The Teaching Function

Unless otherwise stated, the following discussion relates only to teaching in undergraduate, university colleges. Teaching on the graduate and professional level has its problems, but these are less obvious and require less attention here than does the instruction of undergraduates. The only exception to this statement relates to those situations in which graduate or professional students are taught much as are undergraduates—as in large lecture classes. In such cases, there may be little that is distinctive in an advanced program.

Attitudes toward teaching in higher education have, as noted in Chapter I, gone through three stages over the past hundred years. Until universities emerged, it was assumed that a college professor's chief function was that of teaching. Thereafter, for some time, a new emphasis on research crowded out concern about teaching in the universities and even had a similar effect on some independent arts colleges. But objections to this state of things were voiced as early as the 1920's, and these protests have swelled to a chorus during the last decade.

The battle for better teaching has already been won in the independent arts colleges, in the sense that this is the function which they now most value. "Contrary to a widespread assumption," reported an NEA survey of about 1954, "... re-

1 We cannot enter here, e.g., into questions peculiar to the teaching of law or medicine, although recent concern about such matters has been reflected in the professional schools. See, e.g., the files of the *Jour. of Med. Education.*
search is not the most important factor in promotion” in the colleges at large. Rather it is “exceptional skill in teaching.” 2 Partly because of this value judgment, moreover, there is a mounting concern about ways and means for promoting better teaching throughout higher education. How are potentially “good teachers” to be found, 3 how trained, and how most effectively utilized?

Universities should not, and probably cannot remain aloof from this growing concern about the teaching process. We have already stated, to be sure, that a real university should reverse the emphasis of the independent college by placing creative and professional values above teaching per se. And we have criticized the many who, in writing about “college teaching,” make no distinction between the place of this procedure in “colleges” and in “university-colleges.” But we have also urged that, within the limits set by this distinction, every effort should be made to improve teaching in university, as well as in other types of, colleges.

Training Teachers for University-Colleges. The recruitment of university teachers has been discussed in Chapter IV, and we may therefore proceed to a consideration of their training. Traditionally, it was assumed that the “Ph.D. program” somehow prepared students to teach, and the current criticisms of that assumption have already been mentioned. Some critics even say that this program bears no relation to future teaching functions whatever. Such criticism, in our opinion, goes too far, inasmuch as an intimate understanding of how knowledge is acquired, and even a detailed awareness

2 As reported in the Jour. of Higher Ed., vol. 26 (1955), 69 ff.; see also School and Society, vol. 81 (1955), 123.
3 A bit disturbing is the common use of the term “recruited” in this connection. Realistic as this may be, “selected” would be better from the university viewpoint.
of a particular sub-field may be assets to the college teacher as such.

It may be held that some awareness of how knowledge is acquired—as well as broad familiarity with a field—can be secured in a modified Master's program and that the effort to secure a Ph.D. is therefore unnecessary. If this proves to be the case, well and good for college teachers outside real universities. We are only saying here that the indictment of this degree, as having no value for future teaching, is an exaggerated one.

Having claimed something for the much-abused Ph.D., there is no reason to deny its past shortcomings. Obviously, the taking of a conventional doctorate did little to familiarize a student with teaching problems. But the most serious aspect of the matter was the assumption, in most graduate schools, that teaching would take care of itself in the case of anyone who could secure the degree. In practice, if not in precept, that assumption came close to the view that teaching as such was of no great importance. Or it may have been assumed that each student had seen, during school days, enough teaching to provide all necessary guidance.

Such supreme indifference to teaching is now probably rare even within university circles. No one was encountered, among the staff at Pennsylvania, who did not at least claim to recognize the importance of this function. Although there may have been some lip service here, the opinion seemed genuine in most cases. Even those who emphasized the claims of research, declared that no one was desired on the staff who was not reasonably effective in undergraduate classes.

Such attitudes are in no wise peculiar to "Penn"; one encounters them at every turn in American universities. Nearly everyone inquires about teaching ability in considering ap-
pointments. And though the replies may not be weighted as heavily as are those to queries about research, they are nevertheless placed in the balance. The writer knows of recent instances in which men, distinguished for their publications, failed to receive invitations to professorships because their teaching ability was doubted. For a university to draw the line so sharply seems to us a mistake, unless a man's classroom deficiencies are extreme; but the fact remains that some strong institutions will do just that.

Assuming that there was indifference in the past, much is gained if a university faculty just takes teaching seriously. Such an attitude, on the part of senior men, will be transmitted sooner or later to graduate students and to junior staff. And the latter will be the better for it, if they consciously try to improve their class-room work—regardless of what particular measures they employ. More than this, senior men will begin to wonder what could be done to aid the younger in this quest.

As soon as university men ponder the matter of teaching, they are at once involved in what seems a morass of subjectivism. Although often invoked, there is probably no such thing as "good teaching" in any absolute sense. At any rate, no agreement as to its nature appears possible, except in terms so abstract as to have little meaning. One must introduce many qualifications before a consensus can even be approached. Teaching of what subject, to what students, on what level, for what purpose—and so on?

Even within limits so suggested, two observers will differ about a given teacher's ability, or on what constitutes excellence in general. Such disagreements can be observed between colleagues in the same department, or between students in the same course. The situation makes it difficult to construct scales for measuring college-teaching performance;
and one may predict that, if these are produced, they will be received with some skepticism. But if such scales ever become reliable, most of us will probably find that we are not as effective as we thought we were—a sobering thought. As for “great teachers,” they are so rare that one almost distrusts those who constantly invoke them.

Judgment has to be passed on teaching ability, nevertheless, when men are considered for appointment or promotion, or when students are asked for their opinions. And what is more to the point here, criteria re teaching effectiveness must also be kept in mind in any training program. Personality, voice, manner, appearance, preparation, procedure, attitude toward students, standards, pedagogical devices, ability to hold interest and doubtless other matters must be considered in one way or another. Although complete objectivity is at best an ideal, guidance may nevertheless be helpful to the degree that the mentor himself is a wise and experienced teacher or—better yet—if several such mentors are in the picture.

Many academic men, even though they agree that some attention should be given to beginning teachers, wish to keep training as simple and informal as possible. They would occasionally talk to an instructor or assistant instructor, offering criticism or hints drawn from their own experience or predilections. They might even observe his class once or twice, but would not go beyond this.

At the other extreme are those who desire a formalized, training procedure—modeled in some degree on programs long in operation for training public-school teachers or other professional personnel. Professional educators are likely to recommend, in addition to regular observation of teaching, some course work in educational subjects—for example, in the philosophy and history of education, in educational psy-
chology, and in the structure and problems of the arts college.

Fully aware of the imperfections of much college teaching, educators point out that the academic profession is the only one that has had no formal training pointed directly at its chief, or at least one of its chief, functions. And some of them say frankly that the academic man should view himself "as primarily a college teacher," rather than as a subject-matter specialist.

Programs involving professional courses in education have operated in recent years at a number of universities. Such courses are usually given by the college of education and those who direct them may feel some sense of mission.

Courses are so offered, for example, at Minnesota as electives, where as many as 150 to 175 graduate students are reported to have taken them in recent years. (A number of departments are said to have suggested that students intending to become college teachers should take a minor in education.) It is admitted that "great numbers" do not know these facilities exist, that there are "centers of resistance," and that the traditional requirement of a certain program of work for graduate students has not yet been overcome. But hope is expressed that "more converts" can be won in the future.

Formal plans for preparing "college teachers" often involve a year of practice teaching, in addition to other re-


5 M. R. Trabue, "Characteristics of College Teachers Desired by College Presidents" (a suggestive title), Jour. Teaching Education, II (1951), 133 ff.

quirements. This so-called internship may grow out of the usual teaching by assistant instructors (graduate students), but implies more time and supervision than is usually devoted to such work. Or the entire first year of an instructor may, with appropriate supervision, be viewed as an internship. At Vanderbilt, for example, graduate students who intend to become college teachers, may elect a special program which includes work in a field, education courses, and supervised teaching experience. 

Our opinion is that such a program as that at Vanderbilt is worth a trial for those who know, in advance, that they wish to teach in colleges but not in universities. In themselves, the arrangements might help even those who later change their minds and teach in universities. But such a change might involve delay, just when everyone is protesting the time taken in securing a Ph.D.

Moreover, if education courses and practice teaching are to be formalized and extended, why not let the student take the usual training for public-school work and teach on that level for several years, before qualifying for college teaching?

This procedure would provide at least as much training in education as do the formal, college-teacher programs and would, in addition, have two advantages. First, experience gained in public-school teaching—in the front lines of education—will be worth more than will any college-teaching “internship.” Pedagogically, college teaching is relatively easy for anyone who has had public-school experience. Second, the initial diversion of some future college teachers to lower schools would be of real benefit to the latter. But the scheme would “work” only if colleges kept their eyes on such men and were willing later to give them appointments.

7 Newsletter, Council on Cooperation in Teacher Education, XI (Feb., 1957), No. 3.
Whatever is said about college teachers, the view has already been expressed here that university staff members should be specialists first and teachers secondarily. If so, what are the implications for training? Certainly, the main education should be that in a man's field. Within that limit, more attention should be given to teacher-training and supervision than is now common at Pennsylvania or in most graduate schools.

First, it would be well to offer as electives one or two short courses in education—for example, in the teaching of a given field, and in the nature and problems of undergraduate colleges. Whether such courses were given by a department concerned, by the education staff, or by an independent professor of higher education would depend on circumstances.

Second, the teaching of assistant instructors should be regularly observed and supervised by the staff under whom they work. To turn a course over entirely to such men is highly questionable, though this is done in certain “Penn” departments. One should remember that the “clinical clerk” in medical schools is never in full charge of patients, and that the internship in that field is analogous to an instructorship and not to the role of a student still working for his degree.

Unsupervised teaching by graduate students at Pennsylvania is said, by certain professors, to be resented by the students. And there is some public evidence in support of this opinion. Thus, Lovejoy's College Guide for 1956-57 advises students selecting a college to:

Investigate . . . whether you are likely to be taught by part-time teachers who are still studying for their graduate degrees, or whether your classes will be conducted by . . . experienced members of the faculty. The latter method is generally preferable from a student's standpoint. . . .

223
All this merely repeats a truism: that the only way in which to reconcile the need for training neophytes with the rights of the clientele (patients, or students) is to provide close supervision of the trainees. Medical schools learned this lesson long ago. Even interns are supposed to be supervised and instructed, though in lesser degree than are clinical clerks; and by analogy, the same may be said of instructors in college.

While on this theme, one may add that—in a more general and informal way—some supervision may be exercised over the undergraduate teaching of all the staff. There should be no hesitation in occasionally observing an assistant professor in class, when this serves a real purpose. Staff members with tenure should not be observed, but there can be ultimate checks of extreme situations even on this level. At Harvard College, for example, all class grades are tabulated and made available to the dean. If a particular "elective" is large and shows very few or no failures, year after year, the dean may call the professor in and inquire politely whether the course is not too easy. Presumably, the same procedure may be followed if there is an extraordinary percentage of failures. Solicitude for professors' feelings should not be carried too far at the expense of the undergraduates.

**Faculty-Student Ratios and Size of Classes.** The faculty-student ratio is often viewed as a general measure of educational effectiveness, on the assumption that small classes are preferable to large. In these terms, Pennsylvania stands well in comparison with the country at large. In 1947, for example, the average ratio for all higher education was reported as one staff member to fifteen students; and an ideal ratio
was said to be 1:20 for the first two college years and 1:13 for the last two.\(^8\) The ratio at "Penn" has been higher than this for years, and was reported as 1:10 in 1956-57.

Universities may be expected, however, to exhibit higher ratios than do all-undergraduate institutions, since graduate classes are usually small. Here, again, Pennsylvania compares well with national figures. Thus, fifty-six private universities were reported in 1954-55 to have a ratio as low as 1:16.\(^9\) One wonders, however, about the status of some of these "universities," and also about certain variables—such as whether part-time teachers are included—which make comparisons difficult.

In any case, the Pennsylvania ratio of 1:10 is not as high as is that in comparable institutions in the Northeast. Those reported for Columbia, Cornell, and Yale in 1956-57, for example, were respectively 1:9, 1:8, and 1:6.\(^10\)

In general, one would expect Pennsylvania to maintain a lower faculty-student ratio than do universities which use tutorial systems of teaching. Other factors also influence the figures—for example, certain types of colleges traditionally require a larger proportion of faculty than do others. Hence comparisons college by college would be more meaningful than are those between universities as a whole.

At Pennsylvania, as elsewhere, the ratio in undergraduate colleges like Arts and Wharton is lower than in advanced schools. The former possess many classes enrolling from 40 to 100 students, and those with 200 or more are not unknown. The larger such lecture classes are, the lower the costs. Hence, as noted, enrollments of this sort are commonly

\(^8\) *Higher Education for Amer. Democracy*, IV, 9-11.


viewed as providing a cheap if not actually shoddy form of instruction. At the other extreme, the tutor—giving individual attention to each of his charges—is presented as ideal.

However desirable a tutorial plan may be, it is obviously too expensive for most institutions—including, in all probability, Pennsylvania. Not only is it too costly; as a shortage of academic men develops, it may also appear wasteful of personnel resources. Demands for a maximum use of such personnel are already insistent, and have revived the old question: Can the large lecture-class be used effectively?

There are no simple answers. True, tutorial methods at Oxford—whence they were imported to America—seem to achieve good results. But so do the methods of Italian universities, where the faculty-student ratio is said to be as low as 1:65! While some praise small classes, others are now recalling that large lectures were the "best courses" they ever took. Clearly, one must know the circumstances before reaching conclusions.\(^{11}\)

There is, in our opinion, a place for the big lecture class—in general courses for undergraduates, and in the hands of a staff member who has a flair for speaking to large numbers. There are, admittedly, dangers that such a man will only repeat what is already in the texts; or that, from being a good teacher, he will be transformed into a good performer. But if these outcomes are avoided, the lecturer can do more than merely "pour in" knowledge. He may clarify a difficult subject, start a student thinking, or even stir his imagination and enthusiasm. And if the lecturer can do this with many as well as with a few, should not the many have an opportunity to hear him?

\(^{11}\) No conclusive evidence is yet available on the correlation of class size and learning. We all just have our opinions. See M. E. Wolfgang, *More Effective Use of Faculty Resources*, Educational Survey, 1957, 8.
There is also, obviously, a place for the small class or “discussion group,” provided that it really discusses! Perhaps educational psychologists can determine what the maximum size for such a class can be. Let us say, arbitrarily, that it is fifteen or even twenty-five. Then the most wasteful size of class will fall between the latter figure and about seventy-five. For, once the number rises above twenty-five, the teacher must do most of the talking, and he might then just as well be speaking to seventy-five or more. The only difference here is that the big class will “take more out of him.” As a rule, therefore, a staff member should not have more than one large lecture class on his schedule.

It is difficult, at times, to implement these principles. Professor X teaches a field in which a large, general course is expected. But X, although an able scholar, is a prosaic lecturer. Rather than inflict him on generations of captive audiences, perhaps a more stimulating assistant professor can “take over.” And the next time this professor’s post is filled, lecturing ability can be kept in mind. Meantime, he may be effective in seminars or small, advanced classes and should be encouraged to devote himself to them. The assignment of men to areas most adapted to their abilities is always an important consideration.

Large lecture classes are often broken up at intervals into sections. If the latter are kept small, the arrangement can combine within one course the advantages of lectures and of discussions. It also provides experience for assistant instructors in charge of the sections—a justifiable arrangement if the latter attend the lectures and are really supervised. But if the sections have more than 25 students, or if the assistants simply give additional lectures “on their own,” the program is a dubious one.
Teaching Devices. The fear of teacher shortages has led to much interest in devices which will make maximum use of those available. Everyone agrees that it is bad economy to impose on staff such burdens as could be carried by less highly-trained personnel. Hence the need, which is obvious in certain colleges at Pennsylvania, for more secretarial aid. In practice, unfortunately, administrators can see no immediate, tangible results when secretarial budgets are increased, and even the staff would prefer to give priority to advances in their own salaries.

It may stretch the term a bit to call office facilities "teaching devices," yet there is a relationship. The advising function, whether it pertains to a student’s whole program or only to a specific problem, is clearly important; and advising is best conducted in privacy. So, too, are a staff member’s other interviews. Ideally, every full-time person should have his own office, even though it may be a small and modest one. If priorities must be established, chairmen and then the tenure staff would come first. Actually, in recent years at Pennsylvania, office facilities have been provided in a more satisfactory manner than have the services of secretaries.

Recent observers have suggested that the use of supplementary personnel might conserve academic time. Could assistants, analogous to technicians in laboratories, be of service? "Teachers’ aids" have been found helpful in certain public-school experiments. As a matter of fact, "graduate assistants" have long been used in large, college courses for such purposes as checking attendance and reading papers. It has also been suggested that upper-class students could be employed in one way or another in first- or second-year courses. There seems no objection to trying this out in certain situations. But the general idea, which is reminiscent
of the "monitors" of the old Lancastrian system, seems to have only limited possibilities.

Thirty years ago, there was some interest in the use of the radio as a device for reaching large numbers of students. This idea has now been superseded by enthusiasm for the employment of "TV"—the "greatest contribution to the art of communication since the invention of printing." Cannot one teacher reach as many as several now do, by using closed-circuits? And cannot the scale of such service be indefinitely expanded, if "live shows" are replaced by films? Thinking along this line, the Ford foundations have invested many millions over the past five years in encouraging the use of "TV" in public schools and in universities.\textsuperscript{12}

The public-school experience, which has been varied, is hardly pertinent for universities. The value of having one able professor of physics prepare films for thousands of high-schools is hardly transferable to a university which, presumably, has a capable professor of its own. True, the latter can reach more students with a closed-circuit arrangement than he can otherwise; and the individual reactions of class members can be given expression in section meetings which follow the broadcasts.

On the other hand, university classes are rarely too large to be reached by a single lecturer in person. A large class must be impersonal but so, also, must a "TV" showing. Students may relax more in small, viewing groups, but whether this would be desirable depends on circumstances. One must also remember that broadcasting can be time-consuming in preparation, and costly in operation.

Most academic men are therefore inclined to be cautious,

\textsuperscript{12} For an interesting account of this story see W. H. Hale, "A Legacy from the Model T to the Age of ETV," \textit{The Reporter}, vol. 16, No. 11 (May 30, 1957).
if not actually skeptical, about any extensive use of television. Such reactions can hardly be ascribed to fear of technological unemployment, in view of the prospect of personnel shortages. We would therefore not urge any immediate, large-scale use of this device at Pennsylvania unless acute lack of staff develops in a particular area. An open mind should be maintained, nevertheless, and experiments such as those at Pennsylvania State University merit careful observation.¹³

Teaching Methods. One need not repeat the various truisms about teaching methods which have enlivened educational texts since the days of the "Herbartian steps." But, in training programs, beginners should be reminded that there are such stages as preparation, presentation, assignments, quizzing, review, and so on. They also should be reminded of personality factors—manner, appearance, voice and so on—and even of the importance of physical conditions in the classroom. Unlike the public-school teacher, the college man will rarely have to worry about discipline; but he should know what to do with the occasional student who is either inattentive or over-assertive.

Two matters relating to methods, however, merit emphasis. The first, growing out of the nonchalance of most undergraduates, is the need for maintaining standards. In some cases, especially in general courses, regular quizzing may be in order. Grades, although often derided, are in our opinion desirable. Remember that, in the first two college years, the students are of gymnasium age and should be subjected to some degree of educational discipline.

Such direction is not inconsistent with the second point

¹³ The various college experiments with "TV" are analyzed in Wolfgang, op. cit., 32-58. Strong opinions, pro and con, are quoted, 27 f.
here suggested, namely, that upper-classmen should be placed more on their own responsibility. In small classes, this procedure can be used even with freshmen and sophomores. At the least, certain class hours can be assigned to students for reports on readings—which will be good for them if not for the teacher. More ambitious experiments, in which several weeks of lecturing are followed by weeks devoted to reading, have been made in some institutions.

These arrangements, which are said to have been highly successful, have the added merit of freeing some of the teacher’s time for other purposes—for attention to individual students or for his own research. It is even claimed that saving the teacher’s time on one or two courses may enable him to carry an additional one.  

We have doubts about this last point, since the result might well be an addition to the actual teaching load. A better way to make the most use of scarce teaching personnel is to reduce the number of courses offered. There is no need to give, within one department on the undergraduate level, a great variety of courses. True, each member above the rank of instructor should have an opportunity to offer one course of his own—but one, at any given time, is usually enough. Additional courses are more apt to reflect the ambitions of staff members than the needs of students.  

*Teaching Loads.* College teachers spend much less time in the class-room than do those who serve in the public schools. The latter will ordinarily teach as many as twenty to twenty-

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14 See Clarence Faust, in the *Key Reporter* (Phi Beta Kappa), XXII (April, 1957).
16 There is no space here to discuss traditional teaching devices which have no bearing on scarcity of teachers. But there are still things to be said about such old, visual aids as blackboards, maps, and films.
five hours per week. Most academic men, in contrast, spend only eight to fourteen hours in class. The latter is undoubtedly a less trying schedule, but can be justified by the relatively greater time which the college teacher gives to other types of work.

The total teaching load of a faculty member involves several factors—the nature of courses, time spent out of class, time spent in class, and the number of courses carried simultaneously. Although all of these must be considered in estimating a "load," only the last two are easily measurable. In the undergraduate colleges at Pennsylvania, hours in class decline with advances in rank. The ordinary schedule, including courses given in the Graduate School, has been about twelve to thirteen hours per week for instructors, ten to eleven for assistant professors, nine to ten for associate professors, and six to eight for professors.

Such loads are lighter than those carried in many large, city colleges or state universities, and are about the same as those maintained at some comparable institutions—for example, at Princeton.

There are, however, certain universities in which professors rarely teach more than six hours, and the other ranks a proportionate number. A few, moreover, make little or no distinction by rank. Thus, in some departments of the arts-graduate faculty at Johns Hopkins, the normal load is four to six hours for all ranks.

Much can be said for this arrangement for the following reasons. Although senior men are assigned relatively light "loads" because they are involved in writing, in committee work, and in guiding graduate students, there are also serious pressures on the junior staff. The latter must adjust themselves to teaching, and are under greater pressure to "produce" than are even the senior staff. (Many men write their
best papers or books before they become professors.) The young faculty members are also, because of low salaries and growing families, more tempted to take on additional teaching burdens in evening or summer-school programs. Serious attention should therefore be given to the possibility of lowering the teaching load of the junior ranks. But in return, so to speak, they may be brought more completely into such services as committee work, advising, and even the guidance of theses.¹⁷

In all cases, of course, teaching loads should be made flexible in terms of a man’s total program. Special obligations to administration, advising, thesis guidance, and professional activities should all be taken into account.

**Extra Teaching.** The extensive involvement of certain Pennsylvania faculties in extra teaching has been pointed out in connection with the salary scale. Such teaching is done (1) in extension programs, (2) in evening classes, and (3) in summer school—either at Pennsylvania or elsewhere. Although attractive to staff members in lieu of higher salaries, work of this nature inevitably detracts from the time and effort which staff members give to regular teaching, creative efforts, or other professional activities.

Extension programs are objectionable because of the time and effort consumed in travel. Evening classes demand less of a man if limited to one class per week in a familiar course, but become questionable if more than this is involved. Summer teaching, which looks relatively harmless at first glance, is actually the greatest menace, since summers are the one

¹⁷ Many individual faculty members at “Penn” desire a moderate decrease in teaching load—e.g., 41 percent of Wharton professors would prefer only 6 hours for their rank, and 42 percent of associate professors only 8 hours; *Wharton Faculty Attitude Survey*, 65. But there seems to be no marked dissatisfaction with present loads.
period when a staff member can give continuous time to cre-
ative work. Occasional teaching at another university can, 
of course, be stimulating; but recurrent summer teaching 
anywhere is deadly. Time once lost in this fashion can never 
be regained.

It is our considered opinion, therefore, that the "Penn" 
faculties—and especially the junior staff—should be syste-
matically discouraged from any extra teaching except in 
emergency situations. They may be reconciled to such a 
policy, in some degree, if it is combined with salary increases 
and with summer research grants.

If the supply of faculty members for evening and summer-
school classes dwindles, however, serious questions will be 
raised about the threat to these programs as community serv-
ices. Public protests might be forthcoming and the Univer-
sity does have public responsibilities. The simplest answer 
would be to suggest that other institutions may provide these 
services—as they already do in considerable measure.

The elimination of evening, extension, and—in part—sum-
mer courses, would not only shield the faculties from tempta-
tion, but would also remove from the campus many students 
who are not of university calibre. The University could, no 
doubt, achieve the same end by enforcing entrance require-
ments for special students—as has just been suggested at 
Columbia.

We do not wish to seem unsympathetic with "adult edu-
cation." Indeed, the writer would rather teach serious adults 
without qualifications than indifferent undergraduates who 
possess them. But the fact remains that the former are not 
really university students.

What, however, if the closing of evening and similar pro-

18 Another exception may be the Education faculty, which wishes to 
reach public-school teachers in the summers.
grams threatens serious public repercussions? The University may then consider other solutions to the whole problem, notably the possibility of continuing such programs with their own, separate staffs. This solution has long been employed at certain universities—for example, at London, at Columbia, and even in so small an institution as Johns Hopkins. All of these have special colleges for adult education, whose staffs are drawn largely or entirely from outside the regular faculties.

**Examinations.** Since most courses terminate with examinations, there is some appropriateness in ending a discussion of teaching on that theme. Comment may be very brief. Faculties face many alternatives in arranging examinations, such as:

1) Frequent course quizzes, mid-terms, finals?
2) “Comprehensives” at the end of a year, or of four years?
3) Oral, or written?
4) With an “honor system,” or without honor?
5) New, or old types of questions? Lists of questions given in advance?
6) Graded with letters, or otherwise?
7) Given and/or graded by the teacher, or by others?

Much could be written on the pros and cons of each of these alternatives, but the truth is that the answers must usually be adjusted to circumstances.

In general, our own opinion is favorable to examinations, not only because of their review value, but because they provide competitive experience in a competitive world. Like all good things, they can be overdone or taken too seriously, but their basic value remains.
We would add only one, final comment with regard to the last alternative noted above. The giving or grading of “exams” by someone other than the teacher has merit in terms of objectivity. But it would be unfortunate if dependence were placed solely on this procedure. The teacher is best informed, in many ways, about what can be expected of a class. And if the class does not live up to his expectations, the examination is just what is needed to appraise him of his own responsibilities in the matter. True, an “exam” may harshly intrude into a fraternal setting—it suddenly transforms the teacher from a friendly guide into a presumably stern and impersonal judge. But life is like that.