DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1920, No. 10

CORRESPONDENCE STUDY IN UNIVERSITIES AND COLLEGES

BY

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WASHINGTON
GOVERNMENT PRINTING OFFICE
1920
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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,

Sir: A very large and important part of the extension work of universities, colleges, and departments of education is done through correspondence, thus giving to large numbers of men and women who can not go to college or attend set courses of lectures an opportunity to profit by well-directed reading and study and by scholarly criticism. To make it possible for all educational extension agencies to profit by the experience of those which have done most in this particular line of work, I recommend that the manuscript transmitted herewith be published as a bulletin of the Bureau of Education. It was prepared at my request by Dr. Arthur J. Klein, now executive secretary of the National University Extension Association, and formerly associate director of the Educational Extension Division of this Bureau.

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

The SECRETARY OF THE INTERIOR.
THE NEED FOR CORRESPONDENCE STUDY SERVICE.

Outside university walls, and often within them, the charge is freely bandied about that the universities have too little to offer the world; that higher education has made for itself a little "other world in the skies." Critics who are more fair and better informed recognize that the university is a great reservoir of information and of help immeasurably valuable to the commercial, industrial, and governmental worlds. The fundamental defect is that work, business, the ties of active life in home communities, prevent the people who need the resources of the university from coming to the campus for what they want, and in too many cases the university has had no means of delivering its service at the doors of these potential students.

Commercial correspondence schools have proved by their prosperity and the testimonials of students whose means of livelihood have been increased and whose lives have been enriched by correspondence study that there are many people unable to attend institutions of higher learning who desire education and are willing to pay for it. Yet the fact that many of our great universities have adopted correspondence instruction as one means of serving the needs of those who can not come to the campus has not destroyed suspicion of the correspondence study method.

Men trained in judgment and jealous of the integrity of education have sometimes failed to examine the merits of the correspondence method, although the great popular demand for this form of home instruction would seem to be entitled to satisfaction at the hands of reputable institutions. Thousands can in no other way obtain the benefits of higher education. Lack of means, ill health, family or social duties, business, and the necessity of earning a living entirely prevent a large proportion of the people from attending schools. This method of instruction should not be rejected, therefore, without the most convincing reasons.

PURPOSE OF THIS BULLETIN.

It is the purpose of this bulletin to report some of the facts concerning the extent of the use of this method of instruction by reputable institutions, to describe the educational service thus rendered, and to show how these institutions carry on the work in such a way that its educational value can not be questioned.
EDUCATIONAL INSTITUTIONS' CONDUCTING CORRESPONDENCE STUDY.

Few educators realize the number of State-supported and privately endowed educational institutions of the highest type which have adopted correspondence study as one means of extending their educational service. The following list of such institutions was compiled from reports, announcements, and letters collected by the division of educational extension in the United States Bureau of Education. Doubtless it is incomplete, but the extent of the list and the character of the institutions which have adopted the method serve to emphasize the present importance of correspondence study in the educational life of the Nation.

Alabama: Agricultural and Mechanical College, Normal.
Arizona: University of Arizona.
Arkansas: University of Arkansas.
California: University of California. Humboldt State Normal School, Arcata.
District of Columbia: Howard University.
Florida: University of Florida. Florida State College for Women.
Georgia: State Normal School, Athens.
Illinois: University of Chicago.
Indiana: Indiana University. Goshen College.
Iowa: University of Iowa. Iowa State College of Agriculture and Mechanic Arts. Drake University.

Kentucky: University of Kentucky.
Louisiana: Louisiana State Normal College, Natchitoches.
Maine: University of Maine.
Maryland: Maryland State College.
Massachusetts: University Extension Department of the State Board of Education.

Michigan: Michigan State Normal, Ypsilanti.
Minnesota: University of Minnesota.
Mississippi: Mississippi Agricultural College.
Missouri: University of Missouri. State Normal School, Cape Girardeau.
IN UNIVERSITIES AND COLLEGES.

Montana. University of Montana.

Montana State School of Mines.

Nebraska. University of Nebraska.

New Mexico. University of New Mexico.


Columbia University.

New York University.


North Carolina Industrial College.

North Dakota. University of North Dakota.

University of Oklahoma.

Central State Normal School.

Northwestern State Normal School.

Oregon. University of Oregon.


University of Pittsburg.

Rhode Island. Rhode Island State College.

South Dakota. University of South Dakota.

Tennessee. University of Tennessee.

George Peabody College.

Texas. University of Texas.

Baylor University.

Howard Payne College.

Westminster College.

Southwestern University.

Utah. University of Utah.

Utah Agricultural College.


Washington State College.

State Normal School, Bellingham, Wash.

West Virginia. West Virginia University.

Wisconsin. University of Wisconsin.

State Normal, Stevens Point.

State Normal School, Platteville.


It will be noted that correspondence work is conducted by non-commercial institutions in 59 States and the District of Columbia. In all these States except one work is conducted by State-supported institutions. Of the 73 institutions listed, 61 are supported by public funds; 12 are privately endowed. These facts alone would be sufficient justification for the publication by the United States Bureau of Education of a report upon correspondence study and should also serve to indicate to professional schools of education the necessity for further careful study and investigation of the extent, methods, and purposes of this form of adult instruction. As in other activities of educational institutions, the war resulted in the reduction of the correspondence work of some institutions and prevented the normal growth in this line. Post-war demand for the continued education of adults will doubtless cause a remarkable growth, how
ever, both in the variety of work offered and in the number of institutions conducting correspondence study courses.

THE CORRESPONDENCE STUDY METHOD.

Much of the correspondence work carried on by educational institutions is known by other names. These names have sometimes been applied in deference to the conservatism and prejudices of trustees and faculties; in other cases they continue to be applied to types of work which originally were not, but have now developed into correspondence study. "Home study courses," reading courses, and club study courses are names that have been used to avoid the use of the term "correspondence course" and to indicate special applications of the correspondence study method.

These attempts to find other names are commendable. The essential characteristic of correspondence study is not the fact that it is instruction by mail; that is in many cases merely incidental. The correspondence method has been tried in resident instruction with results which indicate that the ordinary methods of class instruction may in some degree be displaced profitably by further application of the correspondence method. Indeed, the correspondence method has always been used in resident instruction in certain subjects and in many cases no other method is possible. English composition, for instance, can not be taught in any other way than by correspondence-study methods.

It is not, then, the intervention of the postal system which gives to correspondence study its virtue. The method of instruction is the essential thing. It may or may not be applied through the mails. The chief characteristics of the method are constant efforts by the student and correction by the teacher. As ordinarily applied in correspondence study, the method consists of the assignment by the instructor of definitely planned work, the writing out by the student of the results of his work, the correction and criticism by the instructor of the written lessons, and the suggestion and assistance upon points where the student needs such special help. The student is tested on the whole of every lesson. He not only recites the entire lesson, but reduces it to writing, so that any error may be detected and corrected. The criticism by the instructor is also clearly and definitely written. No slipshod or evasive work, no bluffing, is possible for student or for instructor. The hard grind which such methods require from students is such an ever-present fact, so much a part of correspondence study and so seldom found in class work, that this method of working is more truly than postal transmission the essential feature of correspondence study.
THE GENERAL PLAN OF CORRESPONDENCE WORK.

Few people who have not taken or taught correspondence courses are familiar with the methods and processes of conducting the work. Naturally a large proportion of the opponents of the method are of this group. J. W. Scroggs, director of extension, University of Oklahoma, says:

Diligent inquiry has failed to find a single instance where a competent conscientious instructor has faithfully taught the same subject both in class and by correspondence who does not find words of commendation for correspondence study. Many testify to getting better results by correspondence teaching than in class instruction. Advanced students are competent witnesses and their testimony is overwhelmingly favorable.

For those who have not had opportunity to become familiar with the methods of conducting correspondence study, a brief description of the practice ordinarily followed will be of assistance in understanding why those who have had experience with it are so generally convinced that correspondence study is a method worthy of a place in our great institutions, and, if conducted by them, a device of the highest educational value.

An abstract of the rules suggested by the University of Utah for regulating the preparation and teaching of correspondence courses presents clearly the general plan and method of correspondence work.

REGULATIONS AND SUGGESTIONS OF THE UNIVERSITY OF UTAH CONCERNING CORRESPONDENCE COURSES.

The plans for all correspondence courses shall be outlined by the department concerned and shall be approved by the director of extension work at the beginning of the courses. The general plans shall contain: (1) A concise statement of the purpose and nature of the course: (2) general instruction concerning the entire course in sufficient detail to make perfectly clear to the student the nature of the work that he will be expected to do; (3) explanatory notes concerning required and recommended textbooks, with instructions as to where they may be secured and at what prices; and any other explanations that may be useful to the student in beginning the course. A little clear instruction at the beginning may save days of waiting later on in the course.

Every lesson must be carefully and clearly outlined. A lesson plan should contain: (1) The name and number of the course and the number of the lesson; (2) a statement of the topic or topics that will be covered in the lesson; (3) a statement of the required readings for the lesson, reference being made specifically by chapters or pages; (4) a clear statement of any supplementary readings that the instructor may wish to recommend; (5) explanatory notes and special instructions that apply to this particular lesson and that are not covered in the general instructions mentioned under 2 and 3. The instructor may save hours of the student's time and increase the efficiency of the course 100 per cent by carefully preparing this division; (6) questions or exercises to test the student's understanding of the work assigned. These exercises must...
be clear and full and free from ambiguity. They must not be a mere test of
the memory of the textbook material, but they must be of such a nature as
to require reflective thinking based upon the information gained from the
reading. They may be either in the nature of questions or of problems.

After preparing for recitation on a given lesson the student writes his an-
swers to the questions and mails them to the extension division of the Uni-
versity of Utah, together with a statement of any difficulties that may have
arisen during his study. The instructor, after receiving a recitation paper,
shall within 48 hours, if possible, correct the same and return it to the ex-
tension division. In case the paper be unsatisfactory, he may require the
student to rewrite all or any portion of it. His criticisms shall be clear and
his directions for revision shall be definite and free from ambiguity.

INDIVIDUAL CHARACTER OF CORRESPONDENCE STUDY.

Correspondence study is an individual method of instruction, almost
the only one now practiced on any large scale. Except in cor-
respondence study, individual instruction has given place to the class
method save for the favored few who are able to meet the higher
cost of private teaching.

In correspondence study each student receives continuous individ-
ual attention and assistance to meet his special needs throughout
the course. It therefore serves not only as a practical resort when
intensive study is required, but may in many cases be actually prefer-
able to any other method within reach. The cost of correspondence
study to the student can be kept low because by this device the prepa-
ration of the course material, the services of the instructor, and the
supervision of the work are not, as in private tutoring, given to one
individual but to a number. It thus preserves many of the economies
of the class method without losing the personal character of individ-
ual instruction.

CORRESPONDENCE STUDY AS A METHOD OF GROUP
INSTRUCTION.

Because it also serves as a means whereby persons at a distance
from the institution and the instructor may be efficiently taught,
several attempts have been made to conduct classes by the correspon-
dence method. Such attempts have been called by various names.
Group or club study classes are names commonly applied. The es-
sential thing in each case is the written assignment of lessons, writ-
ing the results of study, and the correction and return of the written
work to those who have undertaken the course. When such classes
are made up of groups of students enrolled individually and working
individually in a single correspondence course, and meeting at set
periods for the purpose of discussing their work, the club or group
correspondence course promises a large measure of effective service.
Equally successful is the correspondence study group which meets periodically with an instructor or advisor trained in the work they have undertaken. Less successful is the group study class of a more heterogeneous kind in which one or two members attempt to qualify as leaders and instructors of the group by means of the lessons, papers, and criticisms of the correspondence course. There is further need for experiment and investigation in adapting the correspondence method to group study when no qualified instructor meets with the group. This bulletin is primarily concerned with correspondence study as a means of individual instruction.

**TYPES OF CORRESPONDENCE STUDY COURSES.**

Correspondence students in general are serious persons, not childish in years or mind. Most of them are adults. The small minority of minors are old for their years, capable of learning and eager to learn. But irrespective of age and purpose there is the widest diversity in previous general training, in ability to study, in intellectual maturity, and in preparation for work in specific subjects. The problems of preparing courses which will meet the needs of students so earnest and yet with such diversity of character and preparation are numerous. University professors were for a long time convinced that they could not be solved. But the work of the commercial correspondence schools and the fact that universities are actually doing correspondence work with great success make possible a simple statement of some of the principles upon which successful correspondence courses are prepared.

Both elementary and university correspondence study courses fall into two main groups determined by their purpose. In the first group are courses which aim to communicate definite information rather than to develop intellectual power. In the second group are courses which aim to develop the mind of the student rather than to communicate a definite body of facts. For convenience, the first group may be termed informational courses, the second instructional. Informational courses do to a certain extent, of course, develop intellectual power. Instructional courses impart much direct information, but the fundamental distinction in general purpose remains.

Informational courses stand as units, each complete in itself and related, if at all, only to the general field of the subject matter. They are frequently unrelated bodies of information presented to students with little regard for the student's intellectual needs or past and future training. Sometimes they are mere entertainment, but commonly they serve to supply the information needed to accomplish a definite, limited task or practical object.
Instructional courses aim to develop power rather than to convey information. They are possible in practically all subjects and the end of all such courses is the same. They do not present a mere body of names, dates, or facts. They try to develop clear observation, accurate expression, ability to choose main topics from developing details, power to arrange materials according to a logical plan, skill in drawing sound conclusions from given facts, and faculty for developing general statements by specific instances, definitions, and comparisons.

THE FORMS OF CORRESPONDENCE COURSES.

Informational and instructional correspondence courses of both elementary and university grade have in practice taken three main forms:

I. The courses made up of assignments in a textbook. The student is told to read a certain portion of the book and then to write the answers to the given questions. The lesson is simply a list of questions to be answered or topics to be discussed.

II. The course made up of textbook assignments supplemented by additional material. For a certain assignment the student is told to read a portion of the text and then to study the supplementary material before writing his answers.

III. The course made up of specially prepared lessons requiring no textbook. Reference books may or may not be required. The student receives one specially prepared assignment containing all that he must study before writing his answers.

The first type, made up primarily of textbooks and questions, serves well with the most elementary and the most advanced students. The most important opportunity for teaching in this kind of course is the correction and criticism of the student’s paper. Lack of the personal element is the greatest defect of this type of correspondence course. The printed text is impersonal, but the criticism which is aimed at him individually may serve to create the personal relationship and to maintain interest in the course.

Better for most students than the course with the textbook alone is the course with text supplemented by additional material for each assignment. Such courses may be changed or supplemented from time to time as experience with a large number of students indicates to the instructor the passages in the text that need explanation and illustration. The additional material is directly related to the questions asked or the topics given for discussion. It serves to make the student feel that something is being done for him personally.

Apparently, however, the best course for correspondence work is that which furnishes the student separate typed or mimeographed
IN UNIVERSITIES AND COLLEGES.

Lessons containing all the material to be studied. This kind of course has four distinct advantages—it permits the instructor to avoid the puzzling things of a textbook and to develop his subject with reference to the needs and the methods of study of a particular class of students; it permits the instructor to change or modify the lessons as the need for change or modification becomes apparent; it permits the student to work easily in his spare time; it makes the student feel that he is getting individual attention and instruction, that the lesson has been prepared especially for him. Experience has shown that few students who enroll in a course of the third type fail to finish their work.

LENGTH OF COURSES AND OF LESSONS.

University extension divisions have found that the safest general rule in preparing correspondence courses is to make the courses as short as is consistent with unity and the lessons not so long that the average student needs more than an hour or an hour and a half to master each lesson.

For sustained interest in a correspondence course it is essential that the student send in his papers for criticism frequently and that the corrected work be returned to him promptly. This is not possible when lessons are so long that it takes weeks to finish the work and write the answer paper. The student in residence may escape the burden of overlong assignments and lessons by letting the work go. He is not dropped from a course because he does not do every day's work. The correspondence study student can not thus regulate the amount of work he finds it possible to do. If he can not finish up a lesson within a reasonably brief time, the tendency is for him to drop out entirely. Experience has proved also that when a course of 56 lessons is broken into two courses of 28 lessons each, a larger proportion of students will complete the two courses than would finish the longer course. Comparatively short courses broken into a large number of brief lessons induce students to complete the work and to register for new courses.

ADMISSION TO CORRESPONDENCE COURSES.

The character and number of correspondence students are controlled by the terms laid down by the institutions for admission to the courses. The conditions actually imposed are determined by academic traditions and by the special purposes for which correspondence work is undertaken by the institution. When correspondence work is regarded or intended primarily as a means of affording persons who can not become resident students an opportunity to obtain college or university credit, satisfaction of the usual require-
ments for college entrance is demanded before credit is granted. Yet, in the case of credit courses, many institutions have violated academic conventions under the incentive of keen desire to render service by meeting the needs of those who have not had the previous educational training ordinarily demanded. Training and instruction rather than the acquisition of credit units are regarded as of prime importance. Students who can not satisfy the college entrance requirements or who do not wish to obtain formal credit for the work done may be admitted upon the presentation of evidence, other than previous education, of ability to carry the work profitably and successfully.

In resident college work in the past a strong emphasis has been placed both by the institution and the students upon grades, credits, formal and artificial norms of work, rather than upon the acquisition of informational and intellectual equipment. A large percentage of special students, however capable and however earnest in their educational purposes, has been regarded as lowering the standard of an institution. Correspondence study reverses this estimate. It believes that its service is more adequately measured and rendered more valuable by the number of students who pursue college courses for the training and the information they afford than by the number who take correspondence courses for the sake of obtaining credit toward degrees. The number of students, therefore, who carry correspondence courses of college grade without receiving or desiring college credit for the work, even when college credit may be given, is a truer measure of educational service than the number who carry the work for the definite purpose of obtaining credit.

For this reason institutions commonly make admission to correspondence courses of college grade easy for students who show evidence of serious purpose. No preliminary examination is required. An application blank is provided for giving full information concerning the student's purpose in undertaking the work, his training and experience, age, occupation, and access to library facilities. If his purpose is the acquisition of college credit, he is required to state the fact and the ordinary requirements will then have to be satisfied. But if he does not desire credit, the data given upon the blank will indicate whether it will be possible for him to carry the work. If a mistake is made in the initial choice of course, or in admission to work which the student is not capable of carrying, the error is easily detected and every facility for proper adjustment is afforded.

In residence study such mistakes are hard to correct. An indulgent teacher or a friendly classmate may encourage a student to carry through in a half-hearted and halting way the work he has undertaken. Change of courses after work has started is unusually discouraged by a whole barbed-wire entanglement of university regula-
In Universities and Colleges.

In universities and colleges there is no such opportunity for concealment and slipshod work. The student cannot hide under the wing of a class group. Every correspondence student is tested from the start upon every phase of his work. He stands upon his own pedestal from the beginning. If the work he has undertaken is not suited to his capacities or needs, the fact is soon revealed, and he is encouraged and even required to change to a course that he is able to carry profitably. This can be done because it is possible for the correspondence student at any time to take a fresh start at the beginning of the more suitable course; he need not plunge into a class that has already been at work for weeks or months.

Desire to serve adults and others who are not resident students of an institution has not been manifested alone by opening regular college courses given by correspondence to students who cannot satisfy college entrance requirements. Courses especially prepared to meet educational needs rather than academic requirements are becoming increasingly abundant.

High-School and College-Entrance Courses.

For the benefit of those who wish high-school training for its own sake or to satisfy college-entrance requirements, many institutions offer high-school courses by correspondence. Such courses are given under conditions intended to encourage attendance of the regular high school if attendance is possible. Students enrolled in high school are not permitted to take these courses during the regular session, nor are they permitted to take them during the summer vacation without the consent of the superintendent or principal. In some cases not more than one-half of the credits required for graduation from high school or for entrance to the higher educational institution can be taken by correspondence. In other cases all of the work required for admission may be taken by correspondence. Minors are sometimes excluded from these courses unless the local high-school principal specifically recommends admission. In a few cases students who satisfactorily complete courses of college grade without having satisfied the entrance requirements are permitted to use this work to reduce the number of preparatory units required.

Noncredit Courses.

But even more important than the opportunities offered to take college courses and college preparatory courses is the educational service rendered through courses designed to meet practical needs without reference to the academic grade of the work. Under the conditions of admission to courses of college and high-school grade any of these may serve those who feel the practical need of such
work, but in addition to these courses constantly increasing provision is made for courses planned especially to serve the requirements of those who need instruction in special phases of their work.

The courses range in grade from courses on the use of the slide rule and the rules of punctuation to courses in bacteriology for practicing physicians and courses in the theory of the functions of a real variable for mathematics professors. Courses for health officers, for visiting nurses, courses in drawing, bird study, cost accounting, drafting, art appreciation, making income-tax returns, these are only a few of the noncredit courses which are primarily intended to serve practical needs. This field is capable of almost indefinite expansion. There are aspects of every employment and occupation in which the need for special instruction is constantly felt by those engaged in the work.

SUBJECTS GIVEN BY CORRESPONDENCE.

Correspondence study advocates do not maintain that all kinds of courses can be given by correspondence. Courses that require large laboratory equipment, courses in which the discussion is the fundamental element of the instruction can in few cases be given successfully by correspondence. The range of subjects thus excluded is, however, not so large as some of the opponents of the correspondence method would have us believe.

Practically all of the courses given in colleges and high schools and many that are not can be and are taught by correspondence. Much of this work can be done to better advantage by correspondence than in residence. For example, in research work the resident student must make investigations and reports. For this class of work the ending of the classroom hour and the fact that the work must be completed by a fixed date makes correspondence study far more reasonable and practicable. It is impossible to parcel out such work into 50-minute periods or terms of fixed length, and for the highest grades of educational work correspondence study methods are universally used.

The dean of one of our graduate schools says that if he were entirely free to act without regard to other universities he would not only permit but would require that at least six hours of the work required for the master's degree be taken by correspondence. Work of that kind can be made wider in its scope and of a higher quality than it is possible to secure in the classroom. There is no limit to the thoroughness and extent of the work which may be demanded and secured by correspondence study; its methods permit the utmost that can be required.

For those wishing intensive study in a single branch or two, classroom work is not adapted. Students must often take three or four
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studies to get the one they wish; they must not go faster than the class and the work must be managed in the interest of the group, not the individual. This makes correspondence study especially desirable for those who wish instruction in special subjects allied to their everyday life. The correspondence course permits them to select what will serve their purposes without doing work that to them is useless or an old story, although required by the courses planned for group instruction.

A class always holds some students back and drags others on too fast; no two minds are exactly alike or require exactly the same treatment. A class is often a Procrustes bed to which students can not be adjusted without doing violence to individual needs and talents. Correspondence study, being strictly individual instruction, has for many students advantages of adaptability and efficiency.

A very incomplete list of subjects taught by correspondence in a few institutions has been compiled and will be found in the appendix to this bulletin. Reference to it or to the announcement of correspondence courses of any institution offering general correspondence courses will make clearer than a long description of the range of the work how extensive are the opportunities offered by correspondence work.

CORRESPONDENCE STUDENTS.

Studies of the actual enrollment of students in correspondence work will show the kind of students the courses are designed to reach. Unfortunately, very few extension divisions have made sufficiently detailed compilations of data to enable us to present as complete information as is desirable.

PURPOSES OF ENROLLMENT.

Many of those who have had extensive experience with correspondence study work have stated that a large proportion of the students take the work for definite practical purposes, but the study made by the extension department of the Massachusetts Board of Education is the only attempt known to the writer in which this impression has been demonstrated by tabulation of the students' enrollment blanks. This study was made from the records of 1,200 correspondence students. The figure here reproduced shows graphically the results of the study.

It will be noted that approximately 30 per cent enrolled in order to increase efficiency in their present work and that almost 22 per cent enrolled in the hope of advancement in position and salary. In other words, over half of the students were seeking immediate prac-
tical aid when they began correspondence study. Of those who entered to prepare for civil service, college, and other courses, 23.5 per cent of the total, many obviously had practical benefits in mind. Only 22 per cent began the work from motives of culture or enjoyment, while less than 1 per cent had definitely altruistic purpose.

**DISTRIBUTION ACCORDING TO MOTIVE FOR ENROLLMENT**

(Percentage of students)

<table>
<thead>
<tr>
<th>Motive for Enrollment</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Service</td>
<td>27</td>
</tr>
<tr>
<td>Culture Interest</td>
<td>488</td>
</tr>
<tr>
<td>Review of Subject</td>
<td>336</td>
</tr>
<tr>
<td>Professional Education</td>
<td>299</td>
</tr>
<tr>
<td>Social Service</td>
<td>67</td>
</tr>
<tr>
<td>Advanced in Position and Salary</td>
<td>36</td>
</tr>
<tr>
<td>Efficiency in Present Work</td>
<td>26</td>
</tr>
<tr>
<td>Preparatory (Civil Servant, College)</td>
<td>26</td>
</tr>
</tbody>
</table>

These figures show unmistakably that the service rendered by correspondence work appeals to those who seek help in their everyday life.

**PREVIOUS EDUCATIONAL PREPARATION.**

The same study shows that 34 per cent of the students had previous elementary education only, 49 per cent secondary education, 8 per cent collegiate, 8 per cent professional, 1.8 per cent private school,
3 per cent vocational, and 4.6 per cent evening school education. The figures given by the Massachusetts State Normal School at North Adams show a somewhat different percentage, as was to be expected from the specialized character of the work, drawing its students in large part from the teaching class. Of the 287 correspondence stu-

dents of the State Normal School, 8, or 3 per cent, were college graduates; 18, or slightly less than 7 per cent, had some college undergraduate training; 35, or about 13 per cent, were normal-school graduates; 63, or 23.5 per cent, were undergraduates of normal school; while 142, or 53 per cent, were graduates of public high schools only. Only 1 was a graduate of a private academy.
The following table from the report of the dean of the extension division of the University of Wisconsin for the biennial period ending July 1, 1914, shows the experience in that institution:

<table>
<thead>
<tr>
<th>Year</th>
<th>1912-13</th>
<th>1913-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students below the sixth grade</td>
<td>35</td>
<td>52</td>
</tr>
<tr>
<td>Number of students attained the sixth grade</td>
<td>42</td>
<td>51</td>
</tr>
<tr>
<td>Number of students attained the seventh grade</td>
<td>112</td>
<td>99</td>
</tr>
<tr>
<td>Number of students attained the eighth grade</td>
<td>441</td>
<td>513</td>
</tr>
<tr>
<td>Number of students graduated from high school</td>
<td>331</td>
<td>412</td>
</tr>
<tr>
<td>Number of students attained business college</td>
<td>145</td>
<td>158</td>
</tr>
<tr>
<td>Number of students attained or graduated from normal school</td>
<td>102</td>
<td>189</td>
</tr>
<tr>
<td>Number of students attained college</td>
<td>282</td>
<td>315</td>
</tr>
<tr>
<td>Number of students attained or graduated from college</td>
<td>348</td>
<td>244</td>
</tr>
<tr>
<td>Number of students giving no data</td>
<td>612</td>
<td>586</td>
</tr>
</tbody>
</table>

Of the 2,119 students reporting in 1912-13, 630, or slightly over 29 per cent, had elementary training only; 642, about the same per cent, had taken part or all of a high-school course; 560, or 26 per cent, had all or some part of a college course.

The figures for 1913-14 show a larger proportion of high-school students or graduates—33 per cent instead of 29 per cent—while the number of college students and graduates falls off slightly.

**AGE OF STUDENTS.**

That correspondence study is distinctly a method adapted to adult education is proved by studies of the age distribution of correspondence students. The study already quoted of the records of 1,200 correspondence students made by the Massachusetts Extension Department shows that 911, or 11 per cent, of the students were beyond school or college age. Of the 55 still of high-school age, 1 were employed in gainful occupations and 14 were pupils taking correspondence work to supplement their regular school work. The average age was 26.3 years. Two hundred and sixty-four, or 22 per cent of the entire group, were between 22 and 25 years. The results obtained from studies of the ages of correspondence students in the University of Wisconsin, Indiana University, and other institutions differ little from those obtained in Massachusetts.

**SEX DISTRIBUTION.**

In this connection sex distribution presents some interesting features:

The number of women in each of the groups between 18 and 45 years of age is much more constant than the number of men in the same groups. Furthermore, the percentage of women in each group tends to increase with advancing years, while the percentage of men in each group correspondingly decreases.
IN UNIVERSITIES AND COLLEGES.

This is the case up to the age of 45; after that the curve of percentages becomes uncertain and negligible because the number in each group is so small that the addition of one or two to either sex unduly affects the percentage. The tabulations, therefore, appear to indicate that among women of all ages the demand for correspondence courses is more evenly distributed than among men. Among men, interest and activity in extension work reaches its high point between the ages of 22 and 25, but wanes very noticeably after the thirtieth year. (Massachusetts report.)

Somewhat more unexpected is the fact that the number of male registrants far exceeds the number of women. The following figures taken from the Massachusetts study show the distribution between the sexes in various subjects:

<table>
<thead>
<tr>
<th>Course</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>149</td>
<td>10</td>
</tr>
<tr>
<td>Civil service</td>
<td>78</td>
<td>5</td>
</tr>
<tr>
<td>Bookkeeping and business arithmetic</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>Stenography and typewriting</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Business management</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Commercial applications</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>Applied mathematics</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>General mathematics</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Household economics</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Education</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>History, etc., economic</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Elementary English</td>
<td>158</td>
<td>71</td>
</tr>
<tr>
<td>Advanced English</td>
<td>24</td>
<td>41</td>
</tr>
<tr>
<td>Foreign language</td>
<td>27</td>
<td>41</td>
</tr>
<tr>
<td>Drawing (mostly mechanical)</td>
<td>150</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>512</td>
<td>258</td>
</tr>
</tbody>
</table>

Of the 1,200 registrants 76 per cent were men, 14 per cent women. In only five of the 16 subjects—stenography and typewriting, household economics, education, advanced English, and foreign language—did the number of women exceed the number of men. In the University of Nebraska in 1917-18, 60 per cent were men, 40 per cent women. The registration of men and women in the correspondence courses of the University of North Dakota was evenly divided in 1918-19. War conditions doubtless contributed in this case to reduce the number of male and to increase the number of female students. In the University of Oklahoma the preponderance of men over women persists, the percentages being 82 and 38 per cent, respectively.

VOCATIONAL DISTRIBUTION.

The occupations of correspondence students include practically every field of human endeavor. During the biennium 1914-1916, 317 different vocations were represented in the enrollment of correspondence students in the University of Wisconsin. The registration of correspondence students of the University of Oregon, by occupations, in 1918, which follows, shows that over half were teachers, fol-
CORRESPONDENCE STUDY

lowed in the order of number by soldiers, housekeepers, farmers, stenographers, and clerks.

University of Oregon—Registration of students by occupations.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculturist</td>
<td>1</td>
</tr>
<tr>
<td>Artist</td>
<td>1</td>
</tr>
<tr>
<td>Attorney</td>
<td>2</td>
</tr>
<tr>
<td>Bookkeeper</td>
<td>1</td>
</tr>
<tr>
<td>Civil engineer</td>
<td>1</td>
</tr>
<tr>
<td>Clerk</td>
<td>8</td>
</tr>
<tr>
<td>Construction worker</td>
<td>1</td>
</tr>
<tr>
<td>County treasurer</td>
<td>1</td>
</tr>
<tr>
<td>Dentist</td>
<td>1</td>
</tr>
<tr>
<td>Draftsman</td>
<td>12</td>
</tr>
<tr>
<td>Farmer</td>
<td>1</td>
</tr>
<tr>
<td>Film operator</td>
<td>1</td>
</tr>
<tr>
<td>Homesteader</td>
<td>1</td>
</tr>
<tr>
<td>Housekeeper</td>
<td>27</td>
</tr>
<tr>
<td>Jeweler's assistant</td>
<td>1</td>
</tr>
<tr>
<td>Laborer</td>
<td>2</td>
</tr>
<tr>
<td>Letter carrier</td>
<td>1</td>
</tr>
<tr>
<td>Lumberman</td>
<td>1</td>
</tr>
<tr>
<td>Merchant</td>
<td>1</td>
</tr>
<tr>
<td>Mill mechanic</td>
<td>1</td>
</tr>
<tr>
<td>Minister</td>
<td>3</td>
</tr>
<tr>
<td>Missionary</td>
<td>1</td>
</tr>
<tr>
<td>Newspaper work</td>
<td>1</td>
</tr>
<tr>
<td>Nurse</td>
<td>3</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>1</td>
</tr>
<tr>
<td>Principal of schools</td>
<td>7</td>
</tr>
<tr>
<td>Printer</td>
<td>2</td>
</tr>
<tr>
<td>Private secretary</td>
<td>1</td>
</tr>
<tr>
<td>Real-estate broker</td>
<td>2</td>
</tr>
<tr>
<td>Sawmill employee</td>
<td>1</td>
</tr>
<tr>
<td>Street car conductor</td>
<td>1</td>
</tr>
<tr>
<td>Superintendent of schools</td>
<td>1</td>
</tr>
<tr>
<td>Surveyor</td>
<td>1</td>
</tr>
<tr>
<td>Teacher</td>
<td>250</td>
</tr>
<tr>
<td>Telephone operator</td>
<td>1</td>
</tr>
<tr>
<td>Y. M. C. A. secretary</td>
<td>1</td>
</tr>
<tr>
<td>Writer</td>
<td>1</td>
</tr>
<tr>
<td>Soldiers</td>
<td>88</td>
</tr>
<tr>
<td>Occupations not known</td>
<td>61</td>
</tr>
<tr>
<td>Total</td>
<td>503</td>
</tr>
</tbody>
</table>

The following graph, prepared by the Massachusetts Extension Department, shows clearly the relationship between the number of persons employed in the State in the occupations named and those enrolled for correspondence work in the same occupations:

CAUSES FOR DROPPING THE WORK.

With a student body drawn from such diverse elements and so largely occupied with the business of getting a living, it is to be expected that a large proportion of the registrants will drop out before courses are completed. Yet the University of Wisconsin found that of 24,555 registrations made in 10 years, 10,192 courses, or over 40 per cent, were completed. Since a great number of these registrations were still active at the time when the figures were compiled the proportion of final completions will certainly be considerably increased. That such a large proportion should complete the work when study is purely voluntary and so often carried on under adverse conditions is a remarkable testimony to the correspondence method of instruction. Reasons assigned by students for not finishing courses show that such delinquency is often justifiable. The course often serves before completion, the practical purpose for which it was undertaken. Removal from the State, ill health, change of
employment, and all the causes which lead resident students to discontinue their work are operative in correspondence study. Dissatisfaction with the work itself is even less frequently, than in resident work of the same grade, the reason for failure to complete it.

**DISTRIBUTION ACCORDING TO OCCUPATION**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>123</td>
</tr>
<tr>
<td>Forestry and Animal Husbandry</td>
<td>34</td>
</tr>
<tr>
<td>Miscellaneous Arts</td>
<td>45</td>
</tr>
<tr>
<td>Transportation</td>
<td>87</td>
</tr>
<tr>
<td>Trade</td>
<td>56</td>
</tr>
<tr>
<td>Public Service</td>
<td>23</td>
</tr>
<tr>
<td>Professional Service</td>
<td>12</td>
</tr>
<tr>
<td>Clerical Occupations</td>
<td>34</td>
</tr>
<tr>
<td>Domestic and Personal Service</td>
<td>23</td>
</tr>
<tr>
<td>Apportionment</td>
<td>56</td>
</tr>
</tbody>
</table>

**GEOGRAPHICAL DISTRIBUTION.**

Hervey F. Mallory, secretary of the correspondence-study department of the University of Chicago, said in an address before the National University Association in 1916:

Our classroom can be world-wide. Its present bounds are marked by Western China in the Far East; Dawson, Fairbanks, and Dahlak Island in the north; Chile to the south; and Sejong and the Union of South America in the Near East. Our constituency embraces college presidents, Government officials, representatives of most of the professions and vocations, and those who by stress of circumstances are debarred from the ordinary means of education.
A missionary going to western China enrolled for six courses before she left, bought her books and equipment, and has begun to send back her reports. Teachers everywhere are taking advantage of our courses to increase their efficiency, and individuals in lonely places are utilizing them to keep alive mentally.

The same wide geographical distribution is found in the enrollments of the universities of Wisconsin and of California and in several other institutions. A still larger number of institutions have correspondence students in every State in the Union.

But when institutions are supported by public funds the primary purpose is service of the home State. The geographical distribution of correspondence students within the State is, therefore, especially significant. The figures for a few of the State-supported institutions are available and show clearly that the service rendered by correspondence study is State wide. In Oklahoma the State University has correspondence students in every county in the State. Indiana University has correspondence students in 53 counties; the University of Oregon in 31 counties; the University of Washington in 29 counties. The Massachusetts State Normal School at North Adams has correspondence students in 85 towns in the State; the University of Kansas has students in 238 towns. In other departments a large portion of the students of State-supported institutions are drawn from the immediate vicinity; in their correspondence study departments institutions reach out to the most remote section with the same ease that they serve those close at hand.

NUMBERS OF STUDENTS.

Almost a hundred thousand students are taking work, in whole or in part conducted by correspondence, in State-supported and privately endowed educational institutions. These figures could easily be made ten times as large if institutions were supplied with sufficient funds to carry on the work. From the initiation of the work practically all institutions have been handicapped for funds, and service has of necessity been incomplete and in some cases not entirely satisfactory. Yet the growth of registrations has been phenomenal. The following table shows this growth in the University of Kansas since the organization of its correspondence study department in 1909:

| Registration from Sept. 1, 1909, to Sept. 1, 1910 | 57 |
| Registration from Sept. 1, 1910, to Sept. 1, 1911 | 137 |
| Registration from Sept. 1, 1911, to Sept. 1, 1912 | 290 |
| Registration from Sept. 1, 1912, to Sept. 1, 1913 | 477 |
| Registration from Sept. 1, 1913, to Sept. 1, 1914 | 697 |
| Registration from Sept. 1, 1914, to Sept. 1, 1915 | 732 |
| Registration from Sept. 1, 1915, to Sept. 1, 1916 | 1,005 |
| Registration from Sept. 1, 1916, to Sept. 1, 1917 | 1,200 |
| Registration from Sept. 1, 1917, to Sept. 1, 1918 | 1,373 |
COST TO THE STUDENT.

The cost to these students for correspondence work is not high. While it is true that fees charged have been so low as not to cover the expense to the institution of carrying on the work, one of the chief reasons for imposing them has been the necessity of supplementing available funds. In this way the number of students has been kept down, and the institutions have been able to offer the work to a greater number.

An old argument against free public schools has been resurrected to combat free correspondence courses. It is maintained that payment of fees insures interest and more serious work by the student. There is considerable force to the argument, but the results of the free correspondence study work which the agricultural colleges are able to offer by virtue of Federal subsidies show that the percentage of registrants who complete the work is almost as large as in the case of fee-restricted courses given by the general educational institutions which lack the special benefits of Federal grants for extension work.

Undoubtedly the fees charged prevent many who desire and need correspondence work from enrolling. The correspondence study enrollment of New York State Agricultural College is 25,000; in the Massachusetts Department of Education, entirely supported by State funds, which are not sufficient to meet the demand and make a waiting list constantly necessary, the enrollment is less than 7,000. Federal encouragement of the general work similar to that given agricultural extension would undoubtedly enable the general extension divisions to give to other classes a service which would bring as great transformation to their lives as agricultural extension has brought to the farmer.

When the salaries of teachers, for instance, are so small that with the most careful planning only $5 a year is left for books, study, and recreation, even the low fees for correspondence courses will bar them from taking advantage of the opportunities the method offers for improving their professional training. Many others engaged in the grind of earning their livings are debarred by correspondence study fees from the additional training which would lift them from the dead level and enable them to increase their earnings and the happiness of their lives and families. Mr. Scroggs, director of the extension department in the University of Oklahoma, in another connection, has well described the situation.

From the multiplied thousands who can not attend school correspondence study is constantly selecting those with the greater natural ability, ambition, and energy—the ones whom society most needs for its life and progress. It is prospecting for genius. It is vain to deplore the tragedy of those who can not surmount the obstacles of their environment and at the same time do nothing...
to prevent it. A few Washingtons, Lincolns, and Edisons have had sufficient opportunity to force their genius into world notice, but the world has lost the services of thousands of equally gifted ones for whom the struggle was too hard. The chief significance of correspondence study is the widening of opportunity.

When fees are charged for correspondence study a large proportion of those who might serve the world with better productive force, with greater intelligence, with more complete understanding, are condemned to go through life only half men. The universities and colleges giving correspondence courses have attempted to make payment as easy as possible for those to whom the amounts asked mean a real sacrifice. The installment payment plan has been adopted quite generally, and reductions of from 10 to 25 per cent are made when two or more courses are taken simultaneously. But fees have in most cases already been made as low as possible, and the possibilities of further privilege are very limited.

Correction of papers, postage, reproducing the lessons, clerical work increase with each additional student. Since the fees paid fail to cover all these expenses, with an increasing number of students the burden upon the funds of the institution becomes greater.

The amount of the fee for correspondence courses is determined by the other available resources of the institution and by the cost of this form of instruction. A common method is to reckon the fee for a course upon the basis of so much per lesson or per credit granted. This varies from $1 to $8 a credit, and from 30 cents to 70 cents per lesson in State-supported institutions. Some charge a flat rate and permit the student to carry as much work as he can do. In addition to the course fee, an enrollment fee, varying in amount from $1 to $5, is charged. This fee is not ordinarily applied toward the matriculation fee, when one is required, if the student later becomes a resident student, nor is a student already matriculated excused from the payment of this enrollment fee if he does part of his work by correspondence. Students are also required to pay a small fee for extension of time when they fail to complete their work within the time limits set by the correspondence study regulations. Further, students must pay postage at least one way, and in several institutions full postage both ways on manuscripts sent in. Examination fees are sometimes asked also. The fees are made as low as possible under present conditions for residents of the State, but nonresidents are charged in most cases an amount 50 per cent greater than the fee for residents.

For information concerning the use of fees, etc., see Bulletin, 1910, No. 56, of the U. S. Bureau of Education: "The Administration of Correspondence Study Departments of Universities and Colleges," by A. J. Elda.
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PERIOD FOR COMPLETION OF COURSES.

Since one of the essentials to successful correspondence study is the prompt return by the student of the written lessons, many institutions have set time limits for the completion of a course, and have provided that registrations shall lapse when for a long period no papers are received from a student. The period commonly allowed for completion of a course, depending upon the number of lessons in the course, is from 6 to 12 months from the time of registration. Provision for extension of this time, similar to the following rules laid down by Indiana University, is made by several institutions:

If a student has not completed a course by the expiration of the year allowed him for the work, he may secure a six months' extension of time by obtaining the consent of the secretary of the bureau of correspondence study and the instructor concerned and by paying a renewal fee of $2. At the expiration of the six months, if the course is not completed, the student will be dropped.

If a student is unable to complete a course within the prescribed time because of attendance at some institution of learning, an extension of time will be granted for a period equal to the length of time which the student spends in resident study, providing due notice is given to the secretary of the bureau of correspondence study at both the beginning and the end of such resident study.

The University of Wyoming provides that a student who fails to answer letters for an interval of six weeks may be considered to have withdrawn from the course and another fee may be required for resuming the work. The Universities of Montana, Oklahoma, Chicago, and Texas provide that failure to send in a lesson for 90 days forfeits the student's right to further instruction.

AMOUNT OF WORK PERMITTED AT ONE TIME.

Further regulations, designed to assist the student by preventing him from assuming too much work, limit the number of correspondence courses he is permitted to take at one time. The number allowed varies somewhat, but three courses is the most that any institution permits a student to take simultaneously; two is the more common limit and a few institutions permit a student to carry but one course at a time. These restrictions promote concentration of effort and make for promptness in the return lessons.

LOAN OF BOOKS AND MATERIAL.

While students are in most cases required to purchase their own textbooks, drawing outfits, and other material, several institutions afford special facilities to correspondence students in the purchase or borrowing of the books required and in a few instances lend the textbooks for the period of the course. Many have special arrangements whereby reference books and other material may be bor-
The extension department of the University of California and the State library cooperate closely in meeting the book needs of correspondence students. The extension department of the University of Kansas has made arrangement with the State traveling libraries commission to furnish reference books in loan libraries of 5 to 12 volumes. Package libraries are sometimes available in the extension division, which gives excellent service on special phases of courses and are loaned to students free of charge.

CORRESPONDENCE STUDENTS IN RESIDENCE WORK.

It is the common testimony of institutions that students in residence who have taken work by correspondence ordinarily rank in the upper fourth of their classes. In other words, the average of preparation, of earnestness, and of intellectual capacity of correspondence students, when compared with the average college student in residence, is far higher. This undoubtedly is in part due to the greater age of correspondence students who take up residence work, but the testimony of the students themselves also shows that the discipline of correspondence work makes the work in residence comparatively easy. The training given by correspondence study is so severe that the student who secures his credits by that method is superior to the college student who has had only the regular class preparatory instruction. But it would be too much to claim that correspondence instruction enables a student of mediocre capacity to take rank in residence with those of greater intellectual ability, although this is undoubtedly true in many cases. The significance of the high character of the residence work of correspondence students lies in the fact that correspondence study has served as a selective agency, enabling those of good capacity to prepare themselves for college work or to carry on some part of college work which they could not have done if it had not been for the opportunity afforded by correspondence study. To choose from the great mass those who are capable of high-class work is perhaps a greater service than the service of enabling those of only fair ability to compete with those of great ability.

Not only do correspondence students who take up residence work hold a high rank in scholarship, but the number of correspondence students who become residence students is forming an increasingly large proportion of residence students who graduate from the higher educational institutions. In the University of Indiana, in the grad-

sting class of 1919, 38 of the candidates for a degree had taken part of their work by correspondence study. In the University of Kansas, in the fall of 1917, 36 out of a total of 580 correspondence students enrolled in the university. Under the war conditions of 1918 only 10 enrolled in the university, but even under these adverse conditions for the second year, 7.9 per cent of the enrolled correspondence students became residence students. Mr. Mallory, secretary of the correspondence study department of the University of Chicago, has said that—

For 10 years or more, one out of every five who have entered into student relations with the university have done so through the correspondence study department. Of the total number who have begun with correspondence study courses from 15 to 20 per cent have come into residence. Out of the 230 students who received bachelor degrees, 47 had taken one or more majors by correspondence. All of the 47 averaged higher in their course than did their classmates.

To quote from Mr. Mallory’s conclusion:

The significance of these facts will be appreciated sooner or later throughout the academic world. That it is coming to be recognized is revealed by the growing practice of colleges and universities which do not teach by correspondence of advising their students who can not go on in residence to utilize correspondence study courses in advancing toward their degree.

BASIS FOR CREDIT.

The usual basis for college credit in correspondence study work is the similar course given in residence. A course of one recitation hour per week for one semester is usually the basis upon which residence credits are reckoned. Such a course gives one credit. Correspondence work intended to represent this amount of residence work is usually so planned that from 15 to 20 lesson hours will give this credit. These lessons are grouped into assignments. In the University of Oklahoma 10 or occasionally 8 assignments are equal to one credit hour. The Michigan State Normal College includes in each assignment the work of one recitation hour in residence. In general, these examples represent the practice of the institutions which give correspondence work, although the number of lessons and assignments varies slightly.

In residence work it is ordinarily reckoned that for each hour of recitation two hours of preparation are required. The University of Kansas has sent with its correspondence lessons a questionnaire asking the students to indicate the time it takes them to prepare the work. Reports from students based on 1,196 assignments show that a total of 8,163.17 hours were spent in preparation, including the writing out of the lesson. This gives an average per lesson assignment of 6.89 hours. Upon the basis of a 40-assignment course giving five semester hours of college credit, the time required by corre-
spondence is, therefore, 276 hours. In residence the same amount of credit gained by five recitations per week for 18 weeks, with two hours of preparation for each hour of recitation, would require 270 hours. Although the number of hours required to do the same amount of work by correspondence is greater than in residence according to these figures, it should be noted that the records of time upon the basis of which the estimate for correspondence work is made is the actual record, whereas the number of hours for residence work is an estimated number, and few students in residence spend two hours in preparation for each recitation. Actual figures, therefore, for the time required to complete a five-credit course in residence would probably show that the difference between the time spent in residence instruction and correspondence instruction is greater than these figures would indicate.

THE AMOUNT OF COLLEGE CREDIT ALLOWED.

The writer has discussed in a bulletin written for the United States Bureau of Education the matter of credits in correspondence study work. The description there given may be summarized here very briefly. No institution with which the writer is familiar permits all of the work for a degree to be done by correspondence. Ordinarily only one-half, sometimes only one-third, of the total number of college credits required for degrees may be gained through correspondence study. A further restriction usually makes it necessary for the student to attend the last year of the course in residence.

TEACHER CREDITS.

Of special importance in the present need for trained teacher is the opportunity offered by correspondence study to teachers to enroll in order to obtain credit toward certificates and diplomas. Special professional courses given by correspondence are usually counted by the State departments of education toward the training necessary to obtain high-school teachers' certificates or to secure renewals of certificates. In some cases the certifications of the institution upon the successful completion of the courses offered will be accepted by the State board in lieu of examination. The University of Oregon makes a special provision that teachers holding life certificates may satisfy the one year's residence requirement for graduation from the university by attending three sessions of the summer school and permits them to do the remainder of their work by correspondence. Other institutions whose correspondence work provides special advantages for teachers are the Universities of Wyoming, North Carolina, Texas, Nebraska, Idaho, California, Utah, Kansas, the Colorado State Normal School, and the normal school at Albion, Idaho.
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POSTGRADUATE CREDIT.

The correspondence study method is especially adapted to research work and study of the type required in graduate instruction. Despite this fact, however, comparatively few institutions have so far permitted candidates for graduate degrees to do any part of their work by correspondence. The University of Washington, for instance, offers some correspondence work of graduate grade, but this cannot be used to obtain the master's degree, because the university requires one year, and only one year, of residence study for that degree. Any graduate work done by correspondence is, therefore, outside of and in addition to the required work. The University of Colorado, however, provides that a candidate for the second degree who has done satisfactory graduate work during one summer session may use correspondence study to satisfy part of the requirements. The University of Oklahoma permits one-fourth of the work for a master's degree to be taken by correspondence provided permission in advance for each course is obtained from the dean of the graduate school. The University of Oregon provides that candidates may satisfy the residence requirements by completing 12 hours in summer sessions and 6 hours in special research work under the immediate direction of the major professor. With the consent of the major professor arrangements may be made to do part of this work by correspondence. George Peabody College also permits part of the work for the degree to be done by this method although the minimum residence requirement can not be reduced in this way. The University of Utah permits correspondence credit to be applied for the master's degree up to a maximum of 15 hours. The residence requirements of the University of Chicago do not permit work for the master's degree to be done by correspondence, but candidates for the doctor's degree may substitute correspondence study for residence work upon approval in advance of the head of the department in which the work lies. The character of the institutions mentioned would indicate that the practice of permitting graduate students to secure credit by correspondence will undergo a great development during the next few years.

TRANSFER OF CREDITS.

The transfer of correspondence study credits from one institution to another has in some cases been the cause of considerable difficulty and friction between institutions. As between institutions of the high standing of most of those which give correspondence work there would seem to be little cause for any difficulty in this regard. It is hard to see why the work by correspondence which the University of Chicago accepts should be denied recognition when a
student transfers his registration to another institution. The Universities of Wisconsin and North Dakota permit an amount of credit, not exceeding one-fourth of the number of hours required for graduation, to be taken by students of other correspondence schools or departments which are recognized by these universities as of a grade equal to their own correspondence work. The University of Wyoming provides that correspondence study courses may be accepted for credit provided they are such as are received for credit by other approved institutions. The University of Utah is one of the most liberal in its provisions for accepting transfer credits. Upon the recommendation of the university departments concerned correspondence credit from other institutions may be accepted provided they have been earned in institutions where the requirements are substantially equivalent to those in the correspondence study department of the University of Utah.

SCHOLARSHIPS.

There are very few correspondence study scholarships offered by institutions. Scholarships of this kind when offered usually take the form of free tuition to residence work and are given for high grades in correspondence study conducted by the institution to which free tuition is offered. It is highly desirable that scholarships for correspondence courses themselves be created. They would provide a means of education to those who lack the financial resources to enroll in correspondence courses or the leisure to become residence students. The most noteworthy scholarships provided are those in the University of Chicago and in the University of Texas. In the University of Chicago—

Three scholarships, each yielding tuition in residence for one quarter (provided the regular charge for the same does not exceed $40), are awarded annually on April 1 to the three students who have begun, completed, and passed the greatest number of major correspondence courses (but at least four) that represent new advanced work, with a grade of (B) or better for each course, during the preceding 12 months. If two or more persons finish the same number of majors, the scholarships will be awarded to those whose average grade for the courses in question is highest; and in case of a tie here, in the order in which they finish, beginning with the earliest.

Class B. A scholarship yielding tuition in residence for one quarter (provided the regular charge for the same does not exceed $40) is awarded to a student for every four major correspondence courses that represent new advanced work which he has begun since April 1, 1904, completed, and passed with a grade of (B) or better for each course.

In 1913 the board of regents of the University of Texas—

authorized the granting of resident scholarships to correspondence students who complete as many as five full courses (fifteen-thirds or correspondence courses)
with an average grade of (B). These scholarships are similar to the affiliated school scholarships and entitle the holder to exemption from matriculation fees in the college of arts, the department of education, and the department of engineering so long as their conduct and standing are satisfactory to the faculty.

CONCLUSION.

Inexpensive methods of quickly reproducing written material in considerable quantity have, in combination with cheap and rapid mail service, enabled correspondence teaching to be carried on extensively and effectively. But more important than these external devices are the pioneer study and practice of the method by the proprietary correspondence schools and the universities and colleges supported by public funds. Their work has developed the technique of the method and shown the extent and effectiveness of the service that can be rendered. The experimental state in the development of the general method has now been passed and the results obtained are now available to serve as a basis for the application of the method upon a more extensive and serviceable scale.

Contemporaneously with the creation of standard methods for preparing and conducting correspondence courses, our industrial, commercial, economic, and social life has been analyzed scientifically into a great number of related but distinct phases and each of these phases subjected to careful and constructive study. This work has been carried on for the purpose of acquiring more complete understanding of the elements and meaning of material and social processes in their relation to specific economic and community problems.

The increased knowledge of industrial processes thus gained has been used almost exclusively by large corporations and business enterprises for the purpose of training their workers and administrators to accomplish more profitable results. Corporation schools and private associations are themselves instructing their employees and members. The public schools do not provide the training required, although the development of continuation schools has in part met the need for a closer relationship between theoretical understanding and practical application of industrial and social knowledge.

Privately organized associations have been formed for the study of social and political organization and expedients, largely because the existing educational agencies have no way of informing the common man about these things unless exceptional conditions enable him to pursue a long course of study as a resident in an institution of learning. These organizations for the promotion of their cause issue pamphlets, engage in extensive publicity, and even offer simple correspondence courses.
In both these phases of newly organized knowledge, the material and the social, are innumerable fields which may be explored by the common man in a comparatively short time. Few of them require for his practical purposes long periods of study; few would justify the expenditure of the time and money needed for resident study. Brief and simple correspondence courses which may be studied at home while in daily contact with work and society may be written and taught on every phase of this rapidly extending knowledge of our economic processes and of our common life. Here lies the great future opportunity of the correspondence study method.