on Table 2. Of these, only woodwork, leather craft, and printing rank in the highest group according to the percentages of institutions now offering them or planning to offer them. A teacher planning to work in an institution for boys only can include plastics in his regular industrial arts program and probably be able to include wood carwing also. Auto mechanics is not offered in many industrial arts curriculums at the present time.

Since art, weaving, printing, exocheting, and basket weaving are offered also in more than fifty per cent of the institutions studied, a teacher planning to work in a special institution would probably want to take these courses. And since they are not offered in the regular industrial arts curriculum of most teacher-training institutions, but could likely be had in the art department,

it might be wise for the teacher to do this work there, possibly taking a minor in art in addition to a major in industrial arts. Furthermore, if the teacher chose, he could include in his art program ceramics and beadwork, which are offered in twenty-five per cent to fifty per cent of the institutions studied.

The above suggested program would, it seems, qualify a teacher as far as craft work is concerned, to work in a special institution for handicapped children. However, it is likely that a teacher would not be required to teach all of these subjects, and it might be that his regular industrial arts training in woodwork, leather craft, and other crafts would be adequate to qualify him for a position in a special institution.

In addition to work in the crafts field, psychology and education appear to be very important subjects. In planning to work in a special institution, a teacher could include in his education program such courses as basic psychology, abnormal psychology, psychology of the handicapped child, and various courses pertaining to specialized tests, all of which are advocated by directors of special institutions as desirable or necessary for teachers of handicapped children.

Teachers planning to teach in state-supported institutions, would, of course, have to present qualifications in compliance with the laws governing such institutions. The qualifications for teachers in state-supported institutions in Texas are included in this chapter. The background required for teaching in some types of institutions might be included in the regular curriculum in a teachers college, but for work in other types of institutions it would be necessary for a teacher to complete work over and above that required for the bachelor's degree.

The laws and regulations of states other than Texas are not included here, but should a teacher plan to teach in a state-supported institution in another state, it would be necessary for him to be familiar with the regulations pertaining to the qualifications required for teaching in the institution or type of institution in which he has chosen to work.

CHAPTER V

SUMMARY, RECOMMENDATIONS, AND SUGGESTED STUDIES

Summary

From tabulations and interpretation of data gathered, the following points have presented themselves:

- 1. The survey attempts to discover craft offerings in special institutions studied, need for additional special teachers, and type of special preparation, if any, needed for teachers who plan to work in these institutions. Questionnaires were sent to fifty-six institutions; thirty-eight answered.
- 2. Many studies have been made recently in the field of education for exceptional children. Many aspects of handicapped children have been surveyed, but none of those available were concerned particularly with the handicrafts programs in the various institutions.
- 3. Practically all of the institutions answering the questionnaires offer or plan to offer some type of craft work. All of the craft courses mentioned in the questionnaire are offered, some of them with notably more frequency than others.
- 4. Woodwork, weaving, art, leather craft, painting, and crocheting are offered in more than fifty per cent of

the institutions studied, indicating that for that group of institutions they are most important.

- fered in institutions for both sexes and in those for boys only, but institutions for girls only follow rather closely the trend in the programs of all institutions as a whole concerning craft programs.
- 6. Practically all of the special institutions studied employ special teachers for craft work, and quite a fair percentage of them plan to employ additional teachers, indicating that there is some promise in this field for industrial arts teachers.
- 7. A very high percentage of directors of institutions studied and executives of agencies concerned with handicapped children think that teacher-training institutions should specially prepare teachers for work with physically and mentally handicapped children. None of these administrators, however, offered a definite, complete program to be followed in the training of teachers.
- 8. The offerings in craft work in the various institutions indicate to a certain extent the courses in handicrafts and industrial arts that should be included in the training program of a teacher planning to work in a special institution for handicapped children.

Recommendations

Facts and opinions in the preceding chapter make the following recommendations seem logical:

- 1. A teacher majoring in industrial arts and planning to teach craft work in a special institution should include in his program of training as many of the following courses as are available: woodwork, weaving, art leather craft, painting, crocheting, basket weaving, and printing, and, if possible, beadwork, wood carving, ceramics, plastics, mechanical drawing, bookbinding, bench metal, art metal, and archery.
- 2. If any of the above, and especially any of those listed among the first six mentioned, are not offered in the industrial arts department of the college in which the teacher is doing his work, he should be allowed to work them into his program by taking work in a department which offers them.
- 3. In addition to craft work, the teacher should include in his program of training as many of the following courses as are available to him: basic psychology, abnormal psychology, problems of the handicapped, educational sociology, and courses in various types of educational tests.
- 4. A special course in industrial arts for the handicapped child does not seem necessary in the training of a

teacher who plans to work in a special institution. However, should such a course be offered, its content should be the reading and discussion of recent material in periodicals and books concerning problems in the education of handicapped children.

Suggested Studies

During the course of gathering and tabulating the information contained in this thesis, the following problems or studies became evident as being subjects for future research:

- 1. A comparison of the advantages of the day school with the advantages of the residential school for handicapped children.
- 2. A study of the different types of crafts programs offered in institutions for the blind, for the deaf, for the crippled, for the delinquent, and for the mentally deficient.
- 3. The merits of craft work as compared with academic work as a core curriculum in institutions for handicapped children.

APPENDIX

Nick A. Johnson Box 6093, T. C. Station Denton, Texas

Dear Sir or Madam:

I am conducting a survey of institutions for handicapped children to determine if there is a need for SPECIALLY TRAINED Industrial Arts teachers in that field. Also I should like to have recommendations as to how North Texas State College can better prepare teachers for such work.

I shall appreciate it if you or someone you might designate will fill out the enclosed questionnaire and return it to me as soon as possible with such recommendations and remarks as you see fit to make.

No names of individuals or institutions will be used in reporting the findings of this survey.

Sincerely,

Nick A. Johnson

NAME OF INSTITUTION	ere etter room dennys elemen see een entspronnen ette ere mittelining allette – en egstrekentigigt elemente este stationere	
YOUR NAME AND TITLE	ar range and a range and a supplication of the	
TYPE OF STUDENTS: Physi	ically handicapped, Mont	
Other	· (Specify)	
	of craft work for handicappe	
2. If so, please check w	which of the following are ta	ught:
Jewelry	Beadwork	Ceramics
Bookbinding	Mechanical Drawing	Bench Motal
Woodwork	Art	Basket Weaving
Loather Craft	Weaving	Archery
Plastics	Wood Carving	Printing
Stone Setting	Art Metal	Auto Mochanics
Crocheting	Painting	Others
3. Do you have special t	cachers for those activities	? Yes No
4. If not, who is teachi	ng thom?	
5. Do you contemplate ad	iding any of those crafts to	your program? Yes No
6. If so, which ones?		
7. Do you contemplate em	ploying special teachers for	
		Yes No
8. If so, how many, appr	oximately?	
9. Are there any crafts were available?	you would like to put into t	the program if teachers Yes No
10. Which ones?		
	schor training institutions s rk as you need in your instit	
	ar students are benefitted or	

13.	If you have special crafts work for handicapped children in your institution, is there evidence of progress being made in their mental and physical well being? Yes Ho
14.	Do you have any other type of activities besides those listed above for handicapped children? Yes No
15.	If so, describe your program briefly:
16.	Do you think that the substitution of the crafts program for the one mentioned in (15) above would be an improvement? Yes No
17.	Do you hope to equip some of your students for useful or gainful employment upon completion of your course? Yes No
18.	What per cent of the Children do you think will ever be able to be self-supporting?
19.	In what industries or occupations do you think the greatest number will eventually be employed?
20.	Do you think that their greatest chance for success and happiness will come from learning some hand skills or erafts? Yes No
21.	What is your teacher load? Class ize . Number of classes a teacher teaches .
	What is the age renge of your students?years toyears.

BIBLIOGRAPHY

Books

- Baker, Harry J., <u>Introduction to Exceptional Children</u>, New York, The Macmillan Company, 1944.
- Bennett, Charles A., <u>History of Manual and Industrial Education 1870 to 1917</u>, Peoria, Illinois, The Manual Arts Press, 1937.
- Best, Harry, <u>Deafness</u> and the <u>Deaf of the United States</u>, New York, The Macmillan Company, 1943.
- Frampton, Merle E., and Rowell, Hugh Grant, editors, Education of the Handicapped, Vol. II, Yonkers, New York, World Book Company, 1940.
- Garrison, Karl C., The Psychology of Exceptional Children, New York, The Ronald Press, 1940.
- Gesell, Arnold, The Retarded Child, How to Help Him, Bloomington, Illinois, Public School Publishing Company, 1925.
- Hartwell, Samuel W., Fifty-Five Bad Boys, New York, A. A. Knoff, 1931.
- Heck, A. D., Education of Exceptional Children, New York, McGraw-Hill, 1940.
- Whipple, Helen D., <u>Making Citizens of the Mentally Limited</u>,
 Bloomington, Illinois, Public School Publishing
 Company, 1927.

Public Documents

- Federal Security Agency, Facts About Rheumatic Fever,
 Publication 297, Washington, Government Printing Office, 1946.
- Texas State Department of Education, <u>Teachers Guide for Special Education for Exceptional Children</u>, Austin, 1946.
- Texas State Department of Health, Handbook on Agencies and Organizations Concerned with Care, Training and Treatment of Handicapped Children, Bulletin CC-8657, Austin, 1945.

- Texas State Department of Health, <u>Vital Information Concerning the Crippled Children's Program</u>, Austin, 1946.
- Texas State Legislature, House of Representatives, R. B. Number 754, Austin, 1945.
- United States Department of Labor, Facts about Crippled Children, Publication 293, Washington, Government Printing Office, 1944.
- United States Department of Labor, <u>Crippled Children</u>, Reproduced with permission, by Children's Bureau, United States Department of Labor, from <u>Social Work Yearbook</u>, 1945.
- United States Office of Education, Opportunities for the Preparation of Teachers of Exceptional Children, Bulletin 1937, Number 17, Washington, Government Printing Office, 1937.
- United States Office of Education, Residential Schools for Handicapped Children, Bulletin 1939, Number 9, Washington, Government Frinting Office, 1939.
- United States Office of Education, Education in Training Schools for Delinquent Youth, Bulletin 1945, Number 5, Washington, Government Printing Office, 1945.

Articles

- Case, R. D., "Training the Handicapped," <u>School Executive</u>, LXIII (September, 1943), 31-36.
- Howeiler, George L., "Can Our Vocational Schools Help the Blind?", <u>Industrial Arts and Vocational Education</u>, XXXVI (July, 1945), 22-23.
- Ingram, Christine P., "Changing Concepts in Education for Children with Handicaps," Educational Administration and Supervision, XXX (October, 1944), 385-407.
- Jahr, Herman M., "Twilight Land Children, "Hygeia, XXIV (November, 1946), 813-19, 872-73.
- Jones, Anna May, "Education of Leisure Helps to Prevent Delinquency," The Clearing House, XVII (March, 1943), 407-10.

- Martens, Elise H., "State Legislation for Exceptional Children," School Life, XXVIII (November, 1945), 3-6.
- Martens, Elise H., "Study of a School for the Deaf," School Life, XXVIII (April, 1946), 21-23.
- Robinson, Helen M., and Ingram, Christine P., "Selected References from the Literature on Exceptional Children," <u>Elementary School Journal</u>, XLIII (May, 1943), 544-5.
- Wampler, W. Norman, "Experimental Program for Delinquent Boys in Los Angeles County," The Nation's Schools, XXXVI (July, 1945), 22-23.
- , "A New Day for the Mentally Deficient,"

 <u>National Parent Teacher</u>, LI (September, 1946), 19-21.
- (March, 1943), 22-23. The Nation's Schools, XXXI
- Parent Teacher, XXXVIII (May, 1941), 20-22.