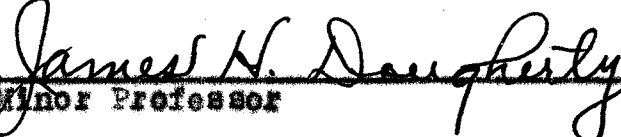


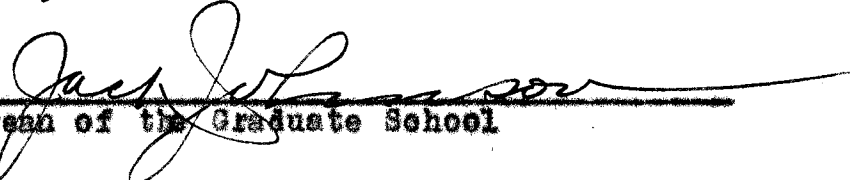
THE INFLUENCE OF ECONOMIC, SOCIAL, AND PHYSICAL FACTORS
UPON NORMAL DEVELOPMENT OF PUPILS IN TWO
WICHITA FALLS ELEMENTARY SCHOOLS

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THESIS

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By

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CHAPTER I

INTRODUCTION

The Statement of the Problem

The problem in this study is to present as true a picture as possible of (1) the social and economic conditions surrounding the children in two Wichita Falls elementary schools, the San Jacinto and the Benjamin Franklin schools, (2) the health status, diet, sleep, outdoor exercise and dental care of these children, and (3) the influences of these factors upon the physical development of the pupils in the two schools.

The Purpose of the Study

Educators agree that learning depends to a large degree upon physical well-being, wholesome environment, and happy adjustment to life situations. Children who learn best are physically, mentally and emotionally adequate.¹ In conjunction with this fact, this study attempts to show

¹Lillian M. Gilbreath, Living with Our Children, p. 9.

the relation that exists between the children from uncomfortable, unsatisfactory environments and those with comfortable, satisfactory environments. Another purpose is to show that it is with the group on the lower level that the greatest degree of work needs to be done.

The Scene of the Study

The scene of the study was Wichita Falls, Texas, which, according to the Texas Almanac, 1945, had a population of 53,000. There is considerable manufacturing in this city, the principle products being window glass, fruit jars, auto trucks, flour, brooms, and oil-well machinery. Wichita Falls is also a supply center for the near-by oil fields. These several fields of work have attracted many day laborers of the illiterate, irresponsible type. On the other hand these same industries have attracted a substantial middle class group.

Location and Physical Properties of the Two Schools

The two elementary schools of Wichita Falls, on which the study is based, are located at two extremes representing two distinct and different standards of living conditions, the upper and the lower.

The San Jacinto Elementary School is located about one-half mile northwest of Wichita Falls proper and two city blocks north of the city auditorium. This school has an undesirable location since it is too near the business center. The building proper is unattractive and too small to take care of the enrollment properly. There is not a sufficient number of washrooms, drinking fountains, teaching aids and other conveniences in the building. Teaching in this building must be done with the very minimum of equipment.

The playground surrounding this building is entirely too small for the enrollment, hence, the children play in the streets. There is a baseball diamond in the community, but no playground equipment; therefore the children are left to their own devices for amusement. The playground is as unattractive as the building. Since there is no grass, the ground is quite dusty. The streets around the school are not paved, but graveled. This, of course, adds more dust and certainly does not enhance the beauty of the place.

The teachers assigned to this building are among the best in the city, and they do not resent the assignment. As a general rule this is true because the school is near the hotels where the majority of the teachers live.

In contrast to the location of the San Jacinto School is that of the Benjamin Franklin School which is located on the northern edge of the Country Club Estates. This location is most desirable from the standpoint of environment and beauty.

The plant itself is a lovely building and is fully large enough for the pupils enrolled without any semblance of crowded conditions. There are plenty of washrooms, drinking fountains, teaching aids, playground equipment and other conveniences. Teachers in this school are provided with the maximum equipment with which to teach.

The building is surrounded by a playground approximately three times the size of that of the San Jacinto School. The ground is covered with beautifully kept green grass, and trees and shrubs planted at advantageous spots, blend themselves into the beauty of the whole. The playground is well-equipped with play apparatus such as swings, see-saws, and slides.

The teachers in this building for the most part, take a singular pride in their assignments, and generally speaking have an opportunity to do a superior type of teaching.²

²Principal's Report, 1941.

Classes of People in the Study

The people who formed the basis of this study represent two distinct social strata. The families of the children enrolled in the San Jacinto School represent the lower level, economically, socially, and physically. This group is made up for the most part of day laborers and semi-skilled workmen. Table 1 reveals that approximately fifty per cent of the children come from broken homes. In about forty per cent of the cases where husband and wife live together, both work outside the home.

The living conditions of most of the families are substandard. Parents accept little responsibility for getting the children to school; consequently, attendance is irregular and difficult to handle. As revealed in Table 1 many boys and girls in the San Jacinto community work after school, on week-ends, and even during the week to help support their families.

In sharp contrast to the conditions in the San Jacinto community is that of the Benjamin Franklin community. Here, in the Country Club Estates, almost all of the people there own their own homes and receive remuneration for work within almost equal salary brackets. The homes are attractive,

TABLE I

LIVING CONDITIONS OF SAN JACINTO
AND BENJAMIN FRANKLIN FAMILIES

Type of Condition	Number Meeting the Situation	
	San Jacinto	Benjamin Franklin
Children not living with real parents	23	0
Parent deceased or divorced	37	2
Mother employed	83	13
Child works after school	35	5
Home owners	38	115

well-kept, and for the most part comfortable. The grounds are beautifully landscaped.. Flowers bloom in a profusion of colors, indicating that the inhabitants have an appreciation of beauty and nature. Except in a few instances where adequate supervision is provided the mothers care for their own children. Furthermore, the parents in this district are actively interested in the community, in the school, and in the training both will provide for their children.

The majority of the parents are educated men and women, and are able to cooperate intelligently with the school in stimulating and guiding their children in setting up worth-while goals for living and in accomplishing these goals in school and in post school days. The children enrolled in school from these homes are happy boys and girls and the cases of mal-adjustment are few. Thus it may be seen that here the social and economic surroundings of the children, as a whole, give them advantages which aid the educative process.

Sources of Data

Material for this study was obtained from questionnaires sent to the homes where they were filled out by the parents and returned to the school. One of these questionnaires related to home conditions and the child's background. Others dealt with diet, sleep, and outdoor exercise.

Two dentists went to the schools and examined the childrens' teeth and recommended corrective treatment. Their findings were recorded on the regular dental inspection chart printed by the State Department of Health and were used in preparing this study.

In this study facts have also been obtained from books and state statutes relating to education in Texas. The material was supplemented by personal interviews with the principals and with several teachers of the respective schools studied.

The schools cannot take all the praise for the normally adjusted children nor can they accept all the blame for the delinquent and the retarded. Two goals of every human being are security and happiness. On the positive side these goals embody achievement of comfort. On the negative side these goals have no dealings with discomfort, with pain, with worry and anxiety, with misfortune and regret. Every child comes to school so conditioned that some needs are already vital. Biological heredity, home, community, environment and associates are largely responsible for the good or bad characteristics which the child brings to school. No matter how efficient a school is, it cannot compensate for an undesirable home in a questionable neighborhood, but to some extent it can help the child who has developed feelings of shame and inferiority because of such conditions.

Home conditions such as these too often result in failures in school or result in the pupils leaving school

entirely, for the child with mental conflicts, or responsibilities far beyond his years rarely ever does well in school.

Without assistance, therefore, the school must in all cases do its utmost to correct and prevent mal-adjustments or fail in its civic and professional responsibility.

During ten and one-half years of tenure in different public schools in the state of Texas, there was ample opportunity to observe the progress made by boys and girls from unwholesome environments and that of children from happier environments. After observing the two situations a comparative study of the two seemed important. The two Wichita Falls schools are quite likely typical of those over the state; therefore attention and help of those interested in education must be given to those children enrolled from the less secure living level.

Delimitations

This study was limited to the children of the fourth, fifth, and sixth grades whose ages ranged from eight through fourteen years. Two hundred forty-nine were included in the comparison for the economic and social study. Three hundred eighty-three were included in the physical study.

Significance of the Study

Every child has a right to expect the school to help him to make the proper adjustments to life situations, and to assist him to emerge from the formal process of education into the world of work as a wholesome, well-adjusted person, able to live with himself and others.

Perhaps some explanation should be made of what an ideal adjustment should be. One explanation has been stated by Jessie Taft this way:

The organism is able to so coordinate its own cravings that they can be expressed satisfactorily and objectively in socially approved ways. This implies that organisms use their intellects or intelligence in meeting the facts of every situation squarely, and work out their satisfactions in terms of those facts. They use no indirect, evasive, or subjective means to escape the problems of wrestling biological success from the world of men and things as they actually are. In other words the healthy adjustment is the scientific adjustment, which controls the situations by mastering the facts in the case and manipulating them with intelligence and skill to carry out the ends of the individual.³

³Jessie Taft, "Mental Hygiene Problems of Normal Adolescence", Mental Hygiene, V (October, 1921), 741-751.

CHAPTER II

① INFLUENCES OF HOME CONDITIONS AND ECONOMIC STATUS

The home and environment play a very important role in the development, achievement, freedom, and happiness of every child. The child wants his home and his parents to be like those of his group. It is the home that must give him his feeling of security, of being wanted, and of occupying an important place in the family group. Deny him this and very likely frustration and mal-adjustment will result.¹

The adolescent period has come to be recognized as a distinct period of bewilderment. Children of this age need to feel loved, wanted, understood, and secure. Children want to belong. They seek and need the approval of the groups of which they form a part. They do not want to be different. On the contrary they want to be like the others, and they are happy only when they are.

A child may not be interested in things as such, but if his friends have radios and pianos, he wants them too.

Ernest R. Groves, The Drifting Home, p. 81.

If his friends or associates have clean, attractive, comfortable homes, he wants one too in order to be like them and to belong. He wants to be able to ask his classmates to his home to play. These problems must be handled intelligently and skillfully otherwise a well-rounded, wholesome individual, making the most of his educational opportunities, will not result.

Environment and Conveniences

The purpose of Table 2 is to show the living conditions of the families in the San Jacinto and Benjamin Franklin school district.

After an examination of Table 2, a sharp contrast is observed between the environment from which the pupils of the two schools come. Table 2 shows, also, that there is a pathetic difference between the conveniences owned by the two groups of families.

The evidence indicates that in most cases the homes of the San Jacinto families are not well located and that there is a definite lack of modern conveniences in the homes. Cars, trucks, and people going to and from the factories and stores causes interference with a normal home life. For the most part the children from these homes do not come from wholesome environments that foster a love of learning.

TABLE 2

ENVIRONMENT AND CONVENIENCES OF ONE HUNDRED FORTY-ONE
SAN JACINTO FAMILIES AND ONE HUNDRED FORTY-
EIGHT BENJAMIN FRANKLIN FAMILIES

Condition	Number of Families in the S. J. Dist. Meeting Each Condition	Number of Families in the B. F. Dist. Meeting Each Condition
Stores in same block with home	82	22
Factory or ware- house within four blocks of the home	92	12
Telephone in the home	34	132
Vacuum cleaner in the home	15	113
Washing machine in the home	47	71
Gas or electric refrigerator in the home	54	131
Family owns a car	65	141
Family had a va- cation within past year	41	104
Paid help in the home	3	70

A. W. Birdwell once said in an address to a group of teachers: "The most anti-social institution that I know is the street corner."²

The survey shows that the living conditions of the families in the Benjamin Franklin community are well above those of the San Jacinto community. Table 2 shows that there are few stores and factories in the same block with homes. Some of the avenues and agencies through which the Benjamin Franklin community acquired dependable information, controlled and enlightened emotions, correct habits of thought and a real regard for society as a whole are revealed in Table 2.

(2) Size of Families

Families of the average social and economic levels usually expend their energies to provide wholesome environment and educational advantages for their children. It is of interest in this study to compare the views of the two groups on different levels with respect to this point. Table 3 indicates the number of children in each family in the two school districts.

The figures in Table 3 indicate that there is an

²Address by A. W. Birdwell at Dallas High School, Sept., 1938, p. 2.

TABLE 3

THE NUMBER OF CHILDREN IN EACH FAMILY IN THE
SAN JACINTO AND THE BENJAMIN FRANKLIN
ELEMENTARY SCHOOLS

Number of Children in Each Family	Number of Families That Have One or More Children			
	San Jacinto		Benjamin Franklin	
	Number	Per Cent	Number	Per Cent
1.....	16	11	23	15
2.....	32	24	77	52
3.....	27	19	26	17
4.....	18	13	13	9
5.....	23	16	1	1
6.....	13	9	3	2
7.....	7	5	2	2
8.....	1	1	2	2
9.....	1	1	0	0
10.....	1	1	0	0

average of over three children to each family in the San Jacinto community. Twenty-three families, or sixteen per cent, have an average of five children in the home. The pupils of this group that were born in this district were only sixty in number.³ This is approximately fifty-eight per cent of the children that were born outside the San Jacinto school district. The families move frequently which is not conducive to the education of the child.

On the contrary it may be seen from the figures in

³Taken from Questionnaire filled out by parents Jan. 15, 1941.

Table 3, relating to the Benjamin Franklin community, that there is an average of less than two children in each family. A family with a moderate income with two children can give their children advantages that the child should have in order to obtain an education.

Out of the one hundred forty-eight pupils, one hundred six are native born, and almost all the families in this district are home owners and have been for some time.⁴ This indicates stability.

It is obvious, therefore, that even though the families in the San Jacinto community live on a much lower, less stable economic level than those of the contrasted community, more children are born to these parents. Thus it appears that the advantages which they are able to give to their children are not considered to the extent that these advantages are by the parents of the Benjamin Franklin community. The frequent moves are certainly not conducive to steady progress in school work, or to a feeling of permanence, security, or belonging among these children.

The figures in Table 3 suggest that in the Benjamin Franklin district, where the economic level is higher and

⁴Taken from Questionnaire filled out by parents Jan. 15, 1941.

where there is an average of two children to a family, the parents are economically able to provide more adequately for their children. The fact that these people own their homes suggests stability and permanence.

Size of the Homes

After observing the number of children in each family it is interesting to note the size of the home. Table 4 gives the size of the home in the San Jacinto community, the number of people living in the home, and the number of families occupying each.

TABLE 4

SIZE OF THE HOUSE IN THE SAN JACINTO COMMUNITY,
THE NUMBER OF PEOPLE LIVING IN THE HOME,
AND THE NUMBER OF FAMILIES

Number of Rooms in the Home	Number of People in Each Family											
	2	3	4	5	6	7	8	9	10	11	12	
1.....	2	3	3*									
2.....		4	9	12	4	2	1					
3.....		6	4	7	4	5		1				
4.....		3	5	4	2	4	1					
5.....		4	4	9	3	5	2	1				
6.....		2		2	3	6	1			1	1	
7.....		1		1	2							
8.....		2					1					2
9.....												
10.....												
11.....												
12.....			1									2

*Number of families living in the different sized homes.

From Table 4 it is observed that the average size of the homes in the San Jacinto community is between three and four rooms. When it is remembered that the average family in the San Jacinto community consists of five people, it is obvious that the homes are entirely too small. Both children and adults need sufficient space in which to live in order to progress normally and to develop into a happy stable individual.⁵ The boys and girls in the San Jacinto homes are thus robbed of many opportunities for learning graceful living. Too, there is little likelihood that there is much chance for uninterrupted study of school work in the home.

The information in Table 5 indicates that the living conditions of the Benjamin Franklin families are above the average and well above those in the San Jacinto district. The average home in the Benjamin Franklin community has six rooms. There is only one family in this community that lives in two rooms with six people occupying the home. Thirty-three families in the Benjamin Franklin Community have four in the family and live in six room houses. These conditions suggest plenty of freedom for almost all the boys and girls of the community.

⁵William A. Yeager, Home-School-Community, p. 16.

TABLE 5

SIZE OF THE HOUSE IN THE BENJAMIN FRANKLIN COMMUNITY, THE NUMBER OF PEOPLE LIVING IN EACH HOME, AND THE NUMBER OF FAMILIES

Number of Rooms in the Home	Number of people in Each Family											
	2	3	4	5	6	7	8	9	10	11	12	
1.....												
2.....					1*							
3.....		1	4									
4.....	2	2	4	2								
5.....	1	9	16	8	1	1	1					
6.....		10	33	6	9	2	1					
7.....		4	8	2	3							
8.....		4	2	7	2							
9.....		3		1								
10.....			5				1					
11.....			1								1	
12.....						1						

*Number of families living in the different size homes.

Overcrowded living conditions are often very unsatisfactory. Nearly every individual needs some privacy; a place however small that he can call his own. When people are forced to live in too close proximity, nearly all semblance of family life is lost; quarreling and nagging result. There is little opportunity to teach children to respect each others' rights as individual or to teach them the social graces that make up a cultured individual able

to take his rightful place in society. Naturally, this lack would handicap a child in school.

Table 5 also shows ample opportunity for socially approved living in the Benjamin Franklin community. Boys and girls from these homes certainly have sufficient space in which to study undisturbed. There is room to have a place of one's own for personal possessions, entertaining, and solitude.

The Cultural and Moral Conditions Surrounding the Children

The items included in Table 5 are considered representative of some of the material advantages which promote opportunities for cultural development and belonging. It will be noted that Table 6 shows that sixty per cent of the San Jacinto families are without a daily newspaper and eighty-three per cent do not subscribe to magazines. Out of the other items mentioned in Table 6, less than twenty-five per cent of families qualify for the cultural values available.

The survey of the Benjamin Franklin families, as indicated by Table 6, shows less than two per cent are without a daily newspaper and about seventeen per cent do not subscribe to magazines regularly.

TABLE 6

THE CULTURAL CONDITIONS SURROUNDING
THE SAN JACINTO AND THE BENJAMIN
FRANKLIN DISTRICTS

Condition in the Home	The Number of Families Answering Yes to the Condition in District		The Percentage of Families Answering Yes to Condition in District	
	S. J.	B. F.	S. J.	B. F.
A camera in the home.....	17	82	12	60
A typewriter in the home.....	14	64	10	43
A fireplace in the home.....	4	117	3	80
A piano in the home.....	25	87	18	59
Encyclopedia books in the home.	34	120	21	81
Fathers have been a member of an organization.....	11	82	8	42
Subscribe to one daily paper...	54	80	38	54
Subscribe to two papers.....	4	65	3	44
Subscribe to four or five magazines.....	18	48	13	32
Subscribe to six or more magazines regularly.....	10	75	4	51

The data presented in Table 6 show that over fifty per cent of the families in the Benjamin Franklin district qualify for all the items mentioned. Therefore it is obvious that

the cultural opportunities in the homes of these boys and girls are far greater than those of the children in the San Jacinto School.

Type of Magazines in the Homes

Table 7 lists the magazines that are in the homes of five or more families.

In the San Jacinto district, the greatest number of families subscribing to a single magazine was seventeen or eight per cent. As a whole, the Benjamin Franklin families did not subscribe to the cheaper type magazines such as True Story, True Confessions, Love Story, and Detective Magazine.

Most people agree that there are two fields of writings, the good and the bad, and that people often choose reading material according to their cultural environment.⁶ The listings in Table 7 indicate that the families of the more cultural group chose reading materials in harmony with their cultural patterns.

It has been said that the test of greatness of any work in literature is time, and that the reading of every great work will create a lasting impression upon the reader.

⁶Address by James Bryce at Rutgers College, Nov. 10, 1911, p. 1674.

TABLE 7

MAGAZINES SUBSCRIBED BY FIVE
FAMILIES OR MORE IN THE
SAN JACINTO AND THE
BENJAMIN FRANKLIN
COMMUNITIES

Name of Magazine Subscribed to in the Home	Number of Families Sub- scribing to the Mag.*	
	San Jacinto	Benjamin Franklin
National Geographic.....	-	25
Time.....	5	30
Popular Mechanics.....	12	10
Saturday Evening Post.....	9	30
Ladies Home Journal.....	14	40
Woman's Home Companion.....	13	45
Collier's.....	15	46
American.....	14	50
McCall's.....	5	57
Cosmopolitan.....	6	38
Red Book.....	6	16
Liberty.....	-	30
Life.....	-	20
Child's Activities.....	-	25
House Beautiful.....	-	15
Fortune.....	-	10
Reader's Digest.....	-	70
House and Garden.....	-	20
Nation's Business.....	-	15
Better Homes and Gardens...	8	45
Parent's Magazine.....	-	20
Field and Stream.....	-	10
Good Housekeeping.....	17	60
Popular Science.....	-	10
Physical Culture.....	-	8
Western Story.....	6	5
True Story.....	13	-
True Confessions.....	5	-
Love Story Magazine.....	8	-
Detective Story Magazine...	7	-

*magazine

At the same time, the writings poor in quality provide time-killing devices. They are read quickly, and as quickly forgotten. They do not lift the reader to higher realms nor inspire him to strive toward worth-while attainments. A glance at the selections made by the majority of the San Jacinto families shows that the children do not have contact with the better, more elevating reading matter available. Such magazines as McCall's, Good House-keeping, and Better Homes and Gardens may indicate an interest in the home on the part of the minority.

Table 7 indicates that there were ten additional magazines to which the families in the Benjamin Franklin community subscribed that those in San Jacinto did not. It will be observed further that these magazines suggest a wider range of interest and higher type of reading material. The Parents Magazine was in the homes of twenty families of the Benjamin Franklin group which indicates an interest in child training.

The fact that education is a process by which culture is developed should be accepted without argument. The Benjamin Franklin and San Jacinto schools are engaged in a great endeavor to raise the standard of culture in their respective communities. In this adventure, their plans of

procedure are very much the same. Perhaps there cannot be any general agreement on the definition of either culture or morals. The one has been closely related to knowing, and the other closely related to those activities which protect and stabilize society. Wanting to know is perhaps the most permanent of men's desires. It is the force which initiates all the great activities into the world of the unknown. A working knowledge is also important. It tends to enrich the life of the individual both culturally and spiritually.

The tools which promote culture and morals are provided to some extent by the schools, but this is not sufficient. The home must share this responsibility, and provide the atmosphere and instruments to the end that all children shall feel the inspiration to follow the avenues leading into cultural frontiers. If the home fails in this mission, it is useless except in a few instances, to expect the child to be an educated, cultured individual. It is also reasonable to expect a large percentage to drop out of school in an effort to satisfy physical wants, or for the same reason to lag behind in their work. Furthermore, in most cases, children lack the inspiration and will to forge ahead.

An interesting part of the study in the comparison of

the two schools was the educational attainment of the parents. Table 8 shows the highest educational attainments of the parents of the two communities.

TABLE 8

EDUCATIONAL ATTAINMENTS OF THE PARENTS FROM SAN JACINTO AND BENJAMIN FRANKLIN ELEMENTARY SCHOOLS

Attainment of the Parents	Mothers		Fathers	
	S. J.	B. F.	S. J.	B. F.
Eighth grade or less	96	14	95	23
Entered high school	23	24	24	25
Completed high school	12	42	15	38
Entered college	6	44	4	42
Completed college	2	12	1	11
Graduate work	2	12	2	9

The facts in Table 8 show that nearly seventy per cent of both mothers and fathers in the San Jacinto community did not finish the eighth grade and less than twenty per cent entered high school. About fifteen per cent of the parents finished high school. Only ten entered college, and three graduated. Four had done graduate work.

In the Benjamin Franklin district, less than ten per

cent of mothers and only sixteen per cent of the fathers failed to finish the eighth grade. Seventy per cent of the fathers and seventy-five per cent of the mothers finished high school. Eighty-six mothers and fathers entered college and twenty-three graduated, while twenty-one had done graduate work.

There are some parents who, because of their own lack of education, encourage their children to avail themselves of every opportunity to equip themselves to face the realities of living in a better manner than they were able to do. It is believed, however, that such parents are in the minority. Many who lack education go through life not recognizing the lack. In many cases they do not have the necessary background to train their children intelligently, nor to create a desire within them to attain a status above that of their parents.

Table 8 shows clearly that the educational attainments of the San Jacinto parents are far below those of the parents of the Benjamin Franklin community.

Occupational Background of the Parents

In order to secure a more complete picture of the background from which the boys and girls from these two schools

came, a consideration of the occupations of the parents is important.

Table 9 shows that forty-three per cent of the fathers in the San Jacinto community are day laborers and only eighteen per cent are skilled workers.

TABLE 9

OCUPATIONAL BACKGROUND OF THE PARENTS OF THE SAN JACINTO AND THE BENJAMIN FRANKLIN SCHOOL DISTRICTS

Type of Work or Condition	Number of Parents Employed	
	San Jacinto	Benjamin Franklin
Day laborer.....	61	9
Slightly skilled.....	6	6
Semi-skilled.....	20	29
Semi-professional and managerial.....	6	58
Professional.....	5	32

In the Benjamin Franklin community, Table 9 indicates, that forty per cent of the fathers are semi-professional or managerial. Twenty-two per cent have professional jobs.

The children of parents from the Benjamin Franklin community have the advantage of living in homes which are on a higher economic level. They, too, have the opportunity to learn household tasks and to assume other home responsibilities under the direction of their mothers.

Children bring diversified ideals and problems from various social backgrounds, and they need help, not only as individuals, but from the standpoint of society. Society expects the school to help the child adjust himself to his present situation in order that he will receive the maximum benefits therefrom, and to help him choose a course of action commensurate with his ability at which he will be happy. The school must offer this help because the home often fails to do so when the parents are on a low occupational level.

Social Background

A study of Table 10 shows the difference between the social backgrounds of the two groups.

One hundred and twelve or eighty-one per cent of the mothers in the Benjamin Franklin community belonged to the Parent Teachers' Association compared to thirty-one or twenty-two per cent in the San Jacinto community.

In all of the social activities the parents of the Benjamin Franklin community out-ranked the parents of the San Jacinto district. Only in the activity of fishing and hunting did the San Jacinto district compare almost equally with those of the Benjamin Franklin community.

Table 10 indicates that parents in the Benjamin

TABLE 10

THE SOCIAL BACKGROUND OF THE PARENTS IN THE SAN JACINTO
AND THE BENJAMIN FRANKLIN COMMUNITIES

Type of Activities	Mothers		Fathers	
	S. J.	B. F.	S. J.	B. F.
A society organized for men or women.....	17	55	20	63
A social club.....	19	55	9	47
Parent Teachers Association.....	31	112	5	16
A civic or political club	4	30	4	60
An art or study club.....	4	60	1	8
Fishing or hunting.....	43	50	66	80
Bridge or forty-two.....	31	90	38	80
Tennis or golf.....	5	18	11	50
Outdoor games of any kind	22	48	30	57

Franklin school have more interest in the school than those in the San Jacinto district as one hundred thirty-eight belong to the Parent Teachers Association as compared to only thirty-six members from the San Jacinto school district. However, this may indicate economic conditions.

Possessions and Activities of Children in the San Jacinto and Benjamin Franklin School Districts

Certain approved facilities and opportunities are necessary if children are to lead healthy, normal lives, and develop wholesomely.⁷ Table 11 indicates those facilities available to the two groups of children.

It is obvious, after a study of the Table 10, that the San Jacinto boys and girls are without the facilities that would enable them to occupy a status equal to that of the Benjamin Franklin children. They out-rank the Benjamin Franklin children only in one of the above facilities. The Boys' Club and Girl Reserves account for the fact that San Jacinto sent more boys and girls to camp than did the Benjamin Franklin district.⁸ This fact also indicates a desire for activity, a desire to be like other children, and, perhaps, a desire to excel at something. When a child is frustrated too often in too many ways, he is going to react in some way, and frequently it is in an unhealthy manner. Thus both the child and his work suffer.⁹

⁷Alice M. Leahy, The Measurement of Urban Environment, p. 44.

⁸Organizations in Wichita Falls for underprivileged children.

⁹Ernest R. Groves, The Drifting Home, p. 45.

TABLE 11

FACILITIES OF THE SAN JACINTO AND THE BENJAMIN FRANKLIN PUPILS

Type of Facilities	No. of Families in San Jacinto District	No. of Families in Benjamin Franklin Dist.
Family and two or more pieces of playground equipment.....	24	67
Child owned a bicycle or tricycle.....	38	119
A pet in the home.....	55	88
A nursery or play room...	10	50
Child had paid lessons in dancing.....	6	62
Given a certain amount of money to spend regularly.	60	91
Savings account in bank..	10	81
Belonged to any paid club	41	83
Attended a camp for boys or girls.....	29	28
Attends movies once a week.....	76	108
Child had paid lessons in music.....	14	82

It is doubtful whether the overcrowded, unorganized home, where the energies of both parents are directed toward

providing bare necessities for the family can meet the recognized needs of childhood.

Progress of Children

The age range of pupils enrolled in the fourth, fifth, and sixth grades in the state of Texas is from nine to twelve years.¹⁰ In order to determine whether the pupils from the lower social strata are able to achieve satisfying progress, the total enrollment in the two schools was computed.

Of the one hundred and forty-one pupils enrolled in the San Jacinto school, there were sixty-nine boys and seventy-two girls. Table 12 shows the distribution of pupils according to age in the two schools.

TABLE 12

AGE DISTRIBUTION OF PUPILS AT SAN JACINTO AND BENJAMIN FRANKLIN SCHOOLS

Age of Child	Number of Pupils from S. J. That Are of This Age	Number of Pupils from B. F. That Are of This Age
9	7	15
10	42	57
11	38	47
12	32	27
13	16	2
14	6	0

¹⁰School Laws of Texas, State Department of Education, 1941, p. 179.

A study of the enrollment shows that the majority of the pupils fall within the normal age level group. It will also be observed that there are sixteen pupils who are thirteen, and six who are fourteen years of age. These compose a retarded group that the schools could not pass along to junior high school where boys and girls of this age should be. Twenty-two retarded children out of a total enrollment of one hundred forty-one is quite a significant number, and normally presents a formidable problem for the school retaining them. These retarded pupils are of necessity forced to spend their time with boys and girls younger than themselves. Such a situation often increases the maladjustments already existing. The result is frequently an unwise adjustment to an unhappy situation.

The questionnaires revealed that out of one hundred forty-eight pupils enrolled in the Benjamin Franklin School, there were sixty-four boys and eighty-four girls. The ages of the boys and girls were from nine through thirteen. Almost all of the pupils were between the ages of nine through twelve years of age. This indicates normal progress.

By examining Table 12, it may be seen that in contrast to twenty-two retarded pupils in the San Jacinto school, there

are only two in the Benjamin Franklin school. Perhaps in every school there are some pupils who for some reason or another do not make normal progress. In this instance, however, the fact must be accepted that those of the Benjamin Franklin district with more ideal environments are more normally distributed according to age than those in the San Jacinto school. This fact further suggests that the better environment may have created fewer problems and contributed to more nearly normal progress in school work.

CHAPTER III

PHYSICAL STATUS OF PUPILS

Within recent years considerable evidence has accumulated showing that the development of sound teeth and maintenance of good dental health are dependent upon the eating of proper foods. Health is the state in which the body functions normally. This condition finds the body free from disease, with all organs and component parts of its structure performing their functions properly and in correct balance. There are varying opinions as to the particular food factor or group of factors essential for these conditions. When an individual receives a diet including liberal amounts of protective foods such as milk, fruits and vegetables, eggs, meat, fish and liver and whole grain cereals, increased resistance to dental decay and sickness results.¹ Many investigators do not attribute dental health to any set of dietary factors but believe that it depends upon a state

¹Nutrition and Dental Health, Texas State Department of Health, p. 1.

of good nutrition resulting from a food intake approaching the optimum in all dietary essentials.

Health of the child implies more than just the food he eats, but the child's diet is an important factor in his physical development. In order to discover what the children in the San Jacinto and the Benjamin Franklin districts had in their diet, a questionnaire was given to each pupil asking for the exact foods that were consumed on two separate days. This information was tabulated and Table 13 gives the protective foods consumed by one hundred and eighty pupils in the San Jacinto school and one hundred ninety-seven in the Benjamin Franklin school.

TABLE 13

DIET OF ONE HUNDRED EIGHTY PUPILS OF THE SAN JACINTO
AND ONE HUNDRED NINETY-SEVEN BENJAMIN FRANKLIN
PUPILS AS OBTAINED BY QUESTIONNAIRE ON FOODS

Type of Food	Number of Pupils Eating Food		Per Cent of Pupils Eating Food	
	S. J.	B. F.	S. J.	B. F.
Milk.....	142	179	76	91
Fruits.....	78	130	42	66
Vegetables.....	126	163	68	83
Eggs.....	108	93	58	47
Meat.....	111	171	60	82
Cereals.....	97	120	52	61
Leafy vegetables.....	16	163	9	83
Candy.....	60	35	32	18
Soda Pop.....	29	30	16	15
Coffee.....	15	2	8	1
Tea.....	35	23	19	12

In Table 13 the type of food and the number of pupils partaking of the food for two separate days are listed. For instance, 111 San Jacinto pupils and 171 Benjamin Franklin pupils had meat to eat on both days of the test. This represents sixty per cent of the San Jacinto pupils and eighty-two per cent of the Benjamin Franklin children. In Table 13 it will be observed that there is a lack of fruits and leafy vegetables in the diet of the San Jacinto children. These foods afford protection against certain disease and promote growth. Green vegetables furnish essential roughage and bulk to the intestinal contents to insure normal bowel movement. Fat is the most difficult food for the body to digest and consume, yet thirty-two per cent of the boys and girls of the San Jacinto community and eighteen per cent of the Benjamin Franklin pupils eat candy each day.

"The energy of fat is released slowly and those who eat fats excessively become sluggish mentally and physically."² In the Benjamin Franklin community one hundred and sixty-three or eighty-three per cent of the pupils eat leafy vegetables. This percentage is ten times that in the San Jacinto district. Table 13 show that twenty-four per cent of the pupils in the San Jacinto community do not drink milk. Only

²C. Ralph Taylor, The New American Encyclopedia, p. 643.

nine per cent of the Benjamin Franklin pupils fail to drink milk.

All of the pupils of the two schools studied should receive (1) liberal amounts of milk and other dairy products including eggs, (2) fruits, (3) vegetables, (4) certain sources of vitamin D such as cod liver oil, (5) less sugar and highly refined cereals.³

Is the candy habit dangerous? There is no doubt that it is! Candy is a habit-forming food as much as alcohol is a habit-forming drink. I know, for I have had the habit--candy habit--and if an alcoholic craves alcohol more than I did candy--and even do yet at times--I am sorry for him.⁴

In children excess candy eating has far more serious consequences than in adults. It very often satisfies the children's appetite so that the foods that they need for for growth and development are not taken. Candy is a food, a very concentrated food, but an energy food only. Neither children nor adults should have candy between meals. After the building needs of the body are supplied, then a small amount of pure candy is unobjectionable if taken at the end of a meal. The craving for sweets can be satisfied more wholesomely by honey, prunes, dates, raisins, and dried figs.

³Nutrition and Dental Health, Texas State Department of Health, p. 4.

⁴L. H. Peters, Diet and Health, p. 242.

Coffee, soft drinks, tea, and other mild stimulants are not harmful to the majority, but, like everything else, excesses will cause ill health. As revealed in Table 12, San Jacinto and Benjamin Franklin pupils drink soda water and tea in excess. Fifteen pupils from the San Jacinto community substitute coffee for the all important food, milk. The longest-lived and most virile people in the world, the pastoral Arabs and other pastoral people of Europe and Asia, subsist largely on milk.

Calories in the Food Eaten

In measuring the quantity of food taken in this study, it is necessary to discriminate between its value as fuel, as body-building material, and as protecting or giving health. By far the greatest bulk of the food is burned as fuel to compensate for the loss of heat from the body and to give energy from muscular movements.⁵ In this study the calorie is used to determine the amount of food received by the pupils of the San Jacinto and the Benjamin Franklin pupils.

Emphasis should always be placed on the importance of getting the calories needed from the foods which will also

⁵L. H. Peters, Diet and Health, p. 225.

supply the vitamins, mineral elements, and the proteins in sufficient amounts and of the right kind. Pupils should be given at least three glasses of milk, a liberal amount of green leaf vegetables, some fruits, and nuts, for the mineral elements necessary to be deposited in the teeth, and for their vitamins; some hard foods, such as coarse cereals, dried toasts, and food containing fiber--these hard foods for the exercise that through mastication will give the jaws and teeth.

Calorie is a heat and energy value unit. Technically, it is that amount of heat necessary to raise four pounds of water one degree, Fahrenheit. Table 14 gives the amount of calories in increments of one hundred from five hundred through twenty-four hundred as shown in the first column. The second column lists the total number of pupils from the San Jacinto and the Benjamin Franklin districts that receive the calories. The other column lists the pupils as to ages in the two schools.

All the evidence from numerous surveys over the past ten years to the present among persons of all ages in many localities is without exception in complete agreement that inadequate diets are widespread in the nation.⁶

A list of foods required for an adequate diet during

⁶Bulletin of Inadequate Diets and Nutritional Deficiencies, National Research Council in the United States, p.46.

TABLE 14

THE AMOUNT OF CALORIES OBTAINED PER DAY BY TAKING AN
AVERAGE OF THE TWO DAYS DIET OF THE SAN JACINTO
AND THE BENJAMIN FRANKLIN PUPILS

Calories Per Day	No. of Pupils		Age of Pupils											
			8		9		10		11		12		13	
	S. J.	B. F.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.
000-499	3						1		1		1			
500-599	7	1					3	1	1		2			1
600-699	8	4				3	6		2	1	1			
700-799	10	7		2		2	3	3	3		3			1
800-899	20	8		1		2	8	3	4	2	5			3
900-999	11	9				4	2	2	2	3	4			3
1000-1099	21	15		1	3	7	2	2	4	4	9	1		3
1100-1199	16	28		2	2	8	5	8	4	8	3	2		2
1200-1299	13	18		2	2	4	6	8	2	3	2	1		1
1300-1399	20	19			4	7	4	5	6	7	5			1
1400-1499	11	25		1		5	2	10	1	8	5	1		3
1500-1599	9	14			3	3	3	3	1	5	2	3		
1600-1699	10	9			1		1	4	7	5	1			
1700-1799	5	13			1	3	3	4	1	6				
1800-1899	5	10			1	2	3	4	1	2		2		
1900-1999	3	5			1	1		2	1	1	1	1		
2000-2099	6	4			2	2	1	1	1	1	2			
2100-2199	2	4				2		1	2	1				
2200-2299	1	1			1	1								
2300-2399	2	1					2	1						
2400-over	2	2					1	2						1
Total	186	197		9	21	56	54	64	46	57	46	11	19	

school age through twelve years of age is given on page 9
of Nutrition and Dental Health published by the State Depart-
ment of Health.

Breakfast	Calories	Total
Oatmeal	100	-
Whole milk	100	-

Breakfast	Calories	Total
Orange juice	150	-
Bread and butter	100	-
Milk	160	-
		610
<hr/>		
Lunch		
Cream tomato soup	200	-
Uneda biscuit	100	-
Peanut butter sandwich	250	-
Baked apple	200	-
Milk	160	-
		710
<hr/>		
Dinner		
Lamb chop	150	-
Baked potatoes	100	-
Peas	75	-
Cottage cheese and lettuce	120	-
Celery	25	-
Butter	100	-
Baked custard	150	-
Milk	160	-
		880
<hr/>		
		2200

The minimum requirement of food for school boys and girls is the smallest amount of each food upon which the body can maintain health. The optimum is this minimum requirement plus an amount estimated by nutrition authorities as advisable for the maintenance of abundant health. The State Department of Health of Texas gives 2200 calories as an adequate diet for school age children through twelve years of age.⁷

⁷Nutrition and Dental Health, State Department of Health, p. 9.

The amount actually required will depend upon the child, but it is reasonable to think that any school boy or girl of this age should receive 1200 calories or less and in the Benjamin Franklin community over one-half of the pupils receive below 1400 calories per day. Twenty of the San Jacinto pupils and eight of the Benjamin Franklin children received less than an adequate dinner as recommended by the State Department of Health. These pupils receive the amount of calories that is required for a one year old child.

Table 14 indicates that there are many pupils in the San Jacinto and Benjamin Franklin communities who are not receiving enough heat-energy food and as a result are suffering from malnutrition.

Malnutrition in children has far-reaching results. Not only is the child's resistance to disease decidedly lessened, but his growth and bodily development in general are slowed up. From various studies the indications are that there are two million children in the United States suffering from malnutrition. These figures do not include the milder type of malnourishment, but only those cases where it is present to a marked degree.⁸

Marion L. Aegre and John E. Anderson, Child Care and Training, p. 39.

Noon Day Meal

The school lunch has a double purpose: it contributes directly to the children's nutrition, and it is an important factor in health education since instead of merely talking about the right kind of foods, it sets up standards and inspires the children to form the right food habits. It will be found that in company with other children, individuals will often eat food which they refuse at home. In skillful hands, the school lunch will help the children experience good manners and happy social relationships. Table 15 lists the places of the noonday meals of the San Jacinto and the Benjamin Franklin pupils and the number of pupils eating at each place.

TABLE 15

PLACE OF NOONDAY MEAL OF THE SAN JACINTO
AND THE BENJAMIN FRANKLIN PUPILS

Location	Number of Pupils		Per Cent of Pupils	
	S. J.	B. F.	S. J.	B. F.
School cafeteria.....	30	134	16	68
Home.....	93	37	50	19
Brought lunch from home.....	47	24	27	12
Ate lunch at store or cafe.....	9	0	5	0
Ate lunch at day nursery.....	4	1	2	1

Table 15 indicates that sixty-eight per cent of the Benjamin Franklin boys and girls eat their lunches in the school cafeteria where they enjoy the privilege of associating with each other socially. There are only sixteen per cent of the San Jacinto pupils that eat in the school cafeteria thereby gaining the social advantages that it offers.

Fifty per cent of the San Jacinto boys and girls go home to eat the noonday meal. As discussed previously in this study, most of the mothers work in this community; therefore it may be assumed that the meal the children ate was cold and not as nourishing as a hot meal would have been.

Those pupils who ate lunch at the stores could get only ready-made sandwiches that are necessary for a balanced diet. The school lunch should have been made available to more of the San Jacinto pupils, not only for health reasons, but for reasons which were pointed out in Chapter II. The working mothers and fathers and the over-crowded homes of the children were not conducive to the teaching of the social graces such as table manners, appearing at meals on time, taking part in care-free conversation, and having consideration of each other.

A hot lunch at midday is highly desirable for every child. Whether or not the school should provide it is a

local problem. Table 15 definitely shows that the Benjamin Franklin school children have an advantage, socially and physically, over the San Jacinto boys and girls at the noon-day meal.

Sleep and Outdoor Exercise of the San Jacinto
and the Benjamin Franklin Children

Always keep in mind that food alone will not insure a well-nourished child. The food must pass through all the processes of digestion before it can properly be utilized by the body. Sleep and rest are necessary for good assimilation. Fresh air and exercise, and a general state of health that keeps the body functioning properly is also required.

Table 16 shows that pupils between the ages of eight and thirteen years of age slept from eight to eleven and a half hours each night. The amount of sleep required for boys and girls of this age should range from nine hours forty minutes to eleven hours and thirty minutes. A table worked out from the book Parent Teacher Associations and School Health, published by the American Child Health Association, gives the amount of sleep required for growing children. Table 16 gives the amount of sleep required for children eight through thirteen years of age.

TABLE 16

NUMBER OF HOURS SLEEP RECEIVED EACH NIGHT BY THE
SAN JACINTO AND THE BENJAMIN FRANKLIN PUPILS

Number of Hours of Sleep	Age of Pupils and the Number in Each Age Group											
	8		9		10		11		12		13	
	S ^a	B ^b	S	B	S	B	S	B	S	B	S	B
8.				1	4	1			4	1	2	
8.5				1	3		1	1	1	1	1	
8.75				1	2	1	3	2	2			
9.		1			3	2	4	4	3	1	3	
9.25			1	2	3	1	5	5	3	1	3	
9.5		1		6	7	3	7	7	4	1	3	
9.75		1	3	1	5	5	5	11	3	2	1	
10.		2	3	11	13	13	7	7	7	1	1	
10.25			3	7	4	12	3	4	6	2		
10.5			4	8	5	11	4	7	7	1	2	
10.75		1	1	7	2	7	3	3	2		1	
11.		3	4	7	2	5	1	2	3		2	
11.25			1	1		1	1	3				
11.5			1	3	1	2	2	1	1			

^aSan Jacinto

^bBenjamin Franklin

A child from eight to ten years of age should sleep from ten to eleven hours each night in a well ventilated room, and a child ten to twelve should sleep from nine to ten hours each night.⁹

Since it is known the amount of sleep required of a growing child as given in Table 17, an examination of the amount of sleep received by pupils of the two elementary schools

⁹Josephine H. Kenyon, "How Long Should A Child Sleep," Good Housekeeping, V (November, 1942), 159.

studied is given. Pupils from eight to ten years of age should receive ten and one-half hours to eleven and one-half hours of sleep each night. Looking at Table 16, it is found

TABLE 17
AMOUNT OF SLEEP REQUIRED FOR BOYS AND GIRLS EIGHT
YEARS OF AGE THROUGH THIRTEEN YEARS
OF AGE¹⁰

Age of School Child	Number of Hours of Sleep Required Each Night
8	11.5
9	11.0
10	10.5
11	10.0
12	9.5
13	9.0

that a great number of boys and girls do not receive this amount of sleep.

One hundred forty-two pupils from the San Jacinto school and one hundred twenty-six from the Benjamin Franklin district do not receive enough sleep. In examining the table further, six, ten, twenty-one and thirty-three children from the San Jacinto school and eleven, twenty-six, twenty-one and seven children from the Benjamin Franklin school

¹⁰American Child Health Association, Parent Teacher Associations and School Health, p. 33.

who are nine, ten, eleven, and twelve years of age do receive enough sleep each night. This represents seventy of the San Jacinto school pupils and sixty-five of the Benjamin Franklin school pupils. San Jacinto boys and girls as a whole receive more sleep than the Benjamin Franklin children.

The results of the study on sleep show that as a whole the boys and girls of these two communities do not receive enough sleep according to the standards set up in Table 16. Perhaps there is no set rule on how much sleep a person should receive as it depends upon so many different things, but definitely many of the boys and girls of these two communities do not receive enough sleep.

The play of children, far from being a mere idling way of the time, is as essential to their well-being as food or shelter. It is their great preoccupation and their preparation for adult life. Just as a kitten chasing a flying leaf--hiding from it, pouncing upon it--is unconsciously training itself to be a hunter, so a child through his play is developing the facilities he will need in manhood.

The reasons for play in childhood may be briefly stated thus: Play is the natural method for developing the body and mind. It is an emotional need. It develops the

body through big muscle activities. It develops resourcefulness, and safety instinct and team work. Learning to play games, to swim, climb, hike, etc., in childhood, develops both a skill and a taste that are useful in grown-up life.

Children get their exercise in the form of play. That is nature's way of developing the body for the business of life. When boys and girls play hard--running, jumping, bending, twisting, turning--they use practically every muscle in their bodies. Unconsciously they get the exercise they need to strengthen muscles and build vitality. It is well recognized that physical capabilities of a mature individual may be dwarfed if his play life as a child is unduly limited. But along with wholesome play, children need physical and health education in such matters as posture, muscular control, mental and emotional poise. There, combined with correct hygienic habits in regard to diet, cleanliness, fresh air, and sleep, help to build stronger, healthier bodies, clearer minds, better traits of character.¹¹

There is no set rule on the amount of exercise a boy and girl is to receive, but several hours outside in fresh air and sunshine is necessary. Table 18 gives the outdoor exercise of the San Jacinto and the Benjamin Franklin pupils. The amount of exercise is more than sufficient in the majority of the cases for both the schools studied. The two schools are about equal as to the amount of exercise received and the diet of neither schools is sufficient for this activity.

¹¹c. Ralph Taylor, The New American Encyclopedia, 1940, p. 647.

TABLE 18

OUTDOOR EXERCISE OF THE SAN JACINTO AND THE
BENJAMIN FRANKLIN SCHOOL CHILDREN

Number of Hours of Outdoor Exercise	Age of Pupils and the Number in Each Age Group											
	8		9		10		11		12		13	
	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.	S.	B.
0.			1		2					2		1
1.				1	2	2	1	1	1			
1.5		2		1	3	2	1	1	2			
2.			1	3		4	1	6	3			
2.5		1	1	5	7	6	2	2	3	1		
3.		1	3	10	2	5	5	7	4			4
3.5			2	7	4	10	13	6	5	2		3
4.		3	3	15	9	9	7	7	5	1		2
4.5			4	5	6	4	6	9	6	2		6
5.		1	2	5	3	8	1	6	3	2		2
5.5			1	2	6	4	2	9	3	1		
6.			2	1	5	4	2	2	3	1		2
6.5		1	2		1	2	2					
7.				1	4	4	3	1	6	1		
Total		9	21	56	54	64	46	57	46	11		19

Assuming that four hours of outdoor exercise is sufficient for the pupils studied, there are seventy-eight pupils from the San Jacinto school and eighty-eight from the Benjamin Franklin school who receive less than that number. As a whole the boys and girls of these two communities receive enough exercise out of doors. Again, however, the Benjamin Franklin children have the advantage. The small playground and lack of playground equipment of the San

Jacinto school, and the adequate space and play facilities of the Benjamin Franklin school have been discussed on a preceding page. Table I indicated the undesirable location of the homes of the San Jacinto children, while Table 3 showed the crowded conditions in which they live. Furthermore, Table 5 indicates the lack of things in the homes with which to play.

When the attractive and desirable conditions under which the Benjamin Franklin boys and girls live are recalled, the facts show clearly that the school and home can properly take care of these pupils, while in most cases the San Jacinto children must play in the streets and use their own devices in amusing themselves.

The Dental Examination

Modern dentistry is very different from that of a few years ago. Only a few years ago, dentistry was little more than a trade that centered its work on the relief of the toothache, usually by extraction, and some rather crude mechanical restoration. Today dentistry ranks as a specialty of medicine. Its primary object is to look after the general health, by taking care of the health of the mouth.

The mouth is the doorway to our very existence. Through it every atom of our sustenance must come and there be

prepared for digestion and final assimilation into the tissues of our body. Through the mouth and nose most of the diseases enter the body, particularly diseases of children. Is it not important, then, that this mouth be kept efficient and sanitary? Who of you would want to take milk from a dairy when the first containers were not kept clean? Who would take groceries from a place where all foods were mixed in a hopper that was seldom or never cleaned and repaired? And yet, how much better that would be than to masticate it--every grain--in an unhealthy and inefficient mouth, thereby contaminating and burdening the stomach and digestive tract? There are many mothers who take great care to see that their child's food and dishes are scrupulously clean and yet will allow him to eat with a mouth that is loaded with filth and infection. That is a good example of "Penny wise and pound foolish."¹²

In the dental survey made of the San Jacinto and Benjamin Franklin schools, two dentists visited each school and examined the pupils's teeth. Two sixth grade pupils recorded the findings and two pupils looked after the sterilization of the instruments. This examination gave a thorough report on the condition of the teeth.

Technique.--In each school on separate days beginning with the fourth grade, pupils passed to the principal's office by rooms. The first part of the regular dental inspection blank furnished by the Department of Health was filled out in the home room and was carried by the student to the office. The pupils then passed into the office and were examined by the dentists.

¹²State Department of Health, Dental Health Talk, p. 2.

Work started at nine o'clock in the morning and continued until noon. One hundred and sixty-two pupils from the San Jacinto school and one hundred eighty-seven pupils from the Benjamin Franklin school were examined in one-half day at each school. Some perfect mouths were found, but for the most part, nearly every pupil had some defect ranging from a small beginning cavity to as many as ten deep rooted cavities. A full list of the defects found by the dentists are listed in Table 19.

In a similar study made in Dallas, Texas, on dental conditions of 700 pupils there were 280 that needed teeth straightened, 94 had mottled enamel, 400 had visited a dentist and 310 had cavities in their teeth.¹³

In a survey made by the United States Bureau of Education of some 4000 schools with reference to the health education in the schools, showed that fifteen to ninety-eight per cent (varying in different localities) have defective teeth.¹⁴

A comparison of the two schools: Table 19 reveals that San Jacinto school pupils had more defects than Benjamin Franklin. In the case of serious malocclusion (poor bite) forty-eight per cent of the Benjamin Franklin pupils were affected to thirty-five per cent of the San Jacinto pupils. Too many defects were present in the mouths of the children

¹³C. W. Morris, Health Supervision in Public Schools, p. 35.

¹⁴Bureau of Education, Health Roundup, V II, No. 4, Jan. 1, 1930, p. 32.

TABLE 19

THE CONDITION OF THE TEETH OF ONE HUNDRED SIXTY-TWO
SAN JACINTO PUPILS AND ONE HUNDRED EIGHTY-
SEVEN BENJAMIN FRANKLIN PUPILS

Condition Found by the Study	Number of Pupils Meeting Condi- tion		Per Cent of Total Pupils Meeting Condition	
	S. J.	B. F.	S. J.	B. F.
Child had been to a dentist	92	157	57	84
Serious malocclusion	57	90	35	48
Cavities in teeth	83	63	51	34
Cavities in one or more permanent sixth year molar	72	45	45	24
Mottled or stained teeth	7	0	4	0
Mouth showed need of dental care	104	103	64	55
Teeth needs straight- ening	57	58	35	31
Permanent teeth needs filling	41	37	25	20
Some teeth needs ex- tracting	27	24	17	13
Teeth needed clean- ing	127	127	78	70

in both schools and the schools should attempt to correct

the deplorable situation. It is alarming to think that almost one-half of the pupils studied in the San Jacinto community as shown in Table 19 have cavities in one or more permanent sixth year molars.

These results as they are listed prove beyond any question that there is need of a systematic health supervision program in the schools of our nation.

Effect Upon Parents.--At no time during the progress of the examinations was there any complaint or objection raised by any parent or guardian. Many parents showed a great deal of interest in the examination of their children's teeth. Many parents from both schools expressed their willingness to cooperate in having the defects corrected.

Remedial Dental Work

The first step in the remedial work was to send to each parent or guardian a full report stating that child had defective teeth and that they take this report and consult their family dentist. Several parents had this remedial work done.

A social club of Wichita Falls, Texas, agreed to do the corrective work on the teeth at a very minimum charge. One hundred forty-five teeth were filled, thirty-six children had teeth cleaned and sixty teeth were extracted. The corrective work was accomplished on the San Jacinto pupils.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of the study has been to make a comparison of the effects of social, economic, and physical factors upon normal development of pupils in two Wichita Falls elementary schools. The data were obtained from questionnaires on size of home and family, reading material, educational and occupational status of parents, type of recreational facilities and an examination of pupils teeth by two dentists.

Conclusions

The facts in this study seem to justify the conclusion that the child in the lower social, economic, and physical status needs help in making proper normal adjustments to life's situations. The educational aim should be more help and assistance to the child in the lower economic level.

Another conclusion is that the better living conditions of the Benjamin Franklin community are more conducive to progress in the educational avenues, and happy living than those in the San Jacinto vicinity.

In this study there is proof that the majority of the pupils from both schools studied are victims of malnutrition. In the San Jacinto community this not only includes the undernourished child but also those whose diet is inadequate.

Malnutrition is about as prevalent in areas of high economic status as in those of the lower economic bracket.

Undernourished children are more numerous in areas of lower economic status.

Recommendations

The facts revealed in this investigation seem to justify the following recommendations:

1. Parents, teachers and school administrators should be fully orientated on the importance of the whole child. Especially the parents need to know the importance of keeping the child healthy and happy.

2. The home background is such an important phase in the child's life, something should be done about it. This is a serious and difficult problem, especially on the economic side, but parents, through education received in study clubs, radio clubs and press can be made to realize the importance of the value of home life in the educational development of the child.

3. A systematic health supervision program should be established in schools of all areas regardless of economic status of the parents.

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