AN EVALUATION OF THE EFFECT OF MOBILITY UPON

ACHIEVEMENT AND PROGRESS IN THE EAST VAN

ZANDT SCHOOL, FORT WORTH, TEXAS

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AN EVALUATION OF THE EFFECT OF MOBILITY UPON
ACHIEVEMENT AND PROGRESS IN THE EAST VAN
ZANDT SCHOOL, FORT WORTH, TEXAS

THESIS

Presented to the Graduate Council of the North
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MASTER OF ARTS

By

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CHAPTER I

INTRODUCTION

Statement of the Problem

The problem of this study is to determine the extent of the mobility of pupil population in the East Van Zandt School, Fort Worth, Texas, and the relationship of this mobility to pupil achievement and progress.

Delimitation of the Field of Investigation

Many factors affect the achievement and progress of pupils. The shifting population of the East Van Zandt School District due to the socio-economic conditions existing there is considered a major factor in the administration of the school. Other factors that may be made the topic of future investigation are the socio-economic background of the pupils, the biological and psychological makeup of the pupils, the curriculum, the faculty, and the philosophy of the school. This investigation is limited to the study of the mobility of pupil population in the East Van Zandt School and to its relationship to the achievement and progress of the sixth-grade classes.
Need and Timeliness of the Study

The East Van Zandt School District is in a low-rent area where much shifting of population occurs at rent-paying periods. It is a community of crowded apartment houses and of two- or three-family-unit houses. Furthermore, the present year has brought many war workers to Fort Worth who have been temporary residents of the district while they were finding more desirable living quarters. This shifting of population and the mobility of pupils is one of the major problems to be considered in the administration and in the evaluation of the school. It is believed that scientific data concerning mobility of pupils may be used advantageously in the administration of the school and in the evaluation of pupil achievement and progress in relation to other schools in the Fort Worth public school system.

A Survey of the East Van Zandt School, Fort Worth, Texas

The East Van Zandt School, Fort Worth, Texas, is an elementary school comprised of grades one to six. It is located in the southeast-central part of town not far from the business district in a community of crowded houses. There are no playground areas in the community, and there is little yard space. Juvenile delinquency is high in the district, although not as high as it was formerly, since
much has been done under the present school administration to improve this condition. The East Van Zandt School District is a community of working people, and the children have little home supervision. The socio-economic status of the people is low, and they are generally of the low-salary income group with few home advantages. The white families are being encroached upon by Negro families on three sides of the district. In the northern part is a settlement of Mexican people whose children attend the East Van Zandt School.

The school plant is in walking distance of all parts of the district. It is a large modernized two-storied brick building with basement. It consists of twenty-three classrooms, an office, a cafeteria, restrooms, store-rooms, and boiler-room. The school has no auditorium or playroom facilities. Each room in the building has modern bulletin boards, chart rails, blackboards, and movable furniture. The playground is small and the grounds are landscaped.

The faculty of the school is composed of the principal, eighteen teachers, a secretary, and a nurse. There are two men on the faculty, the principal and one of the teachers. All members of the faculty have had experience ranging from two to thirty years. The principal has been in charge of the school for a period of ten years, and five of the eighteen teachers have taught in the community for
a period of eight years or longer. All of the faculty hold degrees of Bachelor of Arts or Science, and the principal and two of the teachers hold Master of Arts degrees. The faculty is well informed concerning community problems and is in sympathy with the needs of the community in which they teach.

The Fort Worth school curriculum is adjustable and teachers are permitted to adapt the curriculum to the needs of the pupils in the East Van Zandt School. The curriculum of the Fort Worth public schools is a modified integrated program with units in the study of physical and social relationships. These core subjects deal with five major themes: Interdependence, Increasing Control over Nature, Adaptation, Population, and Democracy. Material for experiences in language arts, fine arts, and mathematics is derived from these unit subjects. It has been found that this curriculum must be adapted to the needs of the children at the East Van Zandt School because of their lack of experiential background, their relatively slow physical and mental development, and their age-grade status. It appears that the needs of the children can best be met by stressing an enriched program of language arts.

The philosophy of the Fort Worth public schools as

1"Curriculum Bulletin 105" (mimeographed), Fort Worth Public Schools, 1933, pp. 8-9.
developed in the elementary school faculty meetings states:

The child is the starting point in the development of a progressive educational philosophy. For him the important consideration is that his individuality be recognized; that the problems and experiences which he meets will contribute to the development of a wholesome personality and help him to do better the desirable things which he will do anyway.

Since thinking is the key to the solution of problems, we must be sure that the individual has the tools that will enable him to think his way through these problems, properly evaluate them, and make right decisions. The child will see the need for these tools and will acquire them and use them best in his reactions to meaningful situations. He should be provided with guidance which will insure, as far as is humanly possible, his growth in understanding of knowledge, in acquisition of adequate habits and skills, and in the formation of desirable emotional attitudes and appreciations. All of his experiences should help him to develop a philosophy of life based upon a proper recognition of his relationship with the Almighty and with his fellow man.

Social contacts should not only build a recognition of group needs, but also they should develop a full realization of the importance of individuality. Since education is living, the materials for it must come from all phases of living, both from the present and from the past. When taken from the past, they should be relevant to the present.

Teaching techniques should include activities, experimentations, and critical inquiries which test the ability of the child to live in a democratic society where he has the right to think, speak, and act happily and effectively.²

The philosophy of the East Van Zandt School holds that the schools are operated for the maximum good of the greatest number of pupils. The child and his needs are the first consideration of the principal and his faculty. They

²"Composite Statement of Your Philosophy of Education" (mimeographed), Fort Worth Public Schools.
believe that the operation of any phase of the school is justified only in that it contributes to the growth of the child. The physical, mental, moral, and spiritual growth of the individual child is the prime objective. The school and the school plant are at the service of the community at all times. The staff is willing to serve the community in any capacity in which it may be called upon to function.

Method of Procedure

The initial step in carrying out this study was to locate the pupils enrolled in the East Van Zandt School at the close of the first two weeks of school in September, 1942, and to consider them as permanent pupils. All other entries in the school during the 1942-1943 school year were considered as mobile pupils. The next step was to keep records by six-weeks periods showing the enrollment of permanent and of mobile pupils and recording the entire number of entries, re-entries, and losses of both types of pupils. Entries were classified according to the type of school from which they came. The records at the end of the school year showed the number of permanent pupils who remained in school and on the school roll at the close of school in June, 1943. The turnover in pupil population in the school was then estimated.

The age-grade status of the pupils in the sixth grade
was determined by observing the relationship of the chronological age of the pupil to his grade placement in school. This was taken from the school records in May, 1943.

The per cent of pupils in the sixth grade classes who had attended the East Van Zandt School during their entire school career was compared with the per cent of pupils who had attended two or more schools during their school life.

The permanent pupils and the pupils who were mobile and of comparable socio-economic status and of approximately the same intelligence levels were matched and comparisons were made of their achievement and progress in school.

The following tests were administered to the sixth grade classes: The Gray-Votaw General Achievement Test to determine the educational age and educational grade, The Otis Intelligence Test to measure the mental ages and the intelligence quotients, and the Sims Score Card for Socio-Economic Status to secure the level of socio-economic background of the pupils.
CHAPTER II

A BRIEF CONSIDERATION OF RELATED STUDIES

Mobility of pupils, that is, the moving of pupils from school to school during their school careers, has been a topic of investigation and research for a number of years. It is variously termed transiency or migration, and the pupils are called migrants, transients, or mobile pupils. The states of California, Florida, and Arizona have been vitally interested in these investigations and some of the graduate students at the University of Arizona have made studies of the extent of transiency and the effect of this factor on the educational achievement of school pupils.¹

A survey of educational literature reveals that during the past ten years there has been a growing interest on the part of educators concerning the mobility of pupils and its effect upon education. Bagley says:

On several occasions I have called attention to the effect upon American education of the very great mobility of the American population. Probably the most extended investigation of this problem was made

¹Emil L. Larson, "Migration and Its Effect upon the Schools," Elementary School Journal, XL (December, 1940), 283-297.
in connection with the California Curriculum Study in 1925. This investigation found that barely one-third of the children in the eighth grade of the California schools had attended school in the same community during the eight years of their elementary school life. It was also found that mobility was a significant factor in retardation.

In the same year (1925) I had a study made of mobility from a somewhat different point of view. It attempted to answer this question: Of the children enrolled in the schools of a small city in 1900, how many were living in that city and its immediate vicinity in 1925? The study found that three-fourths of the enrollment in the city for 1900 represented persons who were not living in the city or its immediate vicinity twenty-five years later. This community is in Montana.

It seems altogether likely that in both California and Montana the population is more mobile than in the country as a whole. That the problem may be serious even in a relatively stable community of the middle west is suggested by data recently sent to me by one of my former students, Superintendent Irving Munson, of Momence, Illinois. An examination of the enrollment figures indicates that, on the average and with very slight variations over a period of years, 51 percent of the children entering the first grade move away from the community within the following eight years. Momence has had during the period covered by the study practically a stationary population, and the pupils leaving the community each year are replaced by the same number who move in.2

Kirkendall3 reports a study made by Dawes in which he found retardation of pupils to be a very serious result of migration. Dawes' investigation showed that school achievement of migratory pupils was from one to two years behind that of the children of permanent residents. He made a

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2William C. Bagley, "The Mobility of the Population as a Factor in School Efficiency," Educational Administration and Supervision, XIX (September, 1933), 473.

3Lester A. Kirkendall, "Education and Recent Western Migration," Journal of Educational Sociology, XIV (April, 1941), 489-501.
survey of 1,406 school children of Kern County, California, of whom forty-eight per cent were classified as migratory. He found that permanent pupils ranked from 0.1 grade higher in grade placement in the second grade to 1.3 grades higher in the eighth grade on the basis of reading achievement. The average age of migratory pupils in each grade was higher, ranging from a difference of four months in the first grade to twenty-one months in the fifth grade.

Grant⁴ made a comparative study of the educational achievement of one hundred migratory children and one hundred native California children. She gives as the purpose of her investigation the determining of similarities and differences in the educational achievements of the two groups. She interprets the results in terms of the educational needs of the migratory children. She found that the native pupils were definitely superior to the migrant children. Their superiority was most marked in reading, literature, and language. In general knowledge, their superiority was definite but less marked. It was interesting to note that in the drill subjects of arithmetic and spelling the achievement of the migrant pupil was more nearly equal to that of the native pupils.

Larson\textsuperscript{5} states that data regarding the effect of migration on school achievement have been conflicting. He reports several studies in which this is the case. He cites that Crowell made a study of conditions in Florida and concluded that transiency was a major cause of school failures. On the other hand, Joy made a study of American schools in the Panama Canal Zone and found that transient children were superior in all subjects except arithmetic computation. Joy's findings were contradictory to those of Grant in the California study. It is likely that these findings were contradictory because of the fact that the background of the transient children in the Panama Canal Zone was superior to the background of the transient children in California.

Larson\textsuperscript{6} also reports the findings of a group of Master's theses of the University of Arizona in which the early evidence seems to indicate that transient children of superior intellectual and economic background do consequently superior school work, yet the age-grade status and age-grade progress indicate that the transient pupils are at a distinct disadvantage. Measurements of achievement indicate that permanent pupils do superior academic work especially in language skills. In some fields transients do equally as well, or even better than the permanent pupils. These

\textsuperscript{5}Larson, op. cit., p. 283. \hspace{1cm} \textsuperscript{6}Ibid.
studies of Arizona transients confirm the findings of Grant\(^7\) with the California transients.

The problem of transient children in Florida is somewhat different from that of other states in that their transient children come from entirely different environments. The Florida transients come from the homes of wealthy families who spend the winter in Florida and the children have an enriched experiential background while the transient children in other states usually come from the laboring class of people who are moving to seasonal work. Goulding\(^8\) made a study of the problem of transient pupils in the Florida schools. He gives as the consensus of opinion of Florida administrators that it is a definite disadvantage to both the pupils and the school when pupils enroll for a period of less than six or eight weeks but that those who stay for longer periods of time seem to adjust themselves more advantageously.

It has been suggested that the intellectual level of migratory children has often been given as the reason for their retardation.\(^9\) However, Beach and Beach made an investigation of retardation in the families of seasonal workers and say:

\(^7\)Grant, op. cit., p. 30.


\(^9\)Kirkendall, op. cit., p. 501.
The question of intelligence level enters one's mind in this connection. It is easy to assume that such children are members of mentally low-grade families and share this characteristic. Such a conclusion, however, is not warranted from the evidence in this research. Mental test data were gathered in the cases of 70 children of transient families; in each case the moving had been recent and there had been many moves -- not merely one or two. The average intelligence quotient of these children was 103.78, which would indicate that they were normal or slightly superior in intelligence. A second average was taken in the case of 15 children whose parents worked at seasonal labor. The mean I. Q. here was 92.2, showing this group to be below normal, but the cases were too few to serve as a basis for generalization.

Scholarship affords another estimate of the influence of mobility upon school children. In 149 cases a rough average of school reports (aided by teachers' estimates in some cases) indicated that the group was somewhat, though not greatly, below normal scholarship.10

The evidence so far is not sufficient to be decisive. The groups will probably vary with the different levels in which they are found.

Some attempts have been made recently to solve the problem of dealing with migratory children in the schools. Rea reports such an attempt in the Contra Costa County schools, Contra Costa County, California. She says:

The problem of determining the achievement of migratory children is one familiar to all teachers who have such children in their classes. Usually these children are in one school only a few days or weeks. Often the teacher has just learned the child's performance level when he moves to another school, where the process is repeated, thus resulting in loss of the child's time and duplication of the teacher's efforts.

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The County Superintendent's office here has devised an evaluation form which lists the results of the teacher's observations and findings in concise descriptive terms. The child and the teacher make out the form together. It is placed in a large envelope, which the child has made, together with samples of his work.  

The child takes this cumulative record with him as he moves from school to school. It is too early to evaluate the effectiveness of this device, but it has the possibility of more adequately meeting the needs of the migrant pupil.

Tetreau and Fuller\textsuperscript{12} report a more recent survey made in Arizona. This study was conducted by the Arizona Agricultural and Experiment Station and the Arizona State Department of Education. A statewide survey of the recent migrations to Arizona was begun in January, 1940, and continued through July, 1941. Data for the study were supplied from questionnaires sent out to the school children. Comparison of the data furnished by the older students indicates that the factors most closely associated with school achievement were the occupation of the head of the family and the location of their region of origin. Mobility and the time of arrival in Arizona were less closely associated with achievement but unmistakably had some effect. This study

\textsuperscript{11}Josephine Rea, "Migratory Children," \textit{Sierra Educational News}, XXXVII (December, 1941), 42.

\textsuperscript{12}E. D. Tetreau and Varden Fuller, "Some Factors Associated with the School Achievement of Children in Migrant Families," \textit{Elementary School Journal}, 41 (February, 1942), 423.
points out the responsibility of the school itself to adjust its requirements to the needs of the transient pupils.

Latta gives an interesting case study concerning one transient who possessed the ability to adapt himself to any learning situation and who had the desire to achieve to such an extent that he overcame the disadvantages of a transient pupil in school. He enrolled in Shafter High School, Kern County, California, in October, 1940. This is his record as Latta gives it:

During the severe winter of 1936-37 while his parents were awaiting word of a promised job in California, Ollie boarded with an aunt and for eight weeks attended the Washington School at Chicago Heights, Illinois. In all the rest of his elementary and high school experience Ollie has attended school every day, has never attended any school more than a week, and has never attended the same school twice.14

It seems that he was an excellent pupil capable of doing school work far beyond his years. He carried with him many reports from schools throughout California, including dozens of voluntary letters, confirming this. He is rated high in intelligence, social courtesies, achievement, and attitudes. He is a striking example of adaptation to a changing environment.

These studies of mobility of pupils indicate that there is a relationship between mobility of pupils and their achievement in school. The study of conditions in the Panama

Canal Zone, Latta's case study, and the study of Florida tourist transients offer the evidence that if other factors are very strong, mobility may have little effect. Yet the age-grade status of mobile pupils indicates that they are at a distinct disadvantage. Investigations have shown that mobility of pupils apparently is the result of various forces beyond the control of the school. Many schools at the present time are trying to solve the problem of helping the transient pupil to adjust himself to the new environments as he comes in contact with them.
CHAPTER III

THE MOBILITY OF PUPILS IN THE EAST VAN ZANDT SCHOOL,
FORT WORTH, TEXAS, FOR THE SCHOOL YEAR 1942-1943

The 1942-1943 school year at the East Van Zandt School opened September 9, 1942, with 515 pupils enrolling during the initial two weeks of school. In this study these pupils who enrolled during the first two weeks of school are termed permanent pupils and all other entries during the school year are termed temporary entries. This distinction is made for the purpose of determining the relative accomplishments of the original 515 pupils and of the temporary pupils. Table 1 shows the enrollment of the school by six-weeks periods according to this classification of pupils. An examination of this table reveals that by the end of the first six-weeks period eighteen of the original 515 pupils had withdrawn from school, and of this number three had later re-entered school. At the close of the second six-weeks period an additional twenty-two permanent pupils had dropped out of school and one had re-entered school. The close of the third six-weeks period, which was the end of


TABLE 1

THE RECORD OF ENROLLMENT BY SIX-WEEKS PERIODS IN THE EAST VAN ZANDT SCHOOL, FORT WORTH, TEXAS, FOR THE SCHOOL YEAR 1942-1943

<table>
<thead>
<tr>
<th>Six-weeks Periods</th>
<th>Permanent Pupils&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Permanent Pupils Who Transfer out of School</th>
<th>Entries in the School&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Entries Who Transfer out of School</th>
<th>Re-entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>First.</td>
<td>515</td>
<td>18</td>
<td>97</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Second.</td>
<td>500</td>
<td>22</td>
<td>42</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Third.</td>
<td>479</td>
<td>13</td>
<td>51</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Fourth.</td>
<td>469</td>
<td>49</td>
<td>21</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Fifth.</td>
<td>421</td>
<td>7</td>
<td>32</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Sixth.</td>
<td>417</td>
<td>9</td>
<td>9</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>409</td>
<td>118</td>
<td>252</td>
<td>102</td>
<td>12</td>
</tr>
</tbody>
</table>

<sup>a</sup>Permanent pupils: pupils entering school the first two weeks of school.

<sup>b</sup>Entries: pupils entering school after the initial two weeks of school.

The fall term of school, found an additional thirteen of the permanent pupils transferring away and three of them re-entering school. A total of fifty-three permanent pupils had withdrawn by the end of the fall term and seven of the fifty-three pupils transferring out had re-entered school sometime during the term. This left 469 permanent
pupils remaining out of the original 515 pupils who had enrolled in September, 1942. The fourth six-weeks period had forty-nine permanent pupils transferring out of school and one pupil re-entering, but of the forty-nine pupils who were transferring away, thirty-two were high-sixth grade pupils who were going to the junior high school. At the close of the fifth six-weeks period, only seven of the permanent pupils transferred out and three re-entered school, while at the close of the sixth six-weeks period nine permanent pupils had transferred away and one had re-entered school. During the entire school year there was a total of 118 permanent pupils transferring away from the school. Of these 118 pupils there were twelve who later re-entered school, leaving a total of 409 permanent pupils enrolled at the close of the school. Of this number, twelve had dropped out of school and later re-entered, leaving 397 of the original group of 515 who had completed a full year at the East Van Zandt School. This was seventy-nine per cent of the original number who had enrolled in the school in September who were still enrolled at the close of school, and seventy-five per cent of the original number who had remained in school for a complete school year.

A further study of Table 1 shows that a total of 252 pupils entered school after the initial two-weeks period. During the remainder of the first six-weeks period there
were ninety-seven entries in the school with fourteen of this number transferring away and one later re-entering school. This moving occurred during the last four weeks of the first six-weeks period. The second six-weeks period had forty-two entries and of this number fourteen transferred away with none of the dropped pupils re-entering school. The third six-weeks period shows fifty-one entries with seven transferring away and six re-entering school. This was the close of the fall term, and there had been 190 entries in the school since the initial two-weeks period of registration, with thirty-five of the entries transferring away and seven of the number later re-entering school. The fourth six-weeks period found twenty-one entries in the school with twenty-two pupils dropping out of school and one later re-entering. The sixth six-weeks period had only nine entries, but eighteen pupils transferred away and two later re-entered. The total number of entries in the school during the school year was 252 pupils, and of this number 102 pupils transferred away and thirteen later re-entered school.

The total number of permanent pupils who withdrew from school was greater than the total number of entries who withdrew, but the per cent of entries who left the school was greater than the per cent of permanent pupils who left the school. Approximately forty per cent of the
entries withdrew from school while approximately twenty-three per cent of the permanent pupils withdrew.

Various factors were listed as the cause of this mobility of pupils. Personal interviews and school records supplied the following reasons for late entry in the school: (1) moving within the city, (2) moving to the city to secure positions in the war industries, (3) moving to the city to secure work, (4) returning to the city from seasonal work in the Wisconsin sugar-beet fields and the Texas cotton fields, and (5) no apparent reason. Table 2 shows the distribution of 252 entries according to their reason given for moving about. The largest group was found to be the group moving within the city, while those moving to the city to secure employment in war work and other types of work were in the next groups. Children of families returning from seasonal work and those with no reason for late entry in school were the smaller groups.

The enrollment of the total school by six-weeks periods with the total transfers in and out of school is shown in Table 3. No distinction is made here between permanent pupils and entries in the school. An analysis of this table shows that during each six-weeks period there were children who were entering in a Texas school for the first time in the current school year. There were 581 original entries; that is, the first entry of any child in
TABLE 2

DISTRIBUTION OF 252 PUPILS IN THE EAST VAN ZANDT
SCHOOL, FORT WORTH, TEXAS, ACCORDING TO THE
REASON GIVEN FOR MOBILITY DURING THE
SCHOOL YEAR 1942-1943

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<thead>
<tr>
<th>Cause of Mobility</th>
<th>Number of Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving within the city</td>
<td>106</td>
</tr>
<tr>
<td>Moving to the city to enter war work</td>
<td>54</td>
</tr>
<tr>
<td>Moving to the city in search of work</td>
<td>40</td>
</tr>
<tr>
<td>Returning to the city from seasonal work</td>
<td>26</td>
</tr>
<tr>
<td>No reason given</td>
<td>26</td>
</tr>
</tbody>
</table>

a Texas school for the current school year, and there were
317 transfers from other schools in Texas. This made a to-
tal of 898 pupils enrolled in the school during the school
year. At the same time there were 370 transfers out of the
school and consequently the greatest number of pupils en-
rrolled at any one time was 594. The enrollment at the close
of the first six-weeks period was 559, and it increased to
a peak of 594 at the close of the third six-weeks period
of school. The enrollment then began to decline and by the
end of the school year only 528 pupils were enrolled in the
school. The peak months of enrollment were the months of
December, January, and February.

Table 4 shows the entries by terms instead of six-
weeks periods and indicates the source of the pupils enter-
ing school. There were 561 entries in the school of chil-
dren who were entering a Texas public school for the first
time during the current school year. This did not include
### TABLE 3

The enrollment in the East Van Zandt School, Fort Worth, Texas, by six-weeks periods, showing the total losses and gains for the school year 1942-1943

<table>
<thead>
<tr>
<th>Six-weeks Periods</th>
<th>Original Entries in the School</th>
<th>Transfers to the School from other Texas Schools</th>
<th>Transfers out of the School</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>First...</td>
<td>547</td>
<td>66</td>
<td>54</td>
<td>559</td>
</tr>
<tr>
<td>Second...</td>
<td>10</td>
<td>62</td>
<td>63</td>
<td>566</td>
</tr>
<tr>
<td>Third...</td>
<td>16</td>
<td>52</td>
<td>42</td>
<td>594</td>
</tr>
<tr>
<td>Fourth...</td>
<td>3</td>
<td>78</td>
<td>150</td>
<td>545</td>
</tr>
<tr>
<td>Fifth...</td>
<td>4</td>
<td>42</td>
<td>47</td>
<td>544</td>
</tr>
<tr>
<td>Sixth...</td>
<td>1</td>
<td>17</td>
<td>35</td>
<td>528</td>
</tr>
<tr>
<td>Total</td>
<td>581</td>
<td>317</td>
<td>370</td>
<td>528</td>
</tr>
</tbody>
</table>

### TABLE 4

The source of origin of 581 original entries in the East Van Zandt School, Fort Worth, Texas, during the school year 1942-1943

<table>
<thead>
<tr>
<th>Term of School</th>
<th>First Entry of Pupil in Any Public School in Texas During the Current Year, Except Out-of-state Pupils</th>
<th>Out of State Pupils Entering Texas Public Schools for the First Time in the Current Year</th>
<th>Total of the Original Entries in the School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall, 1942...</td>
<td>557</td>
<td>16</td>
<td>573</td>
</tr>
<tr>
<td>Spring, 1943.</td>
<td>4</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Total....</td>
<td>561</td>
<td>22</td>
<td>583</td>
</tr>
</tbody>
</table>
out-of-state pupils entering Texas schools for the first time. There were twenty-two of these out-of-state pupils who entered school during the year. They came from the states of Oklahoma, Arkansas, Arizona, California, Wisconsin, and Ohio. The greatest number of original entries entered school during the fall term, but only ten original entries enrolled during the spring term.

Table 5 gives the source of origin of 317 transfers from other schools in Texas. The largest number of transfers consisted of pupils who were received after withdrawal or discharge from the school, but this total is taken from the annual report of the school and includes children who were readmitted to school before being transferred to another school in the same district and does not show the total of pupils who entered school to remain in school for a period of time. This information is given in Table 1 and has been noted previously in this discussion. The largest number of transfers, therefore, was the 106 pupils coming from other schools in the same school district. Another large group of transfers came from schools not in the same county but in the state, there being sixty-four entries of this type. There were few transfers from schools in the same county.

Table 6 shows the losses in the school enrollment arranged according to the destination of the pupil. There
### TABLE 5

**SOURCE OF ORIGIN OF 317 TRANSFERS FROM OTHER TEXAS SCHOOLS TO THE EAST VAN ZANDT SCHOOL, FORT WORTH, TEXAS, FOR THE YEAR 1942-1943**

<table>
<thead>
<tr>
<th>Source of Transfers</th>
<th>Term of School</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall, 1942</td>
<td>Spring, 1943</td>
</tr>
<tr>
<td>From other schools in the same district</td>
<td>69</td>
<td>37</td>
</tr>
<tr>
<td>From a common school district in the same county</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>From an independent district in the same county</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>From in the state but not in the same county</td>
<td>41</td>
<td>23</td>
</tr>
<tr>
<td>Received after withdrawal or discharge</td>
<td>60</td>
<td>77</td>
</tr>
<tr>
<td>Total transfers in the school</td>
<td>179</td>
<td>138</td>
</tr>
</tbody>
</table>

### TABLE 6

**DESTINATION OF 370 WITHDRAWALS FROM THE EAST VAN ZANDT SCHOOL, FORT WORTH, TEXAS, DURING THE SCHOOL YEAR 1942-1943**

<table>
<thead>
<tr>
<th>Destination of Transfers</th>
<th>Term of School</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fall, 1942</td>
<td>Spring, 1943</td>
</tr>
<tr>
<td>Transfers to other schools in the same district</td>
<td>44</td>
<td>64</td>
</tr>
<tr>
<td>Losses due to moving away from the city, or other causes</td>
<td>113</td>
<td>149</td>
</tr>
<tr>
<td>Total losses in the school due to all causes</td>
<td>157</td>
<td>213</td>
</tr>
</tbody>
</table>
were 108 pupils sent to other schools in the same district, and this was approximately the same number as were received from these same schools. The remainder of the losses were children moving out of the city and out of the state.

An interesting study of enrollment is given in the case of a group of children who were divided into two groups during the fourth week of school in the fall term, 1942. They were divided on the basis of report-card grades and were termed 3-1 and 3-2. Room 3-1, which contained the upper half of the group, proved to be an exceptionally stable room in enrollment. There were thirty-three permanent pupils enrolled, and during the entire school year there were only five changes in the enrollment with three children transferring out and two children transferring in. At the close of the school year there were thirty of the original pupils remaining in the school. The other group, in comparison (see Table 7), proved to be very mobile. The enrollment in group 3-2 changed constantly. There were twenty-six entries in the room during the year, and thirty pupils transferred away. Fifteen of the original twenty-nine pupils were remaining at the close of school. It appears likely that there may have been some relationship between stability of the group and their achievement in school. The mobility of group 3-2 affected the stable portion of the group because as the personnel of the room
### TABLE 7

**Enrollment in Rooms 3-1 and 3-2 in the East Van Zandt School, Fort Worth, Texas, Showing the Comparative Mobility of Two Groups of Children Who Were Divided into a Superior Group and a Low Group on the Basis of Report-Card Grades**

<table>
<thead>
<tr>
<th>Groups of Children</th>
<th>Permanent Pupils</th>
<th>Temporary Entries</th>
<th>Permanent Pupils Remaining at the Close of School in June, 1943</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Entries</td>
<td>Losses</td>
<td>Entries</td>
</tr>
<tr>
<td>Group 3-1 (superior)</td>
<td>33</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Group 3-2 (low)</td>
<td>29</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>Total...</td>
<td>62</td>
<td>17</td>
<td>28</td>
</tr>
</tbody>
</table>

changed there were new social relationships to be established and new adjustments to be made. With each change in the mobile group the stable group was confronted with a new environment. Attitudes, standards, work habits, and appreciations had to be revised constantly and social relationships had to be re-established.

The pupil personnel of the East Van Zandt School has been shown to be very mobile. Even the permanent group of entries had a high per cent of its pupils moving in and
out of school. As has previously been pointed out, this changing population has a decided effect upon the stable portion of the group by making necessary the formation of new social relationships. The constantly moving population caused a new environment to be set up as the changes took place in the enrollment and new personalities entered the group. This created a need for a continuous adaptation on the part of the stable group of pupils that probably had an effect upon their progress in school that could not be measured.
CHAPTER IV

THE ACHIEVEMENT AND PROGRESS OF THE SIXTH GRADE PUPILS
IN THE EAST VAN ZANDT SCHOOL, FORT WORTH, TEXAS,
FOR THE SCHOOL YEAR 1942-1943

The Results of Tests

The testing program was begun in October, 1942, at the East Van Zandt School, Fort Worth, Texas. The high sixth grade pupils were selected as the testing group in view of the fact that they were completing their work at the East Van Zandt School. They were also the highest grade taught in the school. The Sims Score Card for Socio-Economic Status was administered to 106 pupils in the high fifth, the low sixth, and the high sixth grades to determine their level of socio-economic background. The high fifth grade was included in this testing group in view of the fact that these pupils would be the low sixth grade during the spring term of school and it was thought that this would give a more complete picture of the socio-economic background of the sixth grade. Of the 106 pupils taking the test, twelve were temporary entries and ninety-four were permanent pupils. The results of the test were not verified by the parents, but in every instance where two pupils from the same family
took the test the same score was achieved. This indicated that the information was probably reliable. The levels of socio-economic status as set up by the Sims Score Card consist of eleven levels ranging from indeterminately low to indeterminately high. Table 8 shows the distribution of permanent pupils and of temporary entries according to the suggested levels of socio-economic status as set up by the Sims Score Card. The mean score for both groups fell in the low socio-economic levels of the scale as did the average score for both the permanent pupils and the temporary entries. This is termed the medium low level of socio-economic background and is the seventh level from the top of the scale and the fifth level from the bottom of the scale. This rating indicates a limited experiential background for both the permanent pupils and the temporary entries. Information supplied in the findings of the score card shows that (1) there was a lack of magazines and books in a majority of the homes, (2) the parents of the children were low in educational training, as they had not attended high school or college, (3) the families enjoyed few social advantages such as clubs, concerts, or summer travel, (4) housing facilities were inadequate as were the study facilities for the children, (5) few of the families owned cars, and (6) the majority of the parents were in the laboring class of people and none of the parents was in the professional class. The level of socio-economic background
TABLE 8

THE DISTRIBUTION OF PERMANENT PUPILS AND OF TEMPORARY ENTRIES IN THE HIGH FIFTH, THE LOW SIXTH, AND THE HIGH SIXTH GRADES IN THE EAST VAN ZANDT SCHOOL, FORT WORTH, TEXAS, IN OCTOBER, 1942, ACCORDING TO THE LEVELS OF SOCIO-ECONOMIC BACKGROUND

<table>
<thead>
<tr>
<th>Levels of Socio-Economic Background</th>
<th>Number of Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Permanent Pupils</td>
</tr>
<tr>
<td>Indeterminately high...</td>
<td>0</td>
</tr>
<tr>
<td>Highest...</td>
<td>0</td>
</tr>
<tr>
<td>Very high...</td>
<td>0</td>
</tr>
<tr>
<td>High...</td>
<td>3</td>
</tr>
<tr>
<td>Medium high...</td>
<td>6</td>
</tr>
<tr>
<td>Medium...</td>
<td>18</td>
</tr>
<tr>
<td>Medium low...</td>
<td>26</td>
</tr>
<tr>
<td>Low...</td>
<td>15</td>
</tr>
<tr>
<td>Very low...</td>
<td>16</td>
</tr>
<tr>
<td>Lowest...</td>
<td>4</td>
</tr>
<tr>
<td>Indeterminately low...</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>93</strong></td>
</tr>
</tbody>
</table>

for both groups of pupils is approximately the same.

The **Otis Intelligence Test** for determining intelligence levels and mental ages was administered to fifty-three sixth grade pupils in January, 1943, and in May, 1943. The average intelligence quotient for both the permanent pupils and the temporary entries was 106. This indicates that both groups were in the average intelligence level. Sixty per cent of the temporary entries and sixty-four per cent of
the permanent pupils ranked above 100. The highest intelligence quotient for the temporary entries was 149, and the lowest was seventy-three; while the highest intelligence quotient for the permanent pupils was 161 and the lowest was seventy. Forty per cent of the temporary entries were below average in intelligence, and thirty-six per cent of the permanent pupils rated below average. The intelligence levels as well as the socio-economic levels for both groups of pupils were approximately the same.

The Gray-Votaw Achievement Test was administered in February, 1943, and again in May, 1943, to determine the educational achievement of the high sixth grades. It was given to sixty-nine sixth grade pupils and of this number fifty-nine were permanent pupils and ten were temporary entries. The test showed that the lowest educational grade of the temporary entries was the fourth year and the sixth month, while the mean educational grade for the group was the sixth grade and the first month, which was a retardation of eight months for the temporary entries. The lowest educational grade for the permanent pupils was the third grade and the fifth month, while the mean educational grade was the sixth grade and no month, which was a retardation of nine months, as compared to the retardation of eight months in the temporary entries group. The highest educational grade for the temporary entries was the twelfth grade and
the second month, and for the permanent pupils it was the ninth grade and no month. Table 9 shows the distribution of sixty-nine pupils according to the educational grade.

Table 9
THE DISTRIBUTION OF PERMANENT PUPILS AND OF TEMPORARY ENTRIES IN THE HIGH SIXTH GRADE IN THE EAST VAN ZANDT SCHOOL, FORT WORTH, TEXAS, IN JANUARY, 1943, AND IN MAY, 1943, ACCORDING TO THE EDUCATIONAL GRADE AS DETERMINED BY THE GRAY-VOTAW ACHIEVEMENT TEST

<table>
<thead>
<tr>
<th>Educational Grade by Years and Months</th>
<th>Number of Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Permanent Pupils</td>
</tr>
<tr>
<td>7-0 and above.......................</td>
<td>10</td>
</tr>
<tr>
<td>6-0 to 6-9.........................</td>
<td>20</td>
</tr>
<tr>
<td>5-0 to 5-9.........................</td>
<td>19</td>
</tr>
<tr>
<td>4-0 to 4-9.........................</td>
<td>8</td>
</tr>
<tr>
<td>3-0 to 3-9.........................</td>
<td>2</td>
</tr>
<tr>
<td>Total.........................</td>
<td>59</td>
</tr>
</tbody>
</table>

Approximately fifty per cent of the permanent pupils ranked in the sixth grade or higher, while approximately seventy per cent of the temporary entries ranked in the sixth grade or higher. Yet only seventeen per cent of the permanent pupils and four per cent of the temporary entries show no
retardation in school. The distribution of pupils again seems to indicate that the two groups of pupils are evenly matched. Here there seems to be a slight advantage in favor of the temporary entries in the matter of educational grade status. It must be remembered that it has been previously shown that the permanent pupils are a very mobile group and that because of this mobility certain social adjustments were constantly being made as permanent pupils and temporary entries dropped out and new entries took their places. New personalities entering the group changed the environment of the group. Without doubt this changing environment and the changing personnel of the group had its effect on the achievement of the group. The changing personnel included not only the pupils but the teachers likewise. During a period of six weeks in the fall term of school the pupils had three different teachers in their basic studies and a like change was made in the personnel of the art department. This changing probably hindered the normal progress of the group at that time.

Number of Schools Attended

Another factor that needs to be considered in the evaluation of the achievement of the pupils in the sixth grade at the East Van Zandt School is the number of different schools each pupil has attended in his school life and the number of years he has been in school. Table 10
shows the per cent of sixth grade pupils who have attended East Van Zandt School for their entire school life and the per cent of pupils who have attended other schools. Out of one group of twenty-eight sixth grade pupils, thirteen pupils had attended East Van Zandt School during their total school career, and fifteen had attended other schools. Out of a group of forty-one pupils there were nine pupils who had attended the East Van Zandt School during their entire school career, and thirty-two pupils who had attended other schools. In a group of twenty-four pupils there were five

TABLE 10

THE PER CENT OF PUPILS IN THE SIXTH GRADE AT THE EAST VAN ZANDT SCHOOL, FORT WORTH, TEXAS, WHO HAVE ATTENDED EAST VAN ZANDT SCHOOL FOR THEIR ENTIRE SCHOOL CAREER AND THE PER CENT OF PUPILS WHO HAVE ATTENDED OTHER SCHOOLS

<table>
<thead>
<tr>
<th>Grades in School</th>
<th>Six Years in the East Van Zandt School</th>
<th>Attended other Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per Cent</td>
</tr>
<tr>
<td>High sixth, fall.....</td>
<td>13</td>
<td>46</td>
</tr>
<tr>
<td>High sixth, spring.....</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Low sixth, spring.....</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Total.....</td>
<td>27</td>
<td>29</td>
</tr>
</tbody>
</table>
pupils who had attended East Van Zandt School for their total school career and nineteen who had attended other schools. This was a total of twenty-nine per cent of the sixth grade who had attended the East Van Zandt School for their entire school life.

Age-grade Status of Pupils

Table 11 shows the age-grade status of the pupils according to the number of years in school. This information was taken from the school records as recorded in May, 1943. According to these data, there were eight pupils who were under age for the sixth grade if we accept the age of twelve years as the normal age for sixth grade pupils. Upon this same basis of evaluation there were twenty-four normal-age pupils and forty-one over-age pupils in the sixth grade at this time. Of this group of over-age pupils there were

<table>
<thead>
<tr>
<th>Ages of Pupils</th>
<th>Number of Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 years</td>
<td>1</td>
</tr>
<tr>
<td>11 years</td>
<td>7</td>
</tr>
<tr>
<td>12 years</td>
<td>24</td>
</tr>
<tr>
<td>13 years</td>
<td>17</td>
</tr>
<tr>
<td>14 years</td>
<td>14</td>
</tr>
<tr>
<td>15 years</td>
<td>9</td>
</tr>
<tr>
<td>16 years</td>
<td>1</td>
</tr>
</tbody>
</table>
seventeen who were retarded one year in age-grade placement, fourteen who were retarded two years in age-grade placement, nine who were retarded three years in age-grade placement, and one who was retarded four years. Assuming that these pupils entered school at the age of six years, we see that the majority of the pupils in the sixth grade had repeated one or more grades in their school life. Whether or not this was due to their mobility or to other causes could not be established in the present study. It may have been that some of these retarded pupils did not enter school until later than their sixth year and consequently had not repeated a year in school. However, the age of the pupils must be considered as an influencing factor in an evaluation of their growth and progress in school.

Case Studies

Perhaps a better picture of the achievement and progress in the East Van Zandt School can be shown by a comparative study of the individual permanent pupils and of the temporary entries in the sixth grade. Table 12 shows the permanent pupils matched with the temporary entries according to their intelligence quotients and their socio-economic status, and it also shows their educational age, educational grade, chronological age, and mental age. Cases A, B, C, D, E, F, G, H, I, and J are temporary entries in the school and cases AA, BB, CC, DD, EE, FF, GG, HH, II, and JJ are permanent pupils in the school.
### Table 12

A Comparison of Ten Permanent Pupils in the Sixth Grade of the East Van Zandt School, Fort Worth, Texas, with Ten Temporary Entries in the Same School Matched According to Intelligence Quotients and Socio-Economic Status, Showing Their Relative Standing According to Chronological Age, Mental Age, Educational Age, Educational Grade, and the Number of Schools Attended

<table>
<thead>
<tr>
<th>Case No.</th>
<th>Type of Pupil</th>
<th>I.Q.</th>
<th>Socio-Economic Status</th>
<th>C.A.</th>
<th>M.A.</th>
<th>E.A.</th>
<th>E.G.</th>
<th>Number of Schools Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>A...</td>
<td>T</td>
<td>94</td>
<td>Med. low</td>
<td>10-11</td>
<td>10-2</td>
<td>10-0</td>
<td>4-6</td>
<td>2</td>
</tr>
<tr>
<td>AA...</td>
<td>P</td>
<td>99</td>
<td>Low</td>
<td>13-3</td>
<td>13-2</td>
<td>10-11</td>
<td>5-4</td>
<td>1</td>
</tr>
<tr>
<td>B...</td>
<td>T</td>
<td>75</td>
<td>Med. low</td>
<td>14-8</td>
<td>10-3</td>
<td>10-4</td>
<td>4-9</td>
<td>4</td>
</tr>
<tr>
<td>BB...</td>
<td>P</td>
<td>75</td>
<td>Low</td>
<td>14-7</td>
<td>10-10</td>
<td>11-8</td>
<td>6-0</td>
<td>3</td>
</tr>
<tr>
<td>C...</td>
<td>T</td>
<td>73</td>
<td>Very low</td>
<td>14-5</td>
<td>10-7</td>
<td>11-0</td>
<td>5-5</td>
<td>1</td>
</tr>
<tr>
<td>CC...</td>
<td>P</td>
<td>76</td>
<td>Very low</td>
<td>14-0</td>
<td>10-9</td>
<td>11-6</td>
<td>5-8</td>
<td>1</td>
</tr>
<tr>
<td>D...</td>
<td>T</td>
<td>106</td>
<td>Med. low</td>
<td>11-4</td>
<td>12-3</td>
<td>11-4</td>
<td>6-1</td>
<td>5</td>
</tr>
<tr>
<td>DD...</td>
<td>P</td>
<td>109</td>
<td>Med. low</td>
<td>12-3</td>
<td>13-3</td>
<td>11-11</td>
<td>6-1</td>
<td>1</td>
</tr>
<tr>
<td>E...</td>
<td>T</td>
<td>94</td>
<td>Low</td>
<td>12-5</td>
<td>11-7</td>
<td>11-10</td>
<td>6-1</td>
<td>2</td>
</tr>
<tr>
<td>EE...</td>
<td>P</td>
<td>106</td>
<td>Low</td>
<td>12-1</td>
<td>12-9</td>
<td>12-1</td>
<td>6-3</td>
<td>1</td>
</tr>
<tr>
<td>F...</td>
<td>T</td>
<td>106</td>
<td>Med. high</td>
<td>11-6</td>
<td>13-1</td>
<td>12-0</td>
<td>6-1</td>
<td>3</td>
</tr>
<tr>
<td>FF...</td>
<td>P</td>
<td>105</td>
<td>Med. high</td>
<td>11-1</td>
<td>11-7</td>
<td>10-11</td>
<td>5-5</td>
<td>4</td>
</tr>
<tr>
<td>G...</td>
<td>T</td>
<td>132</td>
<td>Med. low</td>
<td>11-11</td>
<td>15-7</td>
<td>13-4</td>
<td>7-0</td>
<td>4</td>
</tr>
<tr>
<td>GG...</td>
<td>P</td>
<td>154</td>
<td>Very low</td>
<td>14-1</td>
<td>19-0</td>
<td>13-6</td>
<td>7-1</td>
<td>4</td>
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<tr>
<td>H...</td>
<td>T</td>
<td>101</td>
<td>Low</td>
<td>13-1</td>
<td>13-4</td>
<td>13-8</td>
<td>7-3</td>
<td>3</td>
</tr>
<tr>
<td>HH...</td>
<td>P</td>
<td>102</td>
<td>Low</td>
<td>13-7</td>
<td>13-1</td>
<td>13-4</td>
<td>7-0</td>
<td>5</td>
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<tr>
<td>I...</td>
<td>T</td>
<td>139</td>
<td>Med. low</td>
<td>12-0</td>
<td>15-3</td>
<td>14-8</td>
<td>8-2</td>
<td>3</td>
</tr>
<tr>
<td>II...</td>
<td>P</td>
<td>135</td>
<td>Med. low</td>
<td>11-1</td>
<td>15-1</td>
<td>14-8</td>
<td>8-2</td>
<td>2</td>
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</table>
TABLE 12 -- Continued

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<th>Case No.</th>
<th>Type of Pupil</th>
<th>I.Q.</th>
<th>Socio-Economic Status</th>
<th>C.A.</th>
<th>M.A.</th>
<th>E.A.</th>
<th>E.G.</th>
<th>Number of Schools Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>J....</td>
<td>T</td>
<td>149</td>
<td>Med. high</td>
<td>12-2</td>
<td>21-0</td>
<td>21-0</td>
<td>12-0</td>
<td>3</td>
</tr>
<tr>
<td>JJ....</td>
<td>P</td>
<td>149</td>
<td>Med. high</td>
<td>11-3</td>
<td>21-0</td>
<td>15-4</td>
<td>8-6</td>
<td>2</td>
</tr>
</tbody>
</table>

*a* indicates temporary entries; *P*, permanent pupils.
*b* Chronological age expressed in years and months.
*c* Mental age expressed in years and months.
*d* Educational age expressed in years and months.
*e* Educational grade expressed in years and months.

Case A is a girl whose chronological age in May, 1943, was ten years and eleven months. She is ten years and two months old mentally and is slightly below the normal in intelligence. She entered the East Van Zandt School on October 10, 1942, for the first time. It was the second school she had attended during her school life, having attended a small rural school for five years before coming to East Van Zandt School. She was very quiet in the room and seldom made any contribution to the group activities. She was rated an average pupil according to the report-card grades. The first term she failed in spelling, but was able to overcome this deficiency the second term and did not fail in any subject. She attended school for a total of 160 days. On the Gray-Votaw Achievement Test she ranked in the fourth
grade and the sixth month of school. She rated best in science and poorest in literature and reading comprehension. She showed a retardation of two years and three months in school.

Case AA is a permanent pupil who has attended East Van Zandt School all of her school life. Her chronological age in May, 1943, was thirteen years and three months. She is mentally thirteen years and two months old and is rated slightly below normal in intelligence. Her socio-economic level is very low. Case AA is talkative and interested in group activities. She is rated an average pupil according to report-card grades. On the Gray-Votaw General Achievement Test she ranked in the fifth grade and the fourth month. She rated highest in arithmetic reasoning and computation and lowest in science. She showed a retardation of one year and five months in school.

Case B is a girl who is fourteen years and eight months old chronologically and ten years and three months old mentally. She rates low in intelligence. Her socio-economic level is low. She entered the East Van Zandt School January 30, 1943, and attended school for sixty-five days. She had attended four different schools in her six years of school life. When she first came to the East Van Zandt School she held herself apart from group activities and made no effort to join in the activities of the school. Her music teacher reported that at first she seemed
to consider the activities of the music class as silly and would not take part in the class work. One day she brought her guitar to school and was allowed to play for the group. Her teacher made a point of finding something commendable to tell her about her playing, although it was very poor. Some of the children in the class told her she needed to work on tone quality if she wanted to sing well. She took this criticism well and began to participate in the activities of the music class. She lost her bored air and made an effort to become a member of the group. On the Gray-Votaw Achievement Test she ranked in the fourth grade and the ninth month. This was a retardation of two years. She rated highest in science and lowest in reading vocabulary. She was rated a poor pupil according to report-card grades.

Case BB is a girl who was fourteen years and seven months old chronologically and ten years and ten months old mentally. Like case B she rates low in intelligence and her level of socio-economic background is low. She is a permanent pupil in the school, but she has attended three different schools in her school life. She is quiet and efficient and very good in situations where she must use her hands. On the Gray-Votaw Achievement Test she ranks in the sixth grade and no month, which was a retardation of only nine months. She ranked highest in dictation and lowest in physical education. She was rated a good pupil according to report-card grades.
Case C is a boy who is chronologically fourteen years and five months old. He rates low in intelligence and is mentally ten years and seven months old. His level of socio-economic background is very low. He was counted a temporary entry because of his late entry in school in the fall. He has never attended any other school except the East Van Zandt School, but his attendance is irregular. He is interested in music and played horn in the school orchestra. He was inclined to brag and to display his authority as a patrol boy. On the Gray-Votaw Achievement Test he ranked in the fifth grade and the fifth month, which was a retardation of one year and four months. He rated lowest in choice of words and highest in science. He was rated an average pupil according to report-card grades.

Case CC is a boy who is fourteen years old chronologically and is mentally ten years and nine months old. He rates low in intelligence and his level of socio-economic background is very low. He had attended the East Van Zandt School during all of his school life, but during the last year of school his interest in school lagged and his attendance became irregular. He rated in the fifth grade and the ninth month of school according to the Gray-Votaw Achievement Test, which was a retardation of one year. He was rated an average pupil according to report-card grades.

Case D is a boy who is eleven years and five months
old chronologically. He is average in intelligence and is mentally twelve years and three months old. His level of socio-economic background is medium low. He entered the East Van Zandt School January 30, 1943, and was in school for eighty-seven days. He had attended four different schools in his school career. On the Gray-Votaw Achievement Test he ranked in the sixth grade and the first month, which was a retardation of eight months in school. He rated highest in choice of words and lowest in reading vocabulary. According to report-card grades he rated below average. He was ambitious and seemed at a loss because of his low report-card grades. He worked in spurts and did not seem capable of sustained effort. He fitted into the group socially, but did not actively participate in group activities.

Case DD is a boy who is chronologically twelve years and three months old. He is average in intelligence and has a mental age of thirteen years and three months. He has attended the East Van Zandt School during all of his school life. On the Gray-Votaw Achievement Test he rated in the sixth grade and the first month. He was best in arithmetic computation and poorest in literature; he was rated an average pupil according to report-card grades.

Case E is a girl who is chronologically twelve years and five months old. She is slightly below average in intelligence and is mentally eleven years and seven months
old. She had attended two schools during her school life, and she entered the East Van Zandt School February 15, 1943. She attended school for fifty-eight days. On the Gray-Votaw Achievement Test she rated in the sixth grade and the first month, which was a retardation of eight months. She rated highest in choice of words and lowest in arithmetic computation. She was rated poor according to report-card grades. Her level of socio-economic background was low. She liked to talk and attract attention to herself. She took part in the group activities but was not very well liked by other members of the group.

Case EE is a permanent pupil whose chronological age is twelve years and one month. She is average in intelligence and is mentally twelve years and nine months old. Her level of socio-economic background is low. She has attended the East Van Zandt School all of her school life. On the Gray-Votaw Achievement Test she rated in the sixth grade and the third month of school. This showed a retardation of six months. She ranked highest in science and lowest in literature. She was rated an average pupil according to report-card grades.

Case F is a girl who is eleven years and six months old chronologically. She rates average in intelligence and is mentally thirteen years and one month old. She rates in the medium high level of socio-economic background. She
entered the East Van Zandt School April 30, 1943, and attended school for twenty-two days. On the Gray-Votaw Achievement Test she ranked in the sixth grade and the first month of school. This showed a retardation of eight months. She rated best in science and poorest in reading comprehension. She was rated a poor pupil according to report-card grades. She was socially ill at ease with the group, and her timidity kept her from entering into group activities.

Case FF is a girl who is eleven years and one month old chronologically. She is of average intelligence and has a mental age of eleven years and seven months. Her socio-economic level was in the medium high group. She had attended four schools in her school life and she attended East Van Zandt School during her sixth year of school. On the Gray-Votaw Achievement Test she ranked in the fifth grade and the fifth month, which showed a retardation of one year and four months. She rated best in choice of words and lowest in literature. She was rated average according to the report-card grades. She was well adjusted socially to her group.

Case G is a girl who is eleven years and eleven months old chronologically. She is a little above average in intelligence and is mentally fifteen years and seven months old. Her level of socio-economic background is medium low. She had attended four schools during her school life, coming
to the East Van Zandt School October 4, 1942, and attending school for 144 days. On the Gray-Votaw Achievement Test she rated in the seventh grade, an advancement of one month. She was well adjusted to the group but was quiet and did not offer suggestions or give contributions to group discussions. She was rated excellent on report-card grades.

Case GG is a girl who is fourteen years and one month old chronologically. She is above average in intelligence and has a mental age of nineteen years. Her level of socio-economic background is very low. She has attended four schools in her school life and the last two years she attended the East Van Zandt School. She ranked in the seventh grade and the first month of school, which was an advancement of two months. She rated highest in physical education and lowest in choice of words. She was rated an excellent pupil according to report-card grades. She participated actively in class activities and was well liked by her group.

Case H is a boy who is thirteen years and one month old chronologically. He is average in intelligence and is mentally thirteen years and four months old. His level of socio-economic background is low. He has attended three different schools before entering the East Van Zandt School on October 6, 1942. He was well adjusted socially and took his place in the group activities. He rated in the seventh
grade and the third month on the Gray-Votaw Achievement Test, which was an advancement of four months in school. He ranked highest in reading comprehension and lowest in choice of words. He was rated average according to report-card grades.

Case HH is a boy who is thirteen years and seven months old chronologically. He is average in intelligence and is mentally fourteen years and one month old. His level of socio-economic background is low. He has attended five different schools in his school life and the last two years he has attended the East Van Zandt School. He rated in the seventh grade on the Gray-Votaw Achievement Test, which was an advancement of one month in school. He ranked best in reading comprehension and poorest in arithmetic computation. He was rated good according to report-card grades. He was selected as one of the leaders of the boy patrol in the school and was very dependable. He handled problems that arose on the playground and proved himself capable of making just decisions.

Case I is a boy who is chronologically twelve years old and mentally is fifteen years and three months old. He is above the average in intelligence. His socio-economic status is medium low. He has attended three schools during his school life, entering the East Van Zandt School on October 2, 1942. On the Gray-Votaw Achievement Test he rated in the eighth grade and the second month of school, which
was an advancement of one year and three months. He rated highest in reading vocabulary and lowest in choice of words. He was rated superior according to report-card grades. He was anxious to participate in group activities although, because of his attitude of wanting to show off, he was not readily accepted by the group.

Case II is a boy eleven years and one month old chronologically and fifteen years and one month old mentally. He is above average in intelligence and his socio-economic level is medium low. He rated in the eighth grade and the second month of school on the Gray-Votaw Achievement Test, which was an advancement of one year and three months. He ranked best in science and lowest in choice of words. He was rated a good pupil according to report-card grades. He was a leader in the school and dominated the thinking of the group. The children followed his leadership on the playground and in the classroom. He had been specially promoted in the third grade and again in the sixth grade. He was small for his age, but was nevertheless a leader among the older boys.

Case J is a boy who is twelve years and two months old chronologically and is over twenty years old mentally. He is superior in intelligence and is in the medium high level of socio-economic background. On the Gray-Votaw Achievement Test he rated in the twelfth grade. He rated
best in literature and poorest in choice of words. He had attended three schools in his life and he entered the East Van Zandt School on February 27, 1943. He was rated superior according to report-card grades. He had an active interest in all school activities and was readily accepted as a member of the group.

Case JJ is a boy who is eleven years and three months old chronologically and is mentally over twenty-one years of age. He is superior in intelligence and is in the medium high level of socio-economic background. He has attended two schools during his school life, but the greater part of his school life has been spent at the East Van Zandt School. On the Gray-Votaw Achievement Test he ranked in the eighth grade and the eighth month of school. He was best in reading vocabulary and poorest in literature. He was quiet and he read extensively, and was always too busy reading to participate in the group activities. He did not always get along well with the other children. He was chosen to be one of the boy patrol leaders in the school.

The cases in this study were matched according to intelligence levels and socio-economic backgrounds. This was assumed to be a fair basis for determining their equality of opportunities. In five of the comparisons the permanent pupils ranked higher in achievement than did the temporary entries. In two of the comparisons the permanent pupils and
the temporary entries ranked in the same level of achievement, and in three of the comparisons the permanent pupils ranked below the temporary entries in achievement. The pupils used in the comparisons ranged from very low intelligence levels to superior levels, and all socio-economic levels represented in the group were included. There was no consistency in the subject matter in which either the permanent pupils or the temporary entries ranked highest or lowest. The matter of social adjustment again appears to be an important element in any evaluation of the school. The mobility of pupils appears to have some effect upon achievement and progress in the school.
CHAPTER V

SUMMARY AND CONCLUSIONS

The mobility of pupil population has been the subject of extensive study and research in many of the western states, but as yet little has been done concerning the problem of mobility in Texas public schools. The states of California and Arizona have led in the study of the effects of the mobility of pupils upon their achievement and progress in school. Their findings have indicated that there is a relationship between mobility of pupil population and the achievement and progress in school. They have found that permanent pupils do definitely superior work, especially in language skills; yet mobile pupils of superior intellectual levels do consequently superior work in general. The findings of this study support these conclusions to some extent.

It has been shown in this study that the school population of the East Van Zandt School, Fort Worth, Texas, is very mobile due to the character of the neighborhood and to the socio-economic status of the people living there. The mobility of the group of original entries in the school (the
permanent pupils) is as extensive for their entire elementary school experience as the mobility of the group of temporary entries in the school. The difference in the two groups is in the mobility for the school year of 1942-1943. There is a constant moving in and out of the school of both the permanent pupils and the temporary entries. The percent of mobility among the permanent pupils is as great for their entire elementary school experience as the percent of mobility among the temporary entries. The percent of pupils who attend the East Van Zandt School from the first grade through the sixth grade is very low. Only twenty-nine percent of the pupils finishing the sixth grade in 1943 had attended the East Van Zandt School for their entire school life.

The socio-economic status of both types of pupils in the school has been shown to be in the same level of experiential background. The socio-economic status of both the permanent and the temporary group of pupils is in the medium low level of the scale as set up in the Sims Score Card for Socio-Economic Status. This indicates a very limited experiential background for the total school population.

According to the results of the Otis Intelligence Test, both groups of pupils, permanent and temporary, are of average intelligence levels. Sixty percent of the temporary
entries and sixty-four per cent of the permanent pupils ranked above 100 in their intelligence quotients. The highest intelligence quotient for the permanent group was 161 and the lowest was seventy, while the highest intelligence quotient for the temporary entries was 149 and the lowest was seventy-three. Forty per cent of the temporary entries were below average in intelligence and thirty-six per cent of the permanent pupils rated below average. Both groups of pupils have been shown to have a distribution of intelligence scores ranging from very low to superior. There was no marked difference in the levels of intelligence found in the permanent group of pupils and in the group of temporary entries.

Likewise the achievement and progress in school of the permanent pupils and of the temporary entries show the same level of achievement. The distribution of educational grades in the permanent group ranges from the third grade level to the twelfth grade level in school, while in the temporary group they range from the fourth grade level to the twelfth grade level. Approximately fifty per cent of the permanent pupils ranked in the sixth grade or higher, while approximately seventy per cent of the temporary entries ranked in the sixth grade or higher. Only seventeen per cent of the permanent pupils and four per cent of the temporary entries show no retardation in school. Comparisons
of individual cases in which permanent pupils were equally matched with the temporary entries in the matter of intelligence levels and of socio-economic status show that in fifty per cent of the cases the permanent pupils were superior to the temporary entries. This included pupils whose intelligence quotients were very low, average, and superior. In twenty per cent of the cases the permanent pupils and the temporary entries were evenly matched. This included pupils whose intelligence quotients were average and above average. In thirty per cent of the cases the permanent pupils were below the temporary entries in achievement and this included pupils of average and of superior intelligence. It is probably significant that in the low intelligence levels none of the temporary entries were superior to the permanent pupils in achievement.

It appears that (1) the mobility of pupil population in the East Van Zandt School, Fort Worth, Texas, is extensive and that this mobility covers the total elementary school experiences of the pupils in the school; (2) this mobility does affect achievement and progress in the school, but mobile pupils of superior intellectual levels will probably do consequently superior work; (3) mobility is an important factor to be considered in any evaluation of the school; and (4) since mobility is a factor beyond the control of the school, it will be the problem
of the school to help the mobile pupil to adjust himself socially to his new environment in the most effective way possible.
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