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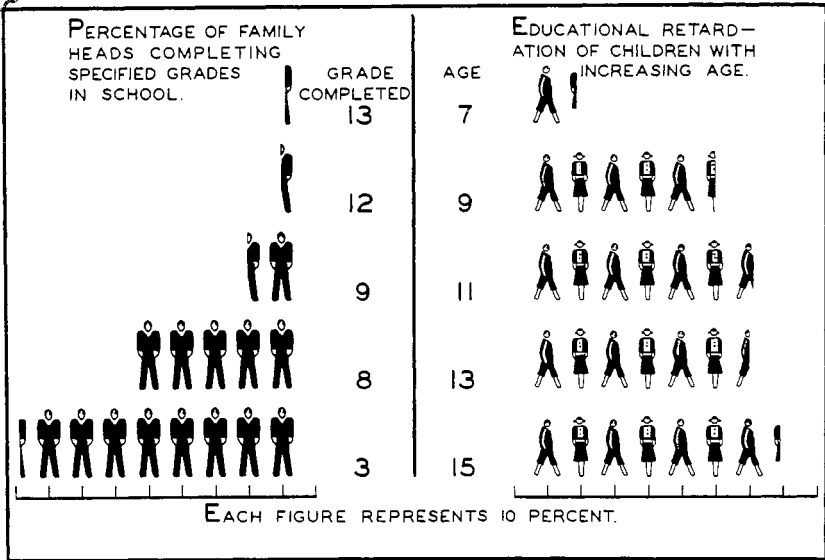
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For

RURAL REHABILITATION

R. W. ROSKELLEY AND OLAF F. LARSON



Limited educational accomplishments of family heads and educational retardation of school children characterize the rural relief group. The left half of the diagram above shows the decreasing percentage of relief family heads who stayed in school as far as college. The right half shows the increasing percentage of school children who became educationally retarded as they grew older.

Cooperative Plan of Rural Research
 Colorado Experiment Station
 Colorado State College
 Fort Collins, Colorado

and

Rural Section, Division of Research
 Federal Work Projects Administration

Summary

1. Heads of rural relief households completed an average of 6.6 school grades. There is considerable evidence based upon other studies which suggests that this is below the normal amount of formal education for all heads of households.

2. Approximately two out of five (39.1 percent) heads of relief households did not complete any grades beyond the sixth. This would suggest that they did not acquire what is ordinarily defined as the educational essentials for the ordinary demands of life.

3. Five and nine-tenths percent of the heads were graduated from high school, 1.5 percent completed at least 1 year of college, and only 0.2 percent were graduated from college.

4. Female heads of relief households completed more years of formal education than did males.

5. The ratio of educational attainment of younger heads of relief households (under 25 years) compared with heads over 64 years was approximately 3 to 2 in favor of the younger group. The variations in grade achievement of heads over 25 and under 65, classified in 10-year intervals, were not great.

6. The average schooling completed by heads of households who were beet laborers was only 3.5 grades. This is about half the average grade completed by all groups combined and slightly over one-third as many as those completed by professional people who had the highest average achievement.

7. Coal miners were second lowest in the amount of formal education.

8. The limited schooling of the sugar beet laborers and coal miners is a reflection of the educational status of a certain class of foreign-born people who compose the majority of persons in these categories.

9. Non-heads of relief households completed about the same number of school grades as the heads.

10. Dependent members of households 16 to 25 years of age finished approximately one-fourth more school grades than the heads.

11. No significant difference existed between the average school grade completed by dependent members 16 to 25 living in the open country and those living in the village.

12. White dependent members of relief households 16 to 25 finished, on the average, 2.6 more grades than non-whites of the same age.

13. Non-white children under 16 and not in school had less formal educational training at the time they discontinued school than the whites.

14. Less than average educational attainment of adults in any occupational or color group seems to be paralleled by a similarly low average educational attainment of their children.

15. The proportion of school children who may be thought of as educationally retarded increases with age and by the time the average school children of rural relief households reach 15 years, approximately 75 percent are below what may be considered normal achievement.

16. The perpetuation of educational deficiencies in a large proportion of the young people on relief raises questions regarding (1) equal opportunities for education, (2) the possibility of certain shortcomings in our educational institutions, and (3) the desirability of establishing guidance and rehabilitation programs based upon the recommendations and an understanding of the basic needs of these people.

17. Although the exact relationship between educational retardation or a limited educational attainment and such factors as (1) a low economic status necessitating public assistance, (2) different types of unsocial conduct, or (3) personality disorganization is not known, it is generally agreed that they are closely related. This being the case, the educational deficiencies presented herein suggest many implications and challenges to the people of Colorado, and more particularly to the Department of Public Welfare, the schools, the program planning committees, and other action groups or agencies.

Educational Foundations for Rural Rehabilitation¹

R. W. ROSKELLEY AND OLAF F. LARSON²

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THE RURAL population of Colorado, like that of the entire United States, is an educationally underprivileged group. Within the rural population, it has been frequently and conclusively shown that the relief population represents a group which is educationally disadvantaged. While lack of education is only one of numerous factors associated with the relief population, in a broad way there is a correlation between socio-economic status and formal educational attainment.

While a large proportion of Colorado's rural people, probably between one-fourth and one-third, have received public assistance since 1933, the idea that this is a permanently depressed group which

¹Full responsibility for the statements appearing herein rests with the authors and not with the Work Projects Administration.

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will continue to be a burden to public agencies must be critically examined. Certainly a considerable proportion of the rural people on relief can be rehabilitated and restored to self-dependence; successful results of "action" programs for rehabilitation testify to the validity of this belief. However, the efforts at reconstruction are greatly influenced by the character and capabilities of the human resources concerned. The amount of formal schooling received offers a clue to the nature of these human resources and has implications for the methods and techniques to be followed for best utilization of such resources. Any program of effective relief administration, rehabilitation of clients, or the prevention of further relief problems must take into consideration the educational progress and achievement of the persons involved. Programs of adult education, such as agricultural extension, must consider the variations in the level of understanding of the various groups of people affected, to attain best results. The success of program planning activities rooted in the "democratic process" will be influenced by the educational equipment of the people who are to participate.

Purpose and Scope

The purpose of this report is to make available certain statistical data concerning the educational attainments of members of rural households receiving relief in Colorado.

This report is one of a series dealing with various aspects of the rural relief problem in Colorado.³ The basic data were collected in connection with the Survey of Current Changes in the Rural Relief Population in Colorado during the period, July through November, 1935. This survey was made in nine sample Colorado counties which were so distributed that it is believed the study is generally representative of rural relief households throughout the State.

The present analysis includes 2,390 heads of households; 1,568 persons who were non-heads and over 25 years of age; 1,701 dependent members of households aged 16 to 25; 455 children aged 5 to 15,

³Larson, Olaf F. **With Rural Relief in Colorado**, Cooperative Plan of Rural Research, Research Bul. No. 1, April 1936.

— — — and John E. Wilson, **Social Security and Rural Relief in Colorado**, Cooperative Plan of Rural Research, Bul. No. 2, June 1936 (out of print).

— — — and John E. Wilson, **Rural Youth and Relief in Colorado**, Cooperative Plan of Rural Research, Research Bul. No. 3, June 1936 (out of print).

— — — **Beet Workers on Relief in Weld County, Colorado**, Cooperative Plan of Rural Research, Research Bul. No. 4, May 1937.

— — — **The Relief Situation in Colorado Rural and Town Areas**, Cooperative Plan of Rural Research, Research Bul. No. 5, August 1937.

— — — **Rural Households and Dependency**, Cooperative Plan of Rural Research, Colo. Exp. Sta. Bul. No. 444, May 1938.

TABLE 1.—Percentage distribution of 2,390 heads of rural relief households in 9 Colorado counties who completed specified grades in school, by sex and age.

Sex and age	Total		Grade school					High School			Some college	NA**	Average grade completed
	Number	Percent	0	1-3	4-6	7	8	9-10	11	12			
Total	2,390	100.0	5.6	9.5	24.0	7.6	35.3	8.6	1.4	4.4	1.5	2.1	6.6
Males (total)	2,172	100.0	5.5	9.8	24.3	7.7	35.5	8.1	1.2	4.4	1.3	2.2	6.5
15-24	156	100.0	...	5.1	13.4	7.7	37.9	15.4	5.8	10.9	1.2	2.6	8.1
25-34	558	100.0	2.0	10.4	19.0	7.7	39.1	11.8	1.6	6.3	.9	1.2	7.1
35-44	560	100.0	5.0	13.2	24.3	7.0	37.1	7.1	.7	3.0	.6	2.0	6.3
45-54	452	100.0	9.3	7.5	29.9	8.2	33.0	5.8	.2	3.1	1.7	1.3	6.1
55-64	305	100.0	5.9	8.5	29.5	9.2	32.4	4.6	.7	3.2	2.4	3.6	6.4
65 and over or NS*	139	100.0	14.4	8.6	28.1	6.5	27.4	4.3	1.4	1.4	1.4	6.5	5.5
NA**	2	100.0	...	50.0	...	...	...	...	...	...	...	50.0	2.0
Females (total)	218	100.0	6.4	6.4	22.0	6.0	33.1	13.3	3.2	4.6	4.1	.9	7.1
15-24	14	100.0	...	...	14.3	7.1	21.4	7.1	14.3	35.8	...	...	9.4
25-34	25	100.0	...	8.0	8.0	4.0	52.0	4.0	12.0	8.0	4.0	...	6.2
35-44	52	100.0	5.8	7.7	23.1	7.7	30.8	19.2	1.9	...	3.8	...	6.9
45-54	54	100.0	11.1	5.6	25.9	1.9	31.5	13.0	1.8	1.8	5.6	1.8	6.5
55-64	41	100.0	2.4	9.8	22.0	7.3	31.8	19.5	...	2.4	2.4	2.4	7.0
65 and over or NS*	32	100.0	12.5	3.1	28.1	9.4	31.2	6.3	...	3.1	6.3	...	6.0
NA**	...	...	...	...	...	...	...	...	...	...	...	...	...

*NS indicates not seeking work.

**NA indicates non-ascertainable.

inclusive, not in school; and 2,653 school children aged 5 to 15, inclusive.

Education of Heads of Rural Relief Households

The average educational attainment of heads of rural relief households was 6.6 grades (table 1). Although there is no comparable data for 1935 on the grade achievement for heads of non-relief households which would give a basis for determining to what extent such an accomplishment deviates from normal, we may assume, on the basis of previous studies, that the achievement is below normal.⁴

Slightly more than 1 out of 20 or 5.6 percent of all heads of relief households had not completed as much as 1 grade in school (table 1). An additional 9.5 percent had completed only 1 to 3 grades. Thirty-nine and one-tenth percent had a sixth grade education or less. This limited amount of education would do little more than teach the people to read and write. In other words, 39.1 percent of heads of relief households did not acquire what is ordinarily defined as the educational essentials for the elementary demands of life, and for that reason they were probably hindered in any attempt at making a living and participating effectively in the various aspects of community life.

Further evidence of the educational handicap of the heads of relief households is found in the fact that only 15.9 percent ever completed more than 8 grades (table 2). Eight and six-tenths percent completed 1 or 2 years of high school before dropping out (table 1),

TABLE 2.—*Cumulative percentage distribution of heads of rural relief households in nine Colorado counties who completed specified grades in school, by sex.*

Grade completed	Cumulative percentages		
	Total	Males	Females
First year college	1.5	1.3	4.1
High school	5.9	5.7	8.7
First year high school	15.9	15.0	25.2
Eighth	51.2	50.5	58.3
Third	82.8	82.5	87.2

⁴Such a conclusion is based upon a national survey conducted in 1933, the results of which were reported by Thomas C. McCormick in **Comparative Study of Rural Relief and Non-Relief Households**, Research Monograph No. II, Division of Social Research, Works Progress Administration. The data comparing relief and non-relief households in Colorado were prepared by Olaf F. Larson and presented as Colo. Exp. Sta. Bul. No. 444, entitled **Rural Households and Dependency**. In the latter publication it was found that the average educational achievement for relief heads of households was 6.5 grades as compared with 7.9 grades for non-relief heads.

and 5.9 percent were graduated from high school before stopping school. Thirty-six people, 1.5 percent of the group, completed at least 1 year of college, while only four people, 0.2 percent, were graduated from college.

Education of Head According to Sex

The average educational achievement of female heads of rural relief households is 7.1 grades as compared with 6.5 grades for male heads (table 1). This difference in educational attainment is significant,⁵ i. e., the difference is so large that it cannot be said to have arisen by chance fluctuation.⁶

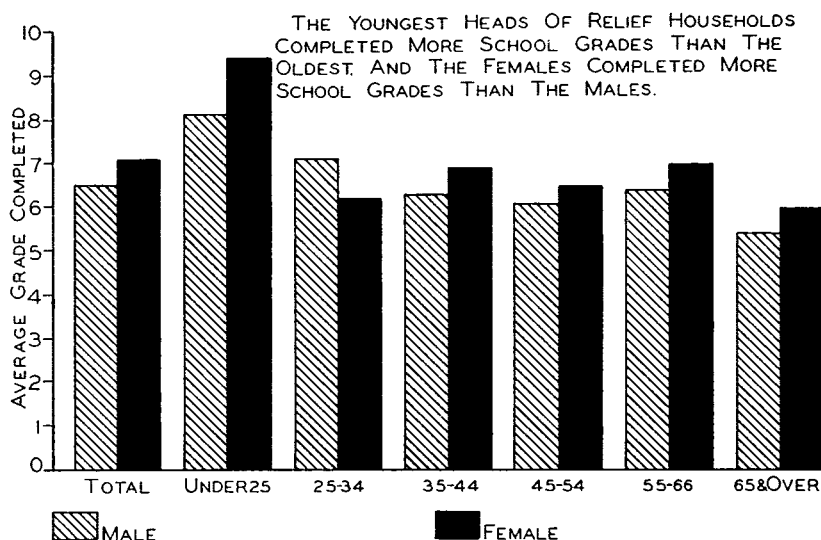


Figure 1.—Average school grade completed by 2,390 heads of rural relief households, in 9 Colorado counties, classified by age and sex.

The proportion of those who have not completed as much as 1 school grade is about the same for each sex, i. e., 5.5 percent of males and 6.4 percent of females. In fact, there is little difference in proportionate attainment between males and females from the first to the

⁵All statements of significance or insignificance in this report are based upon statistical tests of differences. See Yule, G. U., *Introduction to the Theory of Statistics*, Ch. XVII, or Holzinger, Karl J., *Statistical Methods for Students in Education*, Ch. XIII.

⁶This variation between male and female heads raises the general question: Is the educational achievement of women greater, on the average, than men, or is this situation due to the fact that females, if left the responsibility of head of a household, tend to seek advancement on the educational ladder more than men as a means of enhancing their earning power?

eighth grades. It is at the high school and college levels where the women clearly forge ahead of the men. The percentage of women heads of relief households that completed at least 1 or 2 years of high school is 25.2 percent as against 15.0 for the male heads. The percentage of women heads who had college training is nearly three times as high as that of the men.

Education of Head by Age

The proportion of males who did not complete as much as 1 grade in school declines from 14.4 percent among relief heads 65 years of age and over to none for those under 25 years of age (table 1). The decrease among female heads from the same age groups is from 12.5 percent for the older to none for the younger.

Further evidence of the educational difference between the oldest and youngest is found in the proportion of each age group that completed the eighth grade and was graduated from high school. Nearly 72.0 percent of the male heads under 25 years completed the eighth grade while only 35.9 percent of those over 64 completed an equal number of grades. In the case of the females, 78.6 percent of heads under 25 years were graduated from the elementary grades as compared with 46.9 percent of those 65 years of age and over. Twelve and one-tenth percent of the younger males completed high school in comparison with only 2.8 percent of those over 64. Among female heads, 35.8 percent of those born since 1911 were graduated from high school while among those over 64 years, such an accomplishment was limited to but 9.4 percent of the total group.

The average grade completed by the youngest male and female heads was 8.1 and 9.4, respectively, as compared with 5.5 for the oldest men and 6.0 for women 65 years of age and over. These differences are in accordance with the generally accepted fact that the older generation of people living today has had, on the whole, less opportunity for formal education than the younger generation.

When the educational attainment of heads over 25 and under 65 years is considered by age groups at 10-year intervals, one would expect to find a decreasing amount of schooling with increasing age because of changes in educational facilities and incentives over the period of time. Somewhat contrary to this expectation there is not a significant change from one group to another in either the percent which completed any particular grade or the average grade achievement. The answer to such a situation is perhaps deserving of some investigation as a means of testing the validity of the hypothesis mentioned above.

Education of Head by Occupation⁷

When the heads of rural relief households are classified by occupation rather than age or sex, the differences in educational accomplishments become very pronounced (table 3). There were 18.3 percent of the beet laborers or nearly one out of every five heads who either never attended school or did not complete as much as the first grade. The occupational classifications which most nearly approach the beet laborers in having a high percentage that never finished the first grade are coal miners (11.5 percent) and those who were 65 years of age and over or not seeking work.

Interestingly enough, the proportion of farm owners which did not complete the first grade (4.1 percent) is more than five times as large as the percentage of farm tenants (0.8 percent). This situation is somewhat contrary to expectation, yet it is a substantiation of a point of view which has been developed elsewhere,⁸ namely, that many of the characteristics of the tenant which are found in some other sections of the United States do not apply in Colorado.

Further evidence which indicates the limited educational accomplishments of different occupational groups is the proportion of heads that did not go to school beyond the sixth grade. Among the beet laborers, only 12.9 percent of the entire group ever completed more than 6 grades and only 1.0 percent completed more than 8 grades. The other occupational groups listed in ascending order according to the proportion of each group which completed grades beyond the eighth are as follows: Coal miners, 10.7; farm tenants, 11.2; over 65 years of age or not seeking work, 12.1; farm laborers, 18.4; farm owners, 20.5; no occupation, 22.2; "all other," 24.5; professional, 44.4.

The proportion of beet laborers (9.4 percent) that were graduated from the elementary grades is much smaller than of coal miners who were second lowest with 33.2 percent and far below the professional group of which 77.7 percent were graduated.

⁷The term "usual occupation", i. e., the job (other than work relief) lasting for as long as 4 consecutive weeks at which the person had worked longest during the last 10 years, was the criterion for occupational classification.

The professional group was used in this study to include those regularly considered in this classification, also proprietors, clerical and skilled workers.

All persons 65 years of age and over were automatically thrown into the 65-year-age group, even if they had some usual occupation.

⁸See Summers, Thos. H., Droge, Wm. F., and Moorhouse, L. A., **Organization of Irrigated Farms in Otero County, Colorado**, Colorado State College Extension Service, Fort Collins, Colo.; Roberts, Ralph W., "Farm Family Living in Northern Colorado Irrigated District," unpublished master's thesis, Colorado State College; Roskelley, R. W., "Testing Some Factors Thought to be Associated with the Reporting of Population Changes," unpublished paper, Colorado State College.

TABLE 3.—Percentage distribution of 2,390 heads of rural relief households in 9 Colorado counties who completed specified grades in school, by usual occupation.

Occupation	Total		Grade school					High school			Some college	NA	Average grade completed
	Number	Percent	0	1-3	4-6	7	8	9-10	11	12			
Total	2,390	100.0	5.6	9.5	24.0	7.6	35.3	8.6	1.4	4.4	1.5	2.1	6.6
Farm owner	243	100.0	4.1	7.4	23.9	10.3	33.0	11.9	.4	5.8	2.4	.8	6.9
Farm tenant	510	100.0	.8	4.5	19.8	9.0	51.6	6.7	.4	3.3	.8	3.1	7.2
Farm laborer	343	100.0	2.6	8.7	24.2	9.9	34.4	10.5	2.6	5.0	.3	1.8	6.9
Coal miner	253	100.0	11.5	13.0	31.6	8.3	22.5	6.7	--	4.0	...	2.4	5.5
Beet laborer	202	100.0	18.3	32.7	34.1	3.5	8.4	.5	--	.5	...	2.0	3.5
Professional	54	100.0	1.9	...	11.1	7.4	33.3	11.1	3.7	18.5	11.1	1.9	9.2
65 and over or NS	282	100.0	11.0	9.9	25.9	6.0	30.1	6.0	1.1	2.8	2.2	5.0	5.9
None	27	100.0	7.4	3.7	29.6	3.7	33.4	...	7.4	11.1	3.7	...	7.1
All others	476	100.0	2.1	5.9	20.4	5.5	41.2	13.6	3.1	5.2	2.6	.4	7.5

Only 0.5 percent of the beet laborers completed high school. This is approximately one-eighth as large a proportion as coal miners, the next lowest group, and about 59 times smaller than the professional group which had the largest percent graduated.

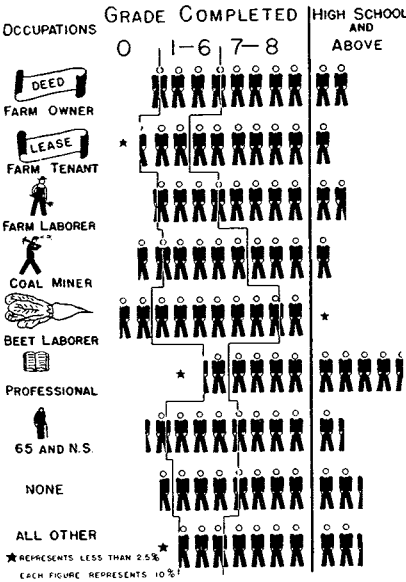


Figure 2.—Percentage distribution of 2,390 heads of rural relief households classified by occupation and school grade completed.

Although data are not available which show the nationalities of those occupational groups which have the lowest educational achievements, a knowledge of the areas studied reveals that a very large proportion of them is foreign born. Among the beet laborers the major nationalities are Spanish-American, Mexican, and German-Russian, while in the coal miner group there is a great predominance of Spanish-Americans, Mexicans, Italians, Greeks, and Slavs. This high percentage of foreign born in the relief group with the lowest educational status makes the problem of rehabilitation more difficult than otherwise. These people not only lack what in America is defined as the minimum requirements for effective participation in the economic and social aspects of community living, but they are also in a land of strange culture patterns, where the economic practices and social customs are not understood by them.

Education of Agricultural Workers by Age

It has already been shown that the average amount of schooling obtained by agricultural workers on relief, even farm operators, is less

In accordance with expectation the professional group had the largest proportion of persons with college training. None of the beet laborers nor coal miners completed as much as 1 year in college.

A summary of the educational achievements of the heads, classified by their various occupations, is given in the average grade accomplishment of each group which is as follows: Beet laborers, 3.5; coal miners, 5.5; 65 years of age and over or not seeking work, 5.9; farm owners, 6.9; no occupation, 7.1; farm tenant, 7.2; other occupations not classified, 7.5; and professional, 9.2.

than that offered by the traditional one-room country school. And yet "it is agreed by many that a farm boy of today who completes a high school with its vocational course in agriculture is no better prepared to meet the problems of farming and rural living than was his father who completed only the eight grades of the country school in his day. The reason given is that problems are more complex both technically and socially."⁹

Are there any differences in the vocational equipment of farm owners, tenants, and laborers on relief according to their age? For farm owners, the average number of grades completed and the proportion with some high school training decreases consistently from youngest to oldest until the age-group 55 to 64 is reached (table 4). Tenants show the same tendencies as the owners. In all but the

TABLE 4.—*Percentage distribution of school grades completed by male heads of rural relief households in nine Colorado counties by usual occupation in agriculture and age.*

Occupation and age	Total		Grade completed							Average grade Completed
	Number	Per cent	0-3	4-6	7	8	9-11	12 & over	NA	
Farm owner—all	230	100.0	11.3	24.3	10.9	31.7	12.6	8.3	0.9	7.0
16-24	3	100.0	...	...	33.3	...	...	66.7	...	10.3
25-34	22	100.0	4.5	9.1	13.7	31.8	31.8	9.1	...	7.7
35-44	66	100.0	10.6	28.8	6.0	33.4	15.2	4.5	1.5	6.8
45-54	69	100.0	11.6	24.6	18.8	32.0	8.7	2.9	1.4	6.5
55-64	70	100.0	14.3	25.7	5.7	31.4	8.6	14.3	...	7.1
Farm tenant—all	501	100.0	4.6	18.2	9.8	46.6	13.6	4.2	3.0	7.4
16-24	29	100.0	3.4	6.9	3.4	62.1	3.4	10.4	10.4	8.0
25-34	150	100.0	3.3	14.7	8.7	52.0	13.3	5.3	2.7	7.7
35-44	142	100.0	4.2	21.1	9.9	51.5	5.6	4.2	3.5	7.3
45-54	111	100.0	7.2	28.8	6.3	48.7	3.6	2.7	2.7	6.6
55-64	69	100.0	4.4	7.3	20.3	15.9	50.7	1.4	...	8.1
Farm laborer—all	342	100.0	11.7	19.6	12.6	34.4	15.2	5.0	1.5	7.0
16-24	51	100.0	5.9	15.7	7.8	33.3	27.5	7.8	2.0	8.0
25-34	117	100.0	8.5	18.8	10.3	39.4	14.5	6.8	1.7	7.3
35-44	86	100.0	22.1	26.7	5.8	33.7	7.0	3.5	1.2	6.0
45-54	54	100.0	9.3	25.9	11.1	35.1	13.0	3.7	1.9	6.8
55-64	34	100.0	8.8	...	47.1	20.6	23.5	...	...	7.4
Beet laborer—all	196	100.0	51.0	34.2	3.6	8.7	0.5	0.5	1.5	3.5
16-24	10	100.0	30.0	40.0	20.0	10.0	...	...	...	4.8
25-34	71	100.0	39.5	36.6	5.6	18.3	...	...	...	2.9
35-44	54	100.0	64.7	24.1	...	3.7	1.9	...	5.6	2.8
45-54	52	100.0	57.8	36.5	1.9	1.9	...	1.9	...	2.8
55-64	9	100.0	44.4	55.6	...	...	...	...	...	3.2

⁹James, J. A. and Kolb, J. H. Wisconsin Rural Youth, Education and Occupation, Wis. Exp. Sta. Bul. 437, November 1936.

youngest age group the tenants average as many or more grades of schooling as the owners, although generally not having as high a proportion with some high school work. Farm laborers under 45 years of age have less formal education than either owners or tenants, while those 45 and over compare favorably with farm operators, having a relative attainment slightly above both owners and tenants in the 45 to 54 group and between them in the oldest age class.

Education of Non-Heads of Relief Households Over 25

Non-head household members over 25 years of age completed an average of 6.9 grades in school (appendix table 1). When the same group is classified on the basis of sex it is found that the differences between male and female are very small. The average grade achievement for males was 6.6 as compared to 6.9 for females. The insignificant differences between sexes with reference to average grade achievement is but a reflection of the fact that the proportion of each group that did not complete as much as 1 school grade or that completed any specific grade is approximately equal.

THERE IS LITTLE DIFFERENCE BETWEEN THE AVERAGE EDUCATIONAL ATTAINMENT OF HEADS AND OF NON-HEADS OF RURAL RELIEF HOUSEHOLDS.

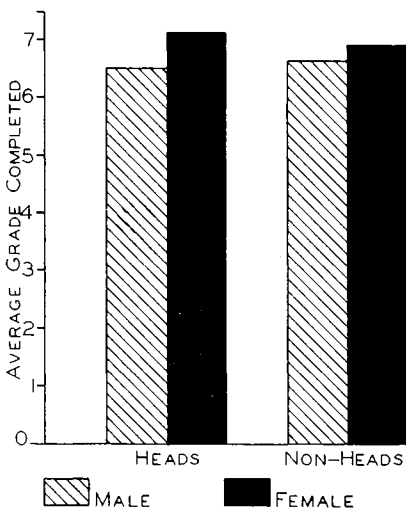


Figure 3.—Average educational attainment of 2,390 heads and 1,568 non-heads of rural relief households, in 9 Colorado counties, classified by sex.

Education of Non-Heads Over 25 by Age

Non-heads of the younger age groups have completed more grades in school than those who are older. This difference is to be expected because of the trend to expand educational opportunities. The proportion that did not complete as much as 1 grade in school increases from 2.1 percent among the males 25 to 34 to 11.1 for males 65 years and over. In case of the females the change is larger. Among the younger group 3.0 percent did not finish the first grade, while among the oldest class the percentage rose to 19.8. Although these significant variations exist between extreme age groups, the transition is in no sense gradual, but is abrupt. When the non-heads between 26 and

65 are classified by age on the basis of 10-year intervals, it will be seen that there is little difference in either the average educational attainment or in the percent that did not complete the first grade in school or who completed any specific grade thereafter.

Education of Heads and Non-Heads Compared

There is a slight but insignificant difference between the educational attainment of heads and non-heads of relief households. The former finished an average of 6.6 grades as compared with 6.9 for the latter.¹⁰ (See fig. 3.)

Education of Dependents

The average school grade completed by dependent members 16 to 25 years of age in rural relief households was 8.5 grades (appendix table 2). This represents an average of 1.9 higher grade attainment than heads and 1.6 more than non-heads over 25.

Education of Dependents by Residence

The formal education of the average dependent member of relief households 16 to 25 living in the open country is 8.5 school grades and that of the villager is the same (appendix table 2). This similarity is somewhat contrary to expectation and raises the question of the validity of the frequent assertion that village residents achieve a higher average grade than the person living in the open country. There are at least two suggestive explanations for this similarity in grade attainment: (1) The distinction between open country and village has little meaning in time of economic crises because of the frequent movement of people from one area to another. In other words, this apparently similar education attainment probably is not a contradiction of the usual belief that the average resident of the open country has less formal education than his village neighbor. It probably is a suggestion that any efforts to measure significant differences have little meaning in times of economic crises, with consequential high rates of population movement, unless interfering factors such as mobility are held constant. This type of provision was not made in setting up this study. (2) The educational facilities of the open country now approach those of the village and have resulted in an increase in average educational attainment.

Education of Dependent Members by Sex

The average male completed slightly fewer grades than the average female. With the former the mean grade achievement was 8.4

¹⁰The reader probably raises the question regarding the effect of age upon the conclusions in this paragraph. The data in table 5 and those following were controlled for age. Holding age constant did not affect the results.

TABLE 5.—Percentage distribution of 1,701 dependent members of rural relief households 16 to 25 years of age, in 9 Colorado counties, by highest grade completed, sex, age, and color.

Sex, age, and color	Total		Grade school										High school				Col- lege	Average grade completed
	Number	Percent	0	1	2	3	4	5	6	7	8	9	10	11	12			
Total	1,701	100.0	.3	.3	.9	1.9	3.1	4.3	6.6	8.6	29.4	9.5	11.9	8.5	12.2	.7	1.8	8.5
Males (total)	807	100.0	.1	.2	.4	2.2	4.2	5.2	6.2	8.9	31.3	8.8	11.6	6.7	11.8	.8	1.6	8.4
22-25																		
W	223	100.0	...	.5	...	1.8	3.6	3.1	4.0	5.4	42.1	11.2	7.6	5.8	10.8	2.3	1.8	8.5
NW	53	100.0	...	1.9	5.7	15.1	7.5	18.8	5.7	16.9	11.3	...	3.8	3.8	3.8	...	5.7	5.8
16-21																		
W	422	100.0	.2	...	...	.5	1.9	1.9	4.5	8.8	30.8	8.8	16.3	9.0	15.9	.2	1.2	9.0
NW	109	100.0	...	...	...	3.7	12.8	15.6	17.5	12.8	20.2	8.3	4.6	.9	1.8	.9	.9	6.7
Females (total)	894	100.0	.5	.5	1.3	1.6	2.0	3.6	7.0	8.4	26.9	10.2	12.3	10.3	12.8	.6	2.0	8.6
22-25																		
W	209	100.0	...	...	...	.5	.5	1.0	5.2	4.8	41.6	8.6	16.2	6.2	13.4	1.0	1.0	9.0
NW	63	100.0	4.8	4.8	4.8	4.8	11.1	12.7	12.7	9.5	20.6	1.6	1.6	3.1	...	1.6	6.3	5.7
16-21																		
W	481	100.0	.2	...	1.0	...	.8	4	3.7	7.3	24.1	13.3	14.6	15.6	16.7	.4	1.9	9.3
NW	141	100.0	...	.7	2.8	7.1	4.3	14.2	17.7	16.3	22.7	5.0	2.8	.7	3.6	...	2.1	6.6

Average grade completed by W (whites), 9.1.

Average grade completed by NW (non-whites), 6.5.

while it was 8.6 for the latter (table 5). These differences are so small, however, that no significance can be attributed to them.

Education of Dependent Members by Color

Although there is no difference between the formal education of dependent members of rural households 16 to 25 when classified by sex and when classified by residence, segregation on the basis of color brings out significant variations. Those of non-Nordic origin were considered non-white and the remainder were thought of as white. In table 5 two factors are held constant, i. e., the people are alike in sex and age. They vary in color, and the educational discrepancies are revealing. The average grade completed by the whites was 9.1 and by the non-whites 6.5, a difference of 2.6 grades.

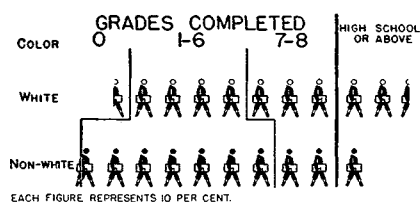


Figure 4. — Percentage distribution of 4,354 dependent members of rural relief households, 5 to 25 years of age, classified by grade attainment and color.

Another way of presenting this educational discrepancy is by revealing the proportion of each group that goes beyond the sixth grade, completes at least 1 year of high school, high school, or the freshman year in college. Only 226, or 61.7 percent, of the non-whites completed the sixth grade or more, while 1,260, or 94.4 percent, of the whites finished as much schooling. The

proportion of non-white youth that went to high school was 12.6 percent, compared with 51.1 percent for the white youth. A little more than five times as many whites as non-whites completed high school.

TABLE 6.—Cumulative percentage of dependent members of rural relief households 16 to 25, in 9 Colorado counties, who completed specified grades, by color.

Grade completed	Cumulative percentage		
	Total	White	Non-White
1st year college	.7	.8	.5
High school	12.9	15.6	3.0
1st year high school	42.8	51.1	12.6
8th	72.2	83.1	32.5
6th	87.4	94.4	61.7
3rd	96.7	97.9	92.1

This basic difference is between the Nordics and the Spanish-Americans or Mexicans. The implications of such a situation are numerous and rather important. The consideration here is of young folks who, at the time the study was made, were dependent upon re-

lief for a livelihood. They had reached the age when, under normal circumstances, they should be moving out into various occupations and becoming self-sufficient. Their average educational achievement was so limited, however, that they had barely achieved the essentials for the ordinary demands of life. Because of this lack of education, any effort on their part to remove themselves from the relief rolls would be more difficult than if they had received a sufficient amount of formal training to assist in any effort pointed toward effective and successful self-supporting participation in the economic and social pursuits of life.

Education of Persons Under 16 But Not in School

Education by Sex

There is no significant difference between the average educational accomplishment of males and females under 16 and not in school (appendix table 3).

Education by Color

The discrepancy between the formal schooling of whites and non-whites which was noted earlier among older persons is also evident among persons under 16 years of age but not in school. If one calculates the average school grade completed of those children that have finished at least the first year of school, a discrepancy of 1.3 grades exists between the two groups (appendix table 4). This difference is not as great, however, as existed between the older white and non-white mentioned earlier. This trend toward uniformity would suggest that the somewhat equal access to educational opportunities or compulsory attendance is ironing out some of the variations in formal training of members of different groups on relief.

Education of Children 15 and Under Now In School

Although it is said that all children are entitled to equal educational opportunities regardless of race, age, or sex, the material presented in text tables 7 and 8 and appendix tables 5, 6, and 7 indicates that they probably do not have similar advantages or are not availing themselves of the opportunities which are provided.

Education of Children by Occupation of Head

Children of beet laborers completed fewer grades, on the average, than those of any other occupational classification, while children in households whose heads were 65 and older or not seeking work completed the most. One of the reasons for the achievement of the latter group is probably the fact that their mean age was slightly higher than the other children.

On the whole there is a very interesting parallel between the education of the children and the heads of households when classi-

fied by occupation. A comparison of tables 3 and 7 reveals that in the occupational classes where the education of the heads is highest, the mean grade achievement of the children of those groups is above average. Likewise in those groups where the education of the head is below the average, the formal schooling of the children is low. This situation is not only true for the group taken as a whole but is also the case when the children are classified by age groups (appendix tables 5, 6, and 7).

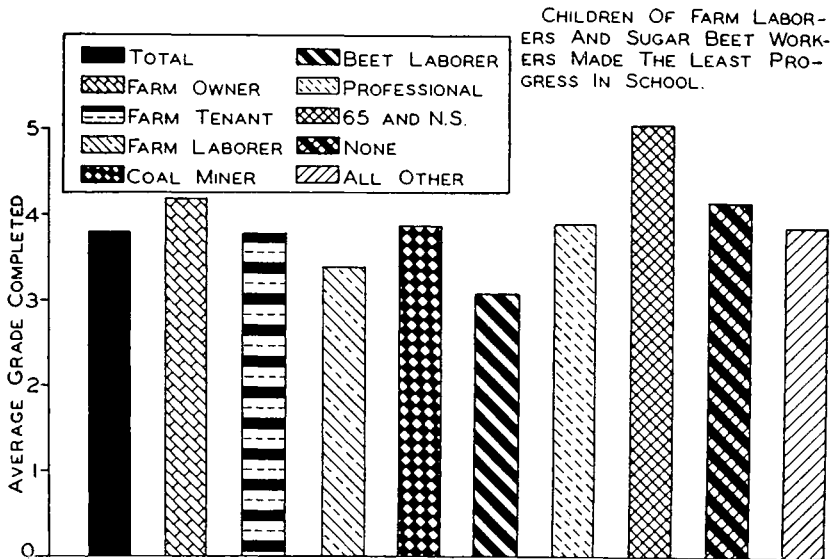


Figure 5.—Grade accomplishment of 2,653 children of rural relief households, under 16 now in school, in 9 Colorado counties, classified by occupation of head.

Education of Children by Color

It has been pointed out that the average educational attainment of the non-white, classified according to (1) heads of relief households, (2) dependent members 16 to 25 years of age, inclusive, and (3) children under 16 not in school, was less than whites in the same groups. Similar conclusions can be made with reference to the children under 16 now in school. The mean grade completed by all white children was 4.0 against 3.1 for the non-white (appendix table 8).

A more concise picture of this difference can be obtained by revealing the proportion of each group that had attained various grades in school. Sixty-four and seven-tenths percent of the whites were in the third grade or above, while only 53.4 percent of the colored had accomplished as much; 32.1 percent of the white children

TABLE 7.—Percentage distribution of 2,653 school children of rural relief households, 5 to 15 years of age, in 9 Colorado counties, by occupation of head and grade.

Occupation of head	Total		Grade school									High school				Average grade Completed	
	Number	Per-cent	0	1	2	3	4	5	6	7	8	9	10	11	12	NA	Completed
Total	2,653	100.0	7.6	14.7	15.2	12.4	12.1	9.4	10.2	7.9	7.0	2.1	.8	.2	...	.4	3.8
Farm owner	364	100.0	6.6	13.5	11.5	12.1	10.7	8.5	13.5	8.8	8.2	3.8	1.4	.3	...	1.1	4.2
Farm tenant	670	100.0	9.4	13.3	14.9	10.6	13.9	8.7	10.0	9.5	7.3	1.8	.5	.1	...	...	3.8
Farm laborer	348	100.0	8.9	17.2	20.7	10.6	9.8	10.0	8.6	7.5	5.2	.6	...	...	...	.9	3.3
Coal miner	188	100.0	9.6	12.8	13.3	13.3	8.5	12.8	9.6	9.0	6.9	3.7	.5	...	...	...	3.9
Beet laborer	338	100.0	9.5	17.8	20.1	15.1	12.1	9.2	7.4	4.7	4.1	...	...	...	...	...	3.1
Professional	75	100.0	6.7	16.0	12.0	18.7	6.7	13.3	9.3	5.3	6.7	4.0	1.3	...	...	...	3.9
65 and over or NS	125	100.0	3.2	7.2	8.8	7.2	13.6	11.2	19.2	9.6	12.8	4.0	3.2	...	...	...	5.1
None	32	100.0	9.4	9.4	...	28.1	9.4	6.2	15.6	9.4	12.5	...	...	...	...	...	4.2
All others	513	100.0	4.3	16.2	14.8	13.8	14.4	8.6	9.0	6.8	7.2	2.3	1.4	.6	...	.6	3.9

were in the sixth grade or above, while only 17.1 percent of the colored had advanced that far. The proportion of whites in high school was 3.8 percent in contrast with 0.4 percent of the colored (table 8).

TABLE 8.—Cumulative percentage of 2,653 dependent members of rural relief households, 5 to 15 years of age, in 9 Colorado counties, by color and grade in school.

Grade distribution	Cumulative percentage		
	Total	White	Non-white
4th year high school	0	0	0
1st year high school	3.1	3.8	.4
8th	10.1	11.5	4.8
6th	28.3	32.1	17.1
3rd	62.4	64.7	53.4

The difference between the grade achievement of the white and colored is not only true for the group as a whole but is equally significant when classified by occupation of head or by age.

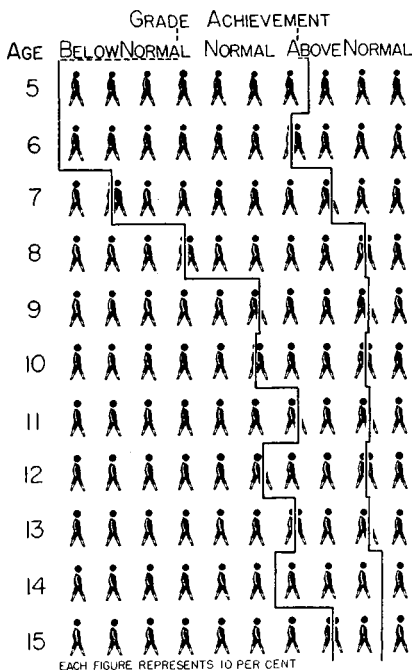


Figure 6. — Percentage distribution of 2,653 school children, 5 to 15 years of age, of rural relief households, classified by age and grade achievement.

Appendix tables 5, 6, and 7 give the groupings by occupation of head and by age. In every class the white children have completed more grades than the non-white. When children of the same ages are compared we observe that whites 13 to 15 achieved educationally 7.0 grades, while the non-white children were, on the average, 1.3 grades below them. White students 10 to 12 were advanced on the average 1.0 grade more than the non-whites. White children 5 to 9 had achieved an educational standing of 1.6 grades compared with 1.3 for non-whites of the same age.

Age-Grade Distribution of Children 5 to 15

Additional insight into the problem of the educational deficiency of the school children 5 to 15, inclusive, may be had by

TABLE 9.—*Age-grade distribution of 2,653 school children of rural relief households, 5 to 15 years of age, in 9 Colorado counties.*

Age	Total		Grade school									High school				
	Num-ber	Per-cent	0	1	2	3	4	5	6	7	8	9	10	11	12	NA
5	10	100.0	70.0	10.0	20.0	..	..	..	..	..	..	..	..	..	..	..
6	239	100.0	<u>62.8</u>	35.5	1.3	.4	..	..	..	..	..	..	..	..	..	..
7	298	100.0	13.7	<u>64.1</u>	19.5	1.7	.7	..	..	..	..	..	..	..	..	.3
8	276	100.0	1.1	30.8	<u>52.5</u>	12.3	2.9	..	..	..	..	..	..	..	..	.4
9	300	100.0	..	5.7	50.7	<u>30.7</u>	11.3	1.3	.3	..	..	..	..	..	..	..
10	276	100.0	..	1.8	8.0	41.3	<u>31.5</u>	13.4	2.2	1.1	..	..	..	..	..	.7
11	261	100.0	.4	1.1	4.6	19.6	42.5	<u>19.9</u>	10.0	1.1	..	..	..	..	..	.8
12	258	100.0	..	.3	.8	4.3	17.8	34.0	<u>28.3</u>	9.7	3.9	..	..	..	..	..
13	290	100.0	..	.3	1.4	5.9	6.2	14.1	37.7	<u>22.4</u>	10.3	1.7	..	..	..	..
14	252	100.0	..	..	.4	2.0	4.4	5.9	13.9	33.3	<u>29.0</u>	7.9	1.2	1.2	..	.8
15	193	100.0	..	..	1.0	.5	2.6	5.2	10.9	15.6	37.8	<u>15.6</u>	9.3	1.0	..	.5

inspection of tables 9 and 10. These tables show the age-grade distribution of the children.¹¹ The striking feature of this phase of the educational achievement as shown in table 9 and figure 6 is the increasingly high percentage of children, who with advancing age, have not made what may be considered normal advancement in school. In the 7-year-age group, the percentages below normal, normal, and above normal were 13.7, 64.1, and 21.9, respectively (table 10). Among those 15 years old, 73.6 percent or nearly three out of every four pupils were below normal, while 15.6 percent were normal and 10.3 percent were above normal.

TABLE 10.—Percentage distribution of 2,653 school children, 5 to 15 years of age, of rural relief households, in 9 Colorado counties, classified by age and grade achievement.

Age	Grade achievement				
	Total	Below normal	Normal	Above normal	NA
5	100.0	....	70.0	30.0	..
6	100.0	....	62.8	37.2	-
7	100.0	13.7	64.1	21.9	.3
8	100.0	31.9	52.5	15.2	.4
9	100.0	56.4	30.7	12.9	..
10	100.0	51.1	31.5	16.7	.7
11	100.0	68.2	19.9	11.1	.8
12	100.0	58.1	28.3	13.6	..
13	100.0	65.6	22.4	12.0	..
14	100.0	59.9	29.0	10.3	.8
15	100.0	73.6	15.6	10.3	.5

Some Implications

This study has considered not only the educational achievements of various members of relief households but certain variations within the group. Three things seem quite evident from this study. First, the formal schooling of the average relief client, measured by number of school grades completed, is rather meager. Second, younger members of relief households seem to be taking some advantages of increased educational opportunities. Third, great variations exist in educational accomplishments, not only among older people but also among the younger ones, which suggest that wide discrepancies will probably continue to exist within the relief group regardless of the so-called equal opportunities for schooling.

¹¹The assumption made here is to the effect that the average child 7 years of age should have reached the first grade, and the average 8-year-old pupil should be in the second grade, etc. Table 11 was calculated from table 10 on this basis, i. e., if a 7-year-old child were in the second grade, he was considered above normal educationally or vice versa.

Little is known about the relative importance of a lack of education as a contributing factor to relief; almost everyone will agree, however, that a minimum amount of formal school training is a prerequisite of successful participation in contemporary American life. There is little question that much education can be obtained outside the school room. However, because of the typical adverse surroundings in which the members of dependent households find themselves, it is questionable to what extent this type of learning can become the basis of successful social and economic adjustments of the average relief client.

Relief is usually conceived of and limited to provision for basic physical needs. Little attention has been devoted to the problem of creating new attitudes, skills, and outlook on life as a means of solving the problem. If more attention is devoted to this aspect of relief work in the future, it seems reasonable to suggest that it must proceed upon the educational foundation of the client. If the education of the client is limited, it follows that the first step in the rehabilitation problem is education. Such a contention is made in light of the assumption that any effort toward the successful solution of a problem must utilize the training and experience of a number of phases of life. As long as the average relief client has only a meager amount of constructive information, is lacking in social background and educational experience, it is quite probable that a spirit of complacency and contentment with his relief status will exist. While not a panacea, education does offer the possibility of developing new attitudes, habits, and skills; it facilitates self-evaluation and encourages one's effort toward self-improvement.

In light of the educational deficiencies found among younger members of relief households, it seems very probable that the economic status, occupational training, and philosophy of life at maturity will not be substantially different from that of their parents at the present. The seriousness of this problem of the educational deficiency of the young people who may be thought of as recipients of relief is not to be interpreted only as a problem of the future but one which deserves immediate consideration. Various studies support common observation to the effect that retardation in school is frequently associated with, perhaps conducive to, a complex set of factors which find expression in juvenile delinquency and other types of social and economic maladjustment. If this is the case it raises the practical question, would an increase in current dollars spent as ounces of prevention be more profitable than later dollars spent as pounds of cure?

Why such a large proportion of the rural relief population has not achieved even an eighth grade education, say nothing about high school or college training, is unanswered by this study. Lack of education among the older people is expected because the growth of opportunities for attending school is only recent. But the perpetuation of this deficiency in a large proportion of the young people on relief raises serious questions. Is there lack of opportunity to obtain an education? If so, there are methods of equalizing opportunity. Are there shortcomings in the educational institutions so that students lose interest and cannot see any merit in the type of training offered? If so, perhaps some readjustments can be effected. Are these persons lacking in the capacity to be educated by the customary formal methods? If this be true for a certain proportion, a guidance and rehabilitation program must recognize their existence and needs.

A lack of basic knowledge is the handicap of many farmers, not only in their own farming but in their community relationships. Many legislative measures for the benefit of agriculture "merely create a situation within which the individual has the opportunity to best himself. The extent to which the individual actually benefits by this opportunity will depend on his energy and intelligence."¹² Those who work with and for farmers and other rural groups need to recognize the variation in the educational equipment of individuals and adapt informational and educational methods and techniques accordingly.

¹²Woolfer, T. J. and Winston, Ellen. *Seven Lean Years*, p. 172.

APPENDIX TABLE 1.—Percentage distribution of 1,568 non-heads and over 25 years of age, in 9 Colorado counties, who completed specified grades in school, classified by sex and age.

Sex and age	Total		Grade school					High school			Col- lege	NA	Average grade completed
	Number	Percent	0	1-3	4-6	7	8	9-10	11	12			
Total	1,568	100.0	7.1	7.1	20.0	7.6	34.3	11.1	2.3	5.7	2.3	2.5	6.9
Males (total)	123	100.0	8.1	6.5	18.7	23.6	18.7	15.5	2.4	1.6	1.6	3.3	6.6
26-34	47	100.0	2.1	2.1	17.1	8.5	42.6	21.3	2.1	--	2.1	2.1	7.6
35-44	6	100.0	--	16.7	16.7	33.2	16.7	16.7	--	--	--	--	6.4
45-54	2	100.0	--	--	50.0	--	--	50.0	--	--	--	--	7.3
55-64	14	100.0	21.4	--	35.7	35.7	7.2	--	--	--	--	--	4.9
65 and over	54	100.0	11.1	11.1	14.8	33.3	1.0	12.9	3.7	3.7	1.0	5.6	6.2
NA	--	--	--	--	--	--	--	--	--	--	--	--	--
Females (total)	1,445	100.0	7.0	7.1	20.1	6.2	35.6	10.8	2.3	6.1	2.4	2.4	6.9
26-34	468	100.0	3.0	8.8	18.8	6.4	30.3	14.5	2.8	10.3	3.0	2.1	7.5
35-44	461	100.0	8.0	6.7	19.8	5.4	40.6	9.5	1.3	5.4	1.8	1.5	6.8
45-54	293	100.0	7.8	7.8	23.2	7.5	33.4	9.3	4.1	3.1	2.4	1.4	6.6
55-64	141	100.0	7.8	5.0	18.5	7.8	42.6	8.5	1.4	2.8	2.8	2.8	6.9
65 and over	81	100.0	19.8	1.2	22.2	2.5	33.3	6.2	--	2.5	--	12.3	5.5
NA	1	100.0	--	--	--	--	100.0	--	--	--	--	--	8.0

APPENDIX TABLE 2.—Percentage distribution of 1,701 dependent members of rural relief households, 16 to 25 years of age, in 9 Colorado counties, classified by highest grade completed, residence and age.

	Total		Grade school									High school ¹				Col- lege	NA	Average grade completed
	Num- ber	Per- cent	0	1	2	3	4	5	6	7	8	9	10	11	12			
Total	1,701	100.0	.3	.3	.9	1.9	3.1	4.3	6.6	8.6	29.4	9.5	11.9	8.5	12.2	.7	1.8	8.5
Total OC*	846	100.0	.1	.2	.5	2.2	2.7	4.6	7.1	7.4	31.1	9.6	10.7	7.7	12.4	.6	3.1	8.5
16-21	574	100.0	..	.3	2.6	2.1	2.4	5.4	6.3	8.2	26.3	10.1	11.7	9.8	14.4	.4	..	8.6
22-25	272	100.0	.4	.7	.7	2.6	3.3	2.9	8.8	5.9	41.2	8.5	8.5	3.3	8.1	1.1	4.0	8.0
Total V*	855	100.0	.5	.5	1.3	1.5	3.4	4.1	6.1	9.7	27.7	9.3	13.1	9.3	12.1	.8	.6	8.5
16-21	579	100.0	.3	.2	1.2	.7	3.3	2.7	7.8	10.7	25.7	10.2	14.0	10.2	12.2	.3	.5	8.6
22-25	276	100.0	.7	1.1	1.5	3.3	4.0	6.9	2.5	7.6	31.9	7.6	11.2	7.6	11.6	1.8	.7	8.2

*OC represents open country; V represents village.

APPENDIX TABLE 3.—Percentage distribution of 455 dependent members of rural relief households in 9 Colorado counties under 16 years of age and not in school, classified by age, sex, and average school grade.

Age and sex	Total		Grade school									High school				NA	Average grade completed
	Number	Percent	0	1	2	3	4	5	6	7	8	9	10	11	12		
Total	455	100.0	83.6	.2	.7	1.3	1.1	2.4	1.1	2.4	4.4	1.3	1.1	..	..	.4	1.0
5-6	M	204	100.0	100.0	..	..	..	..	..	..	..	..	..	..	..	..	0
	F	144	100.0	99.3	..	..	..	..	..	..	..	..	..	..	..	.7	0
7-9	M	13	100.0	92.3	7.7	..	..	..	..	..	..	..	..	..	..	..	.8
	F	15	100.0	86.6	..	6.7	6.7	..	..	..	..	..	..	..	..	..	.3
10-12	M	4	100.0	25.0	..	..	25.0	..	..	..	25.0	..	..	..	..	25.0	3.3
	F	6	100.0	66.7	..	..	..	..	33.3	..	..	..	..	..	..	..	1.7
13-15	M	48	100.0	..	..	4.2	8.3	6.3	14.6	10.4	14.6	25.0	8.3	8.3	..	..	6.5
	F	21	100.0	14.3	..	..	..	9.5	9.5	..	14.3	38.1	9.5	4.8	..	..	6.2

APPENDIX TABLE 4.—Percentage distribution of 455 dependent members of rural relief households, in 9 Colorado counties, under 16 years of age and not in school classified by age, color, and grade.

Age and color	Total		Grade											Average grade completed	
	Num-ber	Per-cent	0	1	2	3	4	5	6	7	8	9	10		NA
Total	455	100.0	83.6	.2	.7	1.3	1.1	2.4	1.1	2.4	4.4	1.3	1.1	.4	1.0
5-6	W	238	100.0	99.6	--	--	--	--	--	--	--	--	--	.4	0
	NW	110	100.0	100.0	--	--	--	--	--	--	--	--	--	--	0
7-9	W	11	100.0	72.7	9.1	9.1	9.1	--	--	--	--	--	--	--	.5
	NW	17	100.0	100.0	--	--	--	--	--	--	--	--	--	--	0
10-12	W	8	100.0	37.5	--	--	12.5	--	25.0	--	12.5	--	--	12.5	2.9
	NW	3	100.0	66.7	--	--	33.3	--	--	--	--	--	--	--	1.0
13-15	W	47	100.0	4.3	--	--	4.3	6.4	6.4	8.5	14.9	31.9	12.7	10.6	7.0
	NW	21	100.0	4.8	--	9.5	4.8	9.5	28.5	4.8	14.3	23.8	--	--	5.3

Average grade completed by W (white), first grade and above, 6.8.

Average grade completed by NW (non-white), first grade and above, 5.5.

APPENDIX TABLE 5.—*Percentage distribution of 1,123 school children of rural relief households, 5 to 9 years of age, in 9 Colorado counties, classified by occupation of head, color, and grade in school.*

Occupation of head	Total		Grade									NA	Average grade completed
	Number	Percent	0	1	2	3	4	5	6	7	8		
Total	1,123	100.0	17.9	33.8	32.2	11.6	3.9	.4	.1	...	...	.1	1.5
Farm owner	W	114	100.0	19.3	28.1	30.7	14.9	7.0	...	...	...	...	1.6
	NW	18	100.0	11.1	72.2	11.1	5.6	...	...	...	...	...	1.1
Farm tenant	W	289	100.0	21.5	28.4	31.8	10.7	7.6	...	...	...	...	1.5
	NW	9	100.0	.....	66.7	33.3	..	..	..	..	..	..	1.3
Farm laborer	W	145	100.0	17.2	33.8	35.9	11.0	2.1	...	...	...	...	1.5
	NW	27	100.0	22.2	29.6	40.8	3.7	...	...	...	...	3.7	1.3
Coal miner	W	73	100.0	24.7	26.0	31.5	13.7	1.4	2.7	..	..	..	1.5
	NW	7	100.0	.....	57.1	14.3	28.6	...	..	..	..	..	1.7
Beet laborer	W	34	100.0	20.7	38.2	38.2	2.9	...	..	..	..	..	1.2
	NW	116	100.0	21.6	40.5	34.5	3.4	...	..	..	..	..	1.2
Professional	W	31	100.0	16.1	32.3	25.8	25.8	...	..	..	..	..	1.6
	NW	4	100.0	.....	50.0	25.0	25.0	...	..	..	..	..	1.8
65 and over or NS	W	22	100.0	13.6	27.3	27.3	18.2	13.6	...	..	..	..	1.9
	NW	6	100.0	16.7	50.0	33.3	..	..	..	..	..	..	1.2
None	W	6	100.0	50.0	16.7	33.3	..	..	..	..	..	..	.8
	NW	3	100.0	.....	66.7	.....	33.3	...	..	..	..	..	1.7
All other	W	168	100.0	11.9	32.1	35.1	14.9	4.2	1.2	.6	..	..	1.7
	NW	51	100.0	3.9	54.9	23.5	15.7	...	..	..	..	2.0	1.5

Average grade attainment W, 1.6.

Average grade attainment NW, 1.3.

APPENDIX TABLE 6.—Percentage distribution of 798 school children of rural relief households, 10 to 12 years of age, in 9 Colorado counties, classified by occupation of head, color, and grade in school.

Occupation of head	Total		Grade									Average grade completed		
	Number	Percent	0	1	2	3	4	5	6	7	8	NA		
Total	798	100.0	.1	1.1	4.5	22.4	30.6	22.4	13.2	3.8	1.3	.6	4.3	
Farm owner	W	95	100.0	...	...	1.1	14.7	24.2	26.3	24.2	4.2	5.3	...	4.9
	NW	21	100.0	...	19.0	14.3	33.3	19.0	...	4.8	...	...	9.6	2.8
Farm tenant	W	188	100.0	.5	.5	1.6	20.7	30.9	24.5	14.4	5.3	1.6	...	4.5
	NW	6	100.0	...	...	...	16.7	83.3	...	...	...	...	...	3.8
Farm laborer	W	86	100.0	...	1.2	3.5	16.3	27.9	29.0	17.4	4.7	...	...	4.5
	NW	14	100.0	...	7.1	21.5	21.5	35.7	...	7.1	...	...	7.1	3.2
Coal miner	W	52	100.0	...	...	1.9	23.1	25.0	25.0	17.3	7.7	...	...	4.6
	NW	8	100.0	...	12.5	...	...	25.0	50.0	12.5	...	...	...	4.4
Beet laborer	W	27	100.0	...	...	7.4	22.2	51.9	18.5	...	...	...	...	3.8
	NW	77	100.0	...	...	15.6	44.1	22.1	18.2	...	...	...	...	3.4
Professional	W	19	100.0	...	...	...	21.0	21.0	42.1	5.3	5.3	5.3	...	4.7
	NW	1	100.0	...	...	...	100.0	...	...	...	...	...	...	3.0
65 and over or NS	W	30	100.0	...	...	3.3	6.7	30.0	26.7	23.3	10.0	...	...	4.9
	NW	8	100.0	...	...	25.0	12.5	50.0	12.5	...	...	...	...	3.5
None	W	7	100.0	...	...	...	42.9	42.9	...	...	14.2	...	...	4.0
	NW	3	100.0	...	...	...	66.7	...	33.3	...	...	...	...	3.7
All other	W	127	100.0	...	...	.8	24.4	37.0	22.0	13.4	1.6	.8	...	4.3
	NW	29	100.0	...	3.4	13.8	17.3	41.4	3.4	10.4	3.4	...	6.9	3.8

Average grade completed by W, 4.5.

Average grade completed by NW, 3.5.

APPENDIX TABLE 7.—Percentage distribution of 732 children of rural relief households, 13 to 15 years of age, in 9 Colorado counties, classified by occupation of head, color, and grade in school.

Occupation of head	Total		Grade school									High school				Average grade completed	
	Number	Per cent	0	1	2	3	4	5	6	7	8	9	10	11	12		NA
Total	732	100.0	...	.1	1.0	2.7	4.6	9.0	22.5	24.5	24.1	7.5	2.9	.7	...	.4	6.8
Farm owner	W 95	100.0	...	...	...	1.0	2.1	3.2	22.1	25.3	25.3	14.7	5.3	1.0	...	...	7.4
	NW 21	100.0	...	...	4.8	19.0	9.5	14.4	19.0	19.0	4.8	...	...	...	...	9.5	5.1
Farm tenant	W 169	100.0	...	...	1.2	...	4.7	6.5	21.9	30.8	25.4	7.1	1.8	.6	...	...	6.9
	NW 9	100.0	...	...	...	...	...	11.2	33.3	22.2	33.3	...	...	...	...	...	6.8
Farm laborer	W 61	100.0	...	1.7	4.9	...	...	11.5	18.0	34.4	26.2	3.3	...	...	...	...	6.6
	NW 15	100.0	...	...	...	20.0	13.3	20.0	20.0	6.7	13.3	...	...	...	...	6.7	5.2
Coal miner	W 45	100.0	...	...	...	2.2	...	11.2	15.5	26.7	26.7	15.5	2.2	...	...	...	7.1
	NW 3	100.0	...	...	...	...	...	...	33.3	33.3	33.3	...	...	...	...	...	7.0
Beet laborer	W 19	100.0	...	...	5.3	10.5	...	5.3	36.8	26.3	15.8	...	...	...	...	...	6.0
	NW 65	100.0	...	...	...	6.2	15.4	16.9	27.7	16.9	16.9	...	...	...	...	...	5.8
Professional	W 18	100.0	...	...	...	...	...	5.5	33.4	16.7	22.2	16.7	5.5	...	...	...	7.3
	NW 2	100.0	...	...	...	...	50.0	50.0	...	...	...	...	...	...	...	...	4.5
65 & over or NS	W 49	100.0	...	...	...	...	...	8.2	22.4	18.4	32.6	10.2	8.2	...	...	...	7.4
	NW 10	100.0	...	...	...	20.0	10.0	10.0	60.0	...	...	...	...	...	...	...	5.1
None	W 10	100.0	...	...	...	10.0	...	...	50.0	10.0	30.0	...	...	...	...	...	6.4
	NW 3	100.0	...	...	...	...	...	33.3	...	33.3	33.3	...	...	...	...	...	6.6
All other	W 121	100.0	...	...	...	.8	4.1	9.9	18.2	24.8	25.6	8.3	5.8	2.5	...	...	7.1
	NW 17	100.0	...	...	...	5.9	17.6	5.9	17.6	11.8	29.4	11.8	...	...	...	...	6.5

Average grade completed by W, 7.0.

Average grade completed by NW, 5.7.

APPENDIX TABLE 8.—Percentage distribution of 2,653 school children of rural relief households, 5 to 15 years of age, in 9 Colorado counties, classified by occupation of head, color, and grade in school.

Occupation of head and color	Total		Grade school									High school				Average grade		
	Number	Per cent	0	1	2	3	4	5	6	7	8	9	10	11	12	NA	completed	
Total	2,653	100.0	7.6	14.7	15.2	12.5	12.1	9.4	10.2	7.8	7.0	2.1	.8	.2	...	.4	3.8	
Farm owner	W	304	100.0	7.2	10.5	11.9	10.5	10.9	9.2	14.5	9.2	9.6	4.6	1.6	.3	...	...	4.4
	NW	60	100.0	3.3	28.3	10.0	20.0	10.0	5.0	8.3	6.7	1.7	...	...	...	...	6.7	3.0
Farm tenant	W	646	100.0	9.8	12.8	15.0	10.8	13.6	8.8	9.9	9.6	7.1	1.9	.5	.2	...	...	3.8
	NW	24	100.0	...	25.0	12.5	4.2	20.8	4.2	12.5	8.3	12.5	...	...	...	...	...	4.0
Farm laborer	W	292	100.0	8.6	17.4	19.9	10.3	9.2	10.9	8.9	8.6	5.5	.7	...	...	...	...	3.4
	NW	56	100.0	10.7	16.0	25.0	12.5	12.5	5.4	7.1	1.8	3.6	...	...	...	...	5.4	2.8
Coal miner	W	170	100.0	10.6	11.2	14.1	13.5	8.2	11.8	9.4	9.4	7.1	4.1	.6	...	...	...	3.9
	NW	18	100.0	...	27.7	5.6	11.1	11.1	22.2	11.1	5.6	5.6	...	...	...	...	...	3.8
Beet laborer	W	80	100.0	8.8	16.2	20.0	11.2	17.5	7.5	8.7	6.3	3.8	...	...	...	...	...	3.2
	NW	258	100.0	9.7	18.2	20.1	16.3	10.4	9.7	7.0	4.3	4.3	...	...	...	...	...	3.0
Professional	W	68	100.0	7.4	14.7	11.7	17.6	5.9	13.2	10.3	5.9	7.4	4.4	1.5	...	...	...	4.0
	NW	7	100.0	...	28.6	14.3	28.6	14.3	14.3	...	...	...	...	...	...	...	...	2.7
65 & over or NS	W	101	100.0	3.0	5.9	6.9	5.9	11.9	11.9	17.8	11.9	15.8	5.0	4.0	...	...	...	5.6
	NW	24	100.0	4.2	12.5	16.7	12.5	20.8	8.3	25.0	...	...	...	...	...	...	...	3.6
None	W	23	100.0	13.1	4.3	...	26.1	13.0	...	21.7	8.7	13.1	...	...	...	...	...	4.3
	NW	9	100.0	...	22.2	...	33.4	...	22.2	...	11.1	11.1	...	...	...	...	...	4.0
All others	W	416	100.0	4.8	13.0	14.4	13.7	14.2	10.1	9.6	7.7	7.7	2.4	1.7	.7	...	...	4.1
	NW	97	100.0	2.1	29.9	16.5	14.4	15.5	2.1	6.2	3.0	5.2	2.1	...	...	...	3.0	3.1

Average grade attainment of W, 4.0.

Average grade attainment of NW, 3.1.

Notes

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430	Oat Production in Colorado
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434	Improving the Farm Wagon
435	North Park Cattle Production—An Economic Study
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455	Colorado's Poisonous and Injurious Plants
456	Analysis of 50 Years' Weather Record

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91	Western Slope Lamb Feeding
93	Controlling the Squash Bug

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Fort Collins, Colorado**