

# EDUCATIONAL NEEDS

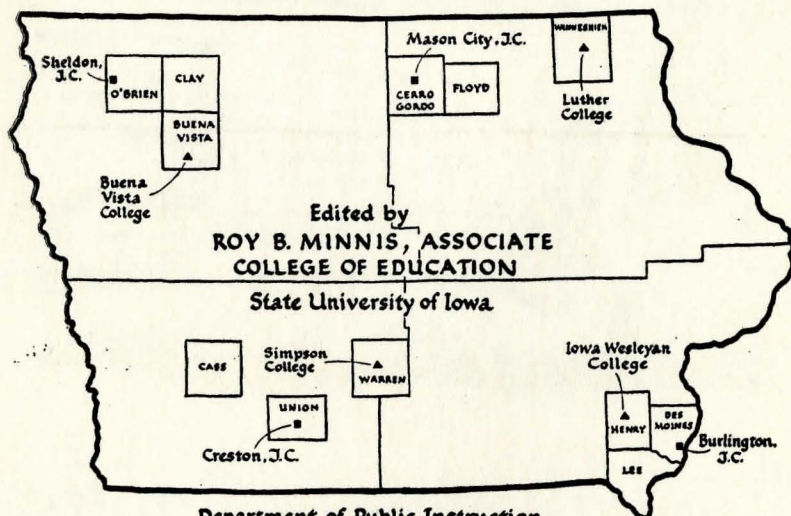


## *Iowa's Young Adults*

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## THE EDUCATIONAL NEEDS OF IOWA'S YOUNG ADULTS



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# Educational Needs IOWA'S YOUNG ADULTS

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# IOWA'S YOUNG ADULTS Educational Needs

## STATE BOARD OF EDUCATION

A report made to the State Board of Education by the Iowa State Board of Education, in accordance with the provisions of the Act of the General Assembly, Chapter 102, Section 1, passed March 1, 1919, and amended by Chapter 102, Section 2, passed March 1, 1919, and Chapter 102, Section 3, passed March 1, 1919.

The Board of Education has the honor to acknowledge the cooperation and assistance of the Iowa State Board of Education, and the Iowa State Board of Education, in the preparation of this report.

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# Introduction

Concern regarding the educational needs of Iowa's young adults led the members of the Junior College Workshop held at the State University of Iowa during the summer of 1949 to recommend to Miss Parker, State Superintendent of Public Instruction, the appointment of a state research committee to investigate the educational needs of Iowa's young adults and the facilities available to supply them. Miss Parker named the representatives of Iowa educational institutions and organizations as listed on the title page.

The State Research Committee organized the research and delimited the problem to be studied. Four areas of general need with specific considerations under each were established as follows: **OCCUPATIONAL NEEDS AT THE COMMUNITY COLLEGE LEVEL:** 1. Industrial needs; 2. Small business needs; 3. Technical training needs; 4. Agricultural needs; 5. Professional assistant needs; 6. Civil service employee needs; 7. Teacher training needs; 8. Home-making needs; and 9. Recreational assistant needs. **GENERAL EDUCATION NEEDS AT THE COMMUNITY COLLEGE LEVEL:** 1. Citizenship training needs; 2. Knowledge of scientific factors; 3. Human relations needs; 4. Family living needs; and 5. Personal and community health needs. **PRE-PROFESSIONAL NEEDS AT THE COMMUNITY COLLEGE LEVEL:** 1. Need for scientific selection; 2. Need for pre-professional facilities; and 3. Common learnings areas. **AVOCATIONAL NEEDS AT THE COMMUNITY COLLEGE LEVEL:** 1. Music needs; 2. Arts and crafts needs; 3. Recreational typing and shorthand needs; 4. Public speaking needs; 5. Foreign language needs; 6. Physical activities needs; and 7. "Cultural" development needs.

With the problem established the State Research Committee concerned itself with the approach to be used. They realized that information must be secured from four sources: 1. From all types of employers in the state; 2. From the young adults; 3. From the experienced teachers; and 4. From the general lay public. Knowing that it would be impossible to determine the educational needs at the 13th and 14th year levels of schooling by considering everyone in the state, the State Research Committee chose the two high school graduating classes they felt were influenced the least since graduation by the war, those of 1946 and 1949. Twelve counties were chosen representative of the state as a whole. Three were from each quarter of the state, one with a junior college, one with a liberal arts college, and the third without a collegiate institution.

Chosen were the following counties as outlined on the map found on the inside front cover:

Section of the State	Name of the County	Collegiate Institution
Northwest	O'Brien	Sheldon Junior College, Sheldon
Northwest	Buena Vista	Buena Vista College, Storm Lake
Northwest	Clay	None
Northeast	Cerro Gordo	Mason City Junior College, Mason City
Northeast	Winnebago	Luther College, Decorah
Northeast	Floyd	None
Southwest	Union	Creston Junior College, Creston
Southwest	Warren	Simpson College, Indianola
Southwest	Cass	None
Southeast	Des Moines	Burlington Junior College, Burlington
Southeast	Henry	Iowa Wesleyan College, Mt. Pleasant
Southeast	Lee	None

Comparisons made by the Bureau of Business and Economic Research at the State University of Iowa have shown these counties deviate less than one per-



cent economically from the average of the whole state, excluding Polk county. They were compared according to the nine types of classifications of business and industry covered by the Old-Age and Survivors Insurance Program.

Each of the cooperating institutions and organizations agreed to perform one or more of the research studies. The State University of Iowa assumed the responsibility for the educational needs as expressed by the young adults, the business and industrial employers, the public employers, and the problems relative to personal and community health. Iowa State College assumed the responsibility of completing the research in the areas of agricultural education, home-making and family living training, and pre-professional education. Iowa State Teachers College agreed to study the educational needs in Iowa relative to citizenship training, teacher training, and the communication skills. The Iowa Association of Junior Colleges undertook the task of determining the reasons for the drop-out of their students and methods by which communities might be served through concert and lecture series.

The State Research Committee demanded that all research be conducted in a realistic manner through actual contacts with the business and professional leaders, through the lay public, and from the viewpoint of the young adult. Insistence was made that the research facilities and techniques should be those that would yield true representations of all facts relative to the needs of education for the young adults beyond the age of high school graduation.

### WHO ARE OUR YOUNG ADULTS?

**Age:** The research committee chose for this investigation the two high school classes that graduated since the end of the second World War who would be farthest apart at graduation time and still not be affected greatly by war in regard to the period of their graduation and their opportunity for immediately starting college. Specifically, the high school graduates of 1946 and 1949 were the groups chosen. At the time they were contacted during the spring of 1950 the most common age was nineteen years for the 1949 graduates and twenty-two years for the 1946 graduates. They ranged in age from seventeen to twenty-seven years. The twenty-seven year old young man was a war veteran who had completed his high school education after discharge from the service.

**Education:** The young adults were made up of two quite different groups educationally: those who had completed their high school education and immediately obtained a job, and those who had experienced some additional type of educational training, most commonly college. One particularly noteworthy deduction that might well be drawn from the type of persons that responded to the questionnaire was that those having had the most education were the ones most intensely interested in further education. Only a little over one-third of all the high school graduates answering the questionnaire had had no training since graduation from high school. Approximately one-third had had training in a college or university, and the other one-third had had additional training, but in different types of educational institutions, most of them in Iowa's public junior colleges.

The enthusiasm expressed toward the possibilities opened by the wording of the questionnaire can best be shown by the following quotation from a girl who graduated from a medium-sized high school in northwest Iowa in 1949 and is now attending Iowa State Teachers College: "The questionnaire seems to be digging out bits of information that could improve our high schools and influence more people on entering college. I've enjoyed filling it out. I wish more could be done to get parents and other people to realize that college is not just preparation for a job but for living and enjoying it more."



**Parental Background:** Parental background gives the trained investigator a reasonable indication of the type of persons the children are most likely to become and the possible success and achievement they may obtain educationally and vocationally in their adult lives. Of the fathers of the young adults in the committee's sample only one-third had had as much as four years of high school training. Less than two of every ten had had training beyond high school, and almost half of the fathers had never received even a single day of high school training. The mothers had experienced more schooling than the fathers but not as many years as their sons and daughters answering this questionnaire. About only one-third of the mothers had not attended high school, a few more than half had received at least twelve years of schooling, and one-fourth had had some educational training since high school graduation.

The following table compares the education of the young adults in the committee's sample with that of their parents:

Maximum Years of Schooling	% of Fathers	% of Mothers	% of Young Adults
1-6 (Elementary)	5	2	0
7-9 (Junior HS)	43	31	0
10-12 (High School)	30	39	37
Beyond 12	17	25	63

This table shows briefly one fact illustrating the rapid trend toward longer periods of schooling by each succeeding generation of our population in Iowa.

Information was secured relative to the types of positions that were held by the breadwinner of the young adult's family at the time he graduated from high school. The occupation of the fathers compared rather closely with similar information as found by the United States Census in Iowa. Nearly half of them held managerial positions. Most of these were either farm owners, renters, or managers or owners of one of the many small businesses typical of our Iowa communities. Only a few more than one in twenty were professionals. Very few were reported as engaged in semi-professional pursuits. About three in twenty were skilled machine operators or craftsmen, and a like number were doing unskilled labor. Almost none of the breadwinners were reported as being unemployed, and few were engaged in one of the service occupations. The size of the family and the increasing total costs of education for those families large in size is indicative of the amount of education that a young adult may be able to obtain. In the sample used only one in ten was the only child in the family while almost one-fourth came from families of two and a like number from families of three children. Thus, over half of the young adults came from families with three or less children. Only three of every twenty came from families of four, with a decreasing number from still larger families until it was found that only one in every fifty came from families as large as ten.

**Residence:** The stability of the homelife as measured by the number of years the families of the young adults lived in the same community indicates considerable permanence of residence of the sampled youth. Nearly three-fourths of the group had resided in the same community for eleven years or more prior to their graduation from high school. Less than one in every eight has lived in the same community from which they graduated from high school for less than five years. It should be noted that this study was made over that period covered by the war years when migration of the workers to the war jobs was greatly accelerated.

No conclusions can be drawn relative to the permanent residences of most of the young adults. A large percentage are attending college away from their home communities and the place of their future residence cannot now be known or accurately predicted. We do know that many of those who have not taken additional training (mostly girls) have migrated to the larger cities to take jobs. Many of these positions are clerical and cannot be considered permanent for



the young women as most of them will soon be married. From studies in other areas one can be fairly confident that many with college and professional training will finally secure positions in the larger communities, which offer opportunities not available in the rural areas of Iowa.

#### WHERE ARE OUR YOUNG ADULTS?

**As to jobs:** Only one in fifty of the young adults was unemployed at the time they participated in the study. Most of these were in the 1949 group. The 1946 group had had four more years and a greater advantage of maturity in seeking satisfactory positions. From the reports of the employers the additional maturity was one of the most important qualifications desired when making choices between applicants for jobs. More than one in ten of the women in the sample was married and did not hold a job outside of the home. As would be expected, the 1946 group showed a much larger percentage of the women married. A few less than one-half of the total were employed; the largest single group were doing clerical or sales work. The next largest group were performing unskilled labor, about one in every ten. As would be expected, more of the 1949 graduates were holding unskilled jobs than were the older youth. Only one in twenty-five was engaged in skilled work and most of these were 1946 graduates. Only one in thirty-five had risen to a managerial position, and most of these were either farm owners or renters and from the 1946 graduating class. None of the 1949 graduates had attained professional status because of the educational impossibility of securing this much training. About one in twenty of the 1946 graduates had attained professional status, most of whom were teachers.

**Schooling:** As reported above, approximately two-thirds of the young adults in the sample had secured some additional schooling since graduation from high school. Nearly half of these were in school when contacted. Most of this group were attending one of the three Iowa state-supported institutions of higher education; the State University of Iowa, Iowa State College, or Iowa State Teachers College. The next largest group was enrolled in one of the four junior colleges located in one-third of the counties in the sample. Most of the remaining group that had experienced advanced training were enrolled in one of the four liberal arts colleges in the sampled counties. The few left that were experiencing advanced training were scattered one or two each to a great many colleges and universities, most of them located in the middle west. A very few were attending business schools and a like number were taking nurses training. Those attending business schools were chiefly from the rather small rural high schools that did not offer secretarial training courses as part of the high school course of study.

**Migration:** Both the groups of young adults who were already holding jobs and those attending school had moved in large numbers to the communities with a more concentrated population. The larger institutions for higher education are generally located in the larger cities, and the young adults feel the opportunities, the more lucrative and "romantic" positions, are available in the urban communities. Few of the youth in the sampled group seemed to be moving to the smaller communities. The only evidence of such a movement seemed limited to the young women who had married residents of smaller communities and naturally established homes in those communities. There seems to be a great need for additional study into the factors which lead young adults to leave their home communities and move to urban areas. Such evidence would be valuable in planning the advanced educational opportunities for the young adults and might well spell the difference between success or failure of the smaller communities where retention of the more capable young adults in positions of leadership is paramount.

#### WHAT TRAINING HAVE THE YOUNG ADULTS HAD?

The young adults answering the questionnaire showed an unexpected interest in training beyond high school graduation. Approximately two of every



three participating in the study reported advanced schooling since graduation from high school. From their remarks it was evident that many of those who reported no additional training had received valuable on-the-job training in those specific skills related to their occupation. Those attending schools and colleges since high school graduation received their advanced training in many different types of institutions. The largest group attended a college or university, and a rather sizeable number had received training in more than one institution. More than might ordinarily be expected received training in junior colleges, but this could be attributed to the fact that in one-third of the counties studied the junior colleges was the only collegiate institution. This figure tends to show the advantage of having a public institution in close proximity to the young adult's home. Only about one in every twenty-five of the sample had obtained their advanced education in business schools and very few in adult evening classes. Few had attended trade schools or had experienced training in the nursing profession. Almost none had taken correspondence courses, and most of these were courses administered by private profit-making agencies located usually in the larger cities of nearby states.

Specifically, the breakdown of training according to the types of institution the youth in the sample had attended is seen in the following abbreviated table:

Type of training	% of Young Adults that attended
None	37%
Colleges and Universities	36
Junior Colleges	20
Business Schools	4
Adult evening schools	3
Trade Schools	3
Nursing Schools	3
Correspondence Courses	1

Most of the participating 1949 graduates were enrolled in liberal arts courses in college while many of the 1946 group had moved beyond this into the professional level training. By their expressed expectations it can be predicted that the 1949 graduates will also attempt to continue their education beyond the B.A. degree into professional areas. As would be expected from a sample of those taking advanced educational training, a much greater proportion of the young men were receiving collegiate level training than was true of the young women.

From the remarks made by those high school graduates included in the sample who did not attend college, it becomes clear that many would have liked to have had the opportunity. Illustrative of this feeling are the words of a young married lady from one of our larger communities in the southeastern section of Iowa. She says, "I would have liked to have gone to college at least a year or two, but the financial status and the times prohibited this. Since a college education is so important any more, it would be a grand thing if colleges were public, as high schools now are." Many of those young adults who had not experienced college would still gladly attend courses if they were provided with the educational facilities within a convenient distance from their present home.

The three primary factors, as found from their statements, that seem to be operating singly or in combinations to prevent certain high school graduates with high potential ability from achieving their desire for additional education—lack of finances, lack of a driving ambition, and/or inappropriateness of the courses available—can best be seen through the actual words of three rather typical Iowa young adults. A 1949 girl graduate from a medium-sized high school in southwest Iowa states, "I would surely like to continue my education but my financial condition wouldn't permit it. It would be a grand project for

I know many young people my age who are in the same predicament..." A 1949 girl graduate from a small high school in northeast Iowa who is now serving as a telephone operator shows her indecision by the following statement: "I **might** go to college next fall for a teaching course in the lower grades." A girl from a tiny school in southwest Iowa that graduated from high school in 1946 illustrates her understanding concerning the lack of flexibility in most college programs by stating, "I think that there would be more people that would further their education by going to night school. If they were like me I wanted to take typing but in order to I had to take other subjects which I wasn't particularly interested in..."

## WHAT EDUCATION DO EMPLOYERS FEEL YOUNG ADULTS NEED?

**Methods used in this study:** The realistic nature of the data in the following section has been assured by the experts who have completed the investigation and the fact that all data was secured by personal interview directly from the employers of Iowa in their own offices. The responsibility for this part of the study was assigned to the Bureau of Economic and Business Research which spends all of its time collecting and interpreting data from business men. A representative sampling was made of all types of private employers in each of the twelve counties with data from Polk County obtained because of its unique status in Iowa. Trained interviewing teams visited the employing officer or administrator in each of the business firms selected to collect the statements of the employers concerning the specific types of employees desired for each job under their jurisdiction and the educational training of both a general and a specific nature required and/or desired.

**Employers in Private Industry:** The employers in private business and industry felt, in general, that a high school education was required and also was a satisfactory level of educational attainment for most of their employees. This generalization held true for approximately eight out of every ten jobs studied. For only an insignificant number of positions the employers felt that an elementary education or no education was sufficient. For those employees who should have advanced education beyond that received in high school the hiring administrators generally required college graduates. It is significant to note that the desire to have employees with the higher levels of educational attainment is much greater in those counties that have junior colleges. The evidence also shows that employers that have had the most experience with employees with college or other advanced educational training were the best satisfied when they could secure additional employees with advanced training. It was interesting and significant to note that employers who themselves have had training beyond high school desired a greater percentage of their employees with advanced schooling.

Substantiation of the need for many additional young adults with the higher degrees of training is seen when inspection was made of the qualifications of those employers who held the jobs which their employers stated should be filled by persons with advanced training. About one-third of these employees actually holding the jobs did not have any training since graduation from high school. A number did not even have high school training.

The employers made very specific their desire for employees with advanced training in general education and in specialized areas. For example, they felt their employees should have a better knowledge of many of the fundamental skills. Specifically, they mentioned the need for greater competence than was found among high school graduates in spelling, facility of reading, understanding of mathematical concepts, and in written expression and penmanship. Some of the employers expressed a need for training in salesmanship for their prospective employees, but it was rather surprising to note that several employers specifically stated that training in shorthand was an unnecessary waste of time considering



the rapid trend by progressive businessmen toward the use of electronic voice recording devices. Strongly recommended was additional training in certain personal characteristics such as the ability to meet customers and to develop a sincere and deep interest in the success of the business in which they were employed. These last two characteristics were indicative of the type of employee most businessmen wished to employ. The employers also wanted prospective employees who would willingly accept a low starting wage and provisions for learning on the job when rapid advancement in the position was probable. Some businessmen expressed a liking for college graduates because they were better able to adjust themselves to the conditions of employment and were more mature in their reactions toward business problems than were those that had not had such training. Stress was placed upon the need for more concern in the schools for the area of vocational guidance to make possible a greater knowledge and understanding of the conditions of employment in business and industry and the problems of management before they became employees.

With respect to specialized education the employers overwhelmingly felt that the greatest educational needs could best be served through apprenticeship or on-the-job training programs. A sizeable group felt that no specialized training was needed, and quite a large number believed the desired training for their employees could best be accomplished through short course offerings by educational institutions. Most of the employers thought the facilities for the training needed by their employees were available either in their own county or at one of the state institutions. The employers did indicate by their statement of needs that these facilities, in their judgment, were not being used to the best advantage of the businesses and industries of Iowa.

**Public Agencies as Employers:** Few people realize the large number of jobs available through public agencies within an agricultural state such as Iowa. Outside of the positions available in municipal and county positions, there are well over 30,000 jobs available in the state and federal governmental agencies within the state. The information concerning the positions and their educational requirements was obtained by expert interviewers and research analysts of the Institute of Public Affairs. For the municipal and county positions interviewing teams contacted all of the employing agencies existing in these two branches of government in the cities and towns and counties of the three counties in the northeastern section of the state. For the state and federal positions in Iowa the information was obtained from job announcements, job analysis sheets, and directly from the payroll records for all positions except for certain groups of positions that were impossible to analyze because data were not available or unnecessary because such a study had been accomplished recently by other agencies.

Reports show that only limited information has been available to the schools and the individuals concerning the requirements for public positions, where they are located, what they pay, the conditions under which the employee must work, and the possibilities for advancement. Consequently, little attention has been given by most high schools, technical and business schools, junior colleges, and colleges and universities toward training for these positions.

**Local Government.** Speaking first of the positions available in local governmental agencies, the positions are usually under the hiring authority of the school district, the county, or the town or city officials. They are commonly either elective or appointive positions. The pay is usually very meager, and except in a few cases no established qualifications educationally are in evidence. In discussing these positions the professional employees of school districts are being excluded because they will be considered in a following section. When competent personnel is obtained for the county or city positions, the person accepting the responsibility often is moved to do so for other than financial reasons. They may have time to do the job and are moved by a sincere desire to serve their home community. Many of these positions in the smaller communities are not full-time jobs. They



may serve as a supplement to the income and also often provide prestige to the incumbent. Only in the larger cities was there any indication that positions were covered by a type of merit system of appointment. These positions were usually with a full-time police or fire department. The employees of the County Welfare Department are also under the merit system.

The implications concerning the educational qualifications for holding these public positions were almost the same as these already discussed under the heading of private business and industrial employers. Only about one in ten of all the positions could be filled by persons with no formal education. The employers stated that one-fourth of their employees needed to know only how to read and write. About one-half were expected to have received a high school education, but only a few more than one in every ten needed advanced training since high school graduation. For this latter group the employers felt that a college degree and additional professional training would be required.

Each employer was asked concerning the amount of education he would prefer for a new employee in each position for which he controlled the hiring and/or supervision. The employer's desire for education for his employees showed a much higher level than had been attained by the present incumbents. Approximately sixty percent of the employing or supervising officials showed an interest in providing for additional training for their subordinates. They suggested short courses, evening or Saturday classes, as being the most appropriate. The actual areas in which the employers desired additional training for certain of their employees were: (1) business courses, (2) legal training, (3) training in specific governmental functions, (4) public relations, and (5) general education. Business courses mentioned as being especially valuable included business administration, bookkeeping, accounting, typing, stenography, and office machine operation. Requests for training in legal areas were concentrated closely to those functions of the special laws and interpretations of the Iowa law which were encountered on a specific job.

**State Government:** Of the 16,000 odd state positions in Iowa the largest single group came under the control of the State Board of Education, which employs nearly 7,000 persons. No attempt was made to study the educational qualifications for these employees because most of them were considered by the recent Strayer Survey. It should be sufficient here to note that each of the faculty members that composed a considerable proportion of the professional employees of the three state schools usually was expected to have the maximum in educational training in the field of his specialization, that a large percentage of these persons received their training outside the state of Iowa and thus are not of great concern in this study, and for their pre-professional training the standard liberal arts program was the most common educational entry for their career in collegiate teaching and research. For other than academic personnel the skills needed for employment by these employees of the State Board of Education are deserving of additional study. Such a study should be highly desirable in full consideration of the problems of training beyond high school that are being investigated by the State Research Committee. With the exception of those under the State Merit System the only information available about most of the positions in Iowa under the jurisdiction of the state government is limited to the position title and the salary range. This information gives little indication concerning the educational requirements for the position, nor does it in any way indicate the desirable academic degrees or courses that should be obtained before applying for such a position. The inability to secure additional valuable interpretive information can be attributed to the lack of a complete classification system of state positions and the resulting required records that would be kept for each state employee and position. Only slightly over fourteen hundred of the total number of positions under the state government are included under the Merit System. Those departments under the merit system of employment are as follows: (1) State Department of Social Welfare, (2) Employment Security Commission, (3) The Merit Sys-



tem Council, (4) State Department of Health, (5) State Services for Crippled Children, and (6) The Iowa Mental Health Authority. All of these agencies are required by federal law or regulation to use merit procedures in the hiring of their personnel. By using the categories of the United States Civil Service Commission the number of positions can be broken down according to the following classifications:

Type of Classification	No. of Employees
Accounting and Auditing .....	51
Administrative .....	208
Economics and Statistics, Publicity, Commerce Commission	24
Education and Training, Recreation .....	5
Engineering, Drafting, Architecture, and Radio .....	12
Investigative, Legal, Law Enforcement, and Inspection ....	26
Medical and Nursing .....	44
Photography and Graphic Arts .....	1
Psychology .....	145
Social Work .....	332
Trades and Manual Occupations .....	3

By inspecting the above table, one can realize immediately that in many cases post high school training of a collegiate or professional level would be both necessary and desirable.

With the limited information now available it is impossible to say just what common elements of training should be given or where the training could best be offered. Without a full investigation of the skills needed in each of the total number of positions in Iowa only interpretations from the job titles can be made concerning those positions not under the merit system. The information obtained concerning the limited number of positions under the merit systems in regard to the educational training and experiences required, and also the desirable level of training, indicates a need for systematic training for these positions. Nearly half of the positions are clerical in nature, and although a high school education was all that was required to secure the positions, the lower level jobs could best be filled by persons with a business school type of training. Specific courses considered by the employers to be valuable were typing, stenography, and office machine operation. A few of the higher level positions could best be filled by persons with at least some college training.

About one-fourth of the employees under the merit system of appointments are working in the field of social work and are under the Social Welfare Department. By far the majority of these workers are required to have only a high school education, but the employers indicated the desirable level of training included college work for all and specific professional courses for many. It was specifically suggested from the tabulated data that every one of those persons holding social service positions should have courses in social work or child welfare.

About one of every seven persons under the merit system of appointment is doing some type of administrative work. Again, most of these persons are required to have had only a high school education, but it was desirable that nearly all of them have either college or professional training. Those courses specifically suggested as being valuable for the administrative personnel followed a pattern closely related to the special branch of work in which they were serving.

As regards the total number of positions available in Iowa under this system, almost nine of every ten of the incumbents are required to have a high school education. Only one of every ten requires persons with college or professional training. On the other hand, it was reported as desirable that over half of these positions be filled by persons with college or professional training. It was desirable to have about four out of every ten filled by persons with business training. With this discrepancy between the required and the desirable levels of



training it seems necessary that additional training should be done at some place in the state in areas of study that are at present quite beyond the present objectives of the high school. Many of these courses could be offered in specialized community colleges strategically located in Iowa. Certain of the liberal arts colleges in Iowa are already doing a fine job in training students in certain specialties, for example, in social work.

**Federal Governmental Positions.** From the information furnished to the research analysts by all the federal hiring agencies it was determined that about 12,000 federal jobs existed in Iowa. This number is subject to much fluctuation with the differing and seasonal needs of certain of the federal agencies. No attempt was made to study or enumerate the federal job situation relative to the armed forces personnel. Of the total number of positions about 8,500 are in the postal department. The educational level or desirable training needed for specific jobs for this group of employees was impossible to determine because the information was not available at the time the study was made. The postal department did indicate that in general all personnel are required to have completed high school.

Other than the postal department positions, all of the federal positions in Iowa provided usable data that would permit classification of the educational requirements or desirable levels of attainment and suggested training courses except for thirty-six positions. All of the federal position appointments were controlled by the procedures and regulations of the United States Civil Service Commission. The most common core of the requirements for obtaining a federal government position was a specified type and amount of experience. Only in a few cases was there any hard and fast educational requirement of a level commensurate with the responsibility of the position. The educational requirements were usually given in terms of the right to substitute certain types of advanced educational training for all or part of the experience required. Approximately one-fourth of those federal employees in Iowa, excluding the postal service, are engaged in clerical work and about one-fifth of them are doing either semi-skilled or skilled types of work. Other than these two classifications the rest of the positions are scattered among many areas with almost every conceivable type of position title.

Only approximately one-third of the total require as a qualification for the position some definite educational training; of this one-third, one-half required high school graduation. One-third required college training, but only one in every ten required professional training. A few specified training in certain specialized areas of training, for example, pilot training. A negligible number were required to have obtained trade school training,—but none of the positions specified training in business schools. Comparing the required levels of educational attainment with that level considered desirable showed a large discrepancy. Better than two-thirds of the job announcement sheets for the federal positions listed educational training, usually specific in nature, that could be substituted for all or part of the required experience. These specific listings of courses and schooling thus were considered advisable for those prospective government employees who wish to be prepared beyond the minimum qualifications. Almost half of the over two thousand federal positions in which educational training could be substituted for experience expected that training to be of college level. About one-third of the suggested courses are offered in the commercial departments of our better high schools, in some junior colleges, nearly all college and universities, and all business schools. Five of every twenty of these were expected to have professional training beyond a liberal arts degree.

**School District Employees:** During the fall of 1950 Iowa State Teachers College and the Board of Educational Examiners assigned specialists in teacher education to determine the types of training and the number of employees needed in the elementary teaching force in the twelve counties designated by the State Research Committee as the sample about which appropriate studies were to be made. Information was obtained concerning 1687 individuals who were employed



as elementary teachers during the school year 1950-1951. Data were thus secured from approximately 97% of all the elementary teachers in the twelve counties. Some information was secured concerning 406 additional teachers that had been employed in the same counties for the school year 1949-1950 but who were no longer on the payrolls. Of those teachers who were replaced an evaluation was secured concerning their services, their reasons for leaving, their present location, and the type of position they now hold.

**Additional education for upgrading elementary teachers:** The data concerning those teachers replaced in the schools of the twelve counties showed three of every ten of the total replaced in the one-room rural schools, seven of every twenty in consolidated schools, and only a few more than one of every ten replaced in the large city schools. Some differences were noticeable between the various sections of the state. The replacements were highest among the one-room rural schools in the southwest part of Iowa and in the consolidated schools of northwest Iowa. The high figures for the consolidated schools in northwest Iowa can be attributed to the fact that this area has few first-class cities located in the counties of the sample. The lowest rate of replacement of teachers in the one-room rural schools was found in northeast Iowa.

The percentage of replaced teachers holding substandard certificates was slightly higher, but not significantly so, than was substandard certificate holders among all elementary teachers. The findings showed a close relationship between the type of certificate held and the type of school in which the teacher was employed. Typically, the one-room rural school had a teacher with one year or less of college who held a substandard certificate. Among the consolidated schools the typical teacher had obtained two years of college and had been awarded a Standard Certificate. In the independent town or city districts the size of the community showed a rather close relationship to the quality and amount of training of the teacher and the type of certificate she held. In cities above two thousand population the typical teacher had three to four years of college training and was the possessor of a Standard or more advanced type of certificate. In the first-class cities the typical teacher had obtained on the average nearly four years of college training and possessed either a Standard or a higher type of teaching certificate. The trend toward four years of college and an Advanced Elementary Certificate was rapidly becoming the norm in both first and second class cities of Iowa.

Within the area sampled there was in existence a pool of former teachers who had not taught for ten years or more and were over thirty years of age. Many of these were being drawn back into service by the school districts. The specialists making the study referred to this group as non-professional teachers, those who had not made a life work of serving their communities as teachers.

The following table shows the percentage of non-professional teachers in each type of school system.

Type of School System	% of non-professional teachers
Rural Schools	62
Independent Town Schools	49
Consolidated Schools	43
Second-Class City Systems	21
First-Class City Systems	16

The above information confirms the idea that the professional teacher moves to the larger city and tends to remain there. The southwest and northeast sections of the state hired a much larger proportion of the non-professional teachers than did either the northwest or southeast. By comparing the average experience with the age of the teachers it was found that the time in their lives when most non-professionals were absent from the teaching ranks was between their late twenties and early forties. This coincided with the time that most of this group were



rearing families. The actual number of teachers in each age group gradually increases for those in their forties up to the time they reach their fifties. At the age of fifty-five there occurs a reversal of this trend with many of the non-professionals dropping out of teaching. Beyond the age of fifty-five the increase of drop-outs is rapid, but the average experience of those remaining in teaching rises more nearly to that point which would be expected of teachers of that particular age group. This means that the professional teacher tends to continue teaching until he nears or reaches the retirement age.

By comparing the age of the elementary teacher with the type of certificate possessed, it was found that a need for additional educational training was evident to the extent that it would provide for the two years of college now required as a minimum for the issuance of any new Standard Elementary Certificate.

Few of the substandard teachers over forty return to summer school, but since a large percentage of those under forty of the professional group do not attend every year, it is assumed that the percentage of those in teaching over forty who will return for additional training will equal those under forty who might be expected to continue their education. A few more than one in every ten of all elementary teachers studied hold only a high school normal certificate, and they average over thirty-six years of age. The youngest of this group was twenty-two, but as no new persons are being added under this program, due to the elimination of this type of training, it could well be expected that many of these persons will fulfill the additional training needed to receive a Standard Certificate. The amount of training would mean something more than an additional year at the junior college level. An equal number, a few over one in every ten, hold the Uniform County Certificate. No new persons are being added to this group. The average age of this group is somewhat more than forty with only about one-third of the total under forty. These younger teachers in the group might well be expected to secure the additional training needed to qualify for the Standard Certificate. Almost three of every twenty of the elementary teachers hold a Limited Elementary Certificate. Nearly all of this group are rather young; they average twenty-two years of age; almost all of them are under forty years of age. This group can be added to young teachers in the groups mentioned above as prime prospects that can be expected to continue their training. Only six out of every hundred of the teachers hold a Standard Certificate that was issued because of experience rather than training. The youngest of this group was thirty-four, and they averaged fifty-one years of age. Because of the small number and their advanced age it is considered likely that but few would consider additional training. A number of the elementary teachers also held Emergency Certificates, but no definite information was available concerning this group. It would be assumed that only a very few would ever secure that amount of additional training needed to qualify them for the Standard Certificate.

By adding those from each group who could be expected to obtain that training needed for a Standard Certificate and generalizing the results to the whole state, it was found that about 2500 elementary teachers could be expected to continue their training. Most of this additional education would undoubtedly be obtained during summer sessions with a small number gaining additional credits through extension work. The need for training facilities as based upon the number needing additional training is greatest in the northeast and southwest of Iowa. Northwest Iowa has the least need.

**Replacements:** Additional educational needs for elementary teachers other than that for upgrading, as discussed in the preceding section involve the factor of replacement needs for those continually dropping out of the profession. Replacements must be found for the following groups: 1. Holders of substandard certificates who do not meet the renewal requirements necessary to keep their certificates in force; 2. Drop-outs from the teaching force because of a continued high marriage rate; 3. Failure of the present teacher pool of non-professionals to re-



turn to the profession; 4. Increasing numbers that may be attracted by other jobs available during a national emergency. Without a continued study of the replacement problem over a number of years it is impossible to convert the above classifications into actual numbers of teachers. The evidence collected does show that the capacity of the junior and senior colleges of Iowa to train teachers is far beyond the numbers that are now in training. With the availability of facilities the prime burden is on a program of selective recruitment. The influence of additional institutions on the recruitment problem cannot be fully determined, but it is known that the continuous training and retraining of the non-professional teachers would require more facilities than would be needed for the original and retraining of faculties wholly composed of professional teachers.

**Educational differences between types of counties:** By comparing the counties that have junior colleges with those that have liberal arts colleges it was found that the percentage of substandard certificates was only slightly less in junior college counties. The counties having a liberal arts college, in turn, had fewer substandard certificates than did the counties with no college. If only the city in which the junior college or liberal arts college was located was considered, both groups seemed to raise the level of preparation among the elementary school teachers. The junior college cities had a slightly better record, but the difference is not very significant. Because the graduates who intend to become elementary teachers from both the junior colleges and the liberal arts colleges are encouraged to seek the "best" positions they prefer employment in other than one-room schools. The solution to the problem of obtaining teachers with satisfactory training for the one-room rural schools will be achieved only when all colleges and the public begin to appreciate the need for a better educated staff in these schools. The one-room rural schools must become as attractive as a place of employment as is a teaching position in a city system.

#### **WHAT ADDITIONAL EDUCATION DO THE YOUNG ADULTS FEEL THEY NEED?**

Up to this point the study has been considering those educational provisions felt necessary or desirable by the employers. This section turns to another demand; that requested by the young adults themselves. One-third of all high school graduates contacted (approximately 2,000) returned their questionnaires expressing freely their opinions concerning their past educational experiences and what they desired or felt they needed for the future. Because most of this group were attending or had attended a college or university, the majority expressed their needs or desires in terms of actual courses they expected to take or would have liked to have taken.

**General Education Needs:** Most of the young adults expressed needs concerning additional academic and cultural training. When stated in their own words under the section entitled "Remarks," a practical twist was in evidence. More youth expressed a desire or need for additional training in the English skills than in any other one subject area. Nearly one-third of all those furnishing information expressed a concern for additional training in this area. By interpretation of their remarks it was evident that many felt very strongly concerning this need. This is seen through the remarks of a young man from a medium-sized high school in northwest Iowa who is now taking a pre-business course in a large eastern university: "I would like to supplement a comment on the need I expressed for English. I feel very strongly that a combined literature-composition course should be the subject most emphasized for high school seniors that plan to go to college. The experience of writing an essay type examination in itself would be valuable enough to warrant having such a course." These young adults also thought of English in different terms than many educators might expect. They wished more instruction in the writing of themes and research papers; they wished to be able to express themselves in speeches and in conversation more freely and clearly; a few felt a lack in their ability to read efficiently; and a very few expressed the



need for more facility in spelling, grammatical expression, knowledge of phonics, and in the writing of business letters. Of those not in school three out of every twenty said they would attend night classes to take training in public speaking. One out of every ten also wanted to participate in a recreational literature program.

Almost one-third of the youth answering the questionnaire indicated a desire for additional training in mathematics and science. Most of this group were attending college and needed this type of course to complete their requirements for graduation. Only a few spoke strongly about wanting this training on the free response section of the questionnaire.

About one-fourth of the group desired or felt the need for additional training in foreign languages. Most of this group were also attending college and facing graduation requirements.

Only three of every twenty young adults expressed a need for additional training in history, but a few more than this, four of twenty, wanted training in other areas of the social sciences. Specifically mentioned were courses in economics, sociology, government, international relations, and family living. It is interesting to compare these expressed desires in the social sciences with the results of a citizenship study that was conducted among the adults of the communities in the twelve-county sample area by staff members of Iowa State Teachers College. The adults felt the school was the chief agency in the community doing the most to promote good citizenship, but the adults themselves were not particularly concerned with the apathetic evidence showing such a small percentage of their citizens as active participators in voting. It was felt by the investigators that a definite gap in the citizenship training and participation activities existed between the time of graduation from high school and the attainment of the minimum voting age of twenty-one. Recognized as the most important contribution toward good citizenship practices was the effectiveness of individual teachers with a strong civic consciousness, a winning personality, and a missionary spirit.

Of the young adults who were not in school three of every twenty expressed a willingness to attend evening classes to study current social and economic problems. Where this type of course has been tried in actual practice the attendance is usually fine the first year, but tends to drop rapidly thereafter. Several exceptions to this generalization may be found in certain Iowa communities in which the class has been directed by a person with an outstanding personality who already possessed an established reputation in this field of study.

One factor that shows up rather clearly in the responses of the young adults from counties with junior colleges was fewer requests for additional training in general education. With more requesting additional general and cultural education from those living in counties with a liberal arts college or no college one might think the junior college has served the need for general education for a larger percentage of the total population. Others might interpret such a variation by condemning junior colleges for not awakening a strong desire in their students for this particular type of training.

**Vocational Education:** Many of the expressed desires of our young adults that will be discussed in this section might be interpreted by some as being general education or as recreational or hobby-type of training. The difference in definition can be made accurately only by knowing the objective of each young adult for the desired training. More than one-fourth of the young adults felt a need for additional training in commercial courses. Of those that were not in school over one-third were willing to attend evening classes to develop skills in typing, shorthand, bookkeeping, and accounting. More persons answered in the affirmative in this area than was true of any other single vocational area. The free responses relative to this area expressed a need only for typing and secretarial



training. A rather unusual aspect of these favorable responses was the high percentage of young men desiring training in business education.

The group that expressed a desire for additional training in agriculture totaled about one-fourth of the young men. Those who were not attending school expressed a desire in this area very strongly, they totaled nearly one half of the men. A greater request for this type of training might well be expected in a state such as Iowa. When considering the fact that most of those in the sample who answered the questionnaire were attending college or had had some college training, it would be expected that many of those not answering would considerably swell the percentage of those desiring agricultural training. The need is shown by such remarks as were expressed by a young man from a small Iowa community located in the northcentral section of the state. He asks, "I would like to ask only one thing, 'Do Junior Colleges carry a agricultural course?' And if so why don't we hear more about it...." A young adult now farming in the southwestern section of the state indicates his qualified desire by saying, "If they would have a night school on agriculture and farming not too far away and it did not cost too much I would be interested in attending."

The requests for trade training were rather strong among the young men. About half of them would be willing to attend classes made available within a reasonable commuting distance. A typical statement by a young man who is now attending one of our liberal arts colleges illustrates the desires in this area. He states, "I think it would be a good idea to have some technical training near by such as electricity, etc."

Very few of the young adults requested specific training in distributive education and in merchandising. It is interesting to note that again more young men than women desired training in this area.

**Training for Family Living:** Homemaking was desired or felt to be needed by nearly half of the young women. Of those not in school slightly more than half were willing to attend evening classes to secure training in one or more of the areas included in the homemaking arts. Only a few young men indicated any desire in this area. The young women were quite specific concerning the type of training they wished to obtain. The largest group wanted classes offered in sewing and tailoring, and only a few wished additional training in cooking. A considerable number expressed a desire for training facilities in family living and adjustment, others wanted training in home decoration, and many wanted guidance in developing themselves in the social graces of living. A few indicated need for sex education and their plea for this type of training according to their remarks was very strong. Relative to sex education a young lady from a small community in southwestern Iowa who is now attending Iowa State Teachers College says, "I think that people need to be educated along vocational and home lines. One thing that everyone needs (and at the present time is lacking) is sex education. There is no wonder that there are so many divorces when people are not educated to live together. There needs to be sex education with boys and girls in the same class. Then there is a better chance for sex adjustment after marriage."

**Recreation and Cultural Training:** When asked concerning their desires for certain recreational and cultural courses, the young adults expressed only slight interest when these were stated using the same course titles that are common to our elementary and secondary school programs. In both physical education and art only about three of every twenty young adults expressed any desire or need. When asked for the same decisions with the areas labelled as **recreational** dramatics, **recreational** music, **recreational** arts, **recreational** crafts, **recreational** literature, and **recreational** physical education, over one-fourth of those not in school indicated a willingness to attend evening schools that provided these facilities. A large number expressed themselves freely concerning what in their opinion was a great need in their home communities. They mentioned such



activities as team games, dancing, fine arts, music, hobbies, and facilities for plain exercise. The feeling of the young adults relative to recreational and cultural training can best be shown in the actual words of typical individuals. A young man, now a farm laborer in southeastern Iowa bluntly illustrated how he feels about these needs by the following words, "I feel that recreational opportunities are needed most of all. Although I think I get enough but feel that others don't." A young man graduate from one of the larger high schools in northeast Iowa who experienced a few months of college training at the State University of Iowa before returning to his home community as a salesman says, "I wish something could be done to give people my age some avocational facilities, such as dancing, etc. If nothing is done we'll have to go to night clubs and other less desirable places." A young man from one of the largest communities in northcentral Iowa and now a student at an Iowa liberal arts college describes the recreational facilities and the needs in his home community, "In your letter, I believe that you stated something about recreational facilities. To me, I think that this is the most important of all. If a person is able to have good, cheap fun, all of the other things fit into place. The recreation facilities of my town, as far as high school students go, **stinks**. For instance, in other towns of our size there is a student price of admission for shows. But in ours there is none. Few students have the money during high school days, so that they can spend an unlimited amount. Since shows are about the only thing to do, the kids either spend their money on that or on beer. Our, so called, "**Youth Center**" is no help either. If you want to dance, the records are old, if you want to play pool, the "pool table" (and I hate to use that word, for it resembles a washboard) is usually crowded. I don't think they even use it now. The only thing is ping-pong, and the facilities for that are not sufficient . . ." A girl from a medium-sized community in northeastern Iowa gives her thoughts on the subject of recreation by saying, "I do not intend to go to college because I have a wonderful job and like it very much. However, I think it would be nice to have something to do during past-time, some hobby."

A detailed investigation of the recreational facilities and needs was made by a trained recreational specialist in the three sample counties in the southeastern section of the state. He found a very real need for facilities and the training of leaders of recreation in this area. These young persons wanted facilities within their home communities where they might dance, play games, and meet other young adults, particularly those of the opposite sex. Their interests were almost the same as they had been while in high school, concerning such activities as basketball, baseball and football; but as they became older, they tended to participate more in the passive types of activities such as reading, card games, movies, and as spectators at team games. The young adults exhibited little imagination concerning their ability as individuals to provide their own recreational facilities or to develop new areas of participation that had not been taught them in school. Many of the young adults had as their chief activity obtaining the family car, touring the surrounding communities, and sampling the commercial recreational facilities available in areas outside their home communities. As gangs riding around the countryside, the possibilities for developing activities unsatisfactory to their parents and friends were very real.

**Guidance and Counseling Services:** More young persons expressed themselves on the free response section of the questionnaire concerning their needs in the area of guidance and counseling than was true of any other item. Because most of the young adults had attended or were now attending college their expressed needs in this area was generally directed toward guidance of an educational or vocational nature. They wished exact information concerning the character and offerings of the various colleges and universities. They wanted to know the caliber of the college staff and how they as individuals might fit into a specific area of training. They desired knowledge concerning the job opportunities and the skills needed to obtain and hold successfully a specific position. Many of the



young adults stated they had personal problems they wished help in solving. A young lady who is now a secretary in a large establishment in another state in the opening words of her remarks states the problem, "More, lots more, vocational guidance . . ." A boy from a large community in north central Iowa now employed in a tile works shows some of his personal confusion by saying, "I believe that before entering high school that each student should have a talk with a counsellor, and maybe allowed to take only the subjects that they have an aptitude in or want to take for a very sound reason. When I graduated from high school, I was very disappointed. I found that I was in no way prepared to go out and make a living. I feel that of all my education, I only learned to reason, and also to use some bigger words. True—I found myself more informed than most of my fellow workers and friends, but it doesn't actually help me in my job. I could hold my job just as well with or without the education I received. I believe that more emphasis should be placed on subjects which will more directly help the pupil. Also I believe that schools should be more stringent." Another young man who attended a junior college in northcentral Iowa and is now enrolled at an out of state liberal arts school remarked, "I believe more advice with regard to required college courses should be furnished in junior colleges. If possible advisors should work out schedules of students planning to attend four years of college. This would insure the covering of required courses and their acceptance when enrolling in a four year college. (I lost eight credits when I transferred)." A young woman 1949 graduate from a very small high school in southeast Iowa who is now working as a telephone operator in a nearby large community sends a personal plea for information, "I would like some information on how to become an airplane hostess." A young woman from a small community in northeastern Iowa attended one of Iowa's better liberal arts colleges for two years, then dropped. She says, regarding her academic adjustment to college life, "I was a 'big wheel' in H.S. and couldn't properly accept the drop in popularity in college. Also although I worked much harder in college all my grades dropped at least one grade lower the second year of college." Adjustment possibilities through the utilization of aptitude testing procedures are seen through the words of a young man who graduated from a large high school, and is now doing bookkeeping, "As the result of a series of aptitude tests I discontinued my education at Iowa State College (engineering) and enrolled in the Chillicothe Business College where I subsequently received an accounting diploma." These exact quotations directly from the pens of our youth show some of the possibilities for service that might be developed at the community level in regional clinics or community colleges to give assistance to the individuals, younger and older adults, as they feel the need for guidance and counseling.

The percentage of young adults that have dropped college or that have transferred to another institution shows the great loss in time and money to both the individual and to our society. These numerous cases would provide a fertile field in any community for both educational and personal counseling pitched at the preventive aspect of the problems. Two-thirds of those attending or with college experience felt one of the main reasons they attended college was to help them decide upon a lifework. About three of every twenty that transferred from one training center to another gave as their reason for transferring a change in their vocational objective. Most of those reasons offered in the questionnaire indicated a need for a realistic type of guidance and follow-up study of each individual. A definite need for further research into the area of drop-outs and the true reasons for them is evidenced by the results of the study. This research should include the study of drop-outs at every level: high school, junior or community college, liberal arts college, and university.

#### **HAVE OTHER STATES ATTACKED THIS PROBLEM—IOWA DISCOVERIES?**

The problem of providing for the educational needs of the young adults is not confined to the state of Iowa or even to the midwest.



Every person in Iowa desires for his son or daughter the maximum education commensurate with his ability. Further, it might well be assumed that the majority of the people of our state would be willing to finance our young adults of high ability who lack financial backing to that additional schooling by which they can profit. At the present time the provisions for additional educational facilities are a problem that must be solved at the state and local level. Other states, some without the financial wealth of Iowa, have seriously attacked the problem of providing education for all who have ability and interest up to that level for which they are capable of doing successful work. Some states have developed plans whereby the solution has been assured. Others are now in the process of attaining a comprehensive plan for higher education. The basic problems of providing for the education of the young adults are common to all areas of the United States, although the procedures for solution must vary according to the desires of the people and their willingness and ability to finance additional schooling.

The factors of the problem that give concern are: 1. A suitable plan of organization that will meet the local educational needs as well as the total statewide necessities in education; 2. A curriculum flexible enough to provide for the continually changing needs as expressed by the young adults, their prospective employers, and the educational specialist; 3. A program for adequate financing of a type that will provide equal opportunity for all those with ability and interest in further education. Some contend that nothing should be done concerning the educational needs of our young adults until such a time as complete agreement is reached regarding the essentials of our elementary and secondary school educational program. Would it not be better to help clarify the problems of the elementary and secondary educational program by the organization of advanced educational training facilities that will take the pressure from the lower areas? This post-high school program could provide training in advanced general and technical education that has, during the recent decades, overcrowded the secondary program and would provide the training at a time when the maturity of the student was such that he possessed readiness to encounter the more advanced learning situations.

**California:**\* The development of a complete system of higher education in California has been accomplished through a statewide plan of regional state colleges and through the upward extension of the high schools to include the thirteenth and fourteenth years. California has more junior or community colleges than does any other state in the United States. The state also has a higher percentage of her population attending such institutions than other states. Most of the junior and community colleges operate within a high school district with a few organized as separate junior college districts. These high school districts in California are large, both in the number of young adults of college age residing in the area and in the assessed evaluation of their property. Liberal state support of both elementary and secondary education is a working reality, and the people have never shown a trend toward conservative and traditional attitudes that are often prevalent in other parts of the United States. State laws legalize and provide support for both the state colleges and universities and the junior or community colleges without competition between the types for funds. The educational institutions in California now lead the nation in their acceptance and approval by the common man. The people would just as soon consider abolishing their high schools as they would the provisions for higher education as typified by the junior or community colleges and state colleges and universities.

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\* Adapted from descriptions in Jesse Bogue's, **The Community College**, McGraw-Hill Book Co., New York, 1950.



**Mississippi:**\* Mississippi has organized a statewide system of junior colleges providing for the localized community functions of education within a cooperative framework. The youth of the state can attend their local junior college, or if that particular school does not specialize in the course of study for which they need training, the individual may transfer without the payment of tuition to the junior college that does provide the particular courses. The system was developed through an extensive survey and study of the needs of the youth and their communities. Control is in the hands of local boards of trustees, but the organization and districting was accomplished on a statewide basis of zoning. Particularly noteworthy is the fact that the application of the criteria for the establishment and location of the junior colleges was so well determined in advance by the Commission on Junior Colleges that no institutions that were once established have been forced to discontinue operation. No tuition is charged and the fees and board and room charges are extremely low even for colleges in Mississippi.

**Minnesota:**‡ During the past decade the state of Minnesota has provided for a commission on higher education to study the state and its people relative to their educational needs and their willingness to provide for education beyond the secondary school period for all those that could profit by such preparation. The commission has maintained a continuing study of the high school graduates, their job prospects, the needs of the businesses, the present facilities for higher education, a study of curriculum, and a more enlightened program for training teacher personnel. The commission found in certain of the less-populated sections of the state that college facilities were not available and that high school graduates with the interest and ability to succeed in college were handicapped in obtaining training after high school graduation. They found the state had assumed the responsibility for the care and training of the handicapped, the sick, the old, and the unfortunate, but had not as yet thought deeply concerning the need for training those with high ability to a point where each could provide the maximum leadership for his home community and for society in general. The economic barrier, the lack of adequate finances, was found to be the main reason young adults with ability did not secure training beyond high school. By establishing only six new institutions, junior or community colleges, facilities would be available within commuting distance of about nine-tenths of all the young adults of the state. To provide equal facilities, the commission found that state aid in an amount to eliminate or to make the tuition only a token amount would be necessary. It was felt that beyond state aid scholarships must be provided for those with ability who still could not afford to attend. The commission recommendations included the full utilization of the existing public and private collegiate institutions in Minnesota. The comprehensive study of the educational needs in the state and the resulting recommendations are expected to provide a plan for higher education that will insure the maximum use of public funds appropriated for this purpose.

**Iowa Discoveries:** Iowa as well as the other states cited has had groups and individuals that have become vitally concerned with the problem of the educational needs of our young adults. Still, little unified or statewide effort has been brought to bear toward a solution.

The series of studies described in this pamphlet concerning the work of the State Research Committee as appointed by the State Department of Public Instruction is only one limited attempt to develop understanding that will make possible plans which will provide for a solution to these problems in Iowa. The various committees of the Governor's Iowa Commission on Children and Youth have also worked toward obtaining pertinent facts concerning the educational needs of

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\* op. cit.

‡ Adapted from the report of the Minnesota Commission on Higher Education Report, **Higher Education in Minnesota**, Un. of Minn. Press, Minneapolis, 1950.



young adults. The League of Women Voters, the Iowa Federation of Women's Clubs, and the Iowa Department of the American Legion are among others that have been concerned with certain aspects of the problem and have worked untiringly to develop solutions. The recent Strayer Report to the State Board of Education, a study of Iowa's three state institutions of higher education, outlined certain recommendations of needed coordination and increased emphasis.

Several individuals have made notable contributions. Undoubtedly the most comprehensive piece of work in this area was the study and plan for thirty-five community college districts in Iowa as proposed by Dr. Starrak and Dr. Hughes of Iowa State College. They developed the statewide system of community colleges according to criteria considering the land area, the property evaluation, the number of counties to be served per district, the number of high schools, the total population, the population of the towns in which the colleges would be located, the number of high school students and graduates, and the percentage of youth at each different age level that might be served by such an institution.

### HOW MIGHT THESE PROBLEMS BE MET IN IOWA?

**Utilization of Present Facilities:** By turning to the back cover of this report the reader will find a map showing the collegiate institutions of different types at present operating within the state of Iowa. It immediately becomes evident that Iowa is well supplied in numbers of each type of institution. It has been said that Iowa has a larger number of institutions of college level in proportion to its population than does any other state in the union. The problem thus arises concerning the possible need for any study of the educational needs for young adults that are beyond high school. Actually, Iowa has about fifty such institutions in existence. A question will help clear up some misconceptions. Why does Iowa with its proportionately large number of colleges have such a small percentage of its young adults participating in training beyond high school graduation? Geographically, only one large area of the state is devoid of educational opportunity of collegiate grade within a reasonable commuting distance (approximately thirty miles) of the homes of the state's youth. The area without colleges is composed of approximately seven counties in the west central part of the state. Certain other areas are served geographically by as many as five or six different institutions. It should be evident from the statements concerning the reasons why young adults do not attend college that opportunity is closely associated financially with the ability of the young adult to secure room and board while living at home. Another financial problem to the young adults concerns the fact that a great number of these colleges are privately operated and thus must necessarily secure their operating expenses from a relatively high tuition or from the earnings of a large endowment. All of the state-supported colleges and universities and public junior colleges also have had to charge tuition. Another factor that precludes the private colleges from operating as community service institutions has been their administrative connections with a definite religious denomination which does not appeal to the many high school graduates who live in the area but are of a different religious conviction. With nineteen public junior colleges and three state-supported institutions in Iowa the geographical coverage of higher education by tax-supported schools is fairly adequate. Only the west central area mentioned above and approximately fourteen counties in the northeastern section of the state are without public institutions within a reasonable commuting distance.

A still more serious restriction relative to the public and private institutions serving as community service colleges is the limited program of course offerings available at most of the schools. Nearly all of the colleges in Iowa have a relatively traditional type of curriculum. From the responses obtained from the young adults and the recommendations of their employers the great need is for a type of training for a number of the young adults that is different from that now



available in most of Iowa's colleges. The institutions do a creditable job in training toward an academic or professional degree, but many of our young adults in Iowa having the ability for and interest in advanced training will not accept such training. Expressed satisfaction with each individual school is seen when the young adults were asked to check the reasons why they attended a particular college. More than three of every four indicated, "I knew the college had a sound reputation." This response was checked by a greater number of youth than any other single item.

It would seem logical that a number of our private colleges in Iowa might well accept the added responsibility of assuming the community service functions and educational leadership role for all of those people living within their "community" area. It would also seem to be advantageous to such a college in better accomplishing their present objectives to enlarge their services both geographically and communitywise. Such a move could add personal, community, and financial support to the institution and certainly would add a sense of satisfaction to the members of the community in which the institution was located. One point of issue from the viewpoint of the state government and the people who support it through taxation would be the legal complications of financing education for the public good through the facilities of private institutions. The plans for the use of public funds would necessarily have to be developed in great detail in advance of commitments to assure acceptance by all the people of the state. Several private collegiate institutions would not probably assume any communitywide educational functions; to provide for the educational needs of the young adults in these areas would necessitate some other plan of action.

**Scholarships:** Another solution to the problem of providing educational opportunity for all young adults with interest and ability would be the provision for scholarships that would cover the complete or partial cost of attendance at an institution of the young adult's choice. Such a plan might necessarily have to be carried to the point of providing for the lost support that the prospective college student would provide to the family finances. To determine those young adults who should be included in such a program of free advanced education in a way that would prevent embarrassment to them or their families and exclude those cases where there was a lack of ability or in which adequate finance was provided would require a professional selection board with a reputation above reproach.

**State Aid:** Because finance, both individually and for the institutions, is one of the crucial issues, state aid from tax funds might be made on a basis of need or enrollment. The aid should be in a sufficient amount that the schools would need charge no tuition nor fees. Aid could be provided to existing institutions, and area colleges could be established where education at the collegiate level does not now exist. The problem of providing state aid to existing institutions again brings up the question relative to furnishing state monies to private institutions that are supplying a public function.

**A Statewide System of Community Colleges:** Both the problems of finance and a satisfactory program of curricular offerings might be provided by a statewide system of community colleges dedicated to perform all of the educational functions for the community in which it is located, certain area functions of the total statewide educational needs, and academic collegiate functions for the freshmen and sophomore year of college where the facilities are not now available. This plan might well be similar to the proposal developed by Dr. Starrak and Dr. Hughes but should also provide institutions within natural communities and should not try to provide facilities in areas in which the educational needs are already being served adequately by established institutions. The present system of junior colleges where located in the strategic area could serve as a nucleus of the system. The organization would need to be flexible, not tied to existing



customs and vested interests, which would permit development continuously parallel to the changing needs of the young adults, the business employers, and communities that are to be served. Insurance that the community needs would be adequately served would demand that the institution be locally administered and controlled. The maximum distance that a young adult should have to travel to attend school and live at home should seldom be more than thirty miles. Such a plan would demand careful study of the natural community areas, suitable sites and cities for the location of the facilities, area populations of youth in sufficient numbers to insure at least an efficient institution as to size and a district with adequate taxable property to insure an institution adequately financed for the maximum education needed but still not a burden on the taxpayer. Such an organization of institutions could well take care of the expressed and growing educational needs and desires of our older adult population. The institution might provide its facilities as a leadership training and service organization to smaller adult evening extension centers within their natural community area.

**Extension Services:** Still another plan that might be developed to provide for the educational needs of those of the population who are not and cannot be serviced by present institutions in Iowa would be a system of extension centers organized and controlled by the present three institutions of higher education or directly under the State Board of Education. Several problems prevent this plan from being enacted at present. Specifically, the state schools are now somewhat limited concerning assuming certain community responsibilities. The State University of Iowa is prohibited by the state constitution from providing extension centers away from the campus of the university. Iowa State College has been performing many community educational functions through their well organized and efficiently operating extension service, but these are generally directed toward the rural people of the state. They are the first to admit they cannot hope to furnish the facilities and leadership for all of the educational needs within the state that cannot be taken care of through existing institutions. Iowa State Teachers College is operating under a specialized objective, that of training teachers. With the state schools not presently able to provide such communitywide educational functions it would seem even more improbable that the private colleges could assume such leadership and provide the facilities.

A need for further research is evident concerning the possibilities of supplying any of the educational needs for young adults through the present or extended facilities of institutions now in existence. Required is a complete and continuing survey of the long range plans and existing facilities of all organized institutions and the needs of the people within the community areas to determine which path or combination of paths should be taken.

The only group of colleges in Iowa that have not been discussed at length in this report are public junior colleges. Most of these institutions are now offering only a limited two-year liberal arts program. A few of the junior colleges are moving into the field of adult education and community service but are restricted greatly by their organization and limited financial resources. The limitation financially is caused by a support that comes primarily from tuition and taxes collected from the immediate secondary school district. With this limited tax base most of the junior colleges are trying to serve educational needs of those outside the district without collecting the full cost of the education from the individual student and nothing from the district. Most of Iowa's junior colleges are so small in enrollment that they are restricted in their academic offerings. Several have even had to close their doors during the past few years, and with the threat to education imposed by a national emergency a number of others will undoubtedly have to pursue a similar course. Only about seven counties in the west central section and fourteen in the northeast are devoid of junior colleges within a reasonable commuting distance of all Iowa homes. These schools are attempting to identify themselves with the community needs and are even listed in a recent



pictorial publication entitled "Schools and Colleges of Iowa," prepared by **The Des Moines Register** and **The Des Moines Tribune**, as "Community Colleges." They might well serve as a basis for a statewide system of organized public education for the young adults. They have no long tradition of set objectives, they are publicly controlled and administered locally. Another provision that must be considered is the lack of such institutions in those areas that possess a concentration of population. Most of these areas do have privately controlled liberal arts colleges. If the privately controlled liberal arts college would and could serve the community educational needs few new institutions would have to be established in Iowa to gain complete geographical coverage.

One of the most promising educational movements in Iowa is the rather spontaneous adult education program developments in well over two hundred communities. The leadership as well as the facilities in these ventures is usually furnished by the public schools. Area community centers could provide the leadership training that is usually lacking and could help develop the necessary evaluative system that would provide flexibility toward serving the complete community educational needs. The local training needs of the businesses and industries could be provided to permit relatively equal competition between the small and large ventures within each community. Community colleges would be free to establish short courses, on-the-job training programs, and other vocational up-grading courses. Recreational needs of the youth, with which they are so concerned, could well be met in the same type of institutional organization as are the vocational and cultural aspects of community life.

### **WHAT RESEARCH STILL NEEDS TO BE DONE?**

As seen from the foregoing report much research has already been accomplished relative to the educational needs of Iowa's younger citizens. Still there are many areas that need to be studied to complete the picture of the total educational needs. Briefly stated there follows an outline of the research that still has not been completed:

1. A study of the educational needs of those individuals graduating from the high schools in 1946 and 1949 who did not return the basic questionnaire; particular emphasis needs to be directed toward those without college training;
2. A careful study of the several metropolitan centers in Iowa relative to the differing educational needs that may exist in such areas of the state;
3. A complete study of those educational needs which are peculiar to the agricultural areas of work and directly related to the population of Iowa that is engaged in agriculture;
4. A survey of the critical family living and homemaking problems within the twelve county area;
5. A job analysis study of the main entry occupations to determine the exact and common skills needed for initial training of youth and an analysis of the rest of the occupations to determine the up-grading and retraining skills that might be developed educationally;
6. A survey of the facilities for higher education in the state to determine how they might be better utilized to fulfill the educational needs of the community; provisions might be necessary for a coordinating agency to provide continuing cooperation between all institutions in the state;
7. A development study of the personal and community health problem in Iowa;
8. A study of the professional opinions of experienced teachers in the institutions of higher education relative to the use of their talents in solving community edu-



cational problems and in the training of pre-professional personnel in the community institutions.

9. The development of pilot projects within different geographical and curricular areas to obtain the actual experience in solving the problems of operating community institutions;

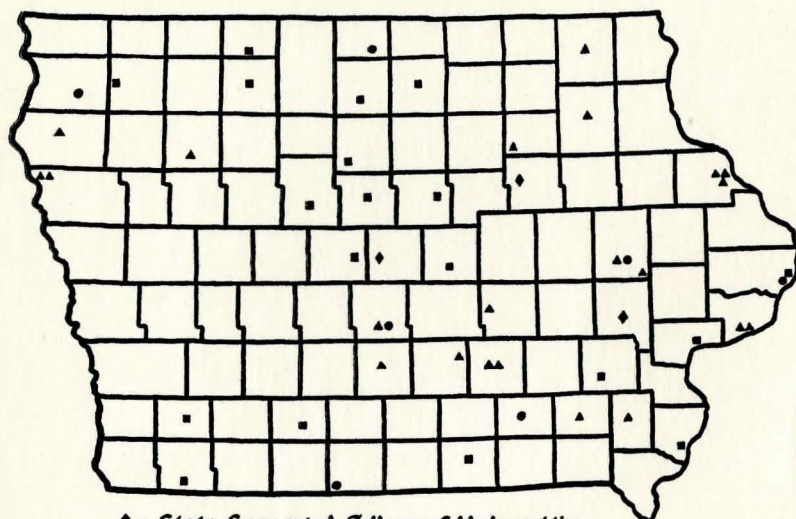
10. A collection of the population trends within each state area to determine the need for the establishment of additional educational facilities;

11. A graphic presentation of the relative wealth of the areas of the state to determine the ability of each area to finance education beyond the secondary school years;

12. A complete study of the educational needs relative to the understanding of human relations concepts by the youth and the general population;

13. A study of the pre-professional needs relative to the selection of students and the common elements of training between the different professions during the early college years.

# COLLEGES *and* UNIVERSITIES IN IOWA



- ◆ - State Supported Colleges & Universities
- - Public Junior Colleges
- ▲ - Liberal Arts Colleges
- - Private Junior Colleges



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