

Bulletin 1950 No. 13



Toward
Better
College
Teaching

FEDERAL SECURITY AGENCY • Office of Education



Toward

Better

College

Teaching

Prepared by

FRED J. KELLEY

*Specialist for Land-Grant
Colleges and Universities*

FEDERAL SECURITY AGENCY • Oscar R. Ewing, *Administrator*
Office of Education • Earl James McGrath, *Commissioner*

Contents

Foreword	IV
Chapter I. <i>The Case For Improving the Preparation of College Teachers</i>	1
Chapter II. <i>The Controversy Between Graduate Schools and Undergraduate Colleges</i> ..	14
Chapter III. <i>The Checklist Study of Graduate Schools</i>	24
Chapter IV. <i>Examples of Graduate School Practices</i>	34
Chapter V. <i>The Checklist Study of Undergraduate Colleges</i>	44
Appendix A. <i>The University of Chicago Inquiry</i>	68
Appendix B. <i>The Graduate School Checklist with Tabulation of Replies</i>	69
Appendix C. <i>References</i>	71

Foreword

THERE is a widespread demand in this country today for greater effectiveness in college teaching. Three facts help to account for this. The maturity and settled purposes of the veteran students is one. The rapid increase in the proportion of young people attending college is another. Finally, the cold war is highlighting the need for a change in both materials and methods of college education to prepare better for the social, economic, and civic problems of tomorrow.

To help meet this demand for better college teaching, this publication is issued. It is based primarily upon returns from checklists dealing with certain devices which have as their purpose the improvement of college teaching. One checklist concerns practices in the graduate schools which prepare college teachers; the other, practices in the undergraduate colleges to strengthen the work of already employed college teachers.

The checklist returns here reported are preliminary to later studies of how satisfactory the colleges and universities are finding the several devices to improve college teaching. The data are helpful also in planning and holding both Nation-wide and local conferences dealing with the various aspects of college teaching. The present report is but one of many efforts emanating from various sources to swell the wave of interest in better college teaching.

JOHN DALE RUSSELL, *Director,*
Division of Higher Education.

The Case for Improving the Preparation of College Teachers

SURELY it is not necessary to elaborate upon the importance of *quality* in college teaching. What college young people make of their lives depends in no small degree upon it. Indeed what the lower school children make of their lives depends to a degree upon it, too, because their teachers are the products of the colleges. It is not too much to claim that, in the long run, the speed with which a society progresses and the effectiveness with which a country solves its social, economic, and political problems are influenced greatly by the quality of its college teaching.

In the light of the far-reaching importance of good college teaching, it would seem that the universities would work out thoroughgoing provisions for the preparation of college teachers. The universities would be expected to make such preparation one of their central interests. The following quotation from the Report of the President's Commission on Higher Education seems, therefore, more than a little surprising. It is almost shocking.

"College teaching is the only major learned profession for which there does not exist a well-defined program of preparation directed toward developing the skills which it is essential for the practitioner to possess."

The universities, through their graduate schools, counter such a charge with the contention that the programs they maintain leading to a Ph. D. degree are in the main satisfactory as preparation for college teaching. Here and there a modification of those programs has been made in the interest of prospective college teachers, but by and large, basic changes are not believed by the graduate schools to be necessary.

There, then, the issue is drawn. The President's Commission reflects a widespread dissatisfaction among employers of Ph. D. graduates as college teachers. The graduate schools, with a few exceptions, contend that they are now maintaining a satisfactory program to prepare prospective college teachers for their jobs.

There is an extensive body of opinion recorded on both sides of this issue. Nation-wide surveys of that opinion have been conducted. Here and there real studies have been made also of certain aspects of the graduate program

to test its effectiveness as preparation for college teaching. On the whole, however, no extensive research has been undertaken of such a nature as to carry conviction with respect to the basic issues involved. How best to prepare college teachers for their all important tasks is still largely in the realm of opinion.

The University of Chicago Study

To shed fresh light of opinion on this subject the University of Chicago's Committee on the Preparation of Teachers on January 21, 1948, addressed a letter by name to the president of each of 850 universities, colleges, teachers colleges, and a few technical schools located throughout the United States. The same letter was also sent to about 150 deans of liberal arts colleges and graduate schools in the larger universities. This letter is reproduced as Appendix A of this report. It made clear that the committee was engaged in a serious study of the best means of preparing prospective college teachers for American colleges. It indicated that a conference was to be held a little later at which the proposals of the committee growing out of its study would be presented for consideration. The replies to the inquiry were both numerous and painstaking.

A proposal of the committee of the University of Chicago was developed following receipt of the replies. This proposal was mimeographed and sent with an invitation to attend a conference to all the respondents who had indicated a likelihood that they could attend. The proposal was discussed for a day by the conferees representing 62 institutions of higher education. Following the conference, a revised proposal was prepared by the Chicago committee and was later adopted by the University of Chicago as the plan it will follow in gradually modifying its program for the preparation of college teachers.

It is not appropriate to quote at length from this Chicago plan. The report of the plan is available on request to the Chicago committee. The plan is significant not only because of its university-wide approach to the problem, but also because of the years of study that went into its development. It recognizes the need for a broader program of graduate study for a prospective college teacher than the program which has been developed generally for the training of a research specialist. The plan contemplates the inclusion in the program of some professional education courses and a post-doctoral year of carefully supervised apprentice teaching.

Whether these changes in the graduate school are the best ones or not, the study has great importance in that the University of Chicago acknowledges ungrudgingly its obligation to the profession of college teaching, and is committed to the constant study and improvement of its program to prepare for that profession.

The careful examination of the more than 400 replies from 363 institutions to the letter provided the Chicago committee with as much information as it needed. Therefore, no tabulation of the replies was undertaken by the committee. The replies were made available, however, to the present writer for detailed tabulation and study. While it is always difficult to define categories into which answers to general questions can be grouped, it is important to find out whether the answers reveal any preponderant commendations or criticisms and whether any new suggestions are made for solving the problems revealed. Hence a tabulation was undertaken.

Before any categories were listed and defined, all the letters of the respondents were arranged alphabetically by States. The letters from 19 States, Alabama through Massachusetts, were read. Attempt was then made to define categories into which the essence of the replies could be classified. Replies originating in the next 14 States, Michigan through Oklahoma, were then examined and a check placed in whatever categories best represented the central meaning of each reply. Respondents from these 14 States represent 31 universities, 49 colleges, 10 teachers colleges, 10 junior colleges, and 6 technical schools, a total of 106 institutions. In about a third of the institutions the president requested some officer — the dean of the graduate school, the dean of the college of arts and sciences, or less often the dean of the school of education — to make the reply for him. In about 10 percent of the institutions, multiple replies were submitted by two or more officers. In a few cases a single reply for an institution was submitted as a result of a conference of several officers.

As the examination and checking of the replies proceeded, it became clear that the trends of the replies as checked by categories were well-established by the time a hundred or so replies had been analyzed. Hence no more replies were checked for use in the tabulations. All the other replies were carefully read, however, and it is believed that the following analysis is essentially correct as representing all the replies.

In trying to interpret the results of this tabulation of replies by categories, the reader must remember that not all respondents replied to all three questions. Nor did each one replying to a given question go into the same detail as others did. Some made a single comment, others wrote paragraphs. The fact that a respondent said nothing about any point defined in a given category does not mean that he thinks it unimportant. Nor does it mean that he disagrees with it. Comments usually are limited in responses by letter to those things concerning the importance of which the respondent has a keen if not a troubled sense. The pressure of time on the respondent is frequently the explanation of the limited reply. At any rate, it is never safe to derive from letters a number which is presumed to be the percentage of respondents who hold a given point of view.

The three requests in the Chicago committee's letter are:

- (a) Your estimate of the strengths and weaknesses of college teachers as now trained in American graduate schools.
- (b) Your description of the duties in addition to teaching which college teachers are called upon to perform for which graduate schools should offer preparation.
- (c) Your suggestions as to the lines along which a program for the improvement of the training of prospective college teachers might proceed.

To begin with, the answers to (b) listed many duties such as committee work, public service, and helping with the extracurricular program, but frequently indicated that the graduate school had no obligation to prepare for them. The two duties most often mentioned under (b) were research and student counseling. These two are intimately related to teaching. Therefore, it was concluded to make no tabulations of the replies to request (b).

One other problem of tabulation will be apparent to one reading requests (a) and (c) together. The first request asks for an estimate of weaknesses (as well as strengths) of teachers as now trained, and the second asks for suggestions for improving the training. The overlapping is obvious. So is it in the replies. A good many respondents say under (c) "adopt a program to remove the weaknesses listed under (a)" or words to that effect. Nevertheless, categories were set up separately for answers to the two questions, the definitions of the categories being based upon the replies analyzed.

Analysis of Strengths and Weaknesses of College Teachers as Now Trained in American Graduate Schools

Strength

(Right here it might be noted that some few respondents had no fault to find with the present program of training college teachers.)

The strengths mentioned in the replies can be cataloged with both ease and confidence. There is little difference of opinion expressed. Furthermore, many respondents mention them. They are:

1. Well prepared in his specialty.
2. Competent as a research scholar.
3. Generally high native intelligence.
4. Generally sincerely devoted to his scholarly interests.

It will be recognized at once that these are important strengths. They bear directly upon success in college teaching. But they do not alone assure success in college teaching. While no one would want a college teacher who had not these strengths, an analysis of the weaknesses reported in the same replies indicates that these strengths may be largely ineffective if accompanied by certain weaknesses.

Weaknesses

The weaknesses fall into four large categories.

1. PERSONAL TRAITS.

"The difficulty lies more with the person than with his education."

"Poor personality," "colorless," "queer."

"Poor attitude toward teaching," "Doesn't like young people."

"The top-notchers are choosing other callings."

This category, while mentioned by only a fifth of the respondents, is regarded as very important. You can't make bricks without straw. Whatever is necessary to overcome or minimize the effect of this type of weakness should be done at any cost. Better status for college teachers — professional, financial — must be achieved. College teaching must have better pulling power as a career for "top-notchers."

2. TOO NARROWLY TRAINED.

The second category of weaknesses has to do with the extent of specialization required for the Ph. D. degree. Of the 106 replies which were tabulated, 52 mention this specifically. Of these 52, 25 are from universities, 20 from colleges of arts and sciences, 6 from teachers colleges, and 1 from a junior college. They are evenly divided between public and private institutions.

The greatest weakness in college teaching is due to the fact that prospective teachers are too narrowly trained.

About 2 years ago I sent letters to all doctors of philosophy from (writer's institution) and received replies from about 70 percent. Almost without exception they hold the view that we are doing a good job of training these prospective teachers as specialists in a narrow field and are doing a poor job of training them in related fields.

Too much specialization.

Lack ability to see the relationship of their subject to other subjects. Can't synthesize. Can't interpret the meaning of their subject in terms of the wider area.

Comments such as these appear over and over in the replies. College teachers are called upon, especially in the freshman and sophomore courses, to teach the more elementary aspects of their own subjects as well as to teach more than one subject within a given area, such as the social sciences. A teacher who has specialized in medieval European history in his graduate study, for example, not only feels unprepared to teach a course in American history, to say nothing about Japanese history, but hesitates to offer a course in modern English history. A teacher who has specialized in zoology feels unprepared to teach a course in biology or entomology, to say nothing of courses in botany or bacteriology. The criticism most often made is that the teacher seems to be unable to relate the material in his own specialty to cognate fields. Not only does he not know the materials in cognate fields, but he is not interested in them. His teaching is pitched to the level of specialists

rather than to the level of students who are but building the foundations of understanding in the broader field.

3. INTEREST IS CENTERED IN RESEARCH, NOT TEACHING.

The third category of weaknesses is the emphasis on research rather than on teaching. This is mentioned by about a fourth of the respondents. While scholarly ability is universally recognized as an essential qualification of a college teacher, the criticism is made that the present emphasis on research in the Ph. D. program tends to emphasize the importance of subject-matter development and to minimize the importance of student development. Hence the teacher's thought tends to center on his subject rather than on his students. He does not adapt his teaching sufficiently to the interests and abilities of his class.

They are all trained for research work, and not for teaching.

The present training in graduate schools . . . too often builds a disrespect for the classroom teaching job.

More interested in research than in teaching.

Very effective in interesting people in research and in preparing them for research as a career. Little attention, however, is paid to the fact that the majority of those who receive the doctor's degree . . . eventually become teachers.

This is the refrain that runs through the pertinent replies. The indifferent attitude toward teaching, which appears to follow from the present research emphasis, makes doubly difficult the training job left for the employing college to do. Too often the young teachers have become steeped in the idea that their satisfactions as well as their rewards will come from research rather than from teaching. They look upon their period of undergraduate teaching as a necessary and not too pleasant experience through which they must go on their way to a professorship which they hope will be devoted largely to research.

It must be remembered always that weaknesses such as those listed under this category are not true of all Ph. D. graduates. Differences among graduate schools, among departments of a given graduate school, and among graduates of a given department in a school are both wide and widespread. But even more important is the fact that interest in teaching is natural to some people and no amount of emphasis upon research in the graduate school will destroy it.

4. LACKS SPECIFIC TRAINING FOR TEACHING.

The fourth category of weaknesses covers all the poor teaching techniques. The replies take on a wide variety of forms, but the four most common are these:

He has little knowledge of the learning process, the place of motivation, or the importance of self-direction. He thinks telling is teaching.

He lacks effective techniques of presentation.

He talks over the heads of his students.

He lacks understanding of the place of higher education as an agency of democratic society.

Where all the phases are taken together, this general criticism of lack of teaching ability is mentioned more often than any other weakness. Out of 106 replies, 24 mention specifically "poor technique of presentation", 17 mention "little knowledge of the learning process and the place of motivation", 13 mention the teacher's "lack of understanding of the intellectual status of undergraduate students."

While many respondents speak of the improvements which take place during the first few years of teaching, they deplore the fact that the basis of understanding the problems of teaching is not given to the teacher during his training period.

In briefest summary, as gleaned from more than 400 letters from college and university officers, the strengths and weaknesses of college teachers as now trained in American graduate schools appear about like this:

In general, college teachers have good intelligence and are well-trained scholars, each in his narrow specialty.

But too frequently these same college teachers have not the personal qualities required of teachers, are not broadly enough educated, have become unduly enamored of research at the expense of appreciation of the importance of teaching, and have inadequate understanding of what is involved in effective teaching.

Suggestions for Improvement

Let us now examine the replies to the request for: "Your suggestion as to the lines along which a program for the improvement of the training of prospective college teachers might proceed."

The suggestions for improvement were many but were often made with apologies and frank acknowledgment by the respondent of the difficulties involved, and with appreciation of the point of view prevailing in many departments in many graduate schools. While an appreciable number of respondents have lost patience with graduate schools (a few even indicating their belief that a new school should be set up for training college teachers outside the present graduate school), the great majority appear to understand the problem faced by the graduate school and wish to work in friendly cooperation with it to improve the training of college teachers. The almost unanimous acclaim the respondents gave to Chicago University's proposal to hold a conference to study the problem is substantial evidence of the good will on the part of the college officers toward the university's efforts to improve the training of college teachers.

It was in this spirit of cooperation and good will that most of the suggestions were made which will now be analyzed. They fall into five categories:

1. SELECT A CONTINGENT OF GRADUATE STUDENTS ON THE BASES OF THEIR TALENTS AND APTITUDES FOR COLLEGE TEACHING.

The first category of suggestions is "better selection." One out of every six respondents mentioned this. "Better" does not mean of higher intellectual caliber necessarily. High native intelligence is important. However, "brilliant but colorless" people do not make good undergraduate teachers. But the aptitude for teaching and its distinction from the aptitude for research; interest in people and in social issues as distinguished from interest in things — these illustrate what is meant by better selection. Naturally there is no thought of minimizing the importance of training for other callings people of other high abilities and aptitudes in the graduate schools. Research scholars and other professional personnel besides prospective college teachers have unquestioned claims on the graduate schools. The most ardent wish of the college officers is that the graduate school shall recognize its obligation to the prospective teachers in the same sincere way that it does its obligation to the other groups.

But such selection means first identifying these prospective college teachers. Indeed, if the program is taken seriously, it means that the graduate school must collaborate with the undergraduate colleges in identifying potential college teachers long before they graduate with the bachelor's degree. A modified undergraduate program in the interest of breadth would probably help much. But beyond identifying them, a different set of requirements within the framework of the over-all requirements of the graduate school will need to be worked out for them. Above all, the graduate school stamp of approval for college teaching will need to be restricted to those graduates who have been so identified and so trained. While this does not suggest State certification for college teaching, it does mean that responsibility must be assumed by some agency, presumably the graduate school, to indicate both to its students and to employing colleges which of its prospective college teachers are believed to be qualified to do good teaching. That means, as one respondent said, "that the university [must] commit itself to a specific program for this type of training, selecting for participants those individuals who are interested in preparing themselves specifically for college teaching."

2. PROVIDE BETTER FOR PERSONAL ADJUSTMENTS AND PERSONALITY DEVELOPMENT OF PROSPECTIVE COLLEGE TEACHERS.

This suggestion was made by one in ten of the respondents but not much was said about how to carry it out. It was recognized, however, that many young people have potentialities for teaching that will not flower unless the graduate school, through both academic and especially nonacademic activities, stimulates their growth and development. The graduate student fre-

quently becomes a sort of recluse during his 3 or 4 years in the graduate school. Instead he should live an active social life if he is preparing to teach. Many aspects of that elusive thing called personality can be strengthened by exercise growing out of carrying a wide range of social responsibilities. Two quotations sum up the matter:

College teachers as a group are "very timid and self-centered to such an extent that they somehow set themselves apart from other people. This they must be helped to overcome."

"More attention should be paid to graduate students as human beings."

3. ADOPT A GRADUATE CURRICULUM DICTATED BY THE NEEDS OF PROSPECTIVE COLLEGE TEACHERS.

The suggestion for a change in the graduate requirements for a Ph. D. was made very often. Out of 106 replies tabulated, 34 suggested "broadening," 21 suggested "more general education in either the undergraduate or graduate school or both," and 13 suggested "more flexibility in requirements in the interest of prospective teachers." These three suggestions are essentially alternative ways of accomplishing one objective, namely, fitting what the graduate student studies to his needs as a prospective college teacher. A few respondents acknowledge that this suggestion really means that the graduate school accept its obligation to prepare college teachers in the same spirit that the medical school accepts its obligation to prepare medical practitioners. It is widely held by the respondents that the present curriculum in the graduate school has developed to meet the needs of research scholars. These respondents now want a curriculum developed as effectively to meet the needs of college teachers. This, it is believed by respondents, may be accomplished sometimes by broadening the major field of study, sometimes by requiring work in two or more departments, sometimes by substituting a broad division for a department as a field of study, sometimes by greater flexibility in applying requirements to individual cases, sometimes by encouraging an individual to pick from many departments the courses suited to his particular needs. Infrequently is it suggested that a different degree from the Ph. D. should be used, but it is urged instead that a different curriculum for prospective teachers should be developed. Still less frequently but as earnestly is it contended that the training of college teachers should not be done in already existing graduate schools at all, but in a newly developed institution.

4. GIVE "TEACHING" ACADEMIC RESPECTABILITY COMPARABLE WITH RESEARCH ON THE UNIVERSITY CAMPUS.

This category is used to embrace a variety of suggestions, some of which are not too much alike. On the whole the group of suggestions add up to this: How can you expect to develop a love for, or a skill in teaching, in an institu-

tion that obviously cares nothing about teaching? It is as if medical doctors were educated in a medical school in which the faculty members were interested only in medical research. The comment appears here and there that the graduate faculty members do not stimulate the graduate students to interest themselves in teaching. Furthermore the faculty members belittle teaching and do ineffective teaching themselves.

But the most general criticism concerns the policies prevailing in the university departments. These departments commonly include work from the undergraduate freshman level to the Ph. D. level. Often those policies affecting all levels are dominated by professors whose primary allegiance is to the graduate-level program. Too commonly those policies give slight recognition to superior undergraduate teaching by departmental staff members, but give great recognition to scholarly work involving research. This is true even in the cases of instructors devoting practically all their time to teaching the elementary aspects of the subject. Little interest is shown in devising means to measure the effectiveness of teaching. In short, teaching as an art or a science has little academic respectability in too many universities which train college teachers.

There are two variations of the suggestions making up this category which deserve special mention. One is that there is no criticism of a graduate school which says plainly and publicly, as a few do, that they do not pretend to prepare for college teaching. They limit their efforts to training research workers and take no responsibility for placing their graduates in undergraduate college teaching positions. Colleges should not call upon such schools for teachers. The other suggestion is that research dealing with college teaching problems might be substituted for research in the subject-matter specialty. This would provide for demonstrating the student's capacity for independent research and at the same time encourage interest in, and preparing for, teaching as a career.

5. EDUCATE PROSPECTIVE COLLEGE TEACHERS IN THE SCIENCE AND ART OF TEACHING.

With remarkable unanimity, teaching is regarded by the respondents as an activity which people can learn something about. That that "something" can be organized into courses of instruction and then be taught to prospective teachers is agreed to widely but with less unanimity. There are some who think each teacher must learn it for himself by the trial and error method. Furthermore, among those who believe that prospective teachers can be taught something about how to teach, there is wide disagreement about the way to teach them.

First, there are those who think that the responsibility for training the college teacher to teach rests with the employing college, not with the graduate

school. This view is supported on two grounds: the graduate school hasn't time, and the employing college can do it better anyway.

Second, there are those who acknowledge that logically it ought to be done by the graduate school, with the help of the school or department of education. They express so much distrust (a manifestation of a long-standing feud) of the professional educationists, however, that the only practical alternative they see is no instruction at all in the art of teaching.

Third, there are those who believe that the essential elements in teacher training will best emerge from informal conferences among chosen ones of the senior members of the departmental faculty and the neophytes. These conferences may be planned around a prearranged series of pedagogical problems or they may be held in connection with the neophyte's graduate study where problems of methods of teaching will be raised more or less incidentally.

Fourth, all three groups of suggestions above mentioned account for but a minor fraction of the responses. The large majority of the respondents believe that definite instruction in the art of teaching ought to be given as a part of the graduate program of the prospective college teacher. While some vagueness characterizes many of the suggestions, they can be classified roughly into the following categories which are accompanied by typical quotations. (Suggestions from teachers colleges or schools of education are not quoted.)

(a) Instruction concerning the nature, purpose, and administrative organization of higher education.

Should have a good knowledge of the history and philosophy of education.

A general orientation course in higher education.

Study of the functions and program of a college.

A course in some of the major issues confronting college education in the United States.

(b) Psychology of college-age youth and preparation for counseling.

Some knowledge and understanding of the psychological make-up of the college student.

Every college teacher should be a student counselor. He should, therefore, know students and their possibilities.

The problems of human psychology and of conduct emergent in the years of late adolescence and early maturity so that a decent job of counseling may be done.

The basic psychological problems of students of college age.

(c) Educational psychology, problems of learning, teaching, defining objectives, and using educational measurements.

Require course in basic class and laboratory teaching techniques.

Increased emphasis on the general and psychological principles of learning.

A departmental approach to the problem, where at least one specially designed course in the art of teaching is required of the graduate students in that department.

Seminars in teaching methods tied in with internships.

The need here is for objective criteria to be used in judging the quality of college teaching.

And above all, he should be familiar with good teaching techniques.

A course in methods of teaching and tests and measurements.

While on-the-job training is good and necessary, there should be a background against which such on-the-job training can be thrown.

I have been greatly impressed by the accomplishments of the workshops in higher education.

(d) Apprentice teaching.

A thoroughgoing apprentice system while the young people are in the graduate school.

Give opportunity for supervised teaching to students who have little or no experience.

Require professional internship under competent professional supervision.

Having the graduate students work as carefully supervised graduate assistants.

Teaching fellowships with adequate supervision.

More meticulous attention by faculty members to the guidance of teaching assistants in their teaching duties.

In the 106 responses, there are a total of 125 suggestions falling into pedagogical classifications. That means that many respondents make more than one suggestion. Of course a good many respondents make none which can be checked under these categories. The total is, however, impressive and represents a considerable faith in the value of organized professional instruction, including carefully supervised apprentice teaching.

The institutions from which the 125 suggestions came are distributed as follows: (These must not be confused with the 106 replies. In many cases a single reply offered several suggestions): Universities, 52; colleges, 52; teachers colleges, 8; and junior colleges, 13.

Of the total, 56 suggestions came from publicly controlled and 69 from privately controlled institutions.

Some of the replies from universities are from deans of graduate schools, but more commonly they are from deans of liberal arts colleges or faculty members in charge of committees on instruction. In general, then, these 125 suggestions are made by users of the product of the graduate schools. They are asking the graduate schools to utilize courses dealing with college teaching and, either separately or in conjunction with these courses, to provide carefully supervised apprentice teaching. They are not suggesting that the graduate schools turn the job over to the departments or schools of education, although an appreciable number of them have no patience with the "unreasonable antagonism" between the academic departments and the departments of education. But whether they make use of members of the education department or work up instruction materials of their own, the suggestions, mounting to a sort of chorus, indicate that the graduate departments should see that such instruction is made a part of the preparation of college teachers.

Furthermore, in almost equally uncertain terms, apprentice teaching, with honest, competent supervision, is suggested as probably the most helpful single device available. Many caution against the use of graduate students merely as a cheap method of getting the load of undergraduate teaching done. Such teaching may be not only harmful to the students taught, but also, unless adequately supervised, it may be of little or no use to the teacher. The suggestion is frequently made, too, that the apprentice teaching should be parallel to or preceded by some basic instruction (seminar work perhaps) in the problems of teaching.

Summary

Here then is a recent, fairly wide sampling of opinion as to the effectiveness of the graduate programs as preparation for college teaching. It would seem to leave little doubt about the way college officers feel in the matter. The opinions follow in general the findings of earlier surveys, but appear, if anything, to be more pronounced than before in their demand for a basic change in the graduate school. That basic change should involve at least three things: Better selection of graduate students as prospective college teachers; a broader curriculum with less emphasis on highly specialized study and research; and specific preparation in the science and art of teaching. The suggestions can best be summed up this way: The graduate school should recognize college teaching as an important profession and take seriously the obligation to prepare practitioners for it.

Chapter II

The Controversy Between Graduate Schools and Undergraduate Colleges

WHAT DO the graduate schools themselves have to say in answer to these more or less pointed criticisms of their programs for the training of college teachers? Of course they don't say one thing; they say many things. But out of all the extensive literature on the subject, it seems adequate for purposes of this study to cite three recent surveys of graduate school opinion:

1. In the early 1940's, Dr. Ernest V. Hollis, in his capacity as field co-ordinator for the Commission on Teacher Education of the American Council on Education, carried out the investigations and field studies reported in his publication *Toward Improving Ph. D. Programs*. Among the data gathered were the replies to a questionnaire asking, among other items, for opinions on the effectiveness of the Ph. D. program as a preparation for college teaching. Of the 204 usable replies received, 85 came from deans of graduate schools.

The main conclusion reached by Dr. Hollis was that a wide divergence of view prevails among the deans with respect to every aspect of the program for the preparation of college teachers. This divergence holds whether the aspect in question is student teaching and professional courses, professional specialization for work at the junior college level, or the psychology of late adolescence. Some think training in these subjects is appropriate but not as a part of a Ph. D. program. Apparently no general consensus had been arrived at among graduate school deans with respect either to the basic idea of making the Ph. D. a teaching degree, or to the changes required if it were made a teaching degree. It is a fair inference from the quotations cited by Dr. Hollis that, with a few exceptions, the graduate schools contemplated little significant change in their Ph. D. requirements. Either they believed that the present Ph. D. program could not be materially altered in the direction called for by the undergraduate colleges without fundamentally weakening it, or they believed the job of training college teachers was the responsibility of the employing institution. They made no constructive suggestion for solving the problem by appropriate changes in the graduate school.

2. A Conference on the Selection and Placement of College Teachers was held under the auspices of the Cooperative Bureau for Teachers in New York, in June 1948. The conference set up a Continuing Committee under the chairmanship of President Rosemary Park of Connecticut College. The Continuing Committee arranged for a questionnaire study of the adaptations made by graduate schools in the interest of prospective college teachers. Of the 41 leading graduate schools addressed, 33 replied. The report of the study was made by Miss Leslie Blanchard and appeared in *The Newsletter of the Cooperative Bureau for Teachers*, December 1948.

No attempt is made in the report to tabulate the replies, but instead the author gives brief descriptions of what each of the graduate schools reports about its own program. Presumably each school which reports a significant practice is noted by the author inasmuch as the principal purpose of the document is to aid employing institutions in their quest for suitably prepared teachers. The replies are arranged under four headings:

- (a) Degree (Ph. D.) programs with provisions for candidates who are, or who intend to become, college teachers
- (b) Provisions for considerable work in more than one department
- (c) Informal and departmental provisions for the consideration of problems of college teaching
- (d) Contemplated changes in degree requirements to secure more consideration of college teaching

Here is a report citing, institution by institution, what adjustments and adaptations are being made in the interest of prospective college teachers. Taken together, these adjustments and adaptations reveal a considerable interest within a number of graduate schools.

In reading what the institutions report about their programs, two facts seem to stand out: In the first place, adjustments have taken place in only one or at most a few of the departments in a graduate school. These adjustments signify no commitment on the part of the graduate school as such to prepare personnel for the profession of college teaching. In the second place, most of the adjustments are permissive, not required. This means that they will be effective only when administered by professors sympathetic with them. For example, the permission for graduate students to take work in two or more departments, according to the reports, gets no "takers" in certain graduate schools. The reason may well lie in the fact that professors in each department concerned are primarily interested in the concentration of students' time in their particular departments. The division of the students' time between departments does not advance the cause of research and intensive specialization in which these professors are often more interested than they are in the preparation for college teaching. On the other hand, these permissive adjustments are without doubt proving to be very effective in many graduate schools as a means of furnishing to individual candidates the facilities to prepare for college teaching.

In her conclusion, Miss Blanchard quotes from the report of the Committee on the Preparation of Teachers at the University of Chicago to the effect that "few graduate schools have so far set out to define the vocation of college teaching and to prepare prospective teachers with the needed competences in view."

3. At the October 1948 meeting of the Association of American Universities the Committee on Graduate Work made a report containing the results obtained from a questionnaire study on the training of college teachers. Two questions were submitted to the dean of the graduate school in each of the 34 member universities:

- (a) What is now being done to train college teachers?
- (b) What changes in graduate procedures might be made which could be expected to improve the training of college teachers?

The Report of the Committee states:

In preparing the questionnaire, the assumption was made that the graduate schools now emphasize and provide adequate training directed toward attainment of knowledge in the major and minor fields, proficiency in techniques of investigation, and distinctive achievement in scholarly research through production of a thesis. Although such training is an essential core, the college teacher should have training and experience in teaching, in methods of presenting material, in examination procedures, and so forth. This kind of training usually has not been considered to be a part of the formal training of the Ph. D. candidate. Questions were included to determine to what extent this kind of training for the college teacher is given informally or formally and to obtain suggestions as to what might be done to improve these aspects of training the college teacher.

Probably the graduate schools' answer to the demands of the undergraduate colleges for better prepared teachers is found in the foregoing quotation rather than in the analysis of the 29 replies submitted to the Committee. There is the admission that the "college teacher should have training," and the further admission that "this kind of training usually has not been considered to be a part of the formal training of the Ph. D. candidate." The replies from the schools bear this out. The report of the Committee states in answer to the first question: "In 8 graduate schools, formal programs for training college teachers at the departmental level are organized in one or more departments, and in 3 graduate schools at the divisional level. In 23 cases, informal training without credit is offered by some departments."

This seems to be an equivocal answer. Of the 29 members of the Association of American Universities which replied, only 11 gave formal training, 8 in one or more departments and 3 in one or more divisions. All the rest of the training for college teaching in these institutions is done informally without credit. The committee takes no position with respect to the absence of any training, formal or informal, in most departments, or to the adequacy or inadequacy of this predominantly informal noncredit policy in those departments that do offer training. This fact would seem to justify the inference that there is no strong sentiment among the graduate deans for any

basic change in the graduate school to adapt it better to the needs of prospective college teachers.

The analysis in chapter I of the replies to the inquiry sent out by the committee at the University of Chicago indicates a widespread feeling that there should be a more effective graduate school training program for college teachers. The answer of the graduate schools, with some significant exceptions, is that the present Ph. D. program does about all that the graduate school ought to be expected to do.

Since this conflict of opinion is of long standing, and since there have been very capable advocates on both sides throughout the past 30 years, there must be some explanation of its apparent insolubility that does not appear on the surface. Must there be set up a new type of graduate school as suggested by Howard Mumford Jones in his *Education and World Tragedy*? Must the Ph. D. be abandoned as a teaching degree and some other degree adopted? Is it impossible to administer side by side two curriculums, one to train research scholars and the other to train teaching scholars? What is the fundamental cause of the conflict which appears to have reached an impasse between the graduate schools and the undergraduate colleges?

Among the students of the problem who have been trying to find an explanation of this impasse Dr. W. H. Cowley, Professor of Higher Education of Stanford University, is one who has analyzed the problem historically. He discovers a reason why the specialists imbued with the importance of research fail so often to understand why a program of exacting demands in the area of research and of knowledge in the fields related to the research does not meet the needs of a prospective college teacher. At the request of the writer, Dr. Cowley has authorized the use of the following condensed version of a yet unpublished paper which he had written on this subject:

TOWARD HARMONIZING THE CONFLICTING POINTS OF VIEW ABOUT THE PH. D. CURRICULUM FOR PREPARING COLLEGE TEACHERS

Today almost everyone uses the terms *the higher learning* and *the higher education* synonymously. Nonetheless a distinction stands out in the writings of educators — albeit with varying degrees of clarity.

With the definition of the higher education we shall have little difficulty: education is the communication of knowledge and attitudes, and hence higher education is the communication of the knowledge and attitudes which society considers appropriate to carry on at the higher level. With the definition of the higher learning, however, we run into complications for the reason that the term encompasses two enterprises which have different historic sources and different objectives but which today have become enmeshed, namely, the enterprise called scholarship and the enterprise called research.

Before we can define the higher learning, therefore, we must on the one hand define scholarship and on the other research.

Tracing the use of the two concepts through a long history, we arrive at two definitions as follows:

Research is the effort to discover new facts or to recover lost or forgotten facts: it is the empirical element in the quest for understanding the nature of the universe and of man.

Scholarship is the organization, criticism, and interpretation of facts and thoughts about facts: it is the rationalistic element in the pursuit of understanding.

These two activities, I would reemphasize, supplement one another, depend upon one another, *require* one another. To prosper they must fertilize each other; and if one suffers, so also does the other. I would also reemphasize what seems to me to be a fact of the expanding complexity of knowledge; that few men can be both research scientists and interpretive scholars and that therefore we have been forced to specialize the two functions. Yet empirical research workers and rationalistic scholars must work together cooperatively fructifying their different but inter-dependent duties.

The definitions just given make it possible to move on to the appraisal of the relation of the higher education to each of the two segments of the higher learning, the empirical or research segment and the rationalistic or scholarly segment.

As the discussion proceeds, I think it will become apparent that the improvement of the higher education — that is, of communicating knowledge and attitudes, or teaching — depends primarily upon the answers given to two questions: (a) How should scholarship be related to teaching? and (b) How should research be related to teaching?

Educators do not often discuss the relationship of scholarship to teaching but chiefly concentrate upon the problem of the relationship of research to teaching. We need, therefore, to trace the answers given to the question of the relationship of research to teaching.

The important point to stress here is that these answers have differed from period to period over the past three-quarters of a century, that the response has not been constant but has changed with shifting conditions. Three such periods and three answers to the question may be identified, and I describe each of them.

In the first period, Newman, Tappan, *et al.*, responded that the universities and colleges should not undertake research but should leave such investigations to the academics, that is, the societies of research scientists. In the second period educators rejected this answer, and Daniel Coit Gilman of Johns Hopkins became the chief spokesman of the revised point of view. He declared that the universities and the academics should both do research but that the universities should primarily stress teaching and the academics primarily stress research. In 1880 (four years after the opening of Johns Hopkins) he spoke on this question before one of the leading academics and said in part:

I take it that the prime purpose of the university is education, its secondary object is research; while the converse is true of the academy, which should always make its major task investigation, and its minor instruction.

In this and other statements Gilman not only expressed his own judgment but also that of his leading contemporaries, Charles W. Eliot of Harvard and Andrew Dickson White of Cornell. These great university leaders admitted the research function to the universities, but they insisted that it be kept subordinate to teaching. White held, for example, "imparting truth" to be "more important than discovering it"; and Eliot declared that "the prime business of American professors in this generation must be regular and assiduous class teaching."

But the next generation of university leaders shifted to a third position and reversed the Gilman-White-Eliot order of emphasis: they put research in first place and allowed teaching to be subordinated to it. Thus President William Rainey Harper of Chicago wrote in 1895:

It is not enough that instructors in a university should merely do the class and lecture work assigned them. This is important, but the university will in no sense deserve the name, if time and labor are not also expended in the work of producing that which will directly or indirectly influence thought and life outside the university. . . . The

first obligation resting upon the individual members who comprise it is that of research and investigation.

Observe the words "first obligation." Newman and Tappan had said that research belonged in the academies and not in universities; Gilman, Eliot, and White admitted the research function to the universities in secondary position, but now Harper made research "the first obligation" of faculty members. So also did most of his administrative and professional contemporaries who approved without reservation such statements as that of Harper and that of David Starr Jordan of Stanford: "The crowning function of a university is original research."

Hence in the course of about forty years a complete about-face had been made, and now the Harper-Jordan generation hailed research as "the crowning function of a university" and "the first obligation" of faculty members. To defend this about-face, the Harper-Jordan group asserted, in the words of Jordan, that "investigation is the basis of all good instruction. No second-hand man was ever a great teacher, and I very much doubt if any really great investigator was ever a poor teacher." Failing to distinguish between research and scholarship and also overlooking the differences between the teaching of professionally-motivated students and students seeking general, non-specialized instruction, hundreds of professors and scores of university administrators took up the Jordan refrain and repeated in season and out that no one could be a good teacher unless he also did research. The affirmation, in fact, became a slogan, and it soon dominated the universities and colleges alike.

It not only dominated academic opinion but also much of academic practice, especially in the universities. Harper not only made research "the first obligation" of professors, but he also wrote that the promotion of University of Chicago faculty members "will depend more largely upon the results of their work as investigators than upon the efficiency of their teaching." And he meant it. His actions initiated the policy of evaluating the work of university instructors and professors in terms of so-called "productive research" which today prevails in practically all universities and many colleges.

Harper and his fellow administrators also went about the business of steering the graduate schools of the country into the policy of training all graduate students to be research workers, of largely ignoring their training as scholars (even in the literary departments against the protests of Irving Babbitt and others), and of completely ignoring their training as teachers. Research in the sense of discovering new facts or of recovering forgotten facts (as in literature in particular) became the supreme university endeavor, and both scholarship and teaching got only the crumbs that fell from the fattening research table.

Many college (as opposed to university) professors and administrators, however, did not look kindly upon these developments; and after the first World War a number of deans of university undergraduate colleges and a number of college presidents began to voice their critical if not alarmed sentiments. These administrators were charged with the responsibility of carrying forward the work of general or liberal education; and they had slowly become aware of the fact that the graduate schools were supplying them with an increasing and, indeed, predominant number of men and women trained only in research — men and women who, in general, had relatively little interest in teaching and who sought invitations to join university faculties by neglecting their teaching in order to do the research that would stimulate such invitations.

The dissatisfaction of the college deans and presidents came to a head in 1926 when the Association of American Colleges established a commission "to investigate the problem of enlisting and training men and women for college teaching" under the chairmanship of Dean Otis E. Randall of Brown University.

Randall headed the commission of the Association of American Colleges for two years, and then early in 1928 another educator of unusual prestige and power succeeded him in

the person of President Ernest Hatch Wilkins of Oberlin College. The previous year President Wilkins had left the deanship of the undergraduate college of the University of Chicago. For a score of years before becoming an administrator he had taught romance languages at Amherst, Harvard, and Chicago; and he had attained distinction as a Renaissance scholar. When, therefore, as a dean and later as a college president he attacked the emphasis upon research which had come to control higher education, he attracted considerable attention to the problem.

In his inaugural address at Oberlin in October, 1927, Mr. Wilkins had declared:

Teaching is, in the last analysis, the function of the college. The quality of the teaching is the measure of the success of the college.

I do not regard interest in research as a necessary concomitant of college teaching. And I deplore the wasted energy of men who, under extrinsic pressure, attempt research though they have no gift for it.

Supported by his associates on the commission and by many other presidents and deans, Mr. Wilkins took the problem of the relationship of research and teaching directly to the deans of the country's leading graduate schools. To them the commission wrote late in 1929:

While we believe that significant experience in the field of research should be given to every prospective college teacher, we believe that the graduate schools in general now tend to stress unduly the relative importance of such experience for students intending to engage in college teaching; and we therefore suggest that for such students there be an optional quantitative relaxation of the research requirement in favor of some additional mastery of subject-matter or of other educational resources.

This pointed proposal with its clear criticism of the work of the graduate schools stirred the graduate deans to defend themselves and their institutions, and early in 1930 two of them accepted invitations to speak at the annual meeting of the Association of American Colleges: Dean Wilbur L. Cross of Yale and Dean Gordon J. Laing of Chicago.

Dean Cross spoke graciously and soothingly, suggested that the situation was not, after all, so bad as claimed and that nothing need be done about it. Dean Laing, however, rolled up his sleeves and rolled out an ebullient denunciation of the critics of the graduate schools. He began:

(Concerning) that clause in your recently issued circular in which you recommend that there be some relaxation of the research requirements in the case of candidates for the doctoral degree who intend to teach in colleges. Just what demon of mischief insinuated itself into the councils of the committee drawing up the recommendations and inspired those fatal words I do not know. But that they are of diabolic origin I am strongly inclined to think; and if insisted upon by you will have diabolic results I am sure.

He then proceeded to describe some of the "diabolic results" he foresaw:

They will have minds of the warehouse type in which were stored packages of information, exhibited from time to time to classes as the semester or quarter for this or that dear old course came round. . . . He spent a great deal of time in 1910 in writing the lectures of a certain course . . . and so he simply takes the material down from the warehouse shelf and ministers to his students from it, perhaps wondering a little that they do not show more enthusiasm and, in his fatuous complacency with his ancient lectures, hardly realizing how musty and moth-eaten they have become.

Laing won the engagement; and, furthermore, his point of view largely prevailed in the discussions of subsequent years participated in not only by the Association of American Colleges but also by the Association of American Universities, the American Association of University Professors, the American Council on Education, and a half dozen other leading educational organizations. Wilkins' prestige had had much to do with interesting these

groups in the problem of the relationship of research to teaching, but Laing and his supporters won the tournament.

About 1936 the Association of American Colleges disbanded its commission. At least a dozen important committees had meanwhile been at work and had produced seven or eight thousand printed pages of discussion. From all this talk and ink, however, little of consequence developed; and in response to my inquiry President Wilkins wrote me in 1941 that "it is a fair statement that the graduate schools did practically nothing to promote the point of view expressed" in the appeals of his group that in graduate work there be a "relaxation of the research requirement." In short, the graduate schools adopted a take-it-or-leave-it attitude toward the colleges.

The depression and the war both diverted the attention of educators to other problems, but today interest in the relationship of research and teaching has again come to the fore. Howard Mumford Jones, who served briefly during the war as Dean of the Harvard Graduate School, helped revive the question with his 1946 book, *Education and World Tragedy*, wherein he came out unequivocally for a complete reformation of the graduate schools and for direct attention to the training of college teachers as teachers. The recent American publication of the lectures of the Spanish philosopher Ortega y Gasset titled *Mission of the University* also stirred up discussion particularly because of such statements as these:

The trend toward a university dominated by "inquiry" has been disastrous.

I have lived close to a good number of the foremost scientists of our time, yet I have not found among them a single good teacher. . . .

The Truman Commission on Higher Education has abetted the growing new agitation, pointing its finger directly at the graduate schools and asserting: ". . . the failure of individuals to learn how to teach is largely the failure of the present graduate school system." Meanwhile the present-day counterparts of the Randalls and Wilkins of twenty years ago have begun to demand change, and typifying their sentiments Dean Harry J. Carman of Columbia College wrote in 1947:

Most of the nation's undergraduate teachers have been prepared primarily for research. . . . It may well be that the time has come for the establishment of an additional graduate school, the primary task of which would be the preparation of prospective college teachers in the field of general education.

Clearly "the time has come" for something, and it may be that that something is "the establishment of an additional graduate school" for the training of college teachers. In my judgment, however, the first task before educators is to discover why the discussions of 1926-36 concerning the relationship of research and teaching failed. Determine that, I suggest, and the road ahead will become many times more luminous.

And I have a suggestion to make about why the 1926-36 discussions failed. It is this: President Wilkins and Dean Laing were both right, but they did not distinguish between research and scholarship. Failing to make this vital distinction, they failed to achieve common ground.

Consider Dean Laing's statement. He castigated "the warehouse type" of mind among teachers, and I confess that I know what he means. I have sat under such men, and I imagine that all but the most fortunate have had the same experience. They are the professors who come to class unprepared, who do not keep up with the developments in their subjects, who do not organize, criticize, and interpret their facts in the light of new research findings. Dean Laing and those who think like him do higher education a laudable service when they expose and denounce such people.

But also consider President Wilkins' statement that research is not a necessary concomitant of good teaching. I know what he means too. The best teachers that I have had were not research men and never to my knowledge conducted any investigations. President Wilkins cited two such men under whom he had studied at Amherst—Professors Cowles and Carman—and probably everyone has been inspired by others like them. Yet some of the

worst teachers that I have had were distinguished research men; and some of them were the most flagrant offenders in lecturing from ancient and unrevised notes. They were so absorbed in their investigations—often important but often needle narrow—that they did not keep up with their subjects in general and therefore often came to class unprepared on the topic in hand and often without even having read over beforehand their archaic lecture outlines. As research men they glittered, but as teachers they resembled lead.

Patently Dean Laing and President Wilkins both spoke truth. Neither of them, however, analyzed the situation adequately: neither saw that he needed to deal not only with the problem of the relationship of *research* to teaching but also with the problem of the relationship of *scholarship* to teaching. They overlooked the fact that three processes and not just two must be identified and reckoned with: first, the discovery of knowledge—or research; second, the organization, criticism and interpretation of knowledge—or scholarship; third, the communication of knowledge—or teaching.

The identification of these three processes leads directly to the recognition of the fact that each of them depends upon the other two: that without research, scholarship degenerates into fatuous verbalism; that without scholarship, research decays into a mere collecting of elaborate trivia; that without both research and scholarship, teaching becomes bromidic prattling.

To perceive these three processes clearly also leads to the awareness that research *per se* has no *direct* relationship to teaching and that scholarship must stand between them and join their hands. Before research data become teachable they must go through the intermediate stage of scholarship, the stage of arrangement, criticism, and explanation. This means that everyone who is to devote his major energies to college teaching should be trained in the skills of scholarship and that the primary emphasis in his graduate training should be, therefore, upon the organization, criticism, and interpretation of the facts turned up by research people. This will involve enough association with the research enterprise to understand both its insistent importance and its methodology, but it need not involve concentrated and continuous participation in research investigations. Instead, attention must be directed to scholarship *per se* and also to the acquisition of skill in communicating the results of research and scholarship in able teaching. People can learn to teach, but such learning must rest upon the foundation of sound and continuous scholarship.

Those who proclaim that no one can be a good teacher unless he does empirical research simply ignore the abounding evidence that many great and good teachers are not research men and never have been. Yet these critics of "mere teaching" and "mere teachers" would be as right as truth if they would modify their statement to read: "No one can be a good teacher unless he keeps continuously organizing, criticizing, and interpreting the data, new and old, of his subject—unless, in short, he's a scholar."

To summarize: the higher education depends upon the higher learning, but the higher learning includes two elements which must be distinguished: empirical research and rationalizing scholarship. At present the higher learning and the higher education conflict with one another because we have not differentiated between research and scholarship and because graduate schools erroneously insist that all their students should be trained as research workers to the neglect of interpretive scholarship and also to the neglect of training in the arts of communication. The conflict will end when we learn that only scholar teachers can build and maintain the bridges that will keep the higher learning and the higher education joined in enriching cooperation.

Dr. Cowley seems to go to the root of the problem. When a graduate school representative says, as one did recently, "We make no special efforts to train men as college teachers. The presumption is that a scholar will be a teacher," he disregards the distinction which Dr. Cowley points out. In this represen-

tative's view the graduate school is designed to turn out "scholars," although he would probably readily agree that there is little in the graduate program which calls for "organizing, criticizing, and interpreting" the body of knowledge, new and old, which is related to, and helps to determine the meaning of, the specialty he is concentrating upon. He is using the word scholar to mean a research specialist, whereas scholarship and research are two separate activities which must team up together to make the higher learning.

And, as Dr. Cowley says, scholarship must make the link between research and teaching. It is no less intellectual in its demands than is research. It is, however, different, and the issue is confused when one contends that the present graduate program turns out scholars. Some research specialists are, of course, scholars, just as some are teachers. But they are neither one by the design of the graduate school. If they are either scholars or teachers it is by virtue of their inherent qualities of mind which a narrow program of study and research could not smother.

Is the graduate school ready to educate *scholars* side by side with *research specialists*? If so, it will be easy to prepare such scholars for college teaching.

The Checklist Study of Graduate Schools

THE FOREGOING discussion of the replies from the colleges and from the graduate schools and Dr. Cowley's analysis of the basic issue involved seem to imply that the graduate schools are doing little beyond their customary Ph. D. programs about their obligation to prepare college teachers. That is true of some, in fact many of them. It is not true, however, of all of them. There is agitation in many university faculties for change. Various parts of the programs which the college deans and presidents advocate are being tried out here and there in graduate schools. Commonly the change has been made in only one or at most a few departments rather than in the entire graduate school, but often there is sympathetic interest in the problem among other departments. In order to obtain information on the extent of use made in graduate schools of the several devices advocated by employing colleges, a special study was undertaken by the author.

On April 1, 1949, a checklist of devices known to be in use in some departments in some graduate schools to improve the preparation of college teachers was sent by the Federal Security Agency, Office of Education, to all graduate schools, 171 in all, listed in the Higher Education part of the Education Directory of the Office of Education. It was sent addressed to the graduate dean by name. This checklist and the cover letter which accompanied it are reproduced as Appendix B, page 69. Following each item is given the number of each type of response made. This checklist covers methods of recruiting graduate students having special talents for teaching, broadening the Ph. D. requirements, apprentice teaching, observation of good teaching, instruction in the science and art of teaching, and provision for a university-wide committee or other machinery to coordinate the efforts of all departments. Each graduate school was asked to check each device it makes use of by one of three marks: Two check marks for each device found to be *very useful*, one check mark for each device found to be *moderately useful*, and a minus mark for each device found to be *of little or no value*. It was hoped by this means to discover the extent of use made of these devices and also in general how satisfactory each device was proving to be.

In addition to filling out the checklist form, each dean was requested to "write a brief account of the most significant experiences" his school has had in its attempts to improve the preparation of college teachers.

Replies were received from most of the graduate schools. Of those replying, many indicated that the checklist was not applicable to them because they did not grant doctor's degrees or they returned the checklist without comment. Replies with at least one item checked were returned by 97 graduate schools, including a number which offer no work above the master's degree. All the subsequent analysis will be based upon these 97 replies.

Device No. 1

The device appearing first on the checklist has to do with special efforts made to recruit graduate students having "unusual talents for college teaching." This is important as evidence of awareness on the part of graduate schools of the special talents required for effective teaching and of the obligation resting upon the graduate school to make special efforts to recruit students having such talents.

The answers reveal that:

1. About two-thirds of the graduate schools do make some special efforts.
2. These efforts almost universally include obtaining recommendations from the student's undergraduate college.
3. More than a third of the institutions award fellowships on the basis of talents for college teaching, in the great majority of cases using the interview as a partial basis of selection but rarely the examination without the interview. In a few cases use is made of both examination and interview.
4. Some special recruiting efforts are made by all departments which prepare college teachers in about a fourth of the graduate schools, but in only some departments in about half.

While the replies give no clue to the extensiveness or the seriousness of the efforts made, they indicate a considerable awareness among graduate schools of the importance of recruiting students on the basis of their talents for college teaching. From comments accompanying the replies it seems that a good many schools checked this item if they include among the qualifications required for the award of certain graduate fellowships abilities believed to be characteristic of good college teachers. It is probable that in some instances the recipient of the fellowship is not aware that he is being selected because of special talents for college teaching. At any rate, an examination of the catalogs of a number of institutions so responding, as well as answers to a special inquiry sent to many of them, revealed no fellowships designated by name as prospective college teaching fellowships in most graduate schools. It appears, in fact, that such designation is used in only a few institutions.

With respect to the usefulness of these several aspects of special recruiting, about half of the respondents find "very useful" the recommendations from the student's undergraduate college, while the other half find these recommendations only "moderately useful."

In checking the satisfactoriness of the means of selecting fellows, about half the respondents who are using the interview regard it as "very useful" and about half as "moderately useful." Of the lesser number who use both examinations and interviews as a method of selecting fellows somewhat more than half find the method "very useful."

Very few of the respondents from institutions in which special recruiting efforts are made only in some departments check that as "very useful." On the other hand, nearly all the respondents from institutions in which all departments make special efforts check the item as "very useful."

Device No. 2

Special counseling services are provided for students contemplating or preparing for college teaching.

This device is essentially a follow-up of special recruiting efforts. A graduate school which makes special efforts to get good prospective college teachers enrolled will naturally afford special counseling services to enable those students to make the most of their years of preparation.

Approximately the same number of graduate schools, 61, indicate that they provide special counseling services as indicate that they make special recruiting efforts. It turns out, however, that more than a third of those providing special counseling services do not make special recruiting efforts and, vice versa, more than a third of those making special recruiting efforts do not follow up with special counseling. It must be remembered that these practices are carried out generally in only some departments. Neither special recruiting nor special counseling is practiced by all departments preparing college teachers in more than a quarter of the graduate schools reporting. Of the graduate schools reporting either special recruiting efforts or special counseling services in all departments, only six are members of the Association of American Universities, and more than three-fifths are neither State universities, land-grant colleges, nor members of the Association of American Universities. This probably is an indication of the greater departmental autonomy in the larger graduate schools, but it may also indicate a somewhat keener awareness of the responsibility for preparing college teachers on the part of the smaller graduate schools. In any case, counseling graduate students with special reference to their particular needs as prospective college teachers is, in general, an interest of some departments only and not of the graduate schools as such.

Device No. 3

Requirements for the Ph. D. have been broadened in the interest of prospective teachers so as to make for less highly differentiated specialization than formerly.

The narrowness of the training of college teachers will be recalled as the practice most widely criticized by the respondents to the University of Chicago's letter.

Relatively few graduate schools indicate that they are broadening their Ph. D. curriculum. About 12 percent indicate they are broadening the requirements for admission, an equal number are broadening the subject-matter requirements, while a little larger number indicate that this broadening is being worked out in both the undergraduate admission requirements and in the graduate curriculums leading to the Ph. D. degree. Furthermore, of the 13 institutions reporting a broadening of the undergraduate requirements, only one regards the practice as "very useful." All the others regard it as "moderately useful." Of the 11 replies which indicate a broadening of the graduate school curriculums, 5 report the practice as "very useful." Of the 20 institutions reporting a broadening of requirements in both the undergraduate and the graduate levels, only 8 find the change "very useful."

From the point of view either of the numbers of graduate schools attempting to broaden the preparation of college teachers or of the usefulness they ascribe to their attempts, the picture is not very promising. It must be remembered, too, that the effort at broadening the requirements in even the few schools attempting it is limited usually to one or more departments and does not apply to the whole graduate school.

Device No. 4

Two alternative Ph. D. curricula have been adopted, one in preparation largely for research, the other in preparation largely for college teaching.

Only nine of the graduate schools check this device. None of these is a member of the Association of American Universities, three are State universities, two are land-grant colleges, one is a State technological college, and three are privately controlled universities. Of the eight, two find the device "of little or no value," three find it "moderately useful," and three find it "very useful."

The policy of offering two parallel curriculums side by side having distinctly different purposes is obviously not popular among graduate schools. In the first place, the view is held by many, perhaps most, graduate school policy makers that the present requirements with their emphasis on research and its accompanying narrow specialization are the best preparation for college teaching. In the second place, there is so much variation allowed among departments in a given graduate school that some of them exemplify the desired breadth even while operating within the over-all regulations and requirements of the graduate school. This does not, of course, help those students who are majoring in the departments which make no provision for the breadth needed by prospective college teachers. In the third place, what

is believed by many to be the key to the situation is flexibility of the regulations. Adjustments, it is maintained, should be made to meet the individual needs not only of college teachers but of many other groups as well. With suitable flexibility existing in a few schools there become available the equivalent of not two parallel curriculums but of many. Each department or often each professor within a department makes up a curriculum suitable for each graduate student, being governed only by the over-all standards and specific requirements if any exist.

If such department or such professor, free to advise and direct graduate students under the policy of flexibility, has a sound concept of the kind of preparation best designed for prospective college teachers, and is deeply interested in such preparation, there may be little reason for announcing special curriculums for the purpose. In other professions than college teaching, the working out of such curriculums is a matter of constant study by leading teachers and practitioners in the field. It seems doubtful, even granted the interest of individual departments and professors, whether the best curriculums will usually evolve by the process of flexible adaptations of a set of regulations designed primarily to serve other groups.

Device No. 5

Some other degree than the Ph. D., such as the Ed. D., has been authorized for those preparing for college teaching.

Thirty graduate schools checked this device. Almost half find it "very useful." While the institutions were not asked to name the "other degree," comments on the returns lead to the belief that few "other degrees" than the Ed. D. are granted, the one most common exception being the D. S. Sc. (doctor of social sciences). Comments on the returns also indicate that in general the Ed. D. is granted generally to persons graduating with a major in education. These persons are commonly prepared to teach education subjects but not other subjects. Therefore, the fact that the Ed. D. is in use in quite a number of institutions does not meet the wider need for a curriculum adapted to the preparation of college teachers.

Summarizing the returns on devices 3, 4, and 5, the graduate schools with rare exceptions — and those rare exceptions apply for the most part in a few departments only — are not broadening materially their curriculums as urged by the vast majority of the undergraduate colleges.

Device No. 6

Apprentice teaching in college classes is provided.

Here the report must suffer severely from poor definition of terms. "Apprentice teaching" is a sort of umbrella under which a wide variety of

experiences take shelter. One graduate student is assigned to mark English compositions; another has charge of six desks in the chemistry laboratory; another is assigned to a section of a French language class where he is in full responsible charge but no supervisor helps him; another has had a course of instruction in educational psychology and is assigned a history class with which to carry out under supervision the principles of teaching developed; another is assigned to teach a class under careful supervision of a superior teacher in the department. All these — and there are many other variations — are doing "apprentice teaching."

One thing is common to "apprentice teaching" activities. They are giving experience in teaching. But in many cases that experience cannot properly be called apprentice teaching. The present practices are the outgrowth mainly of other needs than apprentice teaching. Graduate students very often need financial assistance, and universities need inexpensive instruction. Teaching assignments have been dictated largely by these needs. Only lately have the graduate school departments assumed much responsibility to make that teaching significant educationally. Even now, judging from reports supplementary to the checklists, by no means do all the departments whose graduate students are teaching freshman or sophomore college courses make any serious effort to give that teaching real significance. But apparently all types of teaching assistantships are reported in the checklists as "apprentice teaching."

Altogether, 69 graduate schools report the use of apprentice teaching in their own institutions. In general, graduate schools are in institutions having undergraduate colleges. Commonly, each academic department includes the undergraduate as well as the graduate teachers. Thus the graduate students can be assigned readily to many kinds of teaching duties in the undergraduate college. In only 8 graduate schools is apprentice teaching done in some other institution and of these 8, only 2 rate the practice as "very useful." On the other hand, 45 of the 69 using it regard apprentice teaching in their own institutions as "very useful."

Comments accompanying the checklists indicate that the practice of assigning graduate students to apprentice teaching is confined frequently, probably usually, to students appointed to teaching assistantships or teaching fellowships. These appointments are not made customarily to help train the students who are preparing to teach, but rather to supply needed staff for undergraduate departments. In general, students are appointed who are regarded by the department as competent graduate students. This in the majority of cases probably means competent to carry on a research project.

The checklist asks whether the apprentice teaching is done under the supervision of (1) faculty member from department of the student's specialization; (2) faculty member from department of education; (3) one who has faculty membership in both departments. Here again is an ill-

defined term, supervision. Its meaning appears to stretch from mere responsibility for choosing and assigning teaching assistants to carefully planning, observing, and criticizing the teaching activities of such assistants.

Fifty-seven schools check the first procedure, 10 the second, and 5 the third. A few institutions check both the first and the second. Of the 10 which utilize supervision by the department of education, 2 find the practice "very useful," 6 find it "moderately useful," and 2 find it "of little or no value." Of the 5 institutions which utilize supervisors with membership in both departmental and educational faculties, 2 find the practice "very useful," 1 finds it "moderately useful," and 2 find it "of little or no value." Of the 57 institutions where supervision is carried on by the academic department, half find the practice "very useful," and the other half "moderately useful." Only 1 finds such practice "of little or no value."

In interpreting these data one must keep in mind that a graduate school which indicates that it provides apprentice teaching may provide it in one or several or all departments. Again when a school reports supervision by the academic department, it may mean one or several or all departments. Therefore, even though more than half the schools provide apprentice teaching with supervision, it is not safe to assume that half the graduate students who will later be college teachers get such apprentice teaching. Furthermore, it is not safe to assume that all the teaching assistants in schools where supervision is provided have really significant supervision. Some departments supervise their teaching assistants, some in the same schools do not. In fact, about all that the data signify is that there is a recognition by at least some department or departments in a majority of graduate schools of the value of supervised apprentice teaching. Such recognition is very important.

Where the apprentice teaching is a part of a comprehensive plan of preparing college teachers it would be natural to expect a "very useful" rating of apprentice teaching. Where there is no curriculum adjustment or thesis adjustment to meet the needs of prospective college teachers, and no pedagogical courses, it would scarcely be expected that apprentice teaching, even if carefully supervised, could be made of maximum helpfulness. Such assumptions are not borne out by the returns. There appears to be no relationship between the number of devices in use in a given graduate school and the rating assigned by that school to its apprentice teaching. At any rate, a high value was assigned to apprentice teaching in the institution which wrote, "We initiated in 1945 a Ph. D. program designed exclusively for college teachers of American history. Students are selected mainly on the basis of record and interview. As graduate students, the trainees give lectures and conduct classes under faculty supervision and complete theses which provide broad coverage of the subject matter rather than narrow specialization."

Device No. 7

Prospective college teachers systematically observe illustrations of good teaching as a part of their preparation.

While 36 graduate schools use this device in their own institution, only 15 of them regard it as "very useful." Only 3 schools provide for this observation of good teaching in other than their own institutions.

Here is evidence of awareness on the part of a third of the graduate schools of another aspect of their responsibility to prepare college teachers. The returned checklists do not indicate what, if anything, is done to enhance the value of the observation provided. A few comments accompanying the checklists lead one to doubt whether, in general, much help is given the observers to obtain maximum values from their observations of good teaching. Furthermore, the checklist returns reveal little or no relation between the comprehensiveness of the institution's teacher-training program and the rating given to its observation practices.

In spite of this, it seems reasonable that an observer who understands the psychological and sociological bases of good teaching and the long-time, as well as the immediate, objectives in the mind of the good teacher, can profit more from the teaching he observes than can the observer who lacks such preparation. Possibly when programs for the preparation of college teachers have developed further, the values to be derived from such devices as apprentice teaching and observation of good teaching will be appraised on a somewhat broader and more objective basis than at present.

Device No. 8

Faculty members follow up former students after they enter upon college teaching.

Of the institutions reporting, 25 indicate that they obtain reports of their former students' work. Of these 25, only 7 find the device "very useful." Faculty members in 9 institutions visit the classes taught by their former students. In only 2 institutions is this practice found to be "very useful." Of the other 7, 2 regard the practice as "of little or no value."

This device is thought to be valuable not only as a means of helping to improve the work of the new teacher, but also — indeed much more — as a means of helping the graduate school discover the deficiencies in its own program of preparing college teachers. If a graduate school is earnestly engaged in preparing college teachers, it will wish to know what difficulties its graduates are experiencing. No professional school can remain long indifferent to the professional success of its graduates.

Device No. 9

This device has to do with the science and art of college teaching. It deals with several aspects of instructional activities designed to prepare directly for better teaching. The activities are commonly called "professional education."

Among the most rapidly growing forms of professional education is the workshop which is a center where persons with common interests pool their experiences and information in an effort to find solutions of problems common to the group. Nineteen institutions maintain workshops for their own students only, and 21 maintain workshops for their own and representatives of other institutions also. Included are 6 institutions which conduct both types of workshops. Thus 34, about a third, of the institutions maintain workshops devoted to the problems of college teaching. About half the institutions using this device find it "very useful." Two institutions which have used both types of workshops find both "of little or no value."

Regular courses in professional education for prospective college teachers are maintained by two-thirds of the institutions; 52 put such courses on an optional basis, and 15 require them of all prospective college teachers. Only 8 of the 52 regard the device (optional) as "very useful," while all the others, 44, regard it as moderately useful." More than half of the institutions which require such course or courses of all prospective college teachers find the practice "very useful." The checklists do not make clear how each institution determines "all prospective college teachers," but from comments inserted and letters accompanying the checklists it seems that in some schools the requirement is made of all Ph. D. candidates in some department or departments, and in some schools a recommendation for a position is contingent upon the student's taking the course. It appears that all Ph. D. candidates in a few schools are required to take the course or courses.

However the practices may vary, the availability of a course or courses dealing with the problems of college teaching is relatively widespread. Naturally these education courses differ widely. Some deal with the organization of the college and its relation to social and economic life. Some deal with the psychology of college-age young people. Some deal with the principles of teaching. In any case, the course represents a forthright attempt to help the prospective teacher with his teaching problems.

Who conducts these education courses? In 36 institutions they are conducted by the education department staff, in 9 by the staff of the student's major department, and in 19 by a combination of the two. In five of the nine institutions in which the course is conducted by the major department staff, another course or courses are also conducted by the staff of the department of education. Thus the education department is participating in the conduct of education courses available for prospective college teachers in more than half the graduate schools.

One of the favorite forms of instruction in professional education for college teachers is the seminar. Thirty-seven institutions use this form, limiting the course to students in a single department or group of related departments. Of these 37 institutions, 23 rate the device "very useful." Few devices on the checklist were thus rated by as high a percentage of users. Thirteen institutions maintain a seminar for prospective teachers in all departments. More than half of this group rate the device "very useful."

In summary it may be said that instruction in professional education as a part of the preparation of college teachers has spread to the majority of the graduate schools. Taking these courses is optional with the student in most cases. The returns do not indicate how many departments in the several schools require or even recommend that their Ph. D. candidates who are prospective teachers take the course or courses. If the instruction is in seminar form, it is more commonly limited to students in a single department or group of related departments. This probably means that a member of the departmental staff rather than of the education staff is responsible for the course. Where the professional education course is not of a seminar type, the education department generally participates in its conduct.

Device No. 10

A faculty committee is maintained to coordinate the efforts of all departments in the education of prospective college teachers.

This device is used to bring about a desirable measure of common practice among the divisions and departments of the graduate school. Sometimes a committee dealing with a wider field than training college teachers is used for this unifying function. Sometimes a special committee is set up to deal only with the institution-wide problem of preparing college teachers.

In one form or another, 14 institutions have committees charged with coordinating the efforts of all departments in the education of prospective college teachers. Of these fourteen, eight regard their plans as "very useful." The checklists give no indication of the form of organization nor of the scope of activities of these committees, but comments submitted with the checklists emphasize two divergent institutional policies with which the committees deal. The first is the tendency of the several departments to function with almost complete autonomy. This makes coordination very difficult. The second is the tendency to provide great flexibility in administration of regulations not only among departments, but among the students in a given department. This makes possible adaptations to meet individual student needs without the necessity of much coordination of the practices carried on by the several departments. Probably the greatest service of the faculty coordinating committee is the constant education of the faculty personnel with respect to the obligation the graduate school has to prepare better college teachers.

Examples of Graduate School Practices

BRIEF ACCOUNTS will be given in the following pages of the ways in which effective use is being made of some of the more important devices discussed in the preceding chapter. While in many cases these illustrations were mentioned in the checklists or letters returned by the particular graduate schools which are to be cited, the selection of the schools is not based upon equally full information from all schools. The citation of a given school carries no assumption that the practice in that school is superior to that carried on in some other schools. The schools mentioned are believed, however, to be making effective use of the devices ascribed to them. The purpose of the accounts is to bring about a more widespread understanding of what each device means and how it is used:

1. Fellowships as an aid in recruiting graduate students having unusual talents for college teaching

UNIVERSITY OF CHICAGO

Each year the dean of students of the University of Chicago writes a letter to the presidents of several hundred accredited liberal arts colleges inviting them to nominate their top ranking senior who plans to enter college teaching. The college, then, if it so desires, selects its candidate and names him or her as the choice. The student so named then applies for one of the 10 Graduate Teaching Scholarships.

A special committee in the university goes over the applications and selects the 10 top applicants. The names of the ones chosen, if they accept, appear in the spring fellowship announcements. While the plan depends upon the usual sources of information about criteria for selecting prospective college teachers and makes use of no objective tests, the plan serves admirably to dramatize both on the Chicago campus and among the colleges submitting candidates the fact that college teaching is an important career and calls for special aptitudes and special preparation.

PRINCETON UNIVERSITY

Princeton has established The Woodrow Wilson Fellowships for men of promise as scholars and teachers. The administration of the fellowships has been placed in the hands of a special committee interested in the selection

and development of good college teachers as well as other scholars. Fellowships are awarded normally only on nomination by persons in responsible positions in higher education, by invitation only.

In addition to the normal criteria for the selection, such as letters of recommendation and transcripts of college records, the chairman of the committee and one other member hold an interview with each candidate. By watching the subsequent performance of the men selected, these committee members gain more than average insight into the qualities which enter into the make-up of a good college teacher.

Incidentally, as an evidence of the importance attached to criteria for selecting prospective college teachers, the Carnegie Corporation has made a grant to Princeton to help carry on a 5-year study of the best methods of selecting Woodrow Wilson Fellows.

UNIVERSITY OF OREGON

The University of Oregon has recently announced the establishment of five fellowships as a part of its program for the preparation of college teachers in the social sciences. The program involves fundamental changes in the requirements for a doctor of philosophy degree, and the fellowships will serve to emphasize the university's interest in professionalizing the preparation of college teachers.

There are other universities which maintain such fellowships, but these three — east, central, and west — illustrate the plans.

2. Broadening the requirements for a Ph. D. degree in the interest of prospective college teachers

SYRACUSE UNIVERSITY

Three programs designed particularly for prospective college teachers have been adopted recently by Syracuse University: one in the humanities, one in the social sciences, and one in the natural sciences. While all three have many features in common, they are not alike. Space will permit the description of only one. The humanities program is chosen for this description partly because it offers more difficulties in many respects than either of the others.

The following account is taken from the special committee report which was later adopted by the graduate faculty. The program leads to a Ph. D. degree, is designed specifically to prepare teachers for undergraduate colleges and junior colleges and is characterized by the following features:

(1) Broad undergraduate training is made prerequisite for admission to the graduate program.

(2) The graduate program provides for departmental concentration, sufficient to prepare the student for undergraduate teaching in use of the conventional departments of instruction.

(3) It also requires considerable training in the general field of the humanities,

to be offered in a series of new interdepartmental courses which are planned to equip the student for teaching general education courses in this area.

(4) Undergraduate courses in general education in the humanities are also proposed.

(5) Supervised teaching and assisting are required as an integral part of the training and extend over a period of 3 years. Completion of the program, therefore, will normally require 4 academic years above the bachelor's degree.

(6) An understanding of the purposes of higher education, curricular problems, methods of teaching, and evaluation is provided in an initial seminar in education, followed by continued conferences and readings in connection with the teaching experience.

(7) A dissertation meeting the best prevailing standards of the Ph. D. is required.

(8) The program is proposed specifically for the preparation of teachers on the undergraduate level; it is not intended to replace the existing patterns of graduate work which are designed to fulfill a somewhat different, but equally important, need.

The administration of the program is in the hands of an interdepartmental humanities committee appointed by the chancellor after consultation with the chairmen of the departments concerned.

MICHIGAN STATE COLLEGE

Two new programs were introduced in 1948, each of which furnishes "a broad foundation for prospective college teaching without sacrificing necessary competency in a specialized field. . . . Advanced study in larger content areas, a teaching internship in the general education area, and an adequate foundation in a special field are the major provisions of the programs leading to the doctorate in selected departments and in the areas of biological science, physical science, and social science."

In satisfying the Ph. D. requirements students follow either Plan A with a degree granted in a department now authorized to grant the degree, but under the direction of a guidance committee representing the departments most concerned in both the Graduate School and the Basic College; or Plan B with a degree in biological science, physical science, or social science, but under the direction of a guidance committee representing the departments most concerned in both the Graduate School and the Basic College.

The essentials of both programs are:

(1) The Graduate School shall require evidence that the candidate has academic and personal qualifications necessary for successful college teaching.

(2) The candidate shall present an acceptable dissertation which shall, wherever possible, be concerned with a problem having aspects and ramifications which extend across existing departmental lines.

(3) Experience in a seminar in higher education, not in excess of three credits, will be required of each candidate.

(4) The candidate will teach and be fully responsible for one class in the Basic College in the general area of his graduate study for at least one quarter under the direction of a committee consisting of the head of the Basic College department, an experienced and competent teacher in that department, a representative from an upper-school department, and a representative of the division of education.

UNIVERSITY OF MICHIGAN

To encourage a broader training for the Ph. D. degree, interdepartmental programs are provided for, involving two or three subject-matter fields rather than one.

In addition to these Ph. D. programs, the University of Michigan offers the Ed. D. degree under four categories:

- (1) In Educational Administration for which the cognates chosen are mainly in the social sciences.
- (2) In Teaching and Supervision for which the cognates are mainly in the department of academic specialization.
- (3) In Education and a subject-matter field in which the direction of the work is under a committee chosen from the two departments.
- (4) In a subject-matter field, the work being under the direction of the academic department concerned and including a minimum of 12 graduate hours in Education.

HARVARD UNIVERSITY

Harvard offers a program leading to a Ph. D. in Social Science as "a type of training which will prepare doctoral candidates for teaching positions for which other programs available are not entirely suitable." This program deals with "problems and issues which lie between or among existing Social Science disciplines."

Modifications extend to the dissertation and to teaching experience as well as to the subject-matter requirements.

Harvard has adopted modified programs in Romance Languages and Literature which call for combinations of several languages or of several fields of literature.

UNIVERSITY OF MINNESOTA

Among the many modifications which the University of Minnesota has made in the interest of greater flexibility and breadth in the training of Ph. D. candidates, mention here will be limited to the change that has been made in the regulations governing the foreign language requirement. For purposes of departmental majors there are at the University of Minnesota 80 departments of instruction. The various departments modify their language requirements according to their several needs, but in all cases foreign languages may be selected from any one of 10 ancient or modern languages. On this basis approximately a fifth of the departments require 3 foreign languages, 1 of which must be German. Slightly fewer departments require 2 foreign languages without any specification as to which languages are chosen. Another fifth of the departments require 2 foreign languages or 1 foreign language and the option of a collateral field of knowledge. Another somewhat smaller group of departments require either 2 foreign languages or 1 foreign language and the option of a special research technique. A little more than a fifth require either 2 foreign languages or 1 foreign

language and the option of either a special research technique or a collateral field of knowledge. The Minnesota plan is cited as an example of utilizing the time usually devoted to the mastery of one language in other study believed to be more significant for prospective college teachers.

3. *Providing for apprentice teaching*

One of the most widely used and most generally acceptable devices to aid in training college teachers is apprentice teaching in college classes. Space will permit citing only three illustrations.

UNIVERSITY OF MISSOURI

A letter written by Dean Elmer Davis, College of Arts and Science, University of Missouri, states:

In these two departments (English and History) we had staff members who had had considerable experience in training secondary school teachers in their respective fields. In both cases these persons have supervised the teaching of beginning instructors, most of whom were graduate students doing part-time teaching. They have used all the usual technics of supervision in order to improve the quality of teaching.

UNIVERSITY OF WISCONSIN

Apprentice teaching in English at the University of Wisconsin is under the direction of a member of the English department who gives a considerable part of his time to the work of younger instructors, including graduate fellows and assistants. A letter furnished by the director of the course on request states:

Introductory staff meetings are held during registration week for graduate assistants who have not taught at Wisconsin before. The assistants are given mimeographed material covering the content and philosophy of the course, and explanation of the placement procedure, which occupies the first week of the course.

A meeting of the whole staff is held the Saturday afternoon of registration week, and thereafter the staff meets regularly every other Tuesday afternoon. At these meetings, each unit of work is explained and discussed. Typical class hours are analyzed. At one meeting, in order to secure uniformity of grading, a mimeographed theme is graded by the whole staff.

Mimeographed material includes course calendars, statement of the aims and purposes of the course, statements by various deans and chairmen of courses not connected with the English department as to the value of the course, explanation of library facilities, and work sheets on various common composition problems, to be distributed in whole or in part to the students. Mimeographed material for the staff includes, among other items, a packet of typical themes, ranging from excellent to failure, with such comments as might be made to the students themselves and such comments as might be made to colleagues. Current themes are mimeographed from time to time to serve as basis for staff meeting discussions.

As had already been suggested, theme grading in one way or another occupies a considerable amount of the time devoted to staff meetings. In addition, the director and his assistant check the annotating and grading of the themes corrected by the whole staff, and call in for individual conference any graduate assistant who seems to need help.

During the first semester, every assistant is visited by the director or his assistant, and if possible by both, and has a conference immediately afterwards with his visitor. During the second semester, every assistant is visited by a member of the senior staff, not connected with the Freshman English office, and has a conference afterwards.

While Wisconsin has not organized the foregoing plan as an apprentice training plan primarily but rather as a device to improve the teaching in the college, it serves effectively as an apprenticeship to improve the preparation of fellows and assistants for later college teaching.

STANFORD UNIVERSITY

Quoting from a letter from the Dean of Graduate Study:

Many of the prospective college teachers, especially in the natural sciences in which laboratory work is involved, serve apprenticeship as teaching assistants in the laboratory. These laboratory sections involve some lecturing and a good deal of discussion and leadership of discussion groups. Teaching assistants are commonly drilled in advance in sessions with the professor and the professor also comes into the laboratory from time to time to inspect the teaching operations of the apprentice. In this way direct practical experience under the supervision of experienced teachers is received by the prospective teachers.

4. *Following up graduates*

Apparently little is done by graduate school departments to follow up their alumni to ascertain how well they are doing in their college teaching. It is interesting to note that in 1948 the University of Illinois put a representative of the Appointments Office into the field to visit classes, consult with colleges, and otherwise check on the degree of success or failure of the University of Illinois graduates. He brings back to the University departments such reports as will best serve their needs.

5. *Systematic study of the problems of college teaching*

Workshops

Among the types of approach to the systematic study of problems of college teaching, the "workshop" is proving to be among the most popular. One of the reasons is that the workshop approach acknowledges that the solutions to many of the problems are not known and, therefore, the best help will come from carefully pooling the knowledge and experiences of a number of persons working in a given area. The practice of organizing workshops, particularly as a part of summer sessions, is becoming common.

These workshops are generally available to teachers from both the host institution and other colleges and universities. Not infrequently high-school teachers in the same field participate along with college teachers. Among the universities known to be making most extensive use of workshops are the University of Chicago, the University of Minnesota, and the Ohio State University.

Courses in professional education

Professional education courses adapted to the needs of prospective college teachers are available in some departments in many graduate schools. They are required of Ph. D. candidates who expect to be recommended for college teaching in a few schools. The courses follow a wide variety of forms, the most typical being represented by the following:

OHIO STATE UNIVERSITY**Instruction by the conference method.**

On February 23, 1948, college deans were invited to appoint two graduate students from each teaching department to attend a series of four conferences in April on the subject of preparation for college teaching. About 50 departments from eight colleges made appointments. (These appointees were in the main graduate assistants.)

The purposes of the conferences were to consider the status of preparation of graduate students for college teaching, to learn the practices in departments bearing on this question, and to have data with which to construct a university program to improve the preparation of prospective college teachers.

RADCLIFFE COLLEGE**Instruction by a series of "extra-curricular" evening lectures.**

Through a special circular, graduate students in Radcliffe and Harvard are invited to a series of 13 weekly lectures dealing with the most important aspects of college teaching.

CORNELL UNIVERSITY**Instruction through a regular course taught by a number of different teachers.**

We have initiated a course in college teaching which this semester (Fall, 1949) has an enrollment of 160 students. Most of the students are Ph. D. candidates and the large proportion are teaching fellows or assistants.

The list of the topics treated at each weekly meeting for 17 weeks is represented by the following: Differences among college students; How college students learn and how they are motivated; Evaluation, marks, and grades.

UNIVERSITY OF IOWA**Instruction through a regular course under a single teacher.**

A regular formal course number Ed. 7:295 entitled "College Organization, Curriculum, and Instruction" is given annually. It is described by the professor in charge as follows:

You will note that we cover four units: The historical background of higher education; the functions of ~~the~~ organization for higher education in present-day society; the curriculum of higher education; and Methods of instruction. . . . The basic idea of the course is to give the beginning college teacher somewhat of an idea of the whys and wherefores of the profession as well as what will be expected of him both within and without the classroom.

PURDUE UNIVERSITY

Instruction for both regular staff and teaching assistants.

A regular course is given annually, some students taking it for credit, others, particularly the regular staff members who choose to attend, without credit.

The class meetings are very informal, and devoted to an analysis of the factors which contribute to good teaching, the philosophy which should dominate all types of higher education, as well as the importance of recognizing that teaching is largely an art, and as an art, it must be focused upon the individual.

OREGON STATE COLLEGE

Instruction through independent study.

Under the general title of "College Curriculum Studies" investigations are carried on of a variety of problems which the college itself confronts, including curriculums, college teaching, guidance, and counseling. These studies are under the sponsorship of the Curriculum Council, and may be engaged in by individuals or faculty groups. Graduate students are encouraged to join these studies. Such students register for a course called "College and Curriculum Studies" with term credits and hours to be arranged.

Seminars

The most common device used to give instruction in college teaching is the seminar. Most often it is conducted by a single department for graduate students (commonly teaching assistants) in that department. Its procedures vary all the way from assigning certain problems to be studied and provision for reporting upon the results of such studies, to a carefully planned series of meetings with provision for critical evaluation of the problems under study. Where the seminar is associated with apprentice teaching, it appears to be regarded most highly. Since the seminar is so widely used as a method of graduate instruction, it seems unnecessary to describe any particular institutional practices.

6. Institutional organization to promote the improvement of training for college teaching

It must be remembered that a graduate school is made up of many departments of instruction. These departments in most schools have a large measure of autonomy. Rarely is there administrative machinery with competence and authority to require of all departments conformity in such matters as training college teachers. Therefore, it is not uncommon to find the widest divergence in both philosophy and practice among the departments in a given graduate school.

Various plans of organization are in operation in graduate schools with a view to widening the interest among departments in the problems of training for college teaching and to developing a more nearly institution-wide pro-

gram. The plans are of many types. The two which follow represent the most common.

UNIVERSITY OF CHICAGO

The University Committee on the Preparation of Teachers.

The University of Chicago Committee on the Preparation of Teachers is appointed annually by the chancellor of the university. The chancellor appoints to this committee faculty members from all parts of the university who have an interest in the preparation of teachers. At the present time the committee consists of 21 members.

The university-wide committee is responsible for determining broad policies relative to the preparation of teachers at the elementary, high-school, college, and professional school levels; for approving programs for the preparation of teachers in the various departments and schools. It determines qualifications for admission to the teacher-training program, standards for granting the university's teaching certificate, and the nature and content of the required professional courses. The committee does not have jurisdiction over degree requirements or over the subject-matter courses offered by the various departments. It does, however, attempt to influence the nature of the courses and degree requirements when it feels that modifications would be to the best interests of prospective teachers. The committee does its work in this area largely through the powers of persuasion.

In addition to this central university-wide committee, there are committees in each of the four divisions (biological sciences, humanities, physical sciences, and social sciences) and in certain of the professional schools. They are appointed by the deans of the respective divisions and schools in consultation with the chairman of the university committee. The divisional committees concern themselves with the implementation of the broad policies formulated by the university committee, refer questions and recommendations to the university committee, and study problems peculiar to their units. Usually one or more members of each of the divisional committees also serve on the university committee. From time to time the university appoints special committees to study problems and to advise it in the formulation of general policies.

The plan outlined above has been in operation at the University of Chicago since 1938. It has, through these years, given direction and leadership in the preparation of elementary, high-school, and junior college teachers and more recently in the area of college and university teachers.

UNIVERSITY OF MINNESOTA

The Graduate School Committee on the Preparation of College Teachers is backed up by a long experience in the university with a committee known as the Committee on Institutional Research. A quotation from a letter written by the coordinator of studies of this latter committee makes clear the present organization set-up:

The Graduate School Committee on the Preparation of College Teachers, appointed by Dean Theodore C. Blegen in January of 1948, has been studying current practices in the preparation of advanced candidates for college teaching. This committee, functioning under the chairmanship of Dean T. R. McConnell of the Arts College and representing the broadly varied interests of the University in teacher preparation, has been examining intensively such phases of the problem as: provisions for general education at the graduate level, means of broadening the major field to include work in related and supporting areas, possible improvements in the research training given prospective teachers, and promising methods of cultivating teaching skill through special courses and internships. Research studies now being launched will inquire into the relative success of the University's former graduate students in assuming the responsibilities of faculty membership.

Dominating the committee's study and discussion of these problems has been the point of view that wide experimentation should be fostered, since no single pattern of preparation is likely to be adequate for the education of all college teachers. Departmental groups are therefore being encouraged to develop their own programs of preparation, using these projects as demonstrations of what might be accomplished. By pooling the ideas and tested experience of specialists from many disciplines, it is hoped that new and more functional programs may be developed for the preparation of college teachers.

The University of Minnesota's primary agency for stimulating and guiding study of its own educational problems has been its Committee on Institutional Research. Founded 25 years ago under the title, "Committee on Educational Research," this group has attempted to identify and study critical problems which the University faces in discharging its educational obligations. Representatives from many University divisions cooperate in performing three major functions: arousing faculty interest in programs of self-study and experimentation, developing general policies for the conduct of studies, and selecting particular research projects for committee sponsorship and support.

Studies proposed for sponsorship may concern any aspect of the University's own program or may involve off-campus educational problems that have important implications for University programs and services. Many investigations are proposed by faculty members in the departments most directly concerned; others are suggested by administrative officers. The services of a central research staff are provided for committee-sponsored studies, permitting those initiating studies to concentrate on the broader aspects of planning and interpretation. Collaboration with a technically trained staff normally results in better-designed studies and a more economical use of resources. Important training is also provided for graduate assistants who will later join college faculties.

During the past biennium forty departments of the university participated in studies of their educational problems. In certain of these studies other Minnesota colleges also participated. Investigations ranged from a survey of the status of Minnesota high school graduates nine years later, to searching appraisals of the outcomes of general and professional education. Results of these studies are reported in *Studies in Higher Education*, a bulletin issued periodically by the Committee on Institutional Research.

The preceding illustrations should help to clarify the meaning of the items on the checklist. They were selected principally from the accounts submitted by the institutions when returning the checklists. The writer has made no exhaustive survey of good practices and realizes that the illustrations given may not always represent the best practice to be found in graduate schools.

The Checklist Study of Undergraduate Colleges

EVERY NOW AND THEN some college student or alumnus breaks forth with a bitter denunciation of the teaching in his particular college. One of the most emphatic recent critics was Hamilton Brown, who wrote of his experience as a Harvard undergraduate. The *Harvard Alumni Bulletin* published it in the March 9, 1949, issue under the title, "My Son Will Not Go to Harvard." Mr. Brown listed most of the sins of both omission and commission commonly charged against college teachers and cited chapter and verse from his experience in Harvard classes.

It would be inappropriate to cite here the experience of a single student were it not that at about the time that Mr. Brown's criticism was published, a thoughtful and temperate report concerning Harvard teaching made many of the same criticisms that Mr. Brown made. This report entitled "*Harvard Education 1948 — The Students' View*" was prepared by a 52-man Special Committee on Education of the Harvard Student Council and published by the Council. A single quotation from it epitomizes the current criticisms of college teaching:

We believe that Harvard education has failed to recognize or to assess the implications of the basic problem of teacher-centered versus student-oriented education. It is the difference between viewing a college as an institution in which teachers teach as opposed to one in which students learn. (p. 60).

Probably no one will conclude from these references—certainly the writer does not — that the quality of Harvard's teaching is poorer than that of other undergraduate colleges. Harvard has been more fortunate than most other institutions in having the quality of her teaching studied more effectively and reported more courageously.

In the light of the nature and scope of the adversely critical opinions so widely expressed concerning the quality of present college teaching it seems unprofitable to dwell upon the need for concerted efforts to improve teaching. See chapter I for detailed account of these criticisms. Improvement is admittedly needed. While graduate schools may well be expected to strengthen their pre-service preparation of college teachers in the years ahead, there will always be need for suitable programs in the colleges to evaluate the

teaching being done by the presently employed teachers and to improve its effectiveness.

The need is, however, of special urgency now because of the unusual number of teachers recruited in recent years having less than the customary pre-service preparation. According to a survey made in the spring of 1948, and reported in Office of Education Circular 254, more than a third of the faculty members in American colleges and universities who held the rank of instructors had the bachelor's as their highest earned degree. Another 55 percent had the master's as their highest earned degree. Of the assistant professors only 39 percent and of the associate professors only 54 percent had a Ph. D. degree. Obviously, these faculty members may manifest most of the shortcomings of the doctors of philosophy pointed out in chapter I. They also often lack the strengths which flow from a thorough mastery of a special field and of the research skills which are possessed commonly by holders of the Ph. D. degree.

To assist the colleges in their very important and very difficult task the Federal Security Agency, Office of Education, has undertaken to assemble information about the use now being made by the colleges of several of the more common devices for evaluating and improving the teaching done by their faculty members. To this end the Office sent out a checklist in April 1949 to all the institutions (except professional and technical schools) listed in the Office of Education's Directory on Higher Education. The number of checklists sent out and the number of replies received by the end of August 1949, were as follows:

Item	Colleges and col. variations	Teachers colleges	Junior colleges	Total
1	2	3	4	5
Number of institutions to which checklists were sent	807	211	662	1,680
Number of institutions returning list with one or more devices checked	408	114	305	727
Percentage replying and utilizing at least one of the devices on the list	51	54	44	49

Since no statistical use of the returns was contemplated, no follow-up letter was sent to those who did not return the checklist.

The checklist contains 17 items, broken down into 56 subitems each to be checked if used in the college replying. The instructions provided for three symbols with which to check each subitem: "//" for "devices found to be very useful"; "/" for "devices found to be moderately useful"; "-" for "devices found to be of little or no value."

The items on the checklist fall into five major categories: Items 1 to 4 are concerned with help through professional counsel and supervision. Items 5 to 9 deal with measuring the outcomes of instruction. Items 10 to 12 are concerned with the systematic study of the science and art of teaching. Items

13 to 15 embrace the various schemes for rating teachers. The final category, items 16 to 17, consists of administrative devices for stimulating each teacher to do his best. The replies from the colleges will be discussed under these five categories.

Caution must be exercised in interpreting the returns sent in by the institutions. In general only one respondent, commonly the president or dean, was able to speak for any institution since only one checklist was to be returned for each institution. The information and judgment of that respondent with respect to the usefulness of any given device as practiced in the institution may well differ from the information and judgment of some other equally competent official who might have filled out the checklist. In fact it is not improbable that in many institutions a given device may be in use in one or more departments without the knowledge of the official who filled out the checklist.

In some institutions the checklist was mimeographed and copies submitted to the several departments. Sometimes these departmental reports were all forwarded to the Office of Education and sometimes reduced to a composite report which was forwarded to the Office. The wide variation in practice among the departments of a single institution, both with respect to which devices are used and to the satisfactoriness of the ones used, is a clear indication of how inadequate a single report is as representing a whole institution.

As a further evidence of the difficulty experienced by institutions, particularly the larger universities, in fairly representing their practices on a single checklist, several of the larger institutions responded with letters of regret, saying that they found it impossible to check the list for their respective institutions because of the wide differences in practice among their schools and departments. Probably, too, the same difficulty was responsible for the failure of other institutions to fill out the checklist even though they did not respond with a letter.

Again, an institution, a single department of which makes use of a given device, naturally checked that device. Even though the single department may have made only slight use of the device, the institution may be and probably usually is listed among the users of that device. That accounts in part for the relatively large number of institutions credited with using the several devices.

The replies make entirely clear that in respect to most of the devices listed there is no institution-wide policy in most colleges and universities. Efforts to improve instruction are carried on, generally speaking, by the department, not the institution, nor even the school within the university.

Finally one other factor must be taken into account in interpreting the replies. There is widespread recognition among presidents and deans that

their institutions should be doing more than they are to improve their instruction. Under such circumstances there is a temptation to answer not wholly according to what the institution *is* doing, but in part according to what the respondent thinks his institution *should be doing*. How general this error is cannot be known, but in respect to a few of the replies that have been followed up, a disturbing amount of this type of error has been revealed.

With all these limitations in mind, the replies as they were received will be discussed under the five large categories named above. Each device and the subitems under it will be restated as they appear on the checklist and the more important figures from the tabulations of the replies cited. The importance attaching to many of the figures does not seem sufficient to warrant printing the complete tables.

Counsel on Problems of Teaching

The traditional attitude of college faculty members toward any systematic help with their problems of teaching used to be negative. It still is to a considerable extent. The general feeling has been that, having been assigned to a regular position on the instructional staff, one is expected to work out his own salvation without the benefit of counsel. An instructor's classroom is his castle. To render assistance except as the instructor seeks it on his own initiative is felt to be an infringement of academic freedom. Such assistance may not, according to tradition, be provided for in the regular policies of the college.

This attitude is not easy to understand. It is the more surprising considering both the complicated nature of the teaching art and the near absence of specific preparation for college teaching in the graduate schools. Internship is a recognized practice in many professions. Medicine is an illustration. Both professional preparation and supervisory assistance after appointment are the accepted procedures for teachers in the elementary and high schools. It is difficult to comprehend why college teachers should have remained so averse to utilizing counsel of superior teachers in developing improved procedures in teaching.

What has been said above is believed to characterize college practice in general. But there are many exceptions. What is more important, the number of exceptions appears to be growing rapidly. College teachers are becoming more deeply concerned about the adverse criticism from students, alumni, and college administrative officers. They are becoming more conscious of the broad social and civic significance of their work. Although they have become interested in some highly specialized aspect of their own field of study, they are recognizing more than formerly the difference between teaching that is suitable for advanced specializing students and teaching that is effective for

the younger nonspecializing college students. In short, there is growing appreciation of the professional nature of the job of college teaching. How widespread the use of the various devices has become which depend upon the counsel of superior teachers as aid to the less experienced teachers will be indicated in the following analysis of replies to the several items of the checklist. It must be remembered in all numbers cited that the particular practice may apply only to one or a few departments or even to one or a few teachers in one department in the college, or it may apply to all departments.

Device No. 1

Classes are visited as an aid to the instructor visited: (a) Visits are made by deans; (b) by department heads; (c) by colleagues in instructor's department; (d) by members of department of education; (e) by invited guests from outside the institution.

The practice of visiting classes to aid the instructor visited is carried on in one or more departments in about half the institutions returning checklists. The percentage is somewhat higher in teachers colleges than in colleges and universities or in junior colleges. Department heads do more of the visiting in colleges and universities and in teachers colleges than do the deans while the reverse is true in junior colleges. Relatively seldom is the visiting done by members of the department of education in any of the three groups of institutions.

Regardless of who the officer is who does the visiting of classes, in no group do the majority of those supplying data on the checklists report such visiting as "very useful." The majority report the practice as "moderately useful" or as "of little use." The value "very useful" is ascribed most often to visits by deans, next most often to visits by department heads, and least often to visits by members of the department of education. More than a third of the respondents rate visits by members of the department of education as of "little or no value."

Visits are made by invited guests from outside institutions in 151 out of 727 institutions replying. The experience with such outside visitors seems to be none too happy. About a fifth find the visits of "little value," and only about a quarter find them "very useful."

While no generalizations are warranted by the checklist data the question may be raised as to why the practice of visiting classes, which has become fairly widespread, is not more generally satisfactory. Letters accompanying the return of the checklist seem to suggest a possible answer. The persons doing the visiting are not always thoroughly prepared to perform well such a difficult task. If the persons visited have not the insight into and the information underlying the subtle art of teaching, the same may too often be true

also of those visiting. It is not always enough to have had years of experience in teaching. If visiting classes is to be of maximum helpfulness, special aptitude and preparation for the task must be possessed by the visitor.

Device No. 2

Classes are visited as an aid to the visiting instructor: (a) Visits are made to classes in one's own institution; (b) to classes in other institutions.

This practice is commonly called observation of superior teaching. It generally involves selecting teachers to be observed whose teaching has many features in common with the teaching done by the observer. Ideally such observation involves also some previous determination by the observer of the elements of strength to be identified in the teaching under observation. It should certainly involve a conference between the observer and the observed before the observation takes place, and another conference afterwards.

This practice, though not so common as the supervisory type, is not uncommon. Of the 727 institutions reporting, 274 indicate that such observation is carried on in classes on their own campuses, while 208 utilize visits to classes in other institutions. It is not to be assumed that a large number of teachers participate in this practice even though more than a quarter of the institutions report using it.

How useful does such observation seem to those filling out the checklists? Less than two-fifths of those who report observations of classes in their own institution regard the practice as "very useful," while about three-fifths regard it as "moderately useful." Visits to classes in other than one's own institution are rated somewhat more favorably.

What was said above about the unsatisfactoriness of visits as an aid to the teacher visited is also applicable to visits as an aid to the visiting teacher. Effectiveness of observation requires careful preparation of the observer before the visit and the willingness of the teacher observed to explain his procedures and discuss with the observer afterwards what outcomes he had expected to achieve during the period observed. From letters accompanying the checklist returns it seems unlikely that these conditions prevailed in many of the observations reported. Probably as the conditions requisite for effective observation are more fully met the practice will be regarded more generally as "very useful."

Device No. 3

A person skilled in instructional procedures is employed by the institution as consultant, (a) part-time basis, (b) full-time basis.

This practice plays up the skillful teacher. It recognizes that a skillful teacher can assist less skillful teachers regardless of whether his subject

matter specialty is the same as that of the teacher assisted. It assumes that teaching skill can be identified and isolated from the subject matter being taught. It is not surprising that this device is used much less frequently than the class visiting practices described above.

Of the institutions reporting, 49 utilize such a consultant on a full-time basis and 85 on a part-time basis. In only about a third of the institutions using such a consultant on a part-time basis is the practice regarded as "very useful," while about one in five think the practice is of "little or no value." Of the 20 colleges and universities using such a consultant on a full-time basis, 65 percent find it "very useful," and 30 percent find it of "little or no value." This leaves only 5 percent rating the practice as "moderately useful." The teachers colleges and junior colleges also rate the device preponderantly either "very useful" or of "little or no value."

Probably this means that a *good* consultant is "very useful." Any other kind is of "little or no value." *Good* consultants are hard to find.

Device No. 4

Senior staff members or some special officer designated for the purpose systematically assist younger staff members through: (a) Consultations on course outlines, examinations, etc.; (b) consultations on teaching procedures involving the psychology of learning; and (c) regular supervision.

This device is intended to cover the usual types of assistance given to the recruit new to the profession. Rather than expect a young college teacher to come to his task fully prepared, the users of this device assume that he comes expecting to be assisted by the senior members of his department.

The extent of use reported for this device is the largest of all the devices listed. Of the 408 colleges and universities reporting, 302 assist the younger staff members in one or more departments through "consultations on course outlines, examinations, etc.," 155 through "consultations on teaching procedures involving the psychology of learning," and 136 through "regular supervision." Many institutions use more than one of these ways of assisting younger staff members. Rarely do any of these practices prove to be "of little value"; indeed in 72 percent of cases the consultations on course outlines and examinations are rated "very useful." The consultations on teaching procedures and assistance through regular supervision are not rated so highly, but they are at least moderately useful. In more than two-fifths of the cases they are "very useful."

While the percentage of teachers colleges and junior colleges making use of this device is not as large as is the percentage of colleges and universities, it is still large. Probably the fact that a larger percentage of teachers colleges and junior colleges than of colleges and universities utilize class visits by deans accounts for their smaller percentage of use of assistance by senior

staff members. But those teachers colleges and junior colleges which do make use of the helpful services of senior staff members find the practice "very useful" in more than two-thirds of the cases where help is given through consultations on course outlines, examinations, etc. The vote is less favorable in those cases where help is through consultations on teaching procedures involving the psychology of learning, or where regular supervision is used.

A grouping of the returns on the afore-mentioned four devices yields data on the extent of use of those in-service training practices which may be regarded roughly as supervisory or apprenticeship helps. The institutions report their use in at least some of their departments much more frequently than these practices are generally supposed to be in use. The valuation of them varies notably, the one regarded as "very useful" in the largest percentage of cases being assistance by senior staff members through consultations on course outlines, examinations, etc. The practice least highly rated is visitation of classes by members of the department of education.

Measuring the Outcomes of Instruction

If there were adequate means of measuring the outcomes of instruction, the debates about methodology of instruction would shortly cease. Every teaching device or procedure would be evaluated in terms of its success in bringing about the desired outcomes. Unfortunately the means of measuring the outcomes of instruction are still far from perfect, and can be used only as a part (in many subjects a minor part) of the evidence of a teacher's effectiveness. Much work is in progress to improve these measuring devices, and it is hoped that more and more dependence can be placed upon them as time goes on.

One reason for the tardiness in the development of adequate measuring devices is the difficulty of first agreeing upon the outcomes to be achieved, and then of defining these outcomes in such terms that they may be reliably measured. It is one thing to measure the accuracy with which a person completes 30 addition problems in 60 seconds. It is quite a different thing to measure the increase a person manifests in readiness to carry responsibility. Yet the desired outcomes of instruction for civic and social effectiveness include more of the latter type than of the former.

At any rate, items 5 to 10 on the checklist were designed to obtain information concerning the ways institutions use the devices for measuring the outcomes of instruction. The responses to these items will now be analyzed.

Provision is made for defining objectives of courses in terms, at least in part, of outcomes which can be measured objectively, and suitable tests are then used to measure those outcomes: (a) Such provision is made in some departments only; (b) in all departments.

This device is used in some departments only, in 238 and in all departments in 72 of 408 colleges and universities reporting. It is used in some departments in 52, and in all departments in 41 of the 114 teachers colleges reporting. It is used in some departments in 96 and in all departments in 47 of the 205 junior colleges reporting. It is found to be "very useful" in a far larger percent of institutions where all departments use it than in those institutions in which only some departments use it. Relatively few institutions, in any group, however, find it "of little or no value."

The relatively extensive use being made of the clearer definition of objectives and the more reliable measure of outcomes seem to indicate that college faculties in considerable numbers are looking for measures of the results of instruction upon which they can rely. There is some evidence, however, that in many cases the objective tests are being used mainly to measure facts learned. Other desired outcomes of instruction are not taken into account in the testing program. Where this is the case, the use of objective tests may serve to accentuate the already preponderant emphasis on the facts to be learned. Careful definition of the objectives of a course should precede the adoption of the testing program in order to avoid the imbalance which tests may otherwise foster.

Device No. 6

Tests used at the conclusion of courses are made up and graded by other faculty members than the instructor teaching the course: (a) Tests are made with the aid of the instructor teaching the course; (b) without the aid of such instructor.

The purpose of this device is twofold. First it usually calls upon faculty members experienced in constructing tests to assist in developing them, and brings the critical judgment of more than one member of the faculty to bear upon both the choice of items for the test and upon the wording of each test question. Second, and more importantly, to have tests made and graded by others than the instructor of the course relieves the instructor from the responsibility of evaluating the work of his own students. This tends to improve markedly the relations between student and instructor. Students who are to be rated by the instructor of the course are likely to center their attention upon what they think the instructor will ask in the tests. Or worse, they may try to win the favor of the instructor. In any case it is more difficult to develop in the students a feeling of their own responsibility for their education when they know that they "are at the mercy" of their instructor in obtaining a mark. They do not feel free to differ with him. Instead of his being regarded as a helper to them in their efforts to educate themselves, students tend to feel that the teacher is responsible for their education and they are doing their part when they follow his directions.

From the point of view of its influence on educational methodology, therefore, this device has far-reaching importance. About a third of the institutions make use of it. A large majority of the colleges which use the device have the tests made with the aid of the instructor teaching the course. Only 51 institutions use tests made without the aid of the instructor of the course.

Whether the tests are made with the instructor's aid or without it, only a minority of the using institutions find the device "very useful." Many find it "of little or no value." This poor showing is not surprising. The device breaks with a long-standing tradition. College teachers in this country have long been responsible for their own tests. Syllabi have not been made out in sufficient detail to permit colleagues to prepare satisfactory tests. In fact, objectives of courses have not been thought out clearly enough to give the proper weight to the more subtle and significant extra-informational outcomes of instruction. Under these circumstances, the assumption of even partial responsibility for tests by others than the instructor of the course is likely to seem unsatisfactory to all concerned. Where the practice has been tried over a considerable period and under favorable conditions, however, evidence submitted with the checklist seems to indicate that the plan is generally regarded as "very useful." Those favorable conditions usually involve the tireless efforts of an entire departmental staff to define with care the objectives of the courses taught and to agree upon the types of tests most suitable to measure the whole range of outcomes of instruction.

Device No. 7

A central service office, committee or bureau is maintained to aid instructors in making up tests: (a) Such central service is available to some departments only; (b) to all departments.

The significance of this item lies in its recognition of the difficulty encountered in preparing a really good set of test questions. This is particularly true if test questions are sought which are reasonably objective, i.e., so designed that the answers would be given the same value by several competent instructors. For a set of test questions to be most satisfactory, the questions should not only be objective but the value which is to attach to each correct answer should be determined in the light of experience with each question when answered by larger numbers of students.

Such an ideal can seldom be fully attained under any circumstances, but it cannot even be approached unless the institution sets up the machinery to assemble, validate, and evaluate the items which compose the tests. A single instructor has neither the time nor the facilities required to prepare tests which meet the requirements of objectivity, validity, and standardized values of items. Not until the basic importance of judging teaching chiefly by results is appreciated more widely than it is today will colleges and univer-

sities in large numbers devote to making up tests the amount of time required to do it effectively.

It is not surprising, therefore, to find that relatively few institutions maintain a central service office, committee, or bureau to aid instructors in making up tests. Of the 408 colleges reporting, 26 maintain such facilities for some departments only, and 66 for all departments. Only 35 percent of the 26 institutions find the plan "very useful," whereas 58 percent of the institutions which make the service available to all departments report the plan as "very useful." The device is used even less commonly in teachers colleges and junior colleges than in the colleges and universities and a larger percentage report their experience with it as "of little or no value."

Because the setting up of the machinery to assist instructors to make better tests calls for technical services in the field of educational and social measurements, it is not surprising that of the 66 colleges and universities which make such service available to all departments, 31, or nearly half, are large universities. It is reasonable to expect that with the technical resources available these universities will develop in time more satisfactory machinery for test construction and evaluation so that the device will be rated more generally "very useful." Possibly, too, these test services and evaluation centers may be made available cooperatively to smaller institutions in the regions.

Device No. 8

Examiners from outside the institution are utilized: (a) For oral examinations; (b) for written examinations, (1) some organized agency such as the "Educational Testing Service" is used, (2) individuals from outside the institution are called upon.

Two practices are included in this item. The first is the use of outside examiners to test the achievements of students. This practice has been common throughout the history of education. Promotion and graduation have often been based upon the results of outside examinations. The external examination of the University of London upon the results of which degrees are awarded in certain outlying universities is an illustration. Examinations for professional licenses to practice medicine, law, etc., while not related directly to graduation from professional schools have a very significant indirect relation to them. One common use made today in United States colleges and universities of an examiner from outside the institution is in the Ph. D. oral examination and in the examination of students pursuing independent study in what are commonly called honors courses. This use, it will be noted, is in connection with outcomes only partly covered by regular instruction. In other words, where the student is expected to assume major responsibility for his own achievement, using the facilities and staff

of the institution to aid him, the institution not infrequently calls in an examiner to help determine whether or not the achievement is satisfactory. For like reasons, instructors willingly accept comprehensive examinations compiled by a group of departmental or divisional teachers when the field covered by the comprehensive includes areas outside the boundaries of the courses taught by the instructors. In short, when the instructor is responsible for what the student is expected to learn in a course, he commonly sets the examination for that course. The more that responsibility is shared with the student, or with other instructors, the more freely does the instructor accept outside help either from his colleagues or from outside the institution in setting the examination.

The second practice included under item 8 of the checklist is the use of outside expert assistance in compiling tests and rating the results. With the increasing use of objective tests, two conditions have tended to encourage the use of a test service outside the institution. In the first place, the selection, validation, and evaluation of test items have called for an amount and type of technical service not available in a single institution. In the second place, one of the values of the objective test is to permit comparisons of test results among several institutions. For both these reasons test services conducted for the benefit of several institutions have been organized.

In many cases these services have been associated with universities where the research work required to develop reliable tests has been carried on. In other cases, some national agency such as the American Council on Education or the Cooperative Test Service has served both to devise and refine the tests and to distribute the tests and rate the answers. The principal Nation-wide testing services have now been combined into the Educational Testing Service, Princeton, N. J., which stands ready to assist in devising tests to meet the needs felt by any responsible group, and to score the answers by use of machines. The rapid growth of the standardized test movement is a testimony to the effectiveness of the universities and the Nation-wide testing services.

The checklist returns indicate that the use of outside examiners is limited. The use of some organized testing agency is likewise limited, although more than twice as many institutions use it as use the outside examiner. The use of an outside examiner for oral examinations is confined almost wholly to the college and university category. Thirty-six such institutions report its use. Of these, less than half report the practice as "very useful." Even this limited use is greater than is the use of outside examiners for written examinations if organized testing services are excluded. Furthermore, of the 22 colleges and universities which make use of outside examiners for written examinations only 7 find the practice "very useful."

The returns reveal that, of the institutions reporting, 54 colleges and universities, 15 teachers colleges, and 41 junior colleges make use of organ-

ized testing agencies. About half the institutions in each category find the practice "very useful." While the number of users is small, it is significant that more than one-seventh of the institutions are trying out a practice so recently developed, and involving highly refined technical education procedures. While the standardized tests available do not pretend to measure all the outcomes of instruction, they are doing much to increase the emphasis upon the desirability of evaluating instructional procedures in terms of outcomes of instruction.

Device No. 9

Identical or comparable tests are given to two or more classes or sections taught by different instructors: (a) These classes or sections are all within your institution; (b) they include classes or sections in other cooperating institutions.

About half the reporting institutions use such tests in classes within their own institution, and a few — about 1 in 15 — use such tests in cooperation with other institutions. In general a little fewer than half the institutions find the device "very useful" whether confined to classes in their own institution or used in cooperation with other institutions.

A number of reports accompanying the return of the checklists stress three values of this device: First, it creates a good basis for frequent conferences among the instructors teaching like courses or sections of the same course. These conferences bring out the strong and weak points in teaching procedures as used by the different instructors. They lead to frankness in acknowledging difficulties, and in seeking better methods and materials. They stimulate all instructors to adopt the best methods used by any of them.

The second value of using the same test in several instructors' classes is the emphasis it gives to the development of superior tests. In general all the instructors involved participate in the job of making the test. This naturally calls for critical evaluation of each test item, and thus assures a growing understanding of the importance of establishing clear-cut objectives of the course and of deciding which objectives are subject to measurement by the tests under consideration. The instructors must then confront the question of how tests can be devised which measure most adequately the students' progress toward those objectives.

The third value of this device is the help it affords in grading test papers when tests are only partly objective. The practice is common of having one instructor rate question one on the papers written in all classes, another instructor rate question two, and so on. This leads to more uniform evaluation of essay type answers by all instructors because each one sees — and frequently talks over with others — what rating other instructors give to

each quality of answer. Thus the wide variation commonly found in rating a given answer by different teachers is narrowed, and essay-type examinations become increasingly satisfactory.

Because of these three values, therefore, the use of identical tests by a number of instructors is believed to be of basic importance as one factor in improving the quality of instruction. In at least one field, English, the instructors who superintend the development of common tests in each of several neighboring institutions get together annually to exchange experiences.

The Systematic Study of the Science and Art of College Teaching

The preceding paragraphs dealt with measuring the results of instruction. It is clear that the tests available for such measurement are not yet perfect. Until they are greatly improved, it will be difficult to measure outcomes of instruction adequately and hence difficult to evaluate college teaching in terms of measured outcomes.

It is therefore of utmost importance that institutions should be engaged in the systematic study of the problems of college teaching through other means than measuring outcomes. Item 10 on the checklist is intended to reveal where the marking system is under careful study. Information about the use of the research procedure is the object of item 11 in the checklist. Finally, studies made through faculty conferences, through institutes, workshops, regular courses, and seminars is the third approach. Information about these is sought through item 12.

Device No. 10

The grading system used by each instructor is carefully studied in the light of institutional grading policy: (a) Analysis is made of the weight given by each instructor to the several aspects of the student's work; (b) the distribution of each instructor's marks is compared with applicable norms.

Studies carried on during recent decades have always revealed that marks given on an ordinary examination paper by several equally competent teachers vary widely. Other studies have disclosed that in the same institution one instructor may give to his students a majority of A's and few or no F's, while another may give a few A's and many F's. With student promotion, graduation, and all sorts of awards dependent upon marks in courses, standardization of marks given by college teachers assumes real importance. Courses taught by teachers who habitually give high marks often come to be dubbed "snap courses." The courses taught by low-marking teachers are often called tough. Thus there turns out to be a relationship

between the standard of marks and the quality of achievement by students. Attempts to standardize marks in an institution are likely, therefore, to lead to better methods of teaching and to improve the achievement of students.

For an institution to follow a policy of examining the marks given by the individual faculty members is one way to make each member aware of his obligation to use marks with due regard to their educational significance. About 35 percent of those reporting in each category of institutions indicate that the institution makes an analysis of the weight given by each instructor to the several aspects of a student's work. From 60 to 70 percent of the reporting institutions of the three categories compare a distribution of each teacher's marks with norms established either in the institution or outside.

Neither of these practices is reported to be "very useful" in more than 40 or 50 percent of the institutions using it. This relatively unfavorable report may mean that an inadequate interpretation is made of the findings, or that there is not an effective follow-through with the individual instructors whose markings are out of line with the norms. Too often the tabulations of teachers' marks are made in the registrar's office with little provision for their careful study by a responsible faculty officer or committee. Or it may be that any attempt to work with data as subjective and personal as most teachers' marks are must seem only "moderately useful" to many college officers responding to the checklist.

Device No. 11

The institution maintains a committee or bureau to stimulate and assist with research studies to determine (among other things) relative effectiveness of alternative instructional procedures.

Probably the most distinguishing mark of progressiveness in modern industry is its reliance upon research to stimulate and guide its development. For much of that research, industry depends upon universities. But colleges and universities themselves have been slow to set up research agencies within their organizations to guide their own development. Teaching is an activity upon which colleges and universities spend annually upwards of three-quarters of a billion dollars. Yet these institutions, while committed to the research approach for determining improvements in industry, do not rely much upon research to validate their present teaching procedures or to guide them in making improvements.

The checklist returns indicate that, of the institutions reporting, 131 make use of the device. This number includes an unknown number of institutions which interpreted the question to refer to a research bureau or committee dealing with teaching in the elementary or secondary schools for which the institution prepares teachers. It also includes some institutions where one or more faculty members include in their research programs studies in the

field of college teaching. The number of institutions which maintain well-organized machinery "to stimulate and assist with research studies" in the field of college teaching is known to be considerably less than 131.

Of the 131 institutions using it, only 30 percent find their experiences with such a committee or bureau "very useful." About 7 percent find it "of little or no value." This is a most unfavorable vote. In an attempt to ascertain why this research approach, so congenial to most college and university teachers, was rated so low, the writer addressed a personal inquiry to the persons who filled out the checklist for the 82 colleges and universities which indicated that they use the device. This letter requested the respondent for each institution "to write a brief statement of the way the committee or bureau dealing with research is organized, what some of its main projects or studies have been, and the chief problems it confronts in its efforts to help solve the problems in the field of college teaching."

Answers came promptly from 51 of these colleges and universities. Many gave generously of their time to describe in detail the set-up to which their marks on the original checklists referred.

The institutions represented by these 51 replies can be divided roughly into four groups:

1. Those whose respondents had originally misread the statement on the checklist descriptive of the device. These now indicate that they do not have such a committee or bureau. There are 15 such replies.
2. Those which have one or more faculty committees which often deal with problems related to teaching. The letters give no indication that a research technique is used by these committees unless committee deliberations can be interpreted as research. Of course research may be carried on though not mentioned in the letter. There is no doubt as to the value of the work of these committees, but the item on the checklist was intended to limit the responses to those institutions carrying on "research studies to determine (among other things) relative effectiveness of alternative instructional procedures." This second group numbers 20.
3. Those which have an institution-wide committee concerned (sometimes among other things) with evaluation and improvement of instruction. They appear to be interested in techniques of investigation. Several in this group mentioned their participation in the North Central Association Study of Liberal Arts Colleges. While no sharp line sets this group off from group number 2 above, there seems to be a greater recognition by group 3 institutions than by group 2 of the experimental approach to the solution of teaching problems. This group numbers 8.
4. Those which indicate clearly their purpose to stimulate research studies. These are the ones which the checklist item was designed especially to reveal. This group numbers 8.

A count of the value attached to the device by the last group of institutions shows that five of them regard their experience with such committee or bureau as "moderately useful," and only three regard it as "very useful." While the number of cases is too small to be very significant this rating by the 8 institutions which have the most comprehensive research set-up is no more favorable than the rating of the 82 colleges and universities which originally checked item 11. We must conclude, therefore, that so far as these data are indicative, the efforts being made by colleges and universities to improve college teaching through faculty committees or bureaus are regarded as only moderately useful. This holds regardless of the extent to which a research technique is used by the committees or bureaus.

Device No. 12

Systematic efforts are made by the institution to study and disseminate information about problems of collegiate instruction: (a) Through faculty meetings or conferences; (b) through institutes; (c) through workshops; (d) through regular courses of instruction; (e) through seminars.

This device represents a study approach less formalized than an institutional research program dealing with college teaching. College faculty members responsible for committee reports or institutes, workshops, courses, or seminars must be students of the problems dealt with in such groups. Where such activities are carried on, better and better ways will surely be found to solve college teaching problems. The widespread development of these activities augurs well for the improvement of college teaching.

About 70 percent of the responding colleges and universities, 90 percent of the teachers colleges, and 80 percent of the junior colleges have faculty meetings or faculty conferences devoted to problems of collegiate instruction. This fact is significant principally as an indication of the almost universal awareness of the existence of problems of teaching. Such awareness is the first step on the way to the solution of these problems.

But more significant is the number of institutions which have organized institutes or workshops devoted to college teaching. Out of a total of 727 institutions replying, 134 conduct institutes and 169 conduct workshops "to study and disseminate information about problems of collegiate instruction." It is interesting to note that while neither the institute nor the workshop has a very high rating, the workshop with more than 50 percent "very useful" rating is distinctly higher than the institute with less than 40 percent "very useful." Neither of these rates is as high, however, as the faculty meeting or conference. Probably this means that there is yet relatively little convincing evidence of the superiority of one teaching procedure over another. Therefore the exchange of experiences in faculty meetings and workshops seems to be the most welcome means of studying the problems.

It is to be expected that a relatively small number of institutions should

have introduced regular courses of instruction dealing with college teaching. Only 57 institutions out of 727 report such courses. These institutions are mainly the universities which prepare college teachers. Where they have been introduced these courses commonly serve the needs of both apprentice teachers and full-time faculty members. Of these 57 institutions only 36 percent find them "very useful," while 14 percent find them "of little or no value." Apparently faculty members have not yet developed confidence in the materials available to constitute a "course" on college teaching. On the other hand, the seminar as a procedure has been introduced in 114 institutions, twice the number using the "regular course of instruction." The satisfactoriness of the seminar, while more favorable than the "course," is still quite low.

In summary, it may be said that the systematic study by the institutions of the science and art of teaching is yet largely in the stage of discussion and the interchange of experiences. Some institutions have undertaken research programs and a few have introduced courses of instruction. But generally speaking the activities most widely used are the study of the distribution of each teacher's marks, and the discussion of the problems in faculty meetings and conferences.

Schemes for Rating College Teachers

There is no way to avoid rating of teachers. Selecting a teacher from among a half dozen possibilities, promoting a teacher, increasing a teacher's salary, making administrative decisions with respect to assigning functions to teachers — these and many other actions call for rating of teachers. The question is not whether teachers shall be rated, but how rating can be done most fairly and with the best effects on both the teachers and the institution.

The three preceding sections of this chapter have indicated that there is little agreement among college leaders as to what constitutes superior teaching or how to identify it. Nor is there much confidence that presently organized research programs can produce in the early future convincing evidence as to which teaching procedures are best. Under these circumstances, therefore, college administrators are seeking help wherever they can find it in their required job of rating teachers and in their desire, above all to improve the quality of the teaching on their campuses. Some colleges make use of faculty committees to supplement the ratings by department heads and deans. A few provide for visits to classes. Nearly all listen to comments of students and alumni. But after everything is done the administrative officer or the faculty committee records the required rating with troubled mind. And as to discharging their responsibility to improve the quality of teaching on the campus through rating the teachers, the administrative officer and faculty committee feel largely helpless.

Accordingly there has grown up a considerable interest in three devices for rating teachers. First, a self-rating scheme; second, a rating by students; and third, a rating by alumni. These will be discussed in the following paragraphs.

Device No. 13

Instructors make use of self-rating scales: (a) In some departments only, (b) in all departments.

This is a device for improving teaching, not for rating teachers by the administration. The many self-rating scales are all devised with a view to stimulating each instructor to examine his own procedures in the light of each quality listed on the scale. The assumption is that each instructor will agree that a good teacher could stand high in most of the qualities on the self-rating scale. He will therefore try to strengthen those qualities in which he believes himself to be weak. Not always do instructors recognize their weak qualities, but often they do.

Self-rating scales are used in some departments in about 40 percent of the institutions reporting, but used in all departments in less than 10 percent of the institutions. The practice is thought to be "very useful" in only a quarter of the institutions where it is used in some departments only, but is rated a little higher in the small number of institutions using it in all departments. On the other hand a considerable number, 8, of the institutions using the device in all departments find it "of little or no value."

Device No. 14

Provision is made for the systematic rating of instructors by students: (a) In some departments only; (b) in all departments; (c) at the option of each instructor.

This device has had sporadic use here and there for many years. Only in the last decade, however, has its use become widespread. Even now its use by all departments in an institution is much less common than its use in some departments only. Its use at the option of each instructor is the more general practice where it is used at all.

Student rating of college teachers has come into vogue too recently to permit of any generalizations concerning its value. But the experience of one institution which has used it for about 7 years appears to be typical. In the particular institution referred to (a large State institution) the student rating was first instituted for the dual purpose of informing college teachers concerning student reactions to their teaching and of informing the administrative officers of the rating so they might utilize it in evaluating each individual teacher's services. Such rating was made of all teachers. For several years it continued to serve the two purposes. Then a faculty

committee was appointed to examine the working of the system. After careful study a change was made limiting the required use of the student rating to faculty members spending their first year as teachers at the institution, the completed scales for such first-year teachers to be given to the administrative officers. In the case of all other teachers the use of the scales is optional, and when used, the results are given only to the teacher rated. This institution attaches high value to the results of student rating of faculty members.

The most common practice is for an institution to make first a rather general — though usually not universal — use of the student rating scales. After that, a much more limited use is made until several years later, when again a more general use is made. Generally the students have a leading part in stimulating the use of the rating device and usually participate with faculty representatives in developing the scale used.

The checklist replies indicate that, of 408 colleges and universities responding, 59 make use of the student rating in all departments. Of these, slightly more than half find the practice "very useful." Of the 114 teachers colleges responding, 13 make use of it in all departments, 7 of which find it "very useful." Of the 205 junior colleges only 16 use the device in all departments and of these only 3 find it "very useful," while 5 find it "of little or no value." This relatively low value placed upon student rating of teachers in junior colleges probably reflects the younger age of the junior college students.

A somewhat larger number of institutions of all three types use the device in some departments than use it in all departments, but a considerably smaller percentage of them, less than 25 percent, find it "very useful." The same may be said of the 94 colleges and universities, the 22 teachers colleges, and the 48 junior colleges which use the device "at the option of each instructor." Only about a quarter of them find this practice "very useful."

Reports which accompanied the return of the checklists and other evidence would seem to indicate certain reasons for the relatively unfavorable reception accorded the use of student rating of college teachers. In the first place, such rating runs counter to the long-standing notion that students are expected to be uncomplaining recipients of whatever the faculty members give out to them. It is held that students are young and irresponsible, that they will do only what they are required to do. Hence they will criticize a teacher who demands hard work, or who does not measure up to the whimsical expectations of the immature students. This notion, never more than half valid, is fast losing what truth it ever had. If treated like young adults, sincerely interested in their own education, college students generally assume their share of responsibility. Certainly intellectual growth cannot take place effectively except where students do assume responsibility, and where teachers are their helpers rather than their drivers. Hence the atmosphere of the

college should now be congenial to the use of student opinionaires respecting faculty services if such opinionaires are carefully devised and judiciously used. It is gradually becoming so.

In the second place, the rating scales have too often been hastily devised and put into use without a sufficient ground work of understanding having been laid among both students and faculty. Often the development of the rating scale has its origin in a protest of some student group, or of some faculty members who represent only a minority of the entire faculty. Occasionally it has been at the instance of some administrative officer who has not thought it essential to have faculty approval. In such situations as these, a low value placed upon the use of the device was to be expected.

But where faculty and students have worked together in developing the scales and where the use of the scales has been limited to the aspects of teaching about which the students admittedly have competence to speak, the evaluation of the device is usually high. In other words the device has not been condemned so much because of its intrinsically low value as because it has not been used wisely.

Device No. 15

Provision is made for the systematic rating of instructors by alumni:
(a) *In some departments only; (b) in all departments.*

This device has had very limited use. Perhaps because it involves a good deal of labor, colleges have not drawn upon what would appear to be a reservoir of rather competent opinion. And strangely enough, those 40 institutions which have used the device in some departments only and the 31 institutions which have used it in all departments do not rate it very highly. Not only do fewer than one-fourth find it "very useful" but more than one-fourth find it "of little or no value."

Few respondents took occasion to comment on their experience with this device. It appears that they are relatively indifferent to it, and there is, therefore, nothing to report concerning it from the checklist returns. A few studies that have been reported in educational periodicals would seem to indicate, however, that an occasional canvass of alumni opinion about college teaching has great value.

Administrative Practices To Stimulate and Help Each College Teacher To Do His Best

While the items in this category are found last on the checklist, they are first in importance. In fact, without the display of interest on the part of administrators which these items signify, none of the other devices are likely to be used effectively, if at all. Among the most common complaints made by faculty members is that, although stressing the need for good teaching,

the president or dean makes promotions on the basis of contributions to professional journals. Another complaint is that facilities for visual aids are not readily available even though lip service is paid by the administrators to their use. In short, the administrative officers are believed by many faculty members to be less stimulating and helpful than they might be in bringing about the very improvement they claim to want.

Device No. 16

Newly appointed instructors are oriented by systematic acquaintance with: (a) The institution's organization and pertinent policies; (b) the responsibilities of various institutional officers; (c) the facilities of the libraries; (d) the various types of instructional materials available.

Device No. 17

Care is exercised to enlist constantly the best efforts of faculty personnel. (a) By a series of departmental faculty meetings with the president and dean to discuss problems of teaching; (b) by stimulating freshness in instruction through: (1) varying from year to year the instructor's work; (2) revising courses periodically; (c) by issuing an institutional newsletter frequently dealing, among other things, with instructional problems; (d) by making available special teaching aids such as: (1) trained library staff with time to help instructors; (2) adequate laboratory help and equipment; (3) annotated bibliographies to help instructors; (4) special books and articles dealing with instruction; (5) visual aids and facilities for their effective use; (e) by administrative policies and practices to encourage good teaching, such as: (1) paying expenses to meetings; (2) providing sabbatical and other leaves for study; (3) encouraging experimentation with instructional procedures; (4) recognizing superior teaching as a primary factor in promotions and other academic awards; (5) singling out for special recognition outstanding performance in teaching.

No count was made of the responses to any of these sub-items. They were included in the checklist because without them the checklist would seem to have omitted many of the most effective as well as most commonly used devices to improve college instruction. Virtually all institutions make use of many, if not most, of these sub-items, but such use in the case of most of the items is recognized to be a matter of degree. Since the extent to which an institution uses any one of the items is not indicated by its checking that item, a tabulation of the responses seemed not to be justified.

One point, however, is worth reporting, namely, that preponderantly the items checked are rated as "very useful." The omission of the tabulations should not be interpreted therefore as a lack of appreciation of the value which should attach to these devices. As a matter of fact, the activities

named in these items are basic to an institution's approach to the improvement of its teaching.

Summary

This chapter has dealt with replies from 727 institutions to a checklist containing 56 sub-items, grouped under 17 devices. These devices fall into five larger categories. The checklist provided for three symbols with which to indicate the degree of usefulness each institution found in its use of the several sub-items. The respondents were invited to write a letter to accompany the return of the checklist telling of their experience with any of the devices used to evaluate and improve college teaching.

With respect to helping college teachers by professional counsel on teaching problems, the long-standing attitude that a college teacher's classroom is his castle is giving way to the attitude that a teacher can be helped to improve his teaching. In many colleges it is not beneath a teacher's dignity to request colleagues to make suggestions respecting his teaching. Skillful teachers from within and from without one's institution are being utilized to counsel with the less skillful teachers. Superior teaching is being observed by teachers who want to learn how it is done. The leaven is working in a goodly proportion of the colleges and universities. It is necessary to remember, however, that in these institutions the number of teachers and of departments touched by the leaven is still small.

The heart of the problem of evaluation of teaching is how to measure the results of instruction. The old dictum that whatever exists, exists in some amount and therefore can be measured, seems only remotely applicable in the realm of the changes expected to be wrought by college instruction. But much progress is being made in clarifying the objectives of instruction and in devising tests to measure student progress toward those objectives.

To afford aid in making reliable tests, institutions here and there are setting up test services or evaluation centers upon which instructors may call. Help in validating test items and rating nonobjective test papers is made available. The Educational Testing Service (Princeton, N. J.) has been developed on a national basis to render assistance in developing new tests and in machine scoring its entire series of tests.

The several teachers in charge of similar courses or of sections of the same course are working as teams in many institutions. They pool their experiences, work together in developing tests, and join in rating the answers. In this way skill in evaluating the results of instruction is developed and with it, skill in attaining the desired results.

The third category under which the devices are grouped covers the systematic study of science and art of college teaching. Since study (research) by industry of its manufacturing or operating processes yields such big

financial returns, it would seem reasonable that careful study of educational procedures would yield good educational returns. From the checklist replies it seems that informal study through faculty committees, conferences, workshops, etc., is as far as most colleges have gone. There is a gratifying wide interest in the problems of teaching, but there is little use of the research technique to determine the relative effectiveness of alternative instructional procedures. Possibly the answer is the same as proved to be the case with tests. Until a national test service became available, carefully devised tests did not develop rapidly because the task of making and scoring good tests was too complicated and costly for a single institution to undertake. It would seem that a national agency devoted to assisting colleges and universities work out and administer research programs might similarly speed up the development of more adequate programs of systematic study of teaching problems.

In the realm of rating teachers, information was gathered as to the extent of use of self-rating schemes, ratings by students, and ratings by alumni. Nothing was asked about the common practices of rating by administrative officers and faculty committees because such ratings are universally required in the day-to-day administration of faculty personnel.

These practices are confined largely to a few departments in institutions where they are in use at all. Self-rating scales are more widely used than the other two devices, and from the testimony submitted with the checklists, they are serving well to acquaint teachers with the elements which are believed to make up good teaching. Student rating of teachers has lately come into rather common use, particularly among the college and university category of institutions, but its value is still widely questioned. As evidence of the partnership of student and teacher in the educative process, the extent of optional use of student ratings by individual teachers is significant.

The final category of devices includes all those administrative procedures and practices designed to bring out the best in every teacher. Many of these are in common use and are generally recognized as "very useful." Where good teaching stands high among the demands which the administrative officers make of the staff members they recommend for employment and promotion, many devices will develop to evaluate and improve college teaching. Therefore the fact that a high percentage of institutions utilize and rate as "very useful" many of the commonplace items listed in this category is evidence that at least the essential interest in good teaching is widespread.

Appendix A

THE UNIVERSITY OF CHICAGO

Chicago 87, Illinois

COMMITTEE ON THE PREPARATION OF TEACHERS

Executive Secretary

JANUARY 21, 1948.

DEAR PRESIDENT _____:

The University of Chicago's Committee on the Preparation of Teachers is devoting its attention this year to a study of the best means of preparing prospective teachers for American colleges. In connection with this study, the members of the Committee would very much like to have

- (a) Your estimate of the strengths and weaknesses of college teachers as now trained in American graduate schools;
- (b) Your description of the duties in addition to teaching which college teachers are called upon to perform for which graduate schools should offer preparation;
- (c) Your suggestions as to the lines along which a program for the improvement of the training of prospective college teachers might proceed.

Following further study of the problem of preparing college teachers, the Committee hopes to have an opportunity to discuss its findings and to share its deliberations with college administrators at a conference on the preparation of college teachers to be held at the University of Chicago probably in April of this year. If you would be interested in attending a conference devoted to this problem, please so indicate in your reply to this letter.

Needless to say, the members of the Committee hope very much that you will find time to aid them in their present undertaking by writing a letter of the kind described above and by planning to attend the April conference.

Cordially yours,

HAROLD A. ANDERSON,
Executive Secretary.

F. C. WARD,

Chairman.

_____, *President.*

_____, *College.*

Address:

Appendix B

Budget Bureau #51-4903
Approval Exp. 6-30-50

FEDERAL SECURITY AGENCY
OFFICE OF EDUCATION
Washington 25, D.C.

A CHECKLIST OF DEVICES USED BY GRADUATE SCHOOLS TO IMPROVE THE
PREPARATION OF PROSPECTIVE COLLEGE TEACHERS

Name of institution _____

Official making report _____

Title of official _____ Date _____

Of 97 graduate schools which returned checklists with at least one item checked, the numbers in column 1 represent the institutions which find the device to be "very useful"; column 2, "moderately useful"; column 3, "of little or no value"; column 4, total number using the device.

For each device used by the institution make

- // before each one found to be very useful.
- / before each one found to be moderately useful.
- before each one found to be of little or no value.

Leave unchecked those devices not used in your institution.

	1	2	3	4
1. Special efforts are made to recruit graduate students having unusual talents for college teaching:				
(a) These efforts include recommendations from the student's undergraduate college _____	30	34	1	65
(b) These efforts do not include such recommendations _____	0	3	2	5
(c) These efforts include fellowships awarded on the basis of talents for college teaching, the selection of fellows made by				
(1) Examinations _____	4	2	1	7
(2) Interviews _____	18	18	0	36
(3) Both examinations and interviews _____	9	6	0	15
(d) These efforts are made by some departments only _____	10	43	0	53
(e) By all departments which prepare college teachers _____	18	8	0	26
2. Special counseling services are provided for students contemplating or preparing for college teaching:				
(a) In some departments only _____	23	38	0	61
(b) In all departments which prepare college teachers _____	10	5	0	15
3. Requirements for the Ph. D. have been broadened in the interest of prospective teachers so as to make for less highly differentiated specialization than formerly:				
(a) This broadening has occurred chiefly in undergraduate requirements _____	1	12	0	
(b) Chiefly in graduate school requirements _____	5	6	0	13
(c) In both undergraduate and graduate requirements _____	8	12	0	11
4. Two alternative Ph. D. curricula have been adopted, one in preparation largely for research, the other in preparation largely for college teaching _____	3	3	2	8
5. Some other degree than the Ph. D., such as the Ed. D., has been authorized for those preparing for college teaching _____	13	15	2	30

	1	2	3	4
6. Apprentice teaching in college classes is provided:				
— (a) In your institution _____	45	24	0	69
— (b) In some other institution _____	2	6	0	8
(c) And is supervised by				
— (1) Faculty member from department of student's specialization _____	30	26	1	57
— (2) Faculty member from department of education _____	2	6	2	10
— (3) One who has faculty membership in both departments _____	2	1	2	5
7. Prospective college teachers systematically observe illustrations of good teaching as a part of their preparation:				
— (a) Observation in your institution _____	15	20	1	36
— (b) Observation in other institutions _____	1	1	1	3
8. Faculty members follow up former students after they enter upon college teaching:				
— (a) Reports of their work are obtained _____	7	16	2	25
— (b) Visits are made to their classes _____	2	5	2	9
9. The following instructional activities are maintained as a part of the education of prospective college teachers:				
(a) Workshops				
— (1) For your institution only _____	8	9	2	19
— (2) For representatives of other institutions also _____	12	7	2	21
(b) Courses of a professional education character are:				
— (1) Optional _____	8	44	0	52
— (2) Required of all prospective college teachers _____	8	6	1	15
Given by:				
— (3) Education department staff _____	8	28	0	36
— (4) Major department staff _____	6	3	0	9
— (5) Combination of (1) and (2) _____	6	13	0	19
(c) Seminars:				
— (1) For students in a single department or in a group of related departments _____	23	14	0	37
— (2) For students in all departments _____	7	6	0	13
— 10. A faculty committee is maintained to coordinate the efforts of all departments in the education of prospective college teachers _____	8	5	1	14
11. Other Devices: (Use extra sheet if necessary).				

Please return the completed checklist to

Federal Security Agency
Office of Education
Division of Higher Education
Washington 25, D. C.

References

BECAUSE bibliographies in the field of college teaching are available in all libraries, it does not seem desirable to include a bibliography in this publication. Instead, the following references to bibliographies are given:

1. Books and articles which appeared before 1939 are listed in "The Study of College Instruction," Yearbook No. XXVII of the National Society of College Teachers of Education, 1939. The University of Chicago Press.
2. More recent studies, particularly those using research techniques, are listed in the *Review of Educational Research* for December 1948, devoted to Methods of Research and Appraisal in Education. Published by the American Educational Research Association, the National Education Association, 1201 16th Street, N.W., Washington, D. C.
3. The latest books and articles dealing with the preparation of college teachers are listed in:
The Preparation of College Teachers edited by Russell Cooper and Theodore C. Blegen. The American Council on Education (1950), 744 Jackson Place, N.W., Washington, D. C.
4. Selected bibliographies are being prepared constantly and mimeographed by professors in charge of courses in higher education in the universities and may be had on request addressed to such professors. With permission of the respective institutions, the following are mentioned:
Cornell University, Ithaca, N. Y.
The George Peabody College for Teachers, Nashville, Tenn.
Oregon State College, Corvallis, Ore.
The Ohio State University, Columbus, Ohio.
State University of Iowa, Iowa City, Iowa.
Teachers College, Columbia University, New York, N. Y.

☆ U. S. GOVERNMENT PRINTING OFFICE: 1950