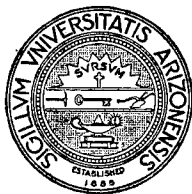


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October 1, 1933



# University of Arizona Bulletin

SOCIAL SCIENCE BULLETIN No. 3

## Teacher-Training and Placement in Arizona

By  
DOYLE D. JACKSON

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**University of Arizona**  
TUCSON, ARIZONA

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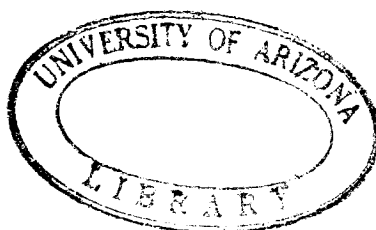
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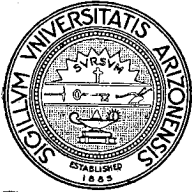
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## PREFACE

The primary purpose of this study was to present a composite picture of the teaching personnel of Arizona. Since objective information is the basis of constructive thought and action, such information is essential in any plan for improving the present situation. The analysis of the teaching staff involves consideration of such factors as type and extent of training, type of certificate held, experience and tenure, professionally progressive tendencies, source of supply, age and sex. A second purpose was an analysis of the teacher-training agencies of the State and of the teacher-placement service associated with these agencies. Incidentally, the study reveals to some extent the employing practices of school boards and other school officials.

The large number of teachers in the State made necessary the use of the sampling procedure with its attendant limitations. Moreover, the study is restricted to quantitative data and to organization and administrative aspects. It is to be hoped that further study will reveal the qualitative aspects of instruction in relation to training and of all associated activities.

The study is a dissertation presented by Mr. Jackson in partial fulfillment of the requirements for the Doctor's Degree. It is presented in the belief that it will be of interest to teachers and of interest and value to school administrators and other school officials.

J. W. CLARSON, JR.



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# Teacher-Training and Placement in Arizona

By  
DOYLE D. JACKSON

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## I. INTRODUCTION

### AIM OF THE STUDY

The purpose of the present study is to determine the status of the teaching personnel in Arizona and to evaluate the State's teacher-training and placement agencies. It attempts to present some of the teacher-training problems of the State and to suggest solutions.

This involves the determination of the preliminary and subsequent training, the experience and salary, the types of certificates held, and the sources of supply of a representative sampling of the teaching force of Arizona. It also includes an analysis and an evaluation of the two State teachers colleges at Flagstaff and at Tempe, and of the College of Education of the University at Tucson. Moreover, it includes an analysis of the teacher-placement agencies of these three institutions.

### SCOPE AND LIMITATIONS

This study relates itself to administration and organization, and has not considered the character of specific instruction.

It further emphasizes the status and preparation of teachers for general positions in high schools and elementary schools, urban and rural. Only in an indirect way is consideration given the status and training of teachers of special subjects, such as music, art, commercial work, and the like.

Certain additional data concerning the teaching personnel that would be interesting are not available. Unfortunately,

accurate information with regard to the ages and to the turnover of the public school teaching force of the State was not obtainable. Moreover, data for comparative purposes on the rural teaching force were found incomplete.

Throughout this discussion certain terms are used in a restricted or inclusive sense. "High-school teacher" is used to designate a teacher employed in any of the high schools or junior high schools recognized by the State Board of Education of Arizona. "Graded-school teacher" indicates any elementary teacher employed in a school having more than two rooms. "Rural-school teacher" indicates any elementary teacher employed in a one- or two-room school.

#### SOURCES OF DATA

For material to make up a picture of the present status of the teaching personnel of the State, the writer was granted access to the records on file in the offices of the state superintendent of public instruction, at Phoenix.

In determining what constitutes an acceptable minimum of training for teachers the standards accepted by other states and by standardizing agencies were drawn upon. Moreover, standards agreed upon by recognized students of the problem were used. The library of the University of Arizona, the package loan library of the University of Texas, and the library of Baylor College, Belton, Texas, afforded representative material along these lines.

Additional material relating to teacher-training and to certification requirements of forty-six states was secured through direct correspondence with the state departments of education.

Information relative to the teacher-training institutions of the State was obtained by personal visits. The data secured relate to the legal status, admission requirements, courses of study, the teaching staffs, practice-teaching facilities, and placement offices.

#### METHODS OF TREATMENT

The techniques employed are: (1) Analysis of school records and reports; (2) Analysis of recent surveys and programs of teacher-training promulgated by other states;

(3) Analysis of books bearing on certain phases of the problem; (4) Analysis of school laws and regulations.

## II. THE STATUS OF THE TEACHERS OF ARIZONA

### A. NUMBER AND CHARACTER OF TEACHING POSITIONS

The number and character of teaching positions in the State as reported in 1924-25 and 1929-30 may be seen in Table I.

TABLE I  
NUMBER OF TEACHING POSITIONS IN THE STATE OF  
ARIZONA REPORTED BY SUPERINTENDENTS IN  
1924-25 AND 1929-30.

	1924-25	1929-30	Per cent change
High School.....	559	771	+37.92
Graded School.....	2,218	2,578	+16.23
Rural.....	.....	149	.....
Total .....	2,777	3,498	+20.59

An examination of this table shows that between 1924-25 and 1929-30 the number of high-school teachers increased 37.92 per cent. Within the same five-year period graded-school positions increased 16.23 per cent. Data are incomplete for 1924-25 on the number of rural school positions. Table I also shows that in 1929-30 superintendents reported less than 3,500 teaching positions in the State, and that of these the high schools constitute about one-fifth. From the data given on rural-school positions which reveal an unusually small number in proportion to the other groups, the conclusion is justified that Arizona is not facing any grave rural-school problem in her teacher-training program, such as exists in the more thickly populated states.

### B. TRAINING, EXPERIENCE, AND SALARY OF TEACHERS OF ARIZONA

In order to secure a picture of the present status of the teachers of Arizona, the records of every third high-school teacher, every fifth graded-school teacher, and ninety-eight rural-school teachers were taken in order as the names

appeared in the superintendents' reports for the year 1929-30. In this way the records of two hundred high-school teachers representing twenty-six different high schools were taken. Also the records of two hundred graded-school teachers representing approximately the same number of different cities and villages were taken, while the ninety-eight rural teachers taught in almost an equal number of rural districts. The records examined included the county superintendents' reports from the fourteen counties of the State.

Table II indicates the amount of schooling above the eighth grade as reported by Arizona teachers in 1929-30. This table shows that the typical high-school teacher is a college graduate. Twenty-four per cent report more than eight years of training above the eighth grade; all show at least some work of collegiate grade. The typical graded-

TABLE II  
YEARS OF SCHOOLING ABOVE THE EIGHTH GRADE REPORTED BY 3,533 ARIZONA TEACHERS AS SHOWN BY COUNTY SUPERINTENDENTS' RECORDS, 1929-30.

Years of Schooling Above the Eighth Grade	Teachers in					
	High Schools		Graded Schools		Rural Schools	
	Number	Per cent	Number	Per cent	Number	Per cent
0 .....	.....	.....	2	.08	0	.....
1 .....	.....	.....	9	.40	3	2.02
2 .....	.....	.....	5	.20	11	7.38
3 .....	.....	.....	31	1.20	30	20.14
4 .....	.....	.....	35	1.25	7	4.69
5 .....	5	.60	91	3.50	12	8.05
6 .....	21	2.70	1323	50.63	62	41.61
7 .....	104	13.60	540	20.66	17	11.40
8 .....	456	59.10	485	18.56	1	.67
9 & over..	185	24.00	92	3.52	6	4.04
Totals .....	771	100.00	2613	100.00	149	100.00
Median ....	8.56		6.85		6.19	

school teacher, as well as the typical rural teacher, is a high-school graduate with two years of college or normal school work. Table II also shows that only eighty-two of the 2,613 graded teachers show no college work; fifty-one, or a little over one-third of the 149 rural teachers, show training be-

low that of collegiate grade. It is also interesting to note that the spread downward toward no schooling above the eighth grade is fairly uniform for rural and graded teachers. Of still greater interest is the fact that only 42.70 per cent of the graded teachers qualify as adequately trained teachers under the *present* law, which requires as a minimum the completion of a three-year college course. On the same basis, only 16.10 per cent of the rural teachers qualify. These two groups combined show that only 41.30 per cent of the elementary teachers of Arizona are adequately trained under the provisions of the law.

A factor of training which has assumed considerable prominence within the past ten or fifteen years is attendance at summer schools, together with leaves of absence and other arrangements for the continuation of the professional preparation of teachers. Few Arizona teachers allow more than two years to elapse between such periods of attendance, and a large majority do not allow more than one year to intervene. Though this added training is probably to a great extent due to pressure exerted by certification requirements, it nevertheless shows the growth of professional interest and a disposition to take advantage of opportunity for more advanced training.

In presenting a picture of the present teaching situation of the State one thing necessary is to show, by a good sampling, the total experience of the present teaching force. Data concerning two hundred high-school, two hundred graded-school, and ninety-eight rural-school teachers clearly indicate that in the high schools, graded schools, and rural schools, Arizona's children are taught by teachers of good average experience. The data also show that the median total experience of high-school teachers is six years plus, that of graded-school teachers also six years plus, that of rural teachers five years plus, and that of all teachers even six years.

Another essential item is the length of time the teachers have been serving in their present teaching positions. Data concerning the experience of 498 teachers in their present positions at the beginning of the school year 1929-30 show a little more uneven and noteworthy condition. Out of two hundred high-school teachers, only nine were beginning their work in their present positions, and forty-one had

served their present communities only one year. Eighty-two, or 41.0 per cent, had held their present positions two years or less. Moreover, it is shown in the data that graded teachers remain in their positions only forty-seven hundredths of a year less than the high-school teachers, and one and twenty-three hundredths years more than rural teachers.

The total experience of the typical high-school teacher is six years, and she has been, on the average, three and one-half years in her present position. The total experience of the graded-school teacher is, as already indicated, also six years, and she has been, on the average, three years in her present position. The total experience of the typical rural-school teacher is five years, and she has been, on the average, a little less than two years in her present position. At the beginning of the school year 1929-30, 12.0 per cent of the rural teachers were new to their positions, 46.0 per cent had served in their present positions only one year, and only eight out of ninety-eight teachers had served in the same positions five years or more.

TABLE III  
DISTRIBUTION OF SALARIES OF 200 HIGH-SCHOOL  
TEACHERS IN THE STATE OF ARIZONA, 1929-30.

Annual Salary	Number Receiving	Annual Salary	Number Receiving
\$1,200-1,249.....	0	\$2,100-2,149.....	24
1,250-1,299.....	1	2,150-2,199.....	10
1,300-1,349.....	4	2,200-2,249.....	1
1,350-1,399.....	6	2,250-2,299.....	5
1,400-1,449.....	7	2,300-2,349.....	0
1,450-1,499.....	3	2,350-2,399.....	8
1,500-1,549.....	7	2,400-2,449.....	12
1,550-1,599.....	4	2,450-2,499.....	2
1,600-1,649.....	8	2,500-2,549.....	3
1,650-1,699.....	8	2,550-2,599.....	1
1,700-1,749.....	12	2,600-2,649.....	1
1,750-1,799.....	3	2,650-2,699.....	1
1,800-1,849.....	22	2,700-2,749.....	4
1,850-1,899.....	2	2,750-2,799.....	1
1,900-1,949.....	15	2,800-2,849.....	1
1,950-1,999.....	2	2,850-2,899.....	1
2,000-2,049.....	18	2,900-2,949.....	2
2,050-2,099.....	1		
Total.....			200
Median Salary.....		\$1,943.33	

Another item of consequence is the matter of salaries. Tables III, IV, and V show the distribution of salaries for high-school, graded-school, and rural-school teachers in 1929-30.

TABLE IV  
DISTRIBUTION OF SALARIES OF 200 GRADED-SCHOOL  
TEACHERS IN THE STATE OF ARIZONA, 1929-30.

Annual Salary	Number Receiving	Annual Salary	Number Receiving
\$ 900- 924.....	0	\$1,525-1,549.....	4
925- 949.....	0	1,550-1,574.....	5
950- 974.....	0	1,575-1,599.....	5
975- 999.....	1	1,600-1,624.....	12
1,000-1,024.....	1	1,625-1,649.....	2
1,025-1,049.....	2	1,650-1,674.....	2
1,050-1,074.....	1	1,675-1,699.....	2
1,075-1,099.....	1	1,700-1,724.....	13
1,100-1,124.....	1	1,725-1,749.....	3
1,125-1,149.....	6	1,750-1,774.....	1
1,150-1,174.....	6	1,775-1,799.....	1
1,175-1,199.....	1	1,800-1,824.....	20
1,200-1,224.....	11	1,825-1,849.....	8
1,225-1,249.....	0	1,850-1,874.....	4
1,250-1,274.....	10	1,875-1,899.....	1
1,275-1,299.....	2	1,900-1,924.....	4
1,300-1,324.....	9	1,925-1,949.....	1
1,325-1,349.....	0	1,950-1,974.....	1
1,350-1,374.....	13	1,975-1,999.....	2
1,375-1,399.....	4	2,000-2,024.....	2
1,400-1,424.....	2	2,025-2,049.....	1
1,425-1,449.....	15	2,050-2,074.....	1
1,450-1,474.....	3	2,075-2,099.....	1
1,475-1,499.....	5	2,100-2,124.....	4
1,500-1,524.....	6		
Total.....			200
Median Salary.....		\$1,525.00	

Table III shows that the median annual salary paid high-school teachers in 1929-30 is \$1,943.33. The reader is to be cautioned that this figure is probably a little high in that the contents of the table, which merely represents a sampling of data, is likely weighted by large schools. Only twenty-one of the two hundred teachers considered were receiving less than \$1,500 annually, while on the upper end of the distribution it may be seen that only fifteen of the two hundred receive more than \$2,500 a year.



The median annual salary paid two hundred graded-school teachers in 1929-30, as shown in Table IV, is \$1,525. Only one teacher of this group receives less than \$1,000. Nine of the two hundred receive \$2,000 or more.

TABLE V  
DISTRIBUTION OF SALARIES OF 98 RURAL-SCHOOL  
TEACHERS IN THE STATE OF ARIZONA, 1929-30.

Annual Salary	Number Receiving	Annual Salary	Number Receiving
\$ 975- 999.....	1	\$1,500-1,524.....	0
1,000-1,024.....	1	1,525-1,549.....	0
1,025-1,049.....	2	1,550-1,574.....	0
1,050-1,074.....	0	1,575-1,599.....	4
1,075-1,099.....	1	1,600-1,624.....	0
1,100-1,124.....	4	1,625-1,649.....	0
1,125-1,149.....	3	1,650-1,674.....	0
1,150-1,174.....	5	1,675-1,699.....	1
1,175-1,199.....	0	1,700-1,724.....	0
1,200-1,224.....	18	1,725-1,749.....	0
1,225-1,249.....	0	1,750-1,774.....	0
1,250-1,274.....	11	1,775-1,799.....	0
1,275-1,299.....	0	1,800-1,824.....	1
1,300-1,324.....	4	1,825-1,849.....	0
1,325-1,349.....	0	1,850-1,874.....	0
1,350-1,374.....	30	1,875-1,899.....	0
1,375-1,399.....	1	1,900-1,924.....	0
1,400-1,424.....	0	1,925-1,949.....	0
1,425-1,449.....	7	1,950-2,000.....	1
1,450-1,474.....	0	2,400-.....	1
1,475-1,499.....	2		
Total.....			98
Median Salary.....		\$1,318.75	

The median annual salary paid ninety-eight rural-school teachers in 1929-30, as shown in Table V, is \$1,318.75. Only one teacher of this number receives less than \$1,000 a year. Eight of the ninety-eight receive \$1,500 or more.

### C. TYPES OF CERTIFICATES HELD

This section presents the results of a study of the certification records of the years 1924-25 and 1929-30. In 1924-25 there were 209 men and 350 women, a total of 559 certificated teachers in the high schools of Arizona. In 1929-30 the number had increased to 329 men and 442 women, a total of 771 teachers. The number of men teachers increased 57.41 per cent within the five-year period, as compared with

TABLE VI  
CERTIFICATES HELD BY ARIZONA TEACHERS  
IN 1924-25 AND 1929-30

Kind of Certificate	High School				Graded School				Rural School			
	1924-25		1929-30		1924-25		1929-30		1924-25		1929-30	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Primary.....	6	1.0	16	2.1	28	1.4	63	2.4	I	I	.....	.....
Elementary.....	386	69.0	618	80.1	1,001	48.8	1,602	62.24	N	N	96	64.43
Secondary.....	79	14.0	81	10.5	102	4.9	458	17.6	C	C	12	8.05
Special.....	61	11.0	24	3.1	112	5.4	184	7.13	O	O	9	6.04
First grade.....	20	3.7	24	3.1	521	25.3	197	7.64	M	M	31	20.80
Vocational.....	.....	.....	.....	.....	5	.3	21	.81	P	P	.....	.....
Trial.....	.....	.....	.....	.....	198	9.6	.....	.....	L	L	.....	.....
Life.....	7	1.3	8	1.1	48	2.5	36	1.48	E	E	1	.68
Early Elementary..	.....	.....	.....	.....	37	1.8	17	.70	T	T	.....	.....
Total.....	559	100.0	771	100.0	2,218	100.0	2,578	100.0	E	E	149	100.0

TABLE VII  
INSTITUTIONS REPRESENTED BY 188 COLLEGE GRADUATES  
TEACHING IN ARIZONA HIGH SCHOOLS, 1929-30

COLLEGE	No.	%
UNIVERSITY OF ARIZONA.....	42	22.5
Brigham Young University.....	17	9.1
Kansas St. Teachers College.....	6	3.0
University of Colorado.....	5	2.6
Colorado St. Teachers College.....	5	2.6
University of Illinois.....	5	2.6
University of Nebraska.....	5	2.6
Stanford University.....	4	2.1
TEMPE STATE TEACHERS COLLEGE.....	4	2.1
Utah Agricultural College.....	4	2.1
University of Wisconsin.....	3	1.5
Colorado College, Colorado.....	3	1.5
University of Michigan.....	3	1.5
Iowa State Teachers College.....	3	1.5
University of Missouri.....	2	1.0
Upper Iowa St. Teachers College.....	2	1.0
University of Kansas.....	2	1.0
Grinnell College, Iowa.....	2	1.0
Missouri Valley College.....	2	1.0
University of Chicago.....	2	1.0
NORTHERN ARIZONA TEACHERS COLLEGE.....	2	1.0
University of Minnesota.....	2	1.0
Coe College, Iowa.....	2	1.0
University of Denver.....	2	1.0
Chicago Institute of Arts.....	2	1.0
E. Central St. College, Oklahoma.....	2	1.0
Nebraska State Teachers College.....	2	1.0
University of Oklahoma.....	2	1.0
Columbia U., Teachers College.....	1	.5
University of California.....	1	.5
College of Wichita.....	1	.5
S. Dakota Teachers College.....	1	.5
Montana State College.....	1	.5
Wilson College.....	1	.5
Nebraska Wesleyan.....	1	.5
Sw. Missouri State Teachers College.....	1	.5
Drury College, Missouri.....	1	.5
Wisconsin Teachers College.....	1	.5
Baylor University.....	1	.5
Washington College.....	1	.5
Bowling Green Teachers College.....	1	.5
New Mexico Teachers College.....	1	.5
University of Southern California.....	1	.5
College of Industrial Arts, Denton, Texas.....	1	.5
Bethany College.....	1	.5
University of Arkansas.....	1	.5
Bradley Polytechnic.....	1	.5
Se. Missouri State Teachers College.....	1	.5

TABLE VII—(Continued)

Carthage College, Ill.....	1	.5
Phillips U. of Okla.....	1	.5
Northwestern School of Music.....	1	.5
San Jose Teachers College.....	1	.5
St. Olaf College, Minn.....	1	.5
Pennsylvania State College.....	1	.5
Syracuse University.....	1	.5
University of North Dakota.....	1	.5
South Dakota Agricultural College.....	1	.5
State Teachers College, Pittsburgh, Kansas.....	1	.5
University of Arkansas.....	1	.5
Kansas State Agricultural College.....	1	.5
Battle Creek College, Michigan.....	1	.5
Ohio State University.....	1	.5
State Teachers College, Emporia.....	1	.5
University of Rochester.....	1	.5
Valpariso University.....	1	.5
State Teachers College, Minnesota.....	1	.5
North State Teachers College, South Dakota.....	1	.5
Westminster College.....	1	.5
University of Iowa.....	1	.5
Akron University.....	1	.5
Wheaton College.....	1	.5
Agnes Scott College.....	1	.5
University of Utah.....	1	.5
Missouri State Teachers College.....	1	.5
Colorado Agricultural College.....	1	.5
Carleton College.....	1	.5
Trinity College.....	1	.5
Purdue.....	1	.5
DePauw University.....	1	.5
TOTAL.....	188	100.0

a 26.28 per cent increase on the part of the women teachers. The total increase for high-school teachers is 37.92 per cent.

In 1924-25 there were 187 men and 1,865 women certificated for teaching in the graded schools of Arizona. In 1929-30 the number had increased to 346 men and 2,231 women, a total of 2,577 teachers. It is of more than passing interest to note that the men teachers increased 85.02 per cent within the five-year period, as compared to a 19.60 per cent increase for the women teachers.

For the rural teachers of Arizona the data for 1924-25 are incomplete. In 1929-30 there were 11 men and 138 women, a total of 149 teachers in the rural schools of the State.

Table VI summarizes these data showing the number and types of certificates held by all the teachers of Arizona in

1924-25 and 1929-30. This summary table shows some progress in the character of certificates held by Arizona teachers. For example, in 1924-25 there were 682 first-grade certificates in actual use, while in 1929-30 the number had fallen to 352, the greatest decrease being in the graded schools. This certificate was replaced by the present "Secondary" and "Elementary" certificates which carry higher minimum scholarship requirements. Within the same period the early elementary certificate, which is also no longer offered, decreased from 37 to 17. According to the data given, the trial certificate has disappeared. The life certificate has decreased from 55 to 45 within the five-year period. No more of these certificates are issued.

#### D. SOURCES OF SUPPLY OF TEACHERS

The seventy-nine colleges represented by one hundred and eighty-eight college graduates given in Table VII show a wide distribution, although the colleges of the Central and Western divisions of the United States predominate.

The University of Arizona has contributed 22.5 per cent of the teachers. Brigham Young University ranks second showing a contribution of 9.1 per cent. These two have contributed 31.6 per cent, or almost one-third, of the entire group. It is quite evident that the graduates of the teacher-training institutions of Arizona are in reality not to any great extent being employed in the high schools of the State. Dr. John Franklin Walker, University of Arizona High School Visitor, in his official report to the University and the State Board of Education for 1931, offers evidence supporting this deduction by showing that of all the Arizona high school teachers only 44 per cent have ever enrolled for any college work within any one or more of the three respective teacher-training schools of the State. (79)<sup>1</sup>

#### SUMMARY

A study of the present status of the teachers of Arizona reveals an increasing number of high-school and graded-school teachers during the period from 1924-25 to 1929-30. Data on rural teachers for the beginning of this five-year period are incomplete.

<sup>1</sup> The numbers in parentheses refer to the numbers and pages in the bibliography.

The typical high-school teacher of Arizona is a woman who is a graduate of some Western college with varying amounts of professional training, and who is entering her sixth year of teaching, but has taught only three and one-half years in her present position. The annual salary of this typical high-school teacher is \$1,943.33. Moreover, this teacher holds a secondary certificate which will expire at the end of four years from the date of issuance.

The typical graded-school teacher of Arizona is a woman who has had two years of college or normal school training and six years of teaching experience, but who has been, on the average, three years in her present position. Her annual salary is \$1,525, and she holds an elementary certificate that will expire four years from the date of issuance.

The typical rural-school teacher is a woman with two years of college or normal school training and five years of experience, but who has taught in her present position, on an average, a little less than two years. Her annual salary is \$1,318.75, and she holds an elementary certificate that will expire at the end of four years from the date of issuance.

### III. MINIMUM STANDARDS OF TRAINING FOR THE SEVERAL TYPES OF TEACHING POSITIONS

#### A. THOSE ESTABLISHED BY ARIZONA

The first prerequisite for a teaching position in the Arizona schools is one of the several types of Arizona certificates. These certificates are based entirely on normal school and college graduation, which signifies that certain minimum standards of training for the different types of teaching positions must be met.

The following teaching certificates have been established in Arizona: 1. Primary; 2. Elementary; 3. Secondary; and 4. Special. The minimum requirement for these certificates granted upon scholastic preparation are as follows:

For the Primary certificate the applicant must show graduation, including twenty-four semester hours in education, from the three-year primary, kindergarten, or kindergarten-primary training course in a school requiring high school

graduation for entrance. This credential permits the holder to teach in the kindergarten, first, second, and third grades. (29 - p. 7)

The Elementary certificate also is granted on evidence of graduation from the regular three-year course, including twenty-four semester hours in education, in one of the Arizona state teachers colleges, or a similar course in other state teachers colleges or state normal schools. This certificate is valid for four years and permits the holder to instruct in any grade from the first to ninth, inclusive. (29)

The Secondary certificate is granted on evidence of the completion of the four-year college course, including eighteen semester hours of professional training, at the University of Arizona or either of the two state teachers colleges. (29 - p. 8)

Special certificates are granted to applicants who show graduation from a four-year high school course, and in addition who have completed a three-year special course in a recognized higher institution, provided that not less than 30 per cent of the work taken is in the special subject or subjects for which special certificates are granted; and whose training includes a minimum of twelve semester hours in education. (29 - p. 9)

In addition to meeting the scholastic requirements enumerated above, all candidates for certification must pass an examination in the United States Constitution and the Constitution of Arizona. (29 - p. 12)

#### B. THOSE SET UP BY OTHER STATES

Scholarship requirements have serious limitations from the standpoint of evaluating or comparing requirements among states. Courses are measured by the length of time they are pursued, examinations in the subjects given and the grades required. It is apparent that not all courses of the same length are of equal value, nor are all examinations in the same subjects, measured by the attainment of the same grades, of equal value. However, the scope of this study does not permit an investigation of the quality of the courses offered in institutions, nor of the kind of examinations given.

TABLE VIII

ACADEMIC REQUIREMENTS FOR THE SEVERAL TYPES OF  
TEACHERS' CERTIFICATES IN FORTY-SIX STATES

Certificates	Number of Years Required in College	Number of States
Secondary	2	7*
	3	7
	4	35
	5	1†
Elementary	0	3
	1	13
	2	24
	3	4
Kindergarten-primary	4	1†
	0	None
	1	2
	2	11
Rural	3	2
	4	1†
	0	None
	1	5
	2	1
	3	None

\* (4 of which are for jr. high school teaching.)

† (California.)

The three summary tables present in compact form the conditions pertaining to academic and professional requirements for certification as they exist in the United States at the present time.

As indicated in the last section of Table VIII, only six states of the forty-six examined issue special rural certificates. These are Indiana, Iowa, North Dakota, Wyoming,



TABLE IX  
PROFESSIONAL REQUIREMENTS, EXCLUSIVE OF PRACTICE-  
TEACHING, FOR THE SEVERAL TYPES OF TEACHERS'  
CERTIFICATES IN FORTY-SIX STATES

Certificates	No. of Required Sem. Hours in Ed., Exclusive of Practice-teaching	Number of States
Secondary (High School)	0	6
	6	2
	9	3
	12	12
	15	15
	18	5
	20 or more	3
Secondary (Junior High School)	0	2
	6	1
	9	1
	12	4
	15	2
	18	1
Elementary	0	26
	3	1
	6	5
	9	6
	12	3
	15	4
	18	1
Kindergarten-primary	0	7
	3	None
	6	None
	9	4
	12	3
	15	2

TABLE IX—(Continued)

Rural	0	4
	3	None
	6	1
	9	None
	12	None
	15	1

Nebraska and New York. In a vast majority of the states, therefore, rural teaching is based on the regular elementary certificate. It will also be noted that there is a similar situation for the primary-kindergarten certificates.

Tables IX and X, along with Table VIII, which are built from data received from bulletins on rules and regulations governing the certification of teachers in the forty-six states studied, do not in all cases give justice to actual practice. For example, in Table IX we find that twenty-six states make no definite professional requirement for the elementary certificate. This does not mean that teacher-training institutions in these states do not require any professional training for the certificate, but simply implies that the twenty-six respective state boards of education do not definitely outline in their state rules and regulations governing the certification of teachers any specific professional requirement in terms of either a definite number of courses or credit hours. The same situation undoubtedly exists in many instances on observation and practice-teaching requirements.

#### CONCLUSIONS

An examination of the academic and professional requirements for the certification of teachers in the foregoing forty-six states,<sup>2</sup> including Arizona which is given special treatment in section "A" of this chapter, warrants the following deductions:

1. That the average minimum requirement for general high school teaching in the United States is graduation from a standard four-year college course, including twelve semester hours of education, exclusive of practice-teaching, which may be set at a minimum of three semester hours.

<sup>2</sup> After considerable effort, the writer has been unable to secure data on South Carolina and Minnesota.

TABLE X  
PRACTICE-TEACHING REQUIREMENTS FOR THE SEVERAL  
TYPES OF TEACHERS' CERTIFICATES IN  
FORTY-SIX STATES

Certificates	No. of Required Sem. Hours in Practice- teaching	Number of States
Secondary (High School)	0	33
	2	2
	3	6
	6	5
	9	None
	10	None
Secondary (Junior High School)	0	7
	2	None
	3	3
	6	1
Elementary	0	38
	2	2
	3	4
	6	1
	9	1
Kindergarten-primary	0	10
	2	None
	3	2
	6	3
	9	1
Rural	0	6
	2	None
	3	None
	6	None

2. That the average minimum requirement for general elementary school teaching in the United States is the completion of a standard two-year normal or college course, including nine semester hours in education courses pertaining to the elementary field, a minimum of two of which are in observation and practice-teaching.

3. That the average minimum requirement for the special kindergarten-primary teaching certificates in the United States is the completion of a two-year kindergarten course in a normal school, including nine semester hours in education, three of which are in observation and practice-teaching.

4. That the average minimum requirement for rural teaching in the United States is the successful completion of one year of college or normal training, including six semester hours in education.

The data show that the minimum requirement for secondary teaching in Arizona is slightly above the average minimum for the United States in that Arizona requires eighteen semester hours of professional subjects. (See section "A" of present chapter.)

Furthermore, the minimum requirement for elementary teaching in Arizona is considerably above that of the average minimum for the United States, in that Arizona requires graduation from a three-year teachers college or normal course, including twenty-four units in education. (See section "A".)

Again, Arizona is found above the United States minimum average on the requirement for the kindergarten-primary teaching position, in that Arizona requires a minimum of graduation of a three-year kindergarten-primary course, including twenty-four units in education, and given in a school requiring the completion of a four-year high school course for entrance. (See section "A".)

Finally, Arizona holds a superior position in rural teaching requirements. As indicated, the average minimum for the United States is one year of college or normal training above a four-year high school course, whereas Arizona requires a minimum of three years of training in a teachers' college or state normal school. (See section "A".)

California is found heading the list in general academic and professional requirements for the certification of her teachers. At the other end of the scale are Connecticut, Florida, and Kentucky, with Florida showing the lowest standards of all.

### C. THOSE SET UP BY STANDARDIZING AGENCIES

For a number of years college graduation<sup>3</sup> has been recognized generally as the acceptable extent of preparation for secondary teaching. This, however, refers only to the length of training. The character of the training is quite as important. In 1926, the New England Association of Secondary Schools recommended twelve semester hours of professional preparation, exclusive of practice-teaching, in addition to a college degree.

The North Central Association of Colleges and Secondary Schools has prescribed the following requirements on the preparation of teachers:

"1. The minimum attainments of a teacher of any academic subject, of the supervisors of teachers of such subjects, of the superintendent, and of the principal, shall be college work equivalent to graduation from a college belonging to the North Central Association of Colleges and Secondary Schools.

"2. The minimum professional training of a teacher of any academic subject, of the supervisors of teachers of such subjects, of the superintendent and of the principal, shall be fifteen semester hours in education.

Requirements (1) and (2) shall not be construed as retroactive within the Association.

"3. All teachers of academic subjects in new schools and all new teachers of academic subjects in accredited schools must teach in the fields of their major or minor specialization in college preparation. A minor is interpreted as consisting of a minimum of ten semester hours.

The Association recommends the following types of courses as meeting the spirit of this standard: educational psychology, principles of secondary education, theory of teaching, special methods in subjects taught, observation and practice teaching, history of education, educational sociology, and school administration and supervision.

The following are listed as academic subjects: English, mathematics, foreign languages, natural science, and social science. All other subjects will be considered as non-academic." (74 - p. 80)

In other words, the North Central Association requires college graduation and fifteen semester hours of professional preparation for teaching in the secondary school.

The Association of Colleges and Secondary Schools of the Southern States sets up the following standard:

"The minimum scholastic attainment required of the faculty of any accredited secondary school on the Southern list is, that not

<sup>3</sup> California requires a college degree and an additional year of professional study.

less than 75% of the total number of teachers of academic subjects, including the principal, teachers of agriculture and home economics, shall hold Bachelor's degrees, or the equivalent, from a college approved by the Association." (9 - p. 18)

The Association of Colleges and Secondary Schools of the Middle States and Maryland prescribes the following for high school teaching:

"The standard of preparation for a teacher of academic subjects in the high school shall be the completion of a four-year course in a college approved by the Association, or by a college of equal rank. The professional preparation shall not be less than twelve semester hours." (p. 84)

The Committee on Standards for Accrediting Teachers Colleges and Normal Schools of the American Association of Teachers Colleges recommended the following definition of a teachers college, which was adopted by the Association at Washington, D. C., February 26, 1926, revised at Dallas, Texas, February 26, 1927, at Boston, Massachusetts, February 25, 1928, at Cleveland, Ohio, February 23, 1929, at Atlantic City, New Jersey, February 22, 1930, and at Detroit, Michigan, February 20, 1931.

"A. Teachers College (Four Year Institution Granting Degrees). A teachers college, within the meaning of these standards, is a state, municipal, or incorporated private institution, or an independent unit of a recognized college or university which has at least one four-year unified curriculum, which is devoted exclusively to the preparation of teachers; which has legal authority to grant a standard bachelor's degree; which has granted and continues to grant such degree; and which requires for admission the completion of a standard four-year secondary school curriculum, or equivalent training approved by this Association.

"B. Normal School. A similar institution devoted exclusively to the preparation of teachers, which requires for admission the completion of a standard four-year secondary school curriculum, or equivalent training approved by this Association; which has a curriculum less than four years in length and does not have legal authority to grant a standard bachelor's degree; or which has a curriculum four years in length but has not granted and does not grant a bachelor's degree, shall be designated as a normal school or a junior teachers college.

Normal schools shall conform to the same standards as teachers colleges except as hereinafter specifically indicated.

"C. No teachers college shall maintain a secondary school, or a department in which strictly secondary school academic work is offered, as a part of its college organization, except for training school purposes." (p. 87)

It is safe to say from this survey of the present standards maintained by the four standardizing agencies, that graduation from a standard college represents the minimum standard of academic training acceptable for high-school teachers in this country. While the amount of required professional training is not uniform, it constitutes an important item in the proclaimed standards of the various accrediting associations.

D. THOSE PROPOSED BY RECOGNIZED AUTHORITIES  
IN SCHOOL ADMINISTRATION. (BASED ON  
BEST CURRENT PRACTICES)

1. PROFESSIONAL PREPARATION OF THE  
ELEMENTARY-SCHOOL TEACHER

Recognition of the need for adequate preparation for elementary teachers has been of slow growth on the part of the public, and until substantial rewards in the form of salary and social recognition are provided, a lower standard of preparation for elementary teachers must be proposed. The question here is not how much training elementary teachers need, but rather how much training is at present recommended.

There is general agreement in placing the minimum training of elementary teachers at two years of professional education, with a strong recommendation for extending the period to three years beyond high school graduation. Dr. F. P. Bachman, in the General Education Board's study of public education in Indiana, states that:

"To be satisfactorily prepared an elementary teacher should be a high school graduate and should have, besides, at least two, three is still better, years of training especially related to teaching in the elementary school." (3 - p. 35)

Cubberley, in his "State and County Educational Reorganization" (Osceola Code, Chapter XIII), states that elementary school certificates should be granted, without examination, to all "graduates of the two-year course in state normal schools, and approved city normal schools." (8 - p. 156)

In his study of the cost of training teachers, Dr. Homer E. Cooper asserts:

"It is generally conceded that the teachers in the elementary school have, as a minimum, normal school training, which is two

years of professional work in advance of high school graduation." (p. 6)

Dr. Joseph L. Henderson firmly believes that the following training should be required of all who are certificated to teach in the elementary school:

"The minimum academic and professional training required for a teacher in the middle grades should ultimately cover at least a four-year course in a teacher-training institution. The writer is well aware that some time will be required before this standard can be fully applied. The important consideration is that we shall make progress toward it." (11 - p. 100)

The members of the salary committee of the National Education Association in its report says:

"In regard to the standards for professional and academic training required for beginning teachers, there is practical agreement in believing that no elementary teacher should have less than two years of normal school training above a standard four-year high school." (26 - p. 49)

Dr. C. J. Anderson in a study of the status of teachers in Wisconsin says of the training of rural teachers:

"The minimum standard of qualification of rural teachers should be two years of academic and professional education beyond the high school." (2 - p. 19)

Herman L. Donovan answers the question, "What amount of training constitutes satisfactory preparation for teaching in the elementary school?" as follows:

"High school graduation plus two years of academic and professional preparation in a teacher-training institution is a minimum preparation for teaching in an elementary school." (p. 9)

## 2. PROFESSIONAL PREPARATION OF THE HIGH-SCHOOL TEACHER

For years college graduation has been recognized generally as the acceptable extent of preparation for secondary teaching. (17 - p. 38). However, the professional preparation of high-school teachers came to be recognized as a necessity much later than that of elementary teachers. (16 - p. 59) Until about two decades ago, large numbers of college graduates took positions as high-school teachers without having had any sort of professional training in preparation for their work. (16 - p. 59) Dr. Bagley refers to this practice in the following statement:

"It has not 'til lately been thought to matter much whether the high school teacher was prepared to teach; it sufficed if he held a



diploma. Most older secondary teachers are painfully aware that their professional training began when they commenced to teach." (18 - p. 136)

That this situation has been almost completely changed is indicated by the fact that many state and private universities now have flourishing schools or colleges of education whose chief function is, or at least has been until recently, to prepare high-school teachers; that practically all of the more than one hundred teachers colleges throughout the United States are very definitely engaged in the training of high-school teachers; and that many of the private and denominational liberal arts colleges scattered over the country have been compelled under the pressure of the demand for high-school teachers with professional training to organize departments of education and to arrange for practice-teaching facilities. The fact that definite professional training of high-school teachers is now universal is shown further by the more recent requirements of state departments of education and the tightening up of the rules of the accrediting associations.

In addition to college graduation, what is the minimum of professional training that constitutes a satisfactory standard for high-school teaching? In answer to this question the Committee of Seventeen set up the following:

- "I. That definite study be given to each of the following subjects:
  - A. History of Education (both general and secondary).
  - B. Educational Psychology with emphasis on adolescence
  - C. The Principles of Education (including courses in methods).
  - D. Special Methods in the Secondary Schools—subjects the students expect to teach.
  - E. Organization and Management of Schools and School Systems.
  - F. School Hygiene.
- "II. That opportunity for observation and practice-teaching with secondary pupils be given.
- "III. That the minimum requirement for a secondary school teacher be graduation from a college maintaining a four-year course and requiring four years' high school work for admission. A year of graduate work divided between academic and professional subjects is desirable." (5 - pp. 205-7)

These statements represent the combined opinion of seventeen recognized authorities in school administration. Moreover, this is a very definite statement of a proposed

standard, although the advances that have been made in recent years in education and educational psychology would doubtless dictate a change in the content of several of the courses listed, or, what is more likely, the substitution of certain other newer courses for some of those the committee listed. It seems apparent that the minimum amount of time required for the student to become anything like adequately grounded in the subjects of this program would be at least a half of a year. We may say, therefore, that the minimum professional preparation set by the Committee of Seventeen for high-school teachers is the earning of fifteen to eighteen semester hours of credit. In line with this standard, Dr. Homer E. Cooper accepts "approximately half of a full year in education" as satisfactory preparation. (6 - p. 13)

Cubberley, in his *Osceola Code*, says:

"Secondary-school certificates should be granted only to graduates of a standard college or university, who have completed as a part of their undergraduate work at least fifteen semester hours of education, which shall have included courses on the theory of education; the principles of teaching and class management; the function and purpose of public education in America; and the peculiar needs and the attainable goals in secondary education." (8 - pp. 161-2)

Edgar Dawson (22 - p. 21) claims that "about 10 per cent or 12 per cent of the requirements for the Bachelor's degree seems to be a sufficient requirement in the theory and practice of teaching. This requirement . . . under the immediate direction of the Department of Education should be insisted upon in every instance." Translated into semester hours this standard would require a minimum of eighteen hours.

Dr. John Franklin Brown in speaking of the question remarks as follows:

"It is now universally conceded by those who have considered the question carefully, that the general academic and professional attainments of the high school teacher should be at least equivalent to that required for graduation from a four-year course of a standard college." (5 - pp. 193-4)

Bachman (4 - p. 26) advocates college graduation with twenty-four semester hours, including six hours of general psychology, in professional studies for high-school teachers, as constituting the minimum of training in education.

"The minimum adequate training of high-school teachers" advocated by the superintendents of schools of Minnesota in 1922, according to Dr. Percival Hutson, (23 - p. 65) was college graduation, including twenty-four semester hours in education.

Dr. Alonzo Franklin Myers in his Doctor's thesis in 1927 called "A Teacher-Training Program for Ohio," states that:

"No important recommendation or proposal regarding training requirements for teaching has been made within the last ten years which contemplated a minimum of less than four years of college education, including varying amounts of professional training, for high school teachers." (15 - p. 108)

### SUMMARY

From a consideration of the expert opinion given in this section of the study, the question as to the minimum preparation acceptable for high-school and elementary teaching may be answered as follows: The minimum training of a high-school teacher is in amount equivalent to that ordinarily required for the Bachelor's degree in a standard four-year college, which includes a minimum of fifteen semester hours in education. The minimum training of an elementary teacher is two years of professional education, with a strong recommendation for extending the period to three.

### E. A STANDARD BASED UPON RECOGNIZED EDUCATIONAL PRINCIPLES

America asserts her belief in universal education and spends millions of dollars in its promotion, but, in general, she has not yet achieved educational universality. One reason for this is that there has not been a proper realization of the academic and professional needs of all those who serve as the nation's teachers.

It is the purpose of this division of the study to set up a standard showing the academic and professional needs of all teachers, at whatever school level, including a listing of the necessary courses of study.

Elementary teachers should have acquired certain knowledge, habits, skills, and attitudes to be used in a successful promotion of their work. To attain these objectives they must pursue definitely outlined courses in academic in-

struction and professional training. Recognized educational principles plus current practice, in so far as practice has gone, demand the following:

- A. Elementary
  - 1. Academic
    - a. Health Education
    - b. Language
    - c. Reading
    - d. Handwriting
    - e. Arithmetic
    - f. Grammar
    - g. Spelling
    - h. History
    - i. Civics
    - j. Geography
    - k. Biology
    - l. Drawing
    - m. Music
    - n. The Industrial Arts
    - o. Agriculture

It may be said that since every prospective elementary teacher must establish basic relationships with her own body, her own language, other people, the material world, economic life, aesthetic appreciation, and also to assist students in establishing such relationships,<sup>4</sup> she should study the principles underlying these relationships as a part of her general training.

- 2. Professional
  - a. Pure and Educational Psychology
  - b. Principles of Teaching in the Elementary School
  - c. General and Special Methods of Elementary Teaching
  - d. Organization and School Management
  - e. History and Philosophy of Education
  - f. The Curriculum of the Elementary School.
  - g. Tests and Measurements
  - h. Personnel Problems and Guidance
  - i. Mental Hygiene
  - j. Extra-curricula Activities
  - k. Observation and Practice-teaching

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<sup>4</sup> These differentiations are made knowing that it is not always easy to draw a line between academic and professional subjects. Under present conditions professional subjects are frequently mingled with academic subjects as professionalized subject matter in the training of all teachers.

High-school teachers also should have attained the foregoing fundamental processes outlined under "academic" courses for elementary teachers. In addition they need advanced training in the academic subjects related more directly to secondary school instruction. Moreover, since the opening of the present century it has been a matter of common knowledge and belief that high-school instructors also should have adequate professional training. A definite outline of the necessary academic and professional courses follows:

B. Secondary

1. Academic:<sup>5</sup>

- a. English
- b. Mathematics
- c. Foreign Languages
- d. Natural Sciences
- e. Social Sciences

All other subjects will be considered as non-academic. (See section "C"—North Central Association Requirements).

2. Professional:

- a. Educational Psychology
- b. Principles of Secondary Education (including General Method)
- c. Theory of Teaching
- d. Special Methods (in subjects taught)
- e. Educational Sociology
- f. Organization and Management
- g. Tests and Measurements
- h. Mental Hygiene
- i. Personnel Problems and Guidance
- j. Observation and Practice-teaching
- k. Extra-curricula Activities
- l. History and Philosophy of Education

It may be seen that these elementary and secondary course outlines are aiming at uniformity in levels of preparation. So long as we "pass childhood through a graded quality of instruction in order finally to place those who survive in charge of real teachers at the top," (18 - p. 8) so long will we deny equal opportunity to all. Training for the teaching of pupils in the second and third grades should

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<sup>5</sup> Classification accepted by North Central Association of Colleges and Secondary Schools.

be as prolonged and as serious as training for teaching the tenth or the twelfth grade, and should be equally well rewarded.

To provide such general uniformity in levels of preparation as are indicated above, the standards of training could not well be lower in length of preparation than are now demanded for superior secondary instruction.

"Four years of well-directed training subsequent to a high school education is sufficient, with selected material, to lay the foundation of a superior teacher. Experience, skilled practical guidance, and further specialized study, attended always by discriminating selection, should result in a group having relatively high mental and social power, and fit to serve any community as leaders." (18 - p. 8)

Several of our states have very definitely set out to secure four-year preparation. The most significant evidence of the trend toward a longer professional training for elementary teachers is seen in the growth of the teachers college idea. In 1925, the United States Bureau of Education (25) lists eighty-six teachers colleges in twenty-nine different states, all but six of which are under state control and supported wholly or in large part from public funds.

Therefore, as a standard, based upon recognized educational principles, as formulated in this division of the present chapter, the following is proposed as a minimum standard of training for teachers of secondary and elementary schools of Arizona:

FIRST, *A four-year high school course which gives a sound foundation "in all of the better known fields of human knowledge—language, literature, social science, natural and physical science, and mathematics."* (78 - p. 120)

SECOND, *The completion of a four-year course of collegiate grade in which is included not less than twenty-four semester hours of work in education applying to the secondary school field, and not less than twenty-four semester hours in education applying to the elementary field, ten semester hours of which in each line of preparation shall be observation and practice-teaching in standard secondary and elementary schools.*

#### F. A COMPARISON OF THE TRAINING OF THE TEACHERS OF ARIZONA WITH THE ABOVE STANDARDS

The foregoing divisions of this chapter set up minimum standards of training for high-school, elementary, and rural teachers. It is the purpose of this section to use these standards in measuring and evaluating the training of the present teaching force of Arizona.

Measured by the standard of four years post-high-school training of collegiate grade, the high-school teachers were found to fall short 16.90 per cent. (See Chapter II, Table II.) In other words, of the seven hundred and seventy-one high-school teachers employed within the State only one hundred thirty of them have had less than four years college training. Only five of this number fall as low as one year in college and twenty-one have finished the two-year course; one hundred and four show three years' work of collegiate grade. In all fairness, however, it may be said that one hundred and eighty-five, or twenty-four per cent, of the high-school teachers have had five years or more of college training. These figures indicate that the State has fifty-five more teachers ranking above the four-year standard than falling below it. It is clear, therefore, that the Arizona high school teaching force has had, on an average, more than four years' work of collegiate grade. It was possible here to measure the length of training only since information as to the quality of college work taken was not within the province of the study and, therefore, not available.

For elementary teachers two years of training in a duly recognized teacher-training institution was established as a minimum standard. Using this as a measuring stick, only 6.63 per cent of the graded-school teachers fell below the standard. At the other end of the scale, 42.74 per cent are found above the two-year course. (See Table II.) On an average, this places the elementary school teaching force considerably above the above-mentioned standard.

For rural teachers one year of college training was objectively set up as a minimum standard. When this was applied as a measuring stick, 34.23 per cent (see Table II) of the rural teaching force fell below the standard. On the

other hand, 57.72 per cent of the rural teachers are above the standard.

Using as a measuring stick the composite standard based upon recognized educational principles set up in the immediately foregoing section E, which is four-year college graduation for all teachers, the high-school teachers were found to fall short by 16.90 per cent. Applying the same measure to the elementary teachers, 77.92 per cent of them fell below the standard. For the rural teachers 95.29 per cent fell below. It is to be remembered, however, that this standard is largely based on recognized educational principles rather than on general current practice. It has been set up and offered as a goal for all teachers of Arizona at whatever school level they eventually reach. Again it was possible to measure only in terms of the length of training.

#### IV. THE PRESENT TEACHER-TRAINING AGENCIES IN THE STATE OF ARIZONA

##### A. ARIZONA STATE TEACHERS COLLEGE AT TEMPE

##### 1. THE LEGAL STATUS

Prior to 1925 the institution had the legal status of a two-year normal school. (76 - p. 21) From 1885, the date of inception, to 1919 it was found necessary to offer high school training preparatory to the two-year normal school course, at which time the development of the high schools of the State rendered this service unnecessary. (76 - p. 21) Hence, from 1919 to 1925 the school was operated as a straight two-year normal school. Since 1925 it has enjoyed the legal status of a four-year, degree-granting, State teachers college. (76 - p. 22)

In the School Laws of Arizona for 1931, on pages 101-2, we find the following provisions pertaining to the present legal status of the State Teachers Colleges:

"Article 11. State Teachers Colleges. Par. 1100. Purpose of colleges. State teachers colleges shall be maintained at Tempe in Maricopa county, and at Flagstaff in Coconino county, for the instruction of persons in the art of teaching the branches of learning that pertain to a common school education, to give instruction in mechanical arts and husbandry, the state and federal constitutions, and the rights and duties of citizens.



"Par. 1101. Board of education for each college. There shall be appointed a board of education for the government and control of each of said colleges. The college at Tempe shall be under the control of a board to be known as the board of education of the Arizona State Teachers College at Tempe, and the college at Flagstaff shall be under the control of a board to be known as the board of education of the Arizona State Teachers College at Flagstaff.

"Par. 1106. Teacher training course; degree. The boards may establish and conduct at each of said colleges a teachers' training course of four years, and award to each student satisfactorily completing said course, the degree of bachelor of arts in education."

With these and previous provisions the Teachers Colleges were legally created, officially named, and provided with a form of control.

## 2. THE ADMISSION REQUIREMENTS

For admission to the Arizona State Teachers College at Tempe, the applicant must be at least sixteen years of age and must present satisfactory evidence of graduation from a full four-year-high-school course pursued in an accredited school and conforming to the following requirements:

### *Required:*

English .....	3 units
History-Civics-Economics group .....	2 units
Algebra .....	1 unit
Laboratory science, including one unit in Biology .....	2 units

### *Elective:*

Additional work to make at least 7 units, subject to the approval of the credentials committee .....	7 units (76-p. 66)
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Applicants who have not graduated from a high school, but who can offer fifteen acceptable units of work completed in an accredited high school may be admitted provided they can show a written recommendation from the principal of the high school in which the credit was earned. (76 - p. 67)

Graduates of non-accredited high schools, or mature students who cannot show any type of high school graduation, but who are able to present satisfactory evidence of equivalent preparation, may be admitted conditionally at the discretion of the committee on entrance requirements, provided they successfully pass such examinations as this committee may prescribe. (76 - p. 67)

A special regulation of the State Board of Education provides that:

" . . . . . the requirement of high school graduation may be waived in the case of mature persons who have attained the age of 25 years and who have had at least three years' successful teaching experience in the State of Arizona." (76 - p. 67)

All freshmen must take a standardized test in English and Penmanship. Moreover, before official registration they must submit themselves to a college aptitude test, the forms being prescribed by the committee on registration. (76 - p. 78)

Credit offered by students of accredited junior colleges is accepted in such amount and manner as may be applicable to the Teachers College curriculum. The total amount of advanced standing credit in such cases must not exceed thirty-two units for the freshman year and thirty units for the sophomore year. (76 - p. 79)

### 3. THE CURRICULA OFFERED

The sections of the present law relating to curricula are:

"Par. 1100. Purposes of colleges. State teachers' colleges shall be maintained at Tempe in Maricopa county, and at Flagstaff in Coconino county, for the instruction of persons in the art of teaching the branches of learning that pertain to a common school education, to give instruction in mechanical arts and husbandry, agricultural chemistry, the state and federal constitutions, and the rights and duties of citizens.

"Par. 1106. Teacher training course: degree. The boards may establish and conduct at each of said colleges a teacher training course of four years, and award to each student satisfactorily completing said course, the degree of bachelor of arts in education.

"Par. 1108. Uniform courses; special courses. The courses of study leading to graduation from the regular teachers' course of the colleges shall be uniform in amount of work, and shall be prescribed by the boards. Special courses may be installed in either college for the training of vocational, industrial and other special teachers." (27 - pp. 23-25)

The curricula at Tempe show an orderly arrangement in that the work is very well differentiated, and in that students are not admitted to collegiate standing who have not satisfied the requirements for college entrance. (76 - pp. 66-8)

A minimum of one year in residence is required of all candidates for graduation and the semester immediately pre-

ceding the time of graduation must be spent in resident work. Exceptions to the rule may be made by the credentials committee when deemed advisable. (76 - p. 76)

While there is a distinction made between work of junior- and of senior-college-rank, there is at the present time no definite amount of work of senior-college-rank required for the degree. However, it is to be said that this particular situation is due to the process of curriculum revision being at present in a state of progress. A general scholarship record equal to or above the median group must be maintained by all students who receive the degree. (76 - p. 46)

Courses by correspondence and extension are offered, but since this non-resident work is of doubtful value in the minds of some, the amount that can be offered in meeting the requirements for the degree is limited to 25.0 per cent. One-half of this amount, or 12.5 per cent, may be done by correspondence alone. (76 - p. 32)

The specific curricula shown in the official catalogue for 1931-32 are as follows:

STANDARD THREE-YEAR CURRICULUM LEADING TO  
THE EDUCATIONAL DIPLOMA FOR TEACHERS  
IN THE ELEMENTARY GRADES

FIRST YEAR

FIRST SEMESTER

	Sem. Hrs.
Eng. 101, First Year English .....	3
Psych. 100, Psychology .....	3
Geog. 100, Prin. of Geog. ....	3
Art 100, Art Appreciation .....	3
Elective .....	3
Phy. Educ. 101 or 111 .....	½
	15½

SECOND SEMESTER

	Sem. Hrs.
Eng. 102, First Year English .....	3
Elective .....	3
Music 100, Sight Singing .....	3
Math. 100, Gen. Mathematics .....	2
Elective .....	4
Phy. Educ. 102 or 112 .....	½
	15½

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## SECOND YEAR

### FIRST SEMESTER

	Sem.	Hrs.
Educ. 110, Prin. of Teaching .....	3	
Agri. 110, Agricultural Projects .....	3	
Major .....	6	
Elective .....	3	
Phy. Educ., 103 or 113 .....	1½	
	<hr/>	15½

### SECOND SEMESTER

	Sem.	Hrs.
Educ. 120, Curriculum .....	3	
Elective .....	3	
Major .....	6	
Elective .....	3	
Phy. Educ. 104 or 114 .....	1½	
	<hr/>	15½

## THIRD YEAR

### FIRST SEMESTER

	Sem.	Hrs.
Educ. 201, Practice Teaching .....	5	
Psych. 200, Educ. Measure .....	3	
Major .....	6	
Elective .....	3	
	<hr/>	17

### SECOND SEMESTER

	Sem.	Hrs.
Educ. 202, Practice Teaching .....	5	
Educ. 210, School Management .....	2	
Major .....	6	
Elective .....	4	
	<hr/>	17

## STANDARD FOUR-YEAR CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF ARTS IN EDUCATION

### FOR TEACHERS IN THE ELEMENTARY GRADES

The first three years are the same as in the preceding curriculum.

## FOURTH YEAR

### FIRST SEMESTER

	Sem.	Hrs.
Educ. 211, History of Education .....	3	
Electives, including Major, 6 to 12 units .....	12	
	<hr/>	15

### SECOND SEMESTER

	Sem.	Hrs.
Educ. 212, Philosophy of Education .....	3	
Electives, including Major, 6 to 12 units .....	12	
	<hr/>	15

# FOUR-YEAR CURRICULUM FOR HIGH-SCHOOL TEACHERS LEADING TO THE BACHELOR'S DEGREE (76 - pp. 72-4)

## FIRST YEAR

### FIRST SEMESTER

	Sem. Hrs.
English .....	3
Science .....	3
Social Science .....	3
<sup>6</sup> Foreign Language .....	4
Major or Elective .....	3
Physical Education .....	1½
	<hr/> 16½

### SECOND SEMESTER

	Sem. Hrs.
English .....	3
Science .....	3
Social Science .....	3
Foreign Language .....	4
Major or Elective .....	3
Physical Education .....	1½
	<hr/> 16½

## SECOND YEAR

### FIRST SEMESTER

	Sem. Hrs.
Science .....	3
Social Science .....	3
Foreign Language .....	4
General Psychology .....	3
Major or Elective .....	3
Physical Education .....	1½
	<hr/> 16½

### SECOND SEMESTER

	Sem. Hrs.
Science .....	3
Social Science .....	3
Foreign Language .....	4
Educational Psychology .....	3
Major or Elective .....	3
Physical Education .....	1½
	<hr/> 16½

<sup>6</sup> Two years of foreign language is strongly recommended but it is not made an absolute requirement of this curriculum.

## THIRD YEAR

## FIRST SEMESTER

	Sem. Hrs.
Principles of Education ..	3
Practice-teaching ..	4
Major or Elective ..	8
	<hr/> 15

## SECOND SEMESTER

	Sem. Hrs.
The Junior High School ..	3
Practice-teaching ..	4
Major or Elective ..	8
	<hr/> 15

## FOURTH YEAR

## FIRST SEMESTER

	Sem. Hrs.
Principles of Secondary Education ..	3
Measurement in High School ..	3
Major or Elective ..	9
	<hr/> 15

## SECOND SEMESTER

	Sem. Hrs.
Philosophy of Education ..	3
Modern Educational Problems ..	3
Major or Elective ..	9
	<hr/> 15

The student must select his major by the beginning of the second year of the curriculum. This major may be chosen from any one of the following departments or department groups:

## DEPARTMENTS

Art  
Commerce  
English  
Foreign Language  
Geography  
Home Economics  
Industrial Arts  
Kindergarten-primary  
Mathematics  
Music  
Physical Education  
Physical Science  
Social Science

## DEPARTMENT GROUPS

General Science Major:  
Biology  
Agricultural Projects  
Geography and Geology  
Physics  
Chemistry  
Physiology  
Biological Science Major:  
Biology  
Bacteriology  
Biochemistry  
Physiology (76-p 75)

In the three-year curriculum, the major consists of not less than twenty-four nor more than forty semester hours of related courses, at least twelve of which must be in courses of upper division work. In the four-year curriculum, the major includes a minimum of thirty semester hours and a maximum of forty hours, one-half of which must be in upper division courses. The minor consists of a minimum of twelve semester hours of related work, one-half of which must be in upper division courses. (76 - p. 75)

Criteria formulated by what is probably the best expert opinion down to the present time for judging the adequacy of the curricula of teachers colleges were set up by the Louisiana Survey Commission in 1926. (82 - pp. 120-2) The criteria, as established and applied to the existing conditions in Louisiana, came as a result of a nation-wide consideration of the curricula of teachers colleges and are classified under three general headings: Differentiation, Content, and Organization.

#### DIFFERENTIATION

"1. Differentiated curricula determined by the character of the work to be done and the subjects to be taught should be provided for the four generally recognized teaching levels, namely, kindergarten-primary, intermediate, upper grade, or junior high school, and secondary.

"2. Specialized curricula should be provided for cognate subject groups in the levels and fields of teaching in which best practice recognizes the desirability of departmental teaching.

#### CONTENT

"3. All curricula should provide for a cross-section of the better known fields of human knowledge even though major emphasis of some is demanded by the type of service for which preparation is being made. This principle implies sufficient flexibility in administration to take into account the students' secondary training.

"4. The courses constituting the curriculum, while providing for breadth, depth, and newness of subject materials, must also provide a scholarship relevant to the adaptations in subject matter which the student must make in the instruction of children and pertinent to the functional point of view.

"5. The curriculum should provide activities and materials which will strengthen the personal and social equipment of the students and put them in possession of the skills and controls known to be an essential part of the teacher's equipment.

## ORGANIZATION

"6. All courses in the curriculum should be arranged with respect to their sequential relationship within and without the subject and should provide for the integration at all points of theory and practice by the parallel treatment of courses in the classroom and the training school.

"7. The introductory courses in all curricula should be identical and planned to give the student a view of the entire field that he may make an intelligent choice of the level of the service for which he will prepare.

"8. The professional treatment of subject matter makes possible the reduction of the number of courses in education, especially those dealing with the special methods of individual subjects. It is important to provide courses for orientation, followed by parallel theory and practice courses. Independent practice teaching should come late in the schedule and be followed by a thorough integration."

The foregoing three- and four-year curricula of the Tempe school have been examined and evaluated by applying these criteria. The prominent characteristics of the 1931 offering may be summarized as follows:

1. Arizona State Teachers College at Tempe offers differentiated curricula of sufficient number and variety to meet the demands made upon it.

2. These curricula show that there is considerable opportunity for specialization in secondary teaching.

3. The curricula show also that students following them come in contact with the important fields of human knowledge.

4. Not all the courses outside the Department of Education offer a professional treatment of subject matter. It is here that the greatest weakness of the Tempe college is to be found. It should be constantly borne in mind that the general offering of an institution designated as a teachers college should be strictly professional in nature. It is not enough to merely establish and maintain a training-school and a department of education.

5. Although the training-school facilities have been considerably improved during recent years, and are really outstanding on a comparative basis, somewhat limited use is still being made of them. There is but little observation of demonstration teaching provided for curriculum courses. More demonstration teaching is needed, even to the extent of limiting practice-teaching, if necessary. At present the facilities are primarily used for practice-teaching. Eight semester hours of this work are required for secondary teaching, while ten hours are required for the elementary field. This is somewhat above the average requirement in this particular branch of the general organization set up for the training of teachers.



6. The offering fulfills all requirements for the certification of Arizona teachers. Unfortunately, however, as at Flagstaff and at the University, the degree of Bachelor of Arts in Education entitles the student to a certificate granted by the State which, in turn, permits the holder to teach in any grade from one to twelve, inclusive. This means that a teacher may instruct in a division of the State public school system for which he has had no special training. This situation, however, is due to a weakness in certification practices as set up by the State Board of Education, which makes it impossible for the teacher-training schools to avoid this difficulty.

7. As a rule, courses are arranged with respect to sequential relationship.

8. The college requires twenty-four semester hours in Education and Psychology for the degree, six of which must be in Psychology. Roughly, the general plan of organization is (1) general introductory courses; (2) parallel theoretical and practice courses; (3) emphasis on training-school work; and (4) integration courses.

#### 4. TEACHER PERSONNEL IN ARIZONA STATE TEACHERS COLLEGE AT TEMPE IN 1931

According to the records of 1931-32 the Arizona State Teachers College at Tempe had fifty-one on its teaching staff. Of this number twenty-six were men and twenty-five were women. Fifty-eight per cent of the men, forty-

TABLE XI  
HIGHEST DEGREES HELD BY TEACHERS IN  
ARIZONA STATE TEACHERS COLLEGE  
AT TEMPE IN 1931

Degrees	Number	Per Cent
None .....	2	3
Bachelor's .....	4	8
Master's .....	35	69
Doctor's .....	10	20
Total .....	51	100.0

eight per cent of the women, and fifty-three per cent of both men and women are under forty-one years of age. Eight per cent of the men are younger and four per cent of them are older than any of the women teachers. The median age of the women—forty-two and twenty-five hundredths years—is eight and seventy-five hundredths years more than that of the men, and two and thirty hundredths years more than the median for the whole group.

TABLE XII  
HIGHEST DEGREES HELD BY THE TRAINING-SCHOOL  
STAFF IN ARIZONA STATE TEACHERS  
COLLEGE AT TEMPE IN 1931

Degrees	Number	Per Cent
None .....	1	6
Bachelor's .....	4	27
Master's .....	10	67
Doctor's .....	0	0
Total .....	15	100.0

Table XIII shows the improvement made in the training of the Tempe faculty since 1927.

TABLE XIII  
HIGHEST DEGREES HELD BY TEACHERS IN  
ARIZONA STATE TEACHERS COLLEGE  
AT TEMPE IN 1927 AND IN 1931

Degrees	In 1927		In 1931	
	Number	Per Cent	Number	Per Cent
None .....	6	14	2	3
Bachelor's .....	18	43	4	8
Master's .....	17	40	35	69
Doctor's .....	1	3	10	20
Total .....	42	100.0	51	100.0

An examination of this table shows that the Tempe school has materially strengthened the scholastic standing of its faculty since 1927. For example, the number holding the Bachelor's degree has decreased 35.0 per cent, while the number holding the Doctor's degree has increased 17.0 per cent.

In Table XIV may be seen how the training of the Tempe teachers in 1927 compares with the training of teachers in similar institutions of other states for the same year.

With the exception of Missouri, this table shows a comparison that is favorable to the Arizona institution.

Table XV shows the colleges and universities represented by the members of the teaching staff at Tempe. It shows also the institutions contributing the several types of degrees.

According to the classification of institutions formulated by the United States Bureau of Education in 1926, practically all the degrees held by teachers in the Tempe school are from duly recognized institutions. Naturally the foreign schools would not be listed.

It will be observed that not more than six per cent of the teachers had their undergraduate and graduate training in Arizona institutions. On the other hand it may be seen that Leland Stanford Junior University alone has contributed almost thirty per cent of the Master's degrees. Leland Stanford and the University of California combined have contributed almost thirty-seven per cent of the Master's degrees. Columbia University has contributed twenty per cent of the Master's degrees. Leland Stanford University and the University of California each contributed twenty per cent of the Doctor's degrees.

Another item of significance in rating a staff of teachers is the matter of experience. Table XVI shows the amount of teaching experience possessed by the teachers of the Tempe institution.

Twenty-three per cent of the men, eight per cent of the women, and fifteen per cent of all teachers have taught less than six years. Forty-seven per cent of the men, eighty per cent of the women, and sixty-three per cent of all teachers have taught more than twelve years. Twenty-three per cent of the men, and thirty-two per cent of the women have

TABLE XIV  
COMPARISON OF DEGREES HELD BY TEACHERS OF ARIZONA STATE TEACHERS COLLEGE AT TEMPE IN 1927 WITH THOSE OF TEACHERS IN SIMILAR INSTITUTIONS OF OTHER STATES FOR THE SAME YEAR

Degrees Held	Tempe	(12-p. 57)	(80-p. 76)	(81-p. 208)	Random Selection
	%	Mo. %	La. %	Mass. %	26 Teachers Colleges (12-p. 57) %
None .....	14	11	27	51	18
Bachelor's .....	43	33	50	30	45
Master's .....	40	51	20	18	31
Doctor's .....	3	5	3	1	6
Total .....	100.0	100.0	100.0	100.0	100.0

TABLE XV  
SOURCES OF DEGREES OF TEACHERS IN ARIZONA  
STATE TEACHERS COLLEGE AT TEMPE, 1931

Colleges Conferring Degrees	Bachelor		Master		Doctor	
	No.	%	No.	%	No.	%
Baylor University.....	1	2.1	1	2.2	.....	.....
Besancon (France).....	.....	.....	.....	.....	1	10.0
Calif. Institute of Technology....	1	2.1	1	2.2	.....	.....
Colo. State Teachers College.....	1	2.1	.....	.....	.....	.....
Colo. Agricultural College.....	1	2.1	.....	.....	.....	.....
Columbia University.....	5	10.4	7	15.5	.....	.....
Cornell University.....	.....	.....	1	2.2	1	10.0
Goshen College.....	1	2.1	.....	.....	.....	.....
Harvard University.....	1	2.1	1	2.2	1	10.0
Hillsdale College.....	1	2.1	.....	.....	.....	.....
Kansas State Teachers College....	.....	.....	1	2.2	.....	.....
Missouri State Tchrs. College....	2	4.2	.....	.....	.....	.....
New York University.....	.....	.....	.....	.....	1	10.0
Northwestern University.....	.....	.....	1	2.2	.....	.....
Oberlin.....	1	2.1	.....	.....	.....	.....
Olivet College.....	1	2.1	.....	.....	.....	.....
Ohio University.....	1	2.1	.....	.....	.....	.....
Penn College.....	1	2.1	.....	.....	.....	.....
Stanford University.....	5	10.4	10	22.2	2	20.0
Toronto University.....	.....	.....	1	2.2	.....	.....
UNIVERSITY OF ARIZONA.....	3	6.2	3	6.6	.....	.....
University of British Columbia....	1	2.1	.....	.....	.....	.....
University of California.....	3	6.2	3	6.6	2	20.0
University of Chicago.....	2	4.2	3	6.6	.....	.....
University of Georgia.....	1	2.1	.....	.....	.....	.....
University of Illinois.....	1	2.1	1	2.2	1	10.0
University of Iowa.....	1	2.1	2	4.4	.....	.....
University of Kansas.....	1	2.1	.....	.....	.....	.....
University of Michigan.....	.....	.....	2	4.4	1	10.0
University of Missouri.....	.....	.....	1	2.2	.....	.....
University of Montpelier.....	1	2.1	.....	.....	.....	.....
University of North Carolina.....	1	2.1	.....	.....	.....	.....
University of South Dakota.....	1	2.1	.....	.....	.....	.....
University of Southern Calif.....	3	6.2	3	6.6	.....	.....
University of Washington.....	3	6.2	2	4.4	.....	.....
University of Wisconsin.....	.....	.....	1	2.2	.....	.....
Utah State Agricultural College....	1	2.1	.....	.....	.....	.....
Washington State College.....	1	2.1	.....	.....	.....	.....
West Virginia University.....	1	2.1	.....	.....	.....	.....
Total .....	48	100.0	45	100.0	10	100.0

taught twenty-seven years or more. The median teaching experience for all teachers is 16.5 years. The data show that the teaching staff at Tempe is a mature, experienced group.

TABLE XVI  
AMOUNT OF TEACHING EXPERIENCE OF TEACHERS IN THE ARIZONA STATE TEACHERS COLLEGE  
AT TEMPE, 1931

Years	1-2	3-5	6-8	9-11	12-14	15-17	18-20	21-23	24-26	27 or more	Median Years
	%	%	%	%	%	%	%	%	%	%	
Men .....	4	19	15	15	8	0	4	8	4	23	11.40
Women .....	0	8	8	4	12	12	8	8	8	32	20.25
Both .....	2	13	12	10	10	6	6	8	6	27	16.50

## 5. PRACTICE-TEACHING FACILITIES

Arizona State Teachers College at Tempe maintains four distinct schools for the training of student teachers. Each of these presents its own particular type of problems so that the institution is enabled to provide special training for practically all the different types of teaching that graduates will have to encounter upon entering the professional field. Opportunities offer themselves for training in all grades from kindergarten or pre-primary through the junior-high school which goes through the ninth grade. There is also opportunity for the exemplification of situations presented in the rural school, the consolidated school, and the town school. All these schools are organized and maintained as regular public schools and class conditions are made to parallel as nearly as possible those found in the other public schools of the State.

In the Campus Elementary School the kindergarten, first, second and third grades are consolidated into a primary unit. Here special attention is given to the social development of the primary children. The intermediate grades are treated as a unit for auditorium work, music, play and athletics.

In the Campus Junior-high School the seventh, eighth, and ninth grades are administered as a separate unit, but as an integral part of the training-school system. The junior-high-school idea is carried out by means of a flexible program, departmentalized work, and a limited number of electives. Assembly and home-room periods and the organization of social and other extra-curricular activities are carried on as a part of the regular school program.

By special agreement with the local board of trustees, the Teachers College has charge of the town school located on Eighth Street at Mill Avenue. This one, known as the Eighth Street School, comprises grades one to six inclusive. The main objective of the operation of this school is to furnish special teacher-training to college students who are interested in Americanization work and the problems connected with the teaching of non-English speaking primary children.

For several years an arrangement has existed with the trustees of Consolidated District No. 13, a neighboring rural

school district, whereby the Teachers College takes full charge of its organization and operation. This school, which includes work from pre-primary through the eighth grade, is used as a training-school for the preparation of teachers to supply the rural schools of the State. The work is under the immediate direction of a trained rural supervisor, and the student teachers are furnished transportation back and forth by automobile. This arrangement enables them to do their teaching without inconvenience or interference with the class-room demands of their collegiate schedule. Another feature of this school is the maintenance of a medical clinic. Hot lunch is served.

Finally, there is the Rohrig School District No. 50, which is a small rural school and offers to students the opportunity for training in the management of one- and two-room schools. The college is operating this school also under special contract with the board of trustees. The physical equipment is simple and well within the means of any rural school district. As much work as possible is carried on in the special subjects and special projects, but care is taken that the work shall not be more elaborate than may be undertaken in any Arizona rural school. In other words, every effort is made to keep the conditions typical of actual rural situations, so that the student teachers may learn to meet actual rural-school problems.

The present enrollments for the four respective training-schools are:

1. Campus Elementary and Junior-High School.....	250
2. The Eighth Street School (Mexican).....	170
3. Consolidated Rural District No. 13.....	265
4. Rohrig School District No. 50 (Rural one- and two-room) ..	48
<b>TOTAL .....</b>	<b>733</b>

Student teaching work is done on a basis of four ten-week periods. According to the director, a total of only thirty-eight weeks, however, is actually secured for the one year of required work. The observation work and student teaching are alternated throughout the year. The plan is the same for both the junior-high and elementary schools, with the exception of requiring and granting eight semester hours credit for high-school practice-teaching as com-



pared with ten semester hours for the elementary. About twenty are doing high-school practice-teaching at present, ten of whom are men. One hundred and fifty-five are engaged in the elementary division, forty-one of whom are men.

Although there is considerable opportunity for making still greater use of the training-school facilities, (see section 3, The Curricula Offered) the Tempe school is to be commended on the scope of action and service already assumed in this branch of the work. Especially is the provision made for rural-school practice-teaching commendable.<sup>7</sup>

#### 6. PLACEMENT FACILITIES AND PRACTICES

Although the management of the placement bureau does not agree to furnish employment or to guarantee the placement of students upon graduation, every reasonable effort is made to place all who are worthy in desirable positions.

The following groups are eligible for the service of the office:

1. Graduating classes. This includes three- and four-year groups.
2. Postgraduates, alumni.
3. All other students attending institution.
4. Candidates who have never had any connection with the school, provided they do not come in direct competition with locally trained teachers.

The Tempe bureau has always had the authority of establishing its own standards of eligibility, a selective process which is in some instances assumed by the institution as a whole.

The plan of registration is as follows:

1. Application for registration blanks.
  - a. Eligibility checked.
  - b. Blanks given.
2. The return of filled-in blanks, pictures, and other material required by the office.

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<sup>7</sup> All data on practice-teaching facilities were secured by a personal interview with Ira Dawson Payne, director of the Tempe training-school.

3. The collection of letters of reference.
  - a. From outside reference.
  - b. From teachers and practice-teaching supervisors.
  - c. These letters of reference blanks are carried by the applicants to the academic references.
  - d. But when blanks are duly executed they are returned directly to the office.
4. Personal interview, if at all possible, of candidate with placement officer.
5. The names of all applicants are placed upon the active list. No separate reserve list, available only after notification by candidate, is maintained. In other words all credentials are kept in the same file.

Registration is on a purely voluntary basis. This is, apparently, the approved method, since it is more or less universally practiced. Nevertheless, well-pointed criticism of voluntary registration may be offered. For example, there is a tendency in many schools for the upper group of students to seek placement through their major professors. This seems quite permissible, except when employers who have already been approached come directly to the office. Upon being asked to evaluate some of the best material on the campus, the office has no credentials to substantiate any statement offered. This is true because the student has gotten his name before the employer by means other than the placement office. But the employer is, in many instances at least, already accustomed to calling on the office, in which he has come to have implicit faith and confidence, for the customary credentials. When he is notified that the office has nothing on this independent, but usually worthwhile, job seeker, he is inclined to feel that something is wrong with the service, and his confidence in the bureau is probably weakened. The writer is inclined to believe that placement service would be more thorough if placement bureaus always knew that all available candidates were on their lists. Where an office is maintained in a given institution, there is much in favor of its being responsible, either directly or indirectly, for the nomination of all candidates. Such an arrangement would demand required registration on a free basis.

The office at Tempe makes no charge either for registration or placement. It is believed, however, by the director that a nominal fee should be charged members of the alumni and general outside candidates. This does not mean that

there is an opinion against the office establishing and maintaining close relationship with alumni, for there is a definite opinion in favor of such.

The bureau places some reliance on a "rating sheet" which is part of each candidate's credentials. At present a revision of this sheet is in process.

The most valuable sources of references are considered present employers including critic teachers. In practice, however, former employers are often called upon. In any and all cases the letters of reference are received directly from the writers.

It is not the practice of the Tempe office to solicit superintendents for vacancies, which means that it waits for the employer to make a direct request for nominations. It is the customary practice, however, to send the candidate's credentials recommending him to an employer, upon the request of the student, even though the employer has not requested the office to do so, though it is always made clear to the employer that the office is fully aware of the conditions under which the credentials are being mailed. Moreover, it is not the practice of the office to assume complete responsibility in the selection of candidates by naming only one for a position and then attempting to "sell" him to the employer, but, on the other hand it follows the wise and customary practice of nominating several candidates and by its advice assist the employer in his selection.

As many as two hundred and forty candidates have been placed through the efforts of the bureau during one single year. At present, however, about one hundred and fifty are being placed annually. From fifteen to twenty-five of this number are men. Last year, 1930-31, four of one hundred and fifty were placed in high-school positions. About two hundred register for the service annually.

The person in charge of the placement office does not work on a full time basis.<sup>8</sup>

## B. ARIZONA STATE TEACHERS COLLEGE AT FLAGSTAFF

### 1. THE LEGAL STATUS

Prior to 1925 this institution, as Tempe did, had the legal status of a two-year normal school. (75 - p. 14.) The date

<sup>8</sup> All information relative to placement facilities and practices was gathered by a personal interview with the director of the office.

of inception is 1899, at which time the Twentieth Territorial Legislature created the school and gave it the name of Northern Arizona Normal School. (75 - p. 14)

For the first two years of the life of the school, the Board of Education was a joint board of the normal schools at both Flagstaff and Tempe. In 1901 the legislature created separate boards for the schools with the State Superintendent of Public Instruction as a member of both. (75 - p. 14)

In 1925, as Tempe, the legal and professional status was changed from Normal School to Teachers College, with the power of offering the four-year curriculum, and granting to its graduates the degree of Bachelor of Arts in Education.<sup>9</sup>

## 2. THE ADMISSION REQUIREMENTS

The catalogue for 1931-32 offers the following on college entrance requirements:

"1. From Accredited Secondary Schools. A student presenting an official transcript containing at least fifteen acceptable units, including three units of English, one unit of Algebra, one unit of laboratory science, one-half unit of American history, and one-half unit of Civics, from an accredited high school will be admitted.

*Note:* A student presenting fifteen acceptable units, but deficient in not more than one of the specified units, may be admitted with the understanding that the deficiency is to be made up during his first year of residence.

To satisfy the minimum requirement of three units in English preferably in Grades X, XI, and XII, the candidate must have successfully completed a course of study requiring two hundred minutes of class work each week for three scholastic years. A fourth unit is desirable and may be credited, especially if the student's attainment is definitely superior in quality. This preparation should assure certain reasonable attainments (a) in language, (b) in composition, (c) in ability to read, and (d) in acquaintance with literature.

"2. By Examination. A student presenting an official transcript containing at least fifteen acceptable units, including those specified above, from a non-approved school, will be admitted upon passing written examinations of such character as will indicate that the applicant is fully prepared to do college work.

"3. Under Ruling of State Board of Education. Under a ruling of the State Board of Education made in 1924, a teacher twenty-four years of age or more, presenting evidence of having taught

<sup>9</sup> For the statutes on the present status of the Flagstaff school, see Tempe under section A of this chapter.

three years in the State of Arizona, will be admitted to the college with the understanding that a diploma will be granted upon the completion of a standard three-year course. Such students, however, if they should continue their work towards the Bachelor of Arts degree must satisfy the admission requirement as stated under (1) or (2).

"4. As a Special Student. The college recognizes that maturity and experience compensate, to a degree, for deficiencies in academic credits; therefore, a person twenty-one years of age or over who cannot meet the formal entrance requirements will be admitted to the college, though not as a candidate for a diploma or a degree.

A special student may be required to submit a transcript of secondary-school work completed and will be permitted to register for courses for which he has the necessary qualifications, subject to the approval of the college. A special student may become a candidate for a degree by satisfying the regular admission requirements.

"5. With Advanced Standing. Students presenting complete transcripts, which contain a statement of honorable dismissal, from other accredited institutions will be credited with the advanced standing which their training seems to justify.

No advanced standing is granted for additional units above the usual sixteen earned in a four-year-high-school course. Advanced standing will not be granted for courses passed by examination only, nor for teachers' certificates or teaching experience, nor for work completed in private institutions, unless the work done by that institution is accepted for credit toward a degree by the university of the state in which the private institution is located, and unless the courses completed fit into the curricula of this college. Cases not provided for above will be considered on their merits.

Students having completed a diploma course (two or three years) in this or other institutions who now desire to work for a degree must satisfy all of the requirements of the degree curriculum. If they have completed a two-year elementary course and are entering upon a four-year secondary course, they should not ordinarily expect to obtain the degree with only two years of additional work. However, students who have completed a two-year elementary course should be able, by choosing their electives carefully, to fulfill the requirements of a four-year elementary course with two years of additional work.

*Note:* Admission of Students from Junior College. Credit offered by students of any accredited junior college will be accepted in such amount as may be applicable upon teachers college curricula."

Viewed in the light of the standard requirements for admission set up by the Committee on Standards for Accrediting Teachers Colleges of the American Association of Teachers Colleges, the foregoing entrance requirements are

acceptable, with the exception of the provision, under a ruling of the Arizona State Board of Education made in 1924, whereby a teacher twenty-four years of age or more, presenting satisfactory evidence of having taught three years in the state of Arizona, may be admitted to the college with the understanding that a diploma will be granted upon the completion of a standard three-year course. The Association's Committee on Standards specifies that "Experience in teaching shall in no case be accepted for entrance." (87 - p. 12) The Committee furthermore specifies, however, that:

"Experienced teachers over twenty-one years of age may be admitted to a teachers college or normal school for such work as they are qualified to take, but before receiving a diploma or a degree they shall meet the full entrance requirement." (87 - p. 12)

The Flagstaff college deviates from this regulation in that the three-year diploma is awarded without the full entrance requirements having been met. (75 - p. 35) It is to be emphasized, however, that this deviation is made in an attempt to comply with the State board regulation; and that only mature people, usually summer school students, whose records are lost or inadequate are permitted to take advantage of this provision.

### 3. THE CURRICULA OFFERED

The same law applies to the curricula of Arizona State Teachers College at Flagstaff as to the school at Tempe, with the exception of a preparatory course being provided for the Flagstaff college. The law pertaining to this course is as follows:

"Par. 1112, Preparatory course at Northern. The board of education of the State Teachers College at Flagstaff shall establish a preparatory course of instruction, for entrance therein, and prescribe the course of study to be pursued in said preparatory department." (27 - pp. 23-5)

The curricula at Flagstaff show an orderly arrangement in that the work is very well differentiated and in that students are not admitted to collegiate curricula who have not satisfied the requirements for college entrance. (75 - p. 35) A minimum of one year in residence is required of all candidates for graduation. The term (quarter) immediately preceding graduation must be spent in residence. The summer quarter counts as a regular long session quarter (term) in satisfying this requirement. (75 - p. 38)

A distinction is made between work of junior- and senior-college rank, and the college demands that at least one-third of the work offered for the degree be of senior-college rank. (75 - p. 38) A general scholarship record equal to or above the median group must be maintained by all students who receive the college degrees. (75 - p. 45) The college offers courses by correspondence and extension, but since this non-residence work is of doubtful value in the minds of some, the amount that can be offered in meeting the requirements for the degree is limited to 25.0 per cent. One-half of this amount, or 12.5 per cent, may be done by correspondence alone. (75 - p. 39)

The specific curricula shown in the catalogue for 1931-32 are as follows:

EDUCATION  
KINDERGARTEN-PRIMARY EMPHASIS  
THREE-YEAR CURRICULUM  
LEADING TO

Elementary Diploma and Primary Certificate

FIRST YEAR

*Fall Quarter*

	Hrs.
English 1, (Composition) .....	3
Science or Mathematics .....	4
Physical Ed. 1a, (P. Ed. & Health) .....	1
Music 15a, (Sight Singing) .....	3
Subj. Matter Minor .....	5
	16

*Winter Quarter*

	Hrs.
English 2, (Composition) .....	3
Science or Mathematics .....	4
English 45, (Fundamentals of Speech) .....	3
Music 15b, (Sight Singing) .....	3
Physical Ed. 1b, (P. Ed. & Health) .....	1
Subj. Matter Minor .....	3
	17

*Spring Quarter*

	Hrs.
English 3, (Composition) .....	3
Science or Mathematics .....	4
Psychology 4, (General Psychology) .....	4
Physical Ed. 1c, (P. Ed. & Health) .....	1
Subj. Matter Minor .....	4
	16

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SECOND YEAR  
*Fall Quarter*

	Hrs.
Social Studies or Economics .....	4
Art 95a, (Fundamentals of Art) .....	2
Subj. Matter Minors (Two) .....	8
	<hr/> 14

*Winter Quarter*

	Hrs.
Social Studies or Economics .....	4
Art 95b, (Fundamentals of Art) .....	2
Subj. Matter Minors (Two) .....	8
	<hr/> 14

*Spring Quarter*

	Hrs.
Social Studies or Economics .....	4
Psychology 95, (Educational Psychology) .....	4
Art 95c, (Fundamentals of Art) .....	2
Subj. Matter Minors (Two) .....	6
	<hr/> 16

THIRD YEAR  
*Fall Quarter*

	Hrs.
Education 107, (Principles of Teaching) .....	4
Education 112, (Kindergarten-primary Materials) .....	4
Education 151a, (Student Teaching) .....	3
Pol. Science 100, (State and Federal Constitutions) .....	4
Minor .....	1
	<hr/> 16

*Winter Quarter*

	Hrs.
Psychology 140, (Ed. Measurements) .....	4
Educ. 117, (Kindergarten-primary Procedures) .....	4
Educ. 151b, (Student Teaching) .....	3
Minors .....	5
	<hr/> 16

*Spring Quarter*

	Hrs.
Educ. 136, (Classroom Management) .....	4
Educ. 122, (Kindergarten-primary Values) .....	4
Educ. 151c, (Student Teaching) .....	3
Minors .....	5
	<hr/> 16

INTERMEDIATE GRADES EMPHASIS  
THREE-YEAR CURRICULUM  
LEADING TO

## Elementary Diploma and Elementary Certificate

This curriculum is essentially the same as the preceding except that in place of Education 112, Education 117, and Education 122, material appropriate for the intermediate grades is substituted.



GRAMMAR GRADES EMPHASIS  
THREE-YEAR CURRICULUM  
LEADING TO

Elementary Diploma and Elementary Certificate

This curriculum is essentially the same as that for Kindergarten-primary emphasis, except, that in place of Education 112, Education 117, and Education 122, in the third year, material appropriate for grammar grade emphasis is substituted.

There is a relationship between the four-year degree curricula designed for the training of secondary-school teachers and the three foregoing three-year curricula, which enables the student by a wise use of electives during his early college years not only to obtain the diploma at the end of the third year but also to be well along toward the major and the two minors required for teaching in secondary schools. (75 - p. 41)

Those students who meet the requirements outlined in the four-year Kindergarten-primary curriculum may by securing twelve quarter hours (eight semester hours) of credit in professional courses in Kindergarten-primary during the fourth year receive a "special proficiency" certificate in this field of work. This twelve quarter hour requirement is in addition to the required courses, not to the full four-year graduation requirements. Similar certificates are also granted to those who in connection with meeting the requirements of the extended four-year Intermediate Grades and Grammar Grades curricula select and complete during the fourth year twelve additional quarter hours (eight semester hours) of professional work in their respective fields of teaching interest. In meeting these requirements the student also qualifies himself for the degree of Bachelor of Arts in Education and a secondary certificate. This credential, as pointed out in the evaluation of the Tempe college offering, entitles him to teach in any grade from the first to the twelfth, inclusive. Thus, although in such a four-year curriculum emphasis has been placed on primary-kindergarten, intermediate grades, or grammar grades, the student is granted a certificate which entitles him to teach in high schools. (75 - p. 42) In other words, a graduate of such a course is granted permission to teach in a senior-high school though his entire professional training has been

in other fields. Of course, as long as the Bachelor's degree carries eligibility for a teacher's certificate which entitles the holder to teach in any grade from the first to the twelfth, inclusive, irrespective of the type of training secured in attaining the degree, the above situation cannot be helped. However, it is certainly unwise for the college to mention specifically, as it does on pages 50, 52, and 54 of the catalogue, that a four-year curriculum for distinctly elementary work leads to the awarding of a secondary certificate. It would be much better to ignore this fact altogether. This unfortunate situation clearly illustrates defective certification requirements.

The elementary certificate which entitles the holder to teach in any grade from the first to the ninth, inclusive, is awarded to those who have graduated with the Elementary Diploma from either the three-year curriculum for teachers of intermediate grades or the three-year curriculum for teachers of grammar grades. The differentiation between the three- and the four-year curricula for teaching in the elementary-school grades begins the first quarter of the third year. (75 - p. 41)

The student who is a candidate for either the elementary or secondary certificate may select his major from the following fields of study:

Art

Business Education

Education

English

Home Economics

Industrial Arts

Mathematics

Physical Education (Men and Women)

Public School Music

Romance Languages

Science:

1. Physical Science

2. Biological Science

Social Studies:

1. Social Science

2. History (75 - pp. 47-66)

The customary unit requirement for majors is forty-eight quarter hours (thirty-two semester hours), one-half of which must be in upper division courses. This requirement shows some variation. For example, in Music fifty-one and a half (thirty-four and one-third semester hours) quarter hours are required for the major. (75 - pp. 54-66)

For the minor twenty-four quarter hours (sixteen semester hours) are required. Students are urged to select their minors not later than the beginning of the second year. For all curricula two minors are advised, and for some two are definitely required. Education cannot be offered as a major or a minor to displace subject-matter work by those graduating with a degree. (75 - p. 46) Pages 50-4 of the official catalogue show that education is an apparent major. According to a comment made by the college, however, this is true only in the case of elementary-grade teaching.

In addition to all curricula enumerated, there is offered a two-year general engineering course and a three-year pre-medic course, (75 - p. 67) both of which are out of place as a part of a teachers college offering. Moreover, there seems to be no warrant in the law for this particular type of training. Thus, the offering is maintained on an apparently illegal basis.

Criteria formulated by what is probably the best expert opinion down to the present time for judging the adequacy of the curricula of teachers colleges were set up by the Louisiana Survey Commission in 1926. (80 - pp. 120-2) These criteria as applied to existing conditions in Louisiana came as a result of a nation-wide consideration of the curricula of teachers colleges and are classified under three general headings: Differentiation, Content, and Organization. (For a specific statement of these criteria, see section A, division 3, of this chapter.)

The foregoing three- and four-year curricula of the Flagstaff school have been examined and evaluated by applying these criteria. The prominent characteristics of the 1931 offering may be summarized as follows:

1. Arizona State Teachers College at Flagstaff offers differentiated curricula of sufficient number and variety to meet the demands made upon it.
2. These curricula show that there is considerable opportunity for specialization in secondary teaching.

3. The curricula show also that students following them come in contact with the important fields of human knowledge.

4. Not all the departments outside the Department of Education offer a professional treatment of subject matter. It is here, as at Tempe, that the greatest weakness of the Flagstaff college is to be found. It should be constantly borne in mind that the general offering of an institution designated as a teachers college should be strictly professional in nature. It is not enough merely to establish and maintain a training-school and a department of education.

5. Although the training-school facilities have been considerably improved during recent years, somewhat limited use is made of them. The amount of practice-teaching required in no case exceeds six semester hours (nine quarter hours), though it must be conceded that the student teachers do an extraordinary amount of work for this credit. In view of the fact that they serve in this capacity 170 clock hours during the year their earned credit should probably be nine semester hours instead of six.

6. As a rule, courses are arranged with respect to sequential relationship.

7. The college requires twenty-four semester hours in education and psychology, eight semester hours of which are psychology, for the degree. Roughly speaking, the plan of organization is: (1) general introductory courses, (2) parallel theoretical and practice courses, (3) independent practice-teaching, and (4) integration courses. By integration courses is meant those subjects which tend to give unity to the science such as History of Education, Philosophy of Education, Current Educational Problems, et cetera.

#### 4. TEACHER PERSONNEL IN ARIZONA STATE TEACHERS COLLEGE AT FLAGSTAFF IN 1931

According to the records of 1931-32, the Arizona State Teachers College at Flagstaff had forty-one members on its teaching staff. Of this number twenty-two were men and nineteen were women. In addition there were four part-time instructors who are not counted in the tables presented in this division of the study.

Eighty per cent of the men, sixty-nine per cent of the women, and seventy-six per cent of both men and women are under forty-one years of age. Five per cent of the women are younger than any of the men teachers. Only two per cent of the entire teaching force are under twenty-six years of age, and twelve per cent are above fifty. In other words, eighty-six per cent of the teachers are between twenty-six and fifty years of age. Only five per cent of the men and five per cent of the women are over sixty. The two following Tables XVII and XVIII are self explanatory.

TABLE XVII

HIGHEST DEGREES HELD BY TEACHERS IN ARIZONA  
STATE TEACHERS COLLEGE AT FLAGSTAFF IN 1931

Degrees	Number	Per cent
None .....	3*	7
Bachelor's .....	10†	24
Master's .....	21	51
Doctor's .....	7	18
Total .....	41	100.0

Including training-school teachers.

\* These are all in special departments and they have training which would be equivalent to A.B. and M.A. degrees.

† Five of this group will have M.A. degrees next year, and one has two degrees in special fields.

TABLE XVIII

HIGHEST DEGREES HELD BY THE TRAINING-SCHOOL  
STAFF IN ARIZONA STATE TEACHERS COLLEGE AT  
FLAGSTAFF IN 1931

Degrees	Number	Per cent
None .....	....	....
Bachelor's .....	5*	63
Master's .....	2	25
Doctor's .....	1	12
Total .....	8	100.0

\* These people will have M.A. degrees next year.

Table XIX shows the amount of improvement made in the training of the two Arizona teaching staffs since 1927.

TABLE XIX  
HIGHEST DEGREES HELD BY TEACHERS IN THE ARIZONA  
STATE TEACHERS COLLEGES AT TEMPE AND AT  
FLAGSTAFF IN 1927 AND IN 1931

Degrees	1927				1931			
	Tempe		Flagstaff		Tempe		Flagstaff	
	No.	%	No.	%	No.	%	No.	%
None .....	6	14	8	29	2	3	3	7
Bachelor's .....	18	43	8	29	4	8	10	24
Master's .....	17	40	12	42	35	69	21	51
Doctor's .....	1	3	....	....	10	20	7	18
Total .....	42	100.0	28	100.0	51	100.0	41	100.0

TABLE XX  
COMPARISON OF DEGREES HELD BY TEACHERS OF  
ARIZONA STATE TEACHERS COLLEGES AT TEMPE  
AND FLAGSTAFF IN 1927 WITH THOSE OF  
TEACHERS IN SIMILAR INSTITUTIONS OF  
OTHER STATES FOR THE SAME YEAR

Degrees Held	Tempe <sup>9</sup>	Flag.	Mo. <sup>9</sup>	La. <sup>9</sup>	Mass. <sup>9</sup>	Random <sup>9</sup> Selection of 26 Teachers Colleges
	%	%	%	%	%	%
None .....	14	29	11	27	51	18
Bachelor's ....	43	29	33	50	30	45
Master's .....	40	42	51	20	18	31
Doctor's .....	3	....	5	3	1	6
Total .....	100.0	100.0	100.0	100.0	100.0	100.0

<sup>9</sup> See Table XIV.

An examination of this table shows that the two Arizona teachers colleges have materially strengthened the scholastic standing of their teaching staffs since 1927.

In Table XX may be seen how the training of the Tempe and Flagstaff teachers in 1927 compares with the training of teachers in similar institutions of other states for the same year.

With the exception of Missouri, this table shows a comparison that is favorable to the Arizona state teachers colleges.

Table XXI shows the colleges and universities represented by the members of the teaching staff at Flagstaff. It shows also the institutions contributing the several types of degrees.

According to a classification of higher institutions formulated by the United States Bureau of Education in 1930, practically all the degrees held by teachers in the Flagstaff school are from duly recognized institutions. The foreign schools represented would naturally not appear on the classified list.

It will be observed that only eleven per cent of the teachers possessing degrees based on graduate work had their graduate training in the University of Arizona. But on the other hand it may be seen that Teachers College, Columbia University, has contributed twenty-two per cent of all teachers teaching on the Master's degree. Moreover, Colorado State Teachers College has contributed fifteen per cent of the Masters. Thus it may be noted that Teachers College and Colorado State Teachers College combined have contributed thirty-seven per cent of all teachers possessing the Master's degree. The University of Iowa has contributed three of the seven, or forty-three per cent, of the teachers holding the Doctor's degree. The other four Doctors came from as many different institutions.

Another item of significance in rating a staff of teachers is the matter of experience. Table XXII shows the amount of teaching experience possessed by the teachers of the Flagstaff college.

Twenty-two per cent of the men, ten per cent of the women, and seventeen per cent of all teachers have taught less than six years. Twenty-seven per cent of the men, sixty-

TABLE XXI

SOURCES OF DEGREES OF TEACHERS IN ARIZONA STATE  
TEACHERS COLLEGE AT FLAGSTAFF, 1931

Colleges Conferring Degrees	Bachelor		Master		Doctor	
	No.	%	No.	%	No.	%
ARIZ. STATE TEACHERS COL. AT FLAGSTAFF	4	9.5				
Ball State Teachers College	1	2.4				
Boston University.....			1	3.7		
Brigham Young Univ.....	1	2.4				
Clark University.....			1	3.7		
Coe College, Iowa.....	1	2.4				
Colorado State Teachers College.....	4	9.5	4	14.8		
Columbia University— Teachers College.....	4	9.5	6	22.2		
Concordia College.....	1	2.4				
Drake University.....	1	2.4				
Duquesne University.....					1	14.2
Emerson Coll. of Oratory..	1	2.4				
Iowa State Teachers Coll..			1	3.7		
Kansas City University....	1	2.4				
Kansas State Teach. Coll.	1	2.4				
Kiev Gimnasium, Russia...	1	2.4				
Miami University, Oxford, Ohio.....	1	2.4				
Montana State Normal School .....	1	2.4				
Nebraska Wesleyan Univ..	1	2.4				
Northwestern College, now North Central.....	1	2.4				
Northwestern University, Evanston .....	2	4.7				
Pittsburgh, Kansas.....	1	2.4				
South Dakota State Coll....	1	2.4				
Stanford University.....	1	2.4	2	7.4	1	14.2
Stout Institute.....	1	2.4				
UNIVERSITY OF ARIZONA .....	3	7.1	3	11.1		
University of Arkansas.....	1	2.4				
University of Iowa.....			1	3.7	3	43.2
University of Kansas.....	1	2.4	2	7.4		
University of Liege, Belgium .....					1	14.2
University of Minnesota....			1	3.7	1	14.2
University of Missouri.....			1	3.7		
University of N. Dakota.....	1	2.4				
University of Oregon.....	1	2.4	1	3.7		
University of Pittsburgh, Penn. ....			1	3.7		
University of Southern California .....	1	2.4	1	3.7		
University of Utah.....			1	3.7		
Vassar College.....	1	2.4				
W. & M. College, Washington, D. C.....	1	2.4				
Y. M. C. A. College.....	1	2.4				
Total .....	42	100.0	27	100.0	7	100.0



TABLE XXII.  
AMOUNT OF TEACHING EXPERIENCE OF TEACHERS IN THE ARIZONA STATE TEACHERS COLLEGE  
AT FLAGSTAFF IN 1931.

No. of Yrs. Teaching Experience	1-2	3-5	6-8	9-11	12-14	15-17	18-20	21-23	24-26	more 27 or	Median Yrs. of Teaching Experience
	%	%	%	%	%	%	%	%	%	%	
Men .....	9	13	23	27	18	....	....	....	....	9	9.55
Women .....	10	....	10	16	22	16	....	10	5	10	13.90
Both .....	10	7	17	22	19	7	....	5	2	10	11.18

three per cent of the women, and forty-three per cent of all teachers have taught twelve years or more. Nine per cent of the men, and ten per cent of the women have taught twenty-seven years or more. The data show that the teaching force at Flagstaff State Teachers College is a mature, experienced group.

## 5. PRACTICE-TEACHING FACILITIES

There is no well formulated program for practice-teaching of the secondary grade. The twenty to twenty-five students per year who make an attempt at this particular type of work are assigned to the Flagstaff senior-high school. There is no official connection between the high school and the college. The college training-school makes no attempt to supervise the work as it is actually carried on under the supervision of the high-school teachers. After the student teacher has done one quarter in the senior-high school, which is largely observation work, he is sent to the college training-school and actually put to teaching in the upper grades of the elementary school. This elementary campus training-school which was built in 1919 is a red sandstone building. It has nineteen rooms, including classrooms, offices, storerooms, and auditorium, and is very well equipped for student teaching.

The student working for the third-year-elementary certificate is sent to the training-school in the beginning of her junior year. She is placed under the supervision of a critic teacher, who has (if it is possible to secure one) an experienced student teacher also assigned to her at work within a given grade. Here, during the first quarter, the beginning student teacher does observation, and a small amount of carefully supervised practice-teaching.

At the opening of the second quarter the student teacher is assigned to a critic teacher who places her in a position of actual teaching, where she works under the strict guidance of this supervising teacher.

With the beginning of the third quarter the student is given responsible charge of the room, and is definitely informed that she must discharge the responsibilities of a regular independent teacher. All of this, however, is under the jurisdiction of the critic teacher in charge. Most of the

student teachers are found quite capable, according to the general director of the work, to assume and properly discharge these duties. A similar program is followed by those who are candidates for the degree certificate, except that they have had more theoretical work, and begin their student teaching at the opening of the last quarter of the junior year. This arrangement results in making the senior free from this responsibility at the beginning of the third quarter of her fourth year.

There are about eighty students per year engaged in student teaching for the elementary certificate, and about twenty-five for the one of secondary grade. The group in the elementary division includes all those who qualify for the primary certificate.

All student teachers in both divisions are engaged every school day of the year in both preparation and actual observation or practice-teaching. On a comparative basis, this is an exceptional amount of work for the credit granted. According to the most common methods used in giving credit for student teaching, (see minimum standards, chapter III, section D) this number of clock hours, approximately one hundred and seventy, would warrant the granting of at least nine semester hours of credit. As it is, six semester hours of credit are given for the full year's work in both the elementary and secondary grades, which is also the amount required in both divisions.<sup>10</sup>

#### 6. PLACEMENT FACILITIES AND PRACTICES

A teacher placement bureau is constantly at the service of those students who qualify for its aid, and of school officials of the State and adjacent sections of the country. Speaking more specifically, the following groups are eligible for the service of the office:

1. Graduating classes. This includes three-and four-year groups.
2. Postgraduates, alumni.
3. All other students attending institution.

This particular office has the privilege of establishing its own standards of eligibility, subject to the approval of the President.

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<sup>10</sup> All data pertaining to practice-teaching facilities were gathered by a personal interview with the director of the training-school.

The plan of registration is as follows:

1. Application for registration blanks.
  - a. Eligibility checked.
  - b. Blanks given.
2. The return of filled in blanks, pictures, and other material required by the office.
3. The collection of letters of reference.
  - a. From outside reference.
  - b. From teachers and practice-teaching supervisors.
  - c. These letters of reference blanks are sent directly to the academic references.
4. Personal interview, if at all possible, of candidate with placement officer.
  - a. One interview at time of enrollment.
  - b. And another at the time of his placement.
5. Credentials are placed upon reserve or active list according to wish of candidate.
  - a. Reserve list—available only after notification.
  - b. Active list—immediately available (all that are available at any given time).

After the placement office has decided upon its standards of eligibility and methods of registration, the question of voluntary versus required registration must be answered. In the Flagstaff office it is voluntary. This is, apparently, the approved method, since it is the plan in common use; nevertheless, rather intelligent criticism of voluntary registration may be made. For example, there is a decided tendency in many schools for the upper group of students to seek placement through their major professors and teachers, or, in some of our larger institutions, through the training-school department. This seems all right except when employers come directly to the office. Quite often upon being asked to give an evaluation on some of the best prospective material on the campus, the office has no credentials to substantiate any statement offered. This is true because the student has gotten his name before the employer other than through the medium of the placement office. But the employer is, in many instances at least, already accustomed to calling on the office, in which he has come to have implicit faith and confidence, for the customary credentials. When he is notified that the office has nothing on this more or less independent, but worthwhile, job-seeker, he is inclined to feel that something is wrong with the service, and his confidence in the placement office is probably weakened.

The writer is inclined to believe that placement service would be much more thorough if placement bureaus always knew that all available candidates were on their lists. Where an office is maintained in a given institution, there is much in favor of its being responsible, either directly or indirectly, for the nomination of all candidates. Such an arrangement would demand required registration.

The office in the Arizona State Teachers College at Flagstaff charges \$1.00 as an enrollment fee; and for general services rendered there is made a charge of one-half of one per cent of the salary of the first year. Moreover, there is a distinction made between the alumni and students in the matter of enrollment fees. Any member of the alumni pays a \$2.00 fee at the time of registration, whereas, as already stated, the student pays only \$1.00 as a fee charge.

There is a definite feeling against the office serving the poorly prepared student. As a matter of fact, according to the director of the bureau, such folk are just not served. This means that students, aside from attaining acceptable scholarship rankings, must choose their subject combinations well. Haphazard selection of courses should be avoided even beyond limits set up by the faculty of the college. On the other hand, there is a decided opinion in favor of the Flagstaff office establishing and maintaining a close relationship with alumni.

The bureau places very definite reliance upon a "rating sheet," which is a part of each candidate's credentials. On this sheet are recorded such items as a composite of grades received, practice-teaching record, I. Q's., activities record, and a numerical translation of the director's evaluation of the candidate's personal qualities.

Present or former employers are considered the most valuable sources of reference, with the balance hanging in favor of the latter; although in practice the former group is almost altogether used. In any and all cases the letters of reference are received directly from the writers.

It is the practice of this placement office to solicit superintendents for vacancies. Of course, in many instances the employer makes a direct request to the office for nominations. No special field agent has ever been used in the solicitation work. It is also customary practice to send the

candidate's credentials recommending him to an employer, upon the request of the student, even though the employer has not requested the office to do so. It is always made clear to the employer, however, that the office is fully aware of the conditions under which the credentials are being mailed. It is not the practice of the bureau to assume complete responsibility in the selection of candidates by naming only one for a position and then attempting to "sell" him to the employer, but, on the other hand, it follows the wise and customary practice of nominating several candidates and by its advice assist the employer in his selection.

The office was first set up in 1925, and at present about one hundred and fifty teachers are registered annually. About one hundred of this number are placed annually. Last year fifteen men and eighty-five women were given positions through the direct service of the bureau. Ten of these were placed in high school and ninety in the elementary school. The director of the office does not work on a full time basis.<sup>11</sup>

### C. COLLEGE OF EDUCATION, UNIVERSITY OF ARIZONA

#### 1. THE LEGAL STATUS

From 1899 to 1915 the offering in education in the University of Arizona consisted of one course in psychology and one course in pedagogy which were given in conjunction with general philosophy.<sup>12</sup>

In 1914 a School of Education was established with Doctor Rufus Bernhard von KleinSmid, President of the University, also serving as its director. He and one assistant offered the twelve two-unit courses listed for that particular year.<sup>13</sup>

In 1921 the School of Education was changed to a College of Education, to take effect in the fall of 1922, with John Oscar Creager, the former director, serving as dean.

In 1925 the Seventh Legislature, in regular session, passed the law which actually specified the College of Education as one of the colleges of the University.<sup>13</sup> This branch of

<sup>11</sup> All data relative to placement facilities and practices were gathered by a personal interview with the director of the office.

<sup>12</sup> Catalogues, University of Arizona, 1899-1915.

<sup>13</sup> The 1925 Session Laws of Arizona, Seventh Legislature in Regular Session, p. 157.

the University has enjoyed a rapid growth, and is at the present time the second largest college on the campus with an enrollment of approximately four hundred students. Doctor James Willis Clarson, Jr., has been serving as dean since 1927.

## 2. ENTRANCE REQUIREMENTS

For admission to the College of Education, the applicant must meet the following prescribed requirements:

### GENERAL REQUIREMENTS FOR NEW STUDENTS

*Age*—All applicants for admission to the University must be at least sixteen years of age.

*Character*—All new students are required to furnish satisfactory evidence of good character, and certificate of graduation or of honorable dismissal from the school last attended.

*Health*—Each year all students are required to report to the University Physician for physical examination.

### ADMISSION TO FRESHMAN RANK

*Application for Admission*—Formal application for admission to freshman standing may be made by submitting a statement of high-school credits and recommendation of the principal on the University certificate of recommendation Form R-25, issued by the Office of the Registrar.

All applicants for admission to freshman rank in the University shall have completed the equivalent of a four-year high-school course; that is, fifteen units of high-school or other secondary-school work in acceptable subjects.

*Deficiencies*—No deficiencies in the general University requirements for admission are permitted, either in the number or the nature of the units, and no admissions are granted with conditions in either quantitative or the qualitative requirements as listed.

### SUMMARY OF ADMISSION UNITS

The fifteen units offered for admission must include the following requirements common to all colleges of the University, together with any additional subject-matter requirements that may be specified by the college in which the student desires to register:

English Composition and Literature .....	3 units
Foreign Language (one subject) .....	2 units
Algebra .....	1 unit
Plane Geometry .....	1 unit
<sup>14</sup> Science, with laboratory work .....	1 unit
United States History and Civics .....	1 unit
Electives .....	6 units
Total .....	15

(77 - p. 56)

<sup>14</sup> Must be other than introductory or general science.

The College of Education makes no additional subject-matter requirements to the foregoing admission units. (77 - p. 57)

The University provisions for accepting transferred students with advanced standing apply to the College of Education. (77 - p. 62)

Applicants twenty-one years of age or over who cannot show evidence of high-school graduation may be admitted to any college of the University as special students. Such students, however, cannot become candidates for degrees, but may elect, with the approval of the department chairman concerned, such courses as they may carry with profit. (77 - p. 63)

Credits presented by junior-college graduates are accepted up to the maximum prescribed in the first two years of regular University work. (77 - p. 63)

The foregoing entrance requirements are in substantial agreement with those proposed by the American Association of Universities, the Association of Land-grant Colleges and Universities, and the North Central Association of Colleges and Secondary Schools. They are, therefore, standard and acceptable.

### 3. THE CURRICULA OFFERED

The College of Education, in cooperation with other colleges in the University, offers courses along the following lines, each division preparing the students for definite types of school positions:

- I. Division of Secondary Education, preparing:
  - a. Teachers and heads of departments in academic subjects in high schools and junior high schools.
  - b. Principals for junior and senior high schools.
  - c. Athletic coaches and teachers of physical education in junior and senior high schools.
- II. Division of Supervision and Administration, preparing:
  - a. Supervisors, superintendents, and principals for city school systems.
  - b. Supervisors, superintendents, and principals for county (rural) school systems.
  - c. Supervisors of physical education in public schools.
- III. Division of Educational Research:
  - a. Directors of research for school systems.
  - b. Directors of educational and vocational guidance.



The curricula of the College of Education show an orderly arrangement in that the work is very well differentiated and in that students are not admitted to collegiate standing who have not satisfied the requirements for college entrance.

In the case of transferred students, a minimum of one year in residence, which must be the senior year, is required for graduation. (77 - p. 94)

A distinction is made between work of junior- and senior-college rank, and the college demands that approximately one-third (40 units) of the work offered for the degree be of senior-college rank. (77 - p. 109)

Where students have done all the work for the degree in residence, a scholarship record must be maintained showing one hundred units with a grade above four. Transferred students must attain a grade of better than four in eighty per cent of the work done in the University in meeting the minimum requirements for the degree. (77 - p. 94)

Courses are offered by correspondence and extension, and the amount of such work which may be offered for meeting the requirements of the degree is limited to approximately one-half (60 semester units). This entire amount may be done by correspondence, by extension, or by both. (77 - p. 295)

The major in the College of Education is the principal subject the student is desirous of teaching. The minimum credit in this selected subject is twenty-four semester units. (77 - p. 108) Those preparing themselves for supervisory and administrative work may select Education as their major subject, either as part of a four-year course leading to the Bachelor's degree or, preferably, in addition to such a course. (77 - p. 106)

The supporting minor consists of twenty semester hours which must be secured in a group of subjects supplementing the major. A teaching minor consists of fifteen to twenty semester hours in a second specialty subject, which the candidate for the degree plans to teach. The supporting minor may or may not meet the requirements of the teaching minor. Students in the College of Education must have both a teaching major and a teaching minor. This means that they may be required to select a teaching minor in addition to the supporting minor. (77 - p. 106)

Students are advised to select their major subject not later than the beginning of the sophomore year, and the work done in this field must spread out over at least two and one-half college years. The student must select his teaching minor not later than the beginning of the third year. (77 - p. 106)

At the present time students in the College of Education may select their majors and teaching minors from the following branches of study:

Art	Political Science
Botany	Mathematics
Chemistry	Physical Educ. for Men
Classical Literature	Physical Educ. for Women
Economics	Physics
English	Spanish
French	Zoology
German	(77 - p. 109)
History	

Each candidate for the degree must present a minimum of seventeen semester hours in professional studies, and in addition three semester hours in General Psychology. Moreover, the candidate must have credit in the constitutions of the United States and Arizona. (77 - p. 109)

Graduation from the College of Education qualifies the student as a teacher for any public-school position, elementary or secondary. (77 - p. 107)

The specific four-year curriculum follows:

*Freshman Year*

First Semester

Subject	Units
English 1a, (Freshman Composition) .....	3
Educ. 2a, (Introduction to Education) .....	1
Foreign Language .....	4
Science (See Summary I) .....	4
Mil. Sci. 1a, P.E. 25 or 26 (Men) .....	1½
Social Fundamentals (Women) .....	½
Physical Ed. 1a, (Women) .....	1
<sup>15</sup> Elective .....	2-3
Total .....	15½-16½

<sup>15</sup>Six units in social science are required for graduation. They may be taken at any time. See summaries.

Second Semester		
Subject		Units
English 1b, (Freshman Composition) .....		3
Educ. 2b, (Introduction to Education) .....		1
Foreign Language .....		4
Science .....		4
Mil. Sci. 1b, P.E. 27 (Men) .....		1½
Social Fundamentals (Women) .....		½
Physical Ed. 1b, (Women) .....		1
Elective .....		2-3
Total .....		15½-16½
Sophomore Year		
First Semester		Units
Subject		
Literature (English or American) .....		3
Psychology 1, (General Psychology) .....		3
Foreign Language .....		4
Military Science or Physical Ed. ....		1
Major and minor subjects .....		--
Elective .....		--
Total .....		15-17
Second Semester		Units
Subject		
Literature (English or American) .....		3
Educ. 14, (Educational Psychology) .....		3
Foreign Language .....		4
Military Science or Physical Ed. ....		1
Major and minor subjects .....		--
Elective .....		--
Total .....		15-17
Junior Year		
First Semester		Units
Subject		
Educ. 112, (Prins. of Teaching) .....		3
Major and minor subjects .....		--
Elective .....		--
Total .....		16-17
Second Semester		
Subject		
Educ. 106, (Secondary Education) .....		3
Major and minor subjects .....		--
Elective .....		--
Total .....		16-17
Senior Year		
First Semester		Units
Subject		
<sup>10</sup> Educ. 197, (Teachers' course) .....		3
Major and minor subjects .....		--
Elective .....		--
Total .....		16-17

<sup>10</sup>Some of these courses may be taken in the second semester of the Junior year; others, the first semester of the Senior year.

Second Semester		Units
Subject		
<sup>17</sup> Educ. 130, (Practice-teaching) .....		1-5
Major and minor subjects .....		--
Elective .....		--
Total .....		16-17
(77 - pp. 109-10)		

The foregoing curriculum has been outlined primarily in the interest of those who desire to become teachers of academic subjects. For teachers and directors of Physical Education for Men twelve semester hours in Zoology are required, which is not prescribed for academic teachers, in that, they may select eight semester hours in either Astronomy, Biology, (Botany, Zoology), Chemistry, Geology, Mathematics, Mineralogy or Physics. Moreover, the former group must earn twenty-four semester hours in physical education, while the latter is required to obtain only five semester hours in Military Science and Physical Education. Teachers and directors of Physical Education for Women must secure two semester hours in Home Economics; and a more elaborate and differentiated course in Physical Education than the one pursued by teachers of Physical Education for Men. With these essential differences, the specific requirements of the three types of teachers in each of the courses indicated are in substantial agreement. (77 - pp. 110-11)

The data presented above show that:

1. Courses are arranged with respect to sequential relationship.
2. Carefully planned and well-administered curricula afford an opportunity for specialization in secondary teaching.
3. Curricular requirements make it necessary that students have a broad and liberal education; thorough scholarship in the subjects to be taught; and, in addition to these things, adequate professional training for meeting the problems of the teaching profession.
4. For the prospective teacher, the general policy of the college is to place the chief emphasis upon the subjects to be taught.
5. The offering fulfills all requirements for the certification of Arizona teachers. Unfortunately, however, as at Flagstaff and at

<sup>17</sup>Practice-teaching may be arranged for either semester of the Senior year depending upon the student's program and the available opportunities for the work. Students who are unable to obtain practice-teaching must make up the requisite number of units in education in some other courses.

Tempe, the degree of Bachelor of Arts in Education entitles the student to a certificate granted by the State which, in turn, permits the holder to teach in any grade from one to twelve, inclusive. As already indicated in the Tempe and Flagstaff reports, this means that a teacher may instruct in a division of the State-public-school system for which he has had no special training. This weakness in certification practices, as set up by the State Board of Education, makes it impossible for the three respective teacher-training agencies to avoid this difficulty. The College of Education at the University, however, urges those who are meeting the requirements for the degree and secondary certificate, and who are also interested in elementary teaching, to take certain provided courses in elementary education.

6. The work in practice-teaching is limited. In no case does the requirement exceed five semester hours. The minimum requirement is only three semester hours. Practice-teaching may be arranged for either semester of the senior year.

#### 4. TEACHER PERSONNEL IN THE COLLEGE OF EDUCATION, UNIVERSITY OF ARIZONA.

The College of Education has four full-time and fifteen part-time members on its staff. The four full-time members are all mature men (ages 35 to 56), who hold the degree of Doctor of Philosophy, and have had extensive experience covering practically every phase of teaching and administration. The fifteen part-time teachers are part-time only in so far as Education is concerned. In reality, they are employed as full-time teachers in the academic departments of the University in which the prospective teachers may major in preparing for the academic subjects they plan to teach. But, inasmuch as these teachers offer courses in special methods of teaching their respective subjects, they are to be counted as professional part-time teachers. This group is made up of both men and women who, with few exceptions, are mature teachers of considerable experience. Three of the fifteen have the degree of Doctor of Philosophy; ten have the degree of Master of Arts, or the equivalent; and two have the degree of Bachelor of Arts, or the equivalent.

In addition there is one part-time special lecturer who has the degree of Master of Arts. This is the Superintendent of the Tucson Public Schools. Moreover, there is the Assistant Superintendent of the Tucson Public Schools who serves as the University Assistant Supervisor of Practice-teaching.

Furthermore, there is to be considered the training of all

teachers of academic subjects from which students in the College of Education have the privilege of selecting their majors and minors. A list of these subjects follows:

Art	Political Science
Botany	Mathematics
Chemistry	Physical Education for Men
Classical Literature	Physical Education for Women
Economics	Physics
English	Psychology
French	Sociology
German	Spanish
History	Zoology (77 - p. 109)

The foregoing subjects represent ninety-two teachers. Table XXIII shows the highest degrees held by this group.

TABLE XXIII  
HIGHEST DEGREES HELD BY NINETY-TWO  
ACADEMIC TEACHERS IN THE  
UNIVERSITY OF ARIZONA  
IN 1931-32

Degrees	Number	Per cent
None .....	1	1.08
Bachelor's .....	15	16.31
Master's .....	41	44.46
Doctor's .....	35	38.15
Total .....	92	*100.0

\*(77 - pp. 13-23)

This table shows that the quality of training of these teachers is comparatively high.

#### 5. PRACTICE-TEACHING FACILITIES

There is no University training-school maintained in connection with the College of Education. However, by arrangement with the administrative heads of the Tucson public schools, opportunities are offered for practice-teaching in the public schools. This cooperative plan enables the stu-

dents of the University to make application of their acquired educational principles under normal classroom conditions. Moreover, by this arrangement with the public schools the students receive not only the professional counsel of the director of apprentice-teaching of the University, but also the supervision of the regular classroom teachers, principal of the school in which they teach, and of the Assistant Superintendent of Schools for all such work done in the grades, and of the principal and departmental heads in the Tucson high schools.

During this current session approximately one hundred students enrolled in the College of Education are doing practice-teaching. Each student is assigned a class in some school, and after having observed the teaching techniques of the critic teacher for approximately six weeks she is actually placed in charge of the class, but works under the close supervision of the regular teacher. After serving in this capacity for the second six weeks the student, during the third and last six weeks of the eighteen-week semester, conducts the class independently.

Apprentice-teachers are considered as beginning teachers employed by the system and assigned to experienced teachers as assistants. They are subject to the rules and regulations of the public-school organization. These student teachers meet with their University director once a week, at which time the problems they have encountered in the classroom are discussed.

The unit requirement in practice-teaching for both the elementary and the secondary grade is from three to five semester hours. A majority of the students engaged in this work meet the maximum requirement of five semester hours.<sup>18</sup> Viewed in the light of common practice in university schools of education and in teachers colleges this minimum requirement of three semester hours is too low. Dr. Sheldon Phelps reports a survey of nineteen university schools of education and of thirty-three teachers colleges in 1923 in which he found the median number of semester hours of practice-teaching required in both types of institutions to be six.

A more recent survey is that of R. S. Newcomb made in

<sup>18</sup> All data relative to practice-teaching were gathered by a personal interview with the director of University practice-teaching.

1925. He reported to the American Association of Teachers Colleges in this same year that returns from sixty-seven teachers colleges, widely distributed and actively engaged in the training of both elementary and high-school teachers, show that the average amount of practice-teaching required of prospective teachers is 7.5 semester hours. (86 - p. 91)

The Committee on Standards of the American Association of Teachers Colleges reported in 1931 that the minimum practice-teaching requirement should be five semester hours with a strong recommendation for carrying it beyond this point. (87 - p. 16)

This study shows that the average minimum requirements in practice-teaching for the two Arizona teachers colleges are eight semester hours for elementary teachers and seven semester hours for high-school teachers.

The foregoing data show that the present minimum requirement in practice-teaching of the College of Education in the University should, at least, be raised to the present maximum which is five semester hours. To require from five to eight semester hours in this branch of the service would place the University more in line with current practice. A properly organized and adequately equipped training-school placed at the service of the College of Education would probably be an aid in raising the requirements of practice-teaching to a level commensurate with common practice. With the absence of a training-school, however, it may be said that the University's five-hour requirement is not the result of any conviction on the part of the administrative officials that it is the optimum amount, but is an administrative convenience. Where practice-teaching is done in the public school only five days of work can be done a week. For the eighteen-week semester this amounts to ninety clock hours, which is five semester hours. Therefore, for the student teacher to exceed the five-hour requirement would necessitate passing over into another semester's work, which cannot very well be done under this particular set of circumstances.

## 6. PLACEMENT FACILITIES AND PRACTICES

There is no placement office maintained in connection with the College of Education. The University, however, maintains an office for the express purpose of aiding graduates



of the University to secure desirable positions. Speaking more specifically, the following groups are eligible for the service of the office:

1. Graduating classes.
2. Postgraduates, alumni.
3. All other students attending the institution.

This particular placement office has the privilege of establishing its own standards of eligibility.

The plan of registration is as follows:

1. Application for registration blanks.
  - a. Eligibility checked.
  - b. Blanks given.
2. The return of filled-in blanks accompanied by a picture.
3. The collection of letters of reference.
  - a. From outside reference.
  - b. From professors, teachers, and practice-teaching supervisors.
  - c. These letters of reference blanks are sent directly to the references.
4. Personal interview, if at all possible, of candidate with placement director
  - a. One interview at time of enrollment.
  - b. And another, if possible, at the time of his placement.
5. The student's name is placed upon the reserve or the active list according to his expressed desire.
  - a. Reserve list—corresponding credentials are available for use only after notification by the students.
  - b. Active list—all names that are immediately available for submitting to employers. (Active candidates for positions at any given time.)

Registration is on a voluntary basis. There is no enrollment fee, and no charge for general service. In other words, there is no fee charged for placement, either flat rate or percentage. Moreover, there is no distinction drawn between the alumni and students in the character of service rendered.

There is a rather definite feeling against the office serving the poorly prepared student. However, his credentials are accepted, and he is recommended for a position upon the basis of his qualifications in case the supply of better prepared applicants becomes depleted.

There is a strong opinion in favor of the University office establishing and maintaining a close relationship with alumni.

The office places considerable reliance upon a "rating sheet," which is a part of each candidate's credentials. On this sheet are recorded such items as health, personal appearance, sense of duty, scholarship, social qualities, probable success as a teacher, and rating in practice-teaching.

Present or former employers are considered the most valuable sources of reference for experienced teachers. For prospective teachers, the university supervisor of practice-teaching, the school supervisor, and the critic teacher are most able to speak authoritatively concerning their actual teaching. Teachers of academic and of professional subjects can speak concerning their preliminary training. In any and all cases the letters of reference are received directly from the writers.

It is not the practice of this placement office to urge school superintendents to report vacancies; although they are given the opportunity of noting the supply of material on the bureau's list. This information is mailed to the school executives during the early spring of each year. No special field agent has ever been used for solicitation purposes. As a rule, the office is either directly or indirectly responsible for all nominations.

It is not the practice of the office to send credentials and recommend for appointments merely upon the request of the candidate. The credentials are mailed only in response to a direct request from the employer. And it is also not the practice of the office to assume complete responsibility in the selection of candidates by naming only one for a position and then attempting to "sell" him to the employer, but on the other hand, it follows the wise and customary practice of nominating several candidates and by its advice assist the employer in his selection.

The placement bureau was first set up about 1925, and is maintained in connection with the Registrar's office. In 1930-31 there were two hundred and seven students registered for the service. In this same year one hundred and thirty-one teachers were placed through its service directly or indirectly. Of this number thirty-eight were men and ninety-three were women. Eighty-three were appointed to high-school positions, and thirty-seven to elementary-teach-

ing positions. As at Tempe and Flagstaff, the director of the office does not work on a full-time basis.<sup>19</sup>

Viewed in the light of common practice the office is functioning on a standard basis, with the exception of having been mislocated within the University. To make the Teachers' Appointment Committee an integral part of the College of Education with the Dean of the College of Education designated as Chairman of the Committee, and with the present director designated as Secretary, would place the service on a basis commensurate with almost universal practice. Aside from current practice, common sense reasoning would make the Placement Bureau a distinct part of the College of Education, for it is this division of the University that is charged with the responsibility of furnishing the State with adequately trained teachers. And whether the College of Education does or does not also have the responsibility of placing teachers after they have been prepared, it receives the credit for the accomplishments made along this line. Common practice shows that it is not the University as a whole, nor the Registrar's office, that is held responsible for teacher placement service, but the Departments, Schools, and Colleges of Education that are directly engaged in the training of the teachers to be placed.

## V. CONCLUSIONS AND RECOMMENDATIONS

### CONCLUSIONS

1. The amount of training possessed by teachers in Arizona is considerably above the standards which have been widely accepted as satisfactory minimum standards of teacher-training.
2. More than three-fourths of all teachers of Arizona have attended school within four years.
3. The certification system of Arizona tends to encourage an ever-increasing period of training in that no certificate granted is valid for a period of more than four years, and can be renewed only upon proof of completion of a definitely prescribed amount of additional training. There is a con-

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<sup>19</sup> All data relative to placement facilities and practices were gathered by a personal interview with the director of the office.

spicuous need, however, for some definite changes in the rules and regulations governing the certification of teachers. (See recommendations.)

4. Arizona, on a comparative basis, is not facing any great rural-school problem in her program of teacher-training.

5. Arizona is not suffering from an over-supply of adequately trained teachers. Table II shows that only 42.70 per cent of the graded teachers qualify as adequately trained teachers under the present law, which requires as a minimum the completion of a three-year college course. On the same basis only 16.10 per cent of the rural teachers qualify. These two groups combined show that only 41.30 per cent of the elementary teachers of Arizona are adequately trained under the provisions of the law.

6. The typical high-school teacher of Arizona is a woman who is a graduate of some Western college, and who is entering her sixth year of teaching, but has taught only three and one-half years in her present position. Her annual salary is \$1,943.33, and she holds a secondary certificate which will expire at the end of four years from the date of issuance.

7. The typical graded-school teacher of Arizona is a woman who has had two years of college training and six years of teaching experience, but who has been, on the average, three years in her present position. Her annual salary is \$1,525.00, and she holds an elementary certificate which will expire at the end of four years from the date of issuance.

8. The typical rural-school teacher of Arizona is a woman with two years of college training and five years of experience, but who has taught in her present position, on an average, a little less than two years. Her annual salary is \$1,318.75, and she holds an elementary certificate which will expire at the end of four years from the date of issuance.

9. Measured by the standard of four years post-high-school training of collegiate grade, the high-school teachers were found to fall short 16.90 per cent. In other words, of the seven hundred and seventy-one high-school teachers employed in the State one hundred and thirty have had less than four years college training. Only five teachers fall as low as one year in college; twenty-one have finished the two-year course; and one hundred and four show three years work of collegiate grade. In all fairness, however, it may

be shown that one hundred and eighty-five, or 24.0 per cent, of the high-school teachers have had five years or more of college training. This indicates that the State has fifty-five more teachers ranking above the four-year standard than falling below. From these facts it may be seen that, on an average, the high-school teaching force of Arizona has had more than four years work of collegiate grade.

10. For elementary teachers two years of training in a duly recognized teacher-training institution is generally accepted as an average minimum standard. When this is used as a measuring stick, only 6.63 per cent of the graded-school teachers fall below the standard. At the other end of the scale, 42.74 per cent are found above the two-year course. This places the elementary-school teaching force considerably above the average minimum standard.

11. For rural teachers one year of college training was shown to be an average minimum standard. When this is used as a measuring stick, 34.23 per cent of the rural-teaching force fall below the standard. On the other hand, 57.72 per cent of the rural teachers are above this standard.

12. The teacher-training institutions of the State do not represent a unified, cooperating system of teacher preparation. The different units work independently of each other and compete for students and funds. Each school determines its own standards of scholarship and applies them in its own way.

13. It is unfortunate that each of the three teacher-training institutions of the State is attempting to turn out high-school teachers. Though Arizona is a large state geographically, it has a small population. The high schools of the State now require annually approximately fifty new teachers. (79) This number does not justify all three of the units offering the high-school teacher-training course.

14. The Flagstaff and Tempe schools offer differentiated curricula of sufficient number and variety to meet very well the demands made upon them.

In certain fields carefully planned and well administered curricula afford an opportunity for specialization in secondary teaching.

With some qualifications all curricula require students to come in contact with the important fields of human knowledge.

Although the training-school facilities have been considerably improved during recent years, only limited use is still made of them. This criticism applies only to a small extent to the Tempe school. The practice work for rural teaching carried on there deserves special commendation.

As a rule, courses are arranged with respect to sequential relationship.

Considering that the supply of teachers in Arizona is greater than the demand, the placement offices are rendering an efficient service.

15. The most conspicuous weakness of the teacher-training schools of Arizona is the lack of a general professional attitude. It should be constantly borne in mind that the general offering of an institution designated as a teachers college should be strictly professional in nature. This criticism does not apply to the University of Arizona, since its College of Education, by virtue of the nature of its entire offering, is altogether professional.

16. The work of the College of Education at the University is in charge of well-trained and experienced teachers, and is successfully meeting the demands made upon it by the State.

#### RECOMMENDATIONS

It is recommended:

1. That Arizona, along with other states maintaining high standards of certification, designate some appropriate amount of required professional preparation for the "Elementary" and "Primary" certificates, as has been done in the case of the "Secondary" and "Special"; and that these requirements, which undoubtedly already exist in rough form, be incorporated within the two sections of the rules and regulations governing State certification of teachers.

2. That Arizona repeal that section of the rules and regulations set up under "Secondary" certificates which reads, "This certificate entitles the holder to teach in grades first to twelve, inclusive." There is no sound argument for permitting the holder of a secondary certificate to teach in the grades below the junior-high school. It is as illogical as it would be to permit holders of the elementary certificate to teach in the high schools of the State, a privilege justly

denied them by the law. It is recommended that the provision be amended to read, "This certificate is valid for four years and entitles the holder to teach in grades seven to twelve, inclusive." Although California and New York, two of our leading school states, have the same unwarranted provision, this fact is not accepted as a defensible justification for the practice.

3. That Arizona furthermore amend the rules and regulations governing the certification of Arizona teachers to the extent of providing definite practice-teaching requirements for the several types of teaching positions. The following specific minimum requirements are suggested:

1. Five semester hours for the Secondary certificate;
2. Five semester hours for the Elementary certificate; and
3. Six semester hours for the Primary certificate.

The writer has found that these proposed requirements can be met by all Arizona teacher-training institutions at the present time. In fact, with the exception of the College of Education at the University, the requirements are above this suggested minimum. In no case within the State's teacher-training agencies do the requirements in practice-teaching fall below the above proposed minima.

4. That Arizona extend the scope of certification requirements to include a certificate for the school administrator and supervisor. The present status of proficiency, brevity, and simplicity of the Arizona plan is duly appreciated, but it is somewhat too narrow to meet the professional needs of the schools. A teacher's certificate, like a school or college diploma, is direct recognition of personal and professional attainment. It is just as essential that supervisors and administrators show definite attainment through the channels of certification before being permitted to enter upon positions within these respective fields of service. Academic or scholastic education, secondary or collegiate, or a thorough knowledge of subject-matter alone is no longer regarded as adequate preparation for supervision. School administration, also, has become highly technical, and is a profession in itself. Needless to say, no longer can one hope to attain high success in the service of education without adequate professional and technical preparation. Therefore, it is to be concluded that school supervisors should be appropri-

ately certificated individuals. Obviously, then, the purpose of setting up such requirements would be to insure a well-trained supervisor and administrator for all such positions within the State. This has long been the proclaimed objective for the general certification of teachers.

The following certificates are recommended for consideration:

I. Superintendents: (General or for High Schools only)

- A. The regular Arizona secondary certificate.
- B. Thirty semester hours of professional training, exclusive of psychology, with a minimum of fifteen semester hours in school administration and supervision.
- C. A minimum of two years of public-school experience.

II Principals:

A. Graded Elementary Schools.

1. The regular Arizona elementary certificate based upon the four-year college course.
2. Twenty-four semester hours in education, exclusive of psychology, nine semester hours of which must be in elementary-school administration and supervision.
3. Two years of experience in public schools.  
*Note:* In a relatively small system where the superintendent directly administers and supervises the entire school a certified elementary principal should not be required.

B. High School Principals—Junior and Senior.

1. The regular Arizona secondary certificate.
2. Twenty-four semester hours in education, exclusive of psychology, nine semester hours of which must be in high-school administration and supervision.
3. Two years of teaching experience in an accredited secondary school.

III. Supervisors:

A. Elementary or High-School Field.

1. The required teacher's certificate for such field.
2. Twelve semester hours of special training for supervision.
3. Three years of teaching experience, two of which must be in the field to be supervised.

5. That the State Colleges at Tempe and Flagstaff be placed under one board of regents, with one member of this board also serving on the University Board of Regents, and



with the president of the University and the Dean of the College of Education attending all meetings of this board. Such an arrangement would do much to bring about a unified, cooperating system of teacher-preparation. The different units would cease working independently of each other in competition for students and in the biennial scramble for funds.

6. That the College of Education at the University of Arizona be designated by this general board as the unit for training all high-school teachers of the State; and that the State Colleges at Tempe and Flagstaff be devoted exclusively to the training of graded and rural teachers. This division of labor would eliminate useless duplication of courses and the corresponding unwarranted expenditure of funds.

7. That the Board of Regents of the University of Arizona, as soon as the economic conditions of the State will permit, set aside from \$60,000 to \$100,000 for the establishment of a University High School to be used as a training-school for the College of Education.

8. That the administrative departments of the State Colleges at Tempe and Flagstaff carry on a vigorous campaign for the purpose of creating a general professional attitude and subsequent treatment of courses throughout the entire organization of these units.

9. That public-school superintendents, boards of trustees, and boards of education of Arizona, demonstrate their loyalty and allegiance to the State school system which they are charged with administering by employing Arizona-trained teachers. Especially does this apply to the employment of high-school teachers.

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