Sound Finances

The financial state of NACTA is excellent. Murray Brown's untiring attention to the affairs of the office of secretary-treasurer must be given special mention. In my estimation the most critical office of any association is the office of secretary-treasurer, and NACTA is indeed fortunate to have this particular office so adequately staffed. Murray also has been active in Delta Tau Alpha, the student organization affiliated with NACTA, and represented your president at DTA's Seventeenth National Convention this year.

The committees of NACTA are working committees, and this past year has been no exception. There are seven standing committees of NACTA with a total of fifty-six committee members. During the past year, each committee was asked to take a special look at its duties and objectives and to recommend changes and additions to the by-laws as needed. Each committee has been especially active this year as evidenced by their annual reports. Too often, however, much of the behind-the-scenes hard work is not reflected by the reports, and I want to pay special tribute to all those committee chairmen and members whose work is so vital to the affairs of NACTA.

A special committee chaired by Frank Carpenter developed a constitutional change which will permit a state group of teachers of agriculture with purposes similar to those of NACTA to become affiliated with NAC-

TA. Barring any unforseen obstacles, this constitutional amendment will be ratified at this conference and the Minnesota Association of Colleges and Teachers will be the first official state affiliate of NACTA. This is indeed a noteworthy milestone.

After 20 years, your executive committee felt that the history and archives of NACTA should be documented and preserved for those yet to come. Consequently, former president and historian Carl Schowengerdt has been commissioned to prepare the history of NACTA's first 20 years. We are indeed fortunate to have the services of Carl in this important task.

In reviewing the state of NACTA, I have touched only on a few of the year's highlights and, undoubtedly, have omitted many activities that merit mention. In an organization such as this with so many people contributing so much, it is impossible to give adequate recognition to all.

Most assuredly, however, I would be remiss if I failed to extend, on behalf of all NACTA members, our deepest gratitude to J. Wayland Bennett and all of Texas Tech University for hosting this conference. It is a distinct pleasure to be on this fine campus, and we thank all those here who have made this meeting possible.

As I pass the gavel now to Ed Frederick, let me assure you that NACTA could not be in better hands during the coming year. I know that it will be an exciting year and one to which we can all look forward.

Improving Teaching Effectiveness At The University Level

Robert H. Anderson

Higher education is very much in the news these days, and the role that colleges and universities play in American life has been under careful scrutiny. Unfortunately, much of the discussion by public figures, citizens, and even educators has been highly critical of our academic institutions; and the serious decline of public confidence in higher education approaches the dimensions of a national tragedy. As Alan Pifer of the Carnegie Corporation recently said, "the damage already done is extensive and it will be catastrophic if public estrangement from the campus is allowed to continue." 1 Pifer went on to say that remedies include pressing ahead with the administrative and educational reforms on which many colleges and universities are now embarked, including paring away unnecessary expense, dropping unproductive activities, reducing the length of time required to gain degrees through better articulation of programs and courses, reexaming faculty loads in terms of

Presented by Dr. Robert H. Anderson, Dean, College of Education, Texas Tech University, on June 17 during the 1976 NACTA Conference held at Texas Tech University, Lubbock. actual productivity, and carefully reviewing every aspect of university operations (including teaching and research) in order to be certain that "in a moral sense (higher education) really does qualify for public trust and approval." ²

In similar and related commentaries, college and university professors are acknowledging that many of their classroom practices fall short of the attainable ideal; and for the past few years there has been both a growing literature about university teaching and a dramatic increase in in-service training programs designed to help professors improve their professional repertoires. Not only because of outside pressures but also out of a genuine desire to succeed as teachers, professors in all branches of academia are becoming serious students of pedagogy.

It would be gratifying to me, as a professor of education, if my fellow educationists and I possessed all the necessary knowledge and skill to serve as both exemplars and tutors for our academic colleagues, so that the painstaking process might be shortened for them and the university might more quickly become the sort of learning environment that we (and our critics) would like for it to be. Regrettably and paradoxically, however, the schools and colleges of education have at best a small advantage over other university units with respect to the improvement of teaching, and that advantage comes mostly from having more direct contact with the literature of learning and teaching and with the thousands of elementary and secondary schools in which various promising ideas about schooling (broadly defined) have been or are being tested. It is from this slight vantage point, and also out of a keen sense of professional interest, that we in education offer such help as we are able to give.

The Role of the Professor

My own experience has been in the public schools, earlier in the successive roles of teacher, building principal, and superintendent of schools and later in several university-based roles such as director of teacher-education programs and consultant to public-school personnel (at the various levels). Most of my professional career has been linked to the search for optimal organizational arrangements in schools, and along the way I have helped in the shaping of school buildings, of approaches to the supervision of school workers, and of mechanisms and programs for in-service staff development. In my present role as a dean, a role very similar to that of the school principal, I find that many of the problems encountered and lessons learned in the public schools are applicable to universities as well. Some of these have to do with role definitions of the teachers (we call them "professors") who work with pupils (colleges use the term "students").

The term "professional" is often used loosely; but when applied to persons who teach, it has certain important connotations. I hope many professors share my view that a strong professional identity for the university-level teacher includes these elements:

- Scholarship (maintaining and enriching one's knowledge, e.g. of the teaching field).
- 2. Research (investigation, inquiry, and other activities intended to produce new knowledge, insights, or formulations).
- 3. Development and Applications (testing and demonstrating the efficacy of promising ideas and mechanisms).
- 4. Formal Communications (issuing publications; lecturing; responding to published work and lectures of others).
- 5. Colleagueship (linking with other professionals and their guild organizations).
- Service (responding to organizational, institutional, and other needs for professional consultation and assistance).
- Ethical Behavior (within the professional role).

Of these items, it seems reasonable to assert that the first six, at least, lead to the expansion and refinement of

one's operational repertoire. Behavior in the last four categories tends to motivate and/or benefit other professionals, as well as apprentices; and 4, 6, and 7 tend also to motivate and/or benefit the organized profession. Deficiencies within these categories, on the other hand, tend to limit or restrict not only the skill but the influence of the professor in question.

The most serious of all possible deficiencies would of course be unethical behavior. Since in this paper our focus is on improving teaching, however, I would like to identify scholarship, colleagueship, research, and development and applications (and probably in that order of importance) as four categories within which deficiencies have a particularly deleterious effect.

If there is an academic discipline within which no new information and new postulations are being generated. I do not know of it. On the contrary, any professor worth his salt must, it seems to me, be in a constant state of restless excitement about the changing terrain he occupies and the mysteries he and his academic kinsmen are probing. Unless such excitement finds expression in his regular contacts with students, and unless he frequently embellishes his utterances with references to newly-acquired data and insights, it is not likely that students will trust his credentials or acquire a perspective on the never-ending scholarly quest.

It follows, I believe, that the professor must be a voracious reader within his field, a tireless collector of various materials (especially books and magazines, it would seem), an active participant in the various meetings where his fellows seek to share and discuss, an energetic investigator and tester, and the ally and collaborator of at least those fellow-professors and senior graduate students with whom he shares university space.

We will return to the latter point when we examine teaming as a strategy for promoting personal/professional growth. The point about lively scholarship probably needs little defense or elaboration (although I fear that many professors are blatantly complacent about what they know and distressingly negligent in keeping up-to-date). What may require further discussion, however, is the implication that research and development are necessary to an effective performance in teaching.

"Publish or perish" is an offensive concept to many professors. and often it is felt that good teachers lose out in the race for promotions and merit raises, in favor of those whose "research" (presumably trivial) ends up in print but whose interests and skills in teaching are negligible. To be sure, we sometimes do find that a well-published professor fails to teach well or even to care about teaching well. It may be, too, that certain professors without talent or interest in research (broadly defined) are superb teacher. However, these stereotyped extremes really don't make much sense; and, given what was said earlier about the excitement and the mystery within each field, it seems very unlikely that teaching can for very long remain adequate (much less say inspired) if disassociated from search and exploration. Further, it is doubt-

ful if professors incapable of periodic formal communication to their peers have much continuing value to their students.

Perhaps one more dimension of the professor's role should be examined, and that has to do with his institutional obligations. Explicit in every professor's assignment is that he will carry certain teaching and other responsibilities, and at least implicit is that the supreme obligation of every professor is to provide distinctive instruction and advisement to students (clients). In order that the university may function well and grow in quality, professors also carry certain service obligations, among them to share in the work of committees and other groups. Implicit is that in return for continuous employment and as a condition of recognition and advancement, the professor will continue to grow in professional skill and achieve a distinctive professional identity.

Dimensions of Teaching

The prior discussion sought to place the role of the college professor, within which his teaching functions are prime but not exclusive, into a broad perspective. A major theme is that the quality and impact of one's teaching are significantly affected by the overarching professional identity one assumes and especially by the tendency, or lack of tendency, to continue throughout one's career to be an active and enthusiastic learner. Now to the more specific functions of teaching, and how they may be more successfully discharged.

In the simplest definition, teaching has three related parts: (1) planning and preparations; (2) carrying out instructional programs or plans; and (3) evaluating outcomes. This is not to say that all (or even most) university teaching is actually the result of careful planning, for (alas) many teachers resort to improvisation and spur-of-the-moment decisions in much of what they do. Nor are we claiming that professors generally employ appropriate evaluation and assessment procedures so as to estimate the success of their work. However, it is impossible to discuss teaching without mentioning the importance of all three parts of the instructional process.

The several relationships in the teaching-learning situation are illustrated in the following triangle:

Figure 1. The Curriculum

Things To Be (Taught (Learned)

Learner

(c)

(a)

Teacher

Teaching-Learning Relationships

Line (a) represents the professor's command of, and commitment to, the subject-matter for which he accepts teaching responsibility. e.g. Agricultural Climatology or Farm Electrification Systems or English Colonial History. Already stressed above in the importance of "knowing your stuff." so probably there is no need for further comment.

Line (b) represents the rapport that inevitably exists (whether good or bad) between the professor and each of his students, and also between him and the class as a whole. Here we are tempted to mention all sorts of possibilities that exist, ranging from the highly-personal relationships that develop between some professors and at least some of their students to the opposite extreme in which the professor is very distant or aloof. Whether such extremes are explained by differences in personality, or by different ways of viewing students, or by differing perceptions of appropriate pedagogical behavior, the fact is that students (individually and collectively) sometimes develop strong feelings about professors and these feelings may have a considerable bearing upon their responsiveness to the course and even upon their performance in it.

Both research and experience give us considerable reason to believe that mutual trust between professors and students is an important plus-factor. Sometimes a professor with admirable command of his subject is a failure in the classroom because his attitude and behavior toward the students convey negative feelings, whether about their ability and/or educability as he sees it, or about their motivation and trustworthiness, or whatever. On the other hand, some professors cause ordinary students to reach unprecedented heights of performance by signalling a special interest in them and a complimentary view of their motivation and potential. Other factors obviously enter into academic accomplishment, of course; but no discussion of teaching effectiveness would be complete until the teacher-learner relationship has been examined and appreciated.

Returning to the triangle, we see that line (c) depicts the relationship between the student (learner) and the various facts, attitudes, skills, concepts, and techniques that are supposed to be learned. Here we are reminded that students bring extremely varied talents and backgrounds into most college courses; that because of their differing histories and interests they react in different ways not only to the material but also to the formats-forlearning that are provided; and that there are many variations in the styles of learning that "work" for students and also in the ways that they are best able to reveal their mastery of material. Professors who, either callously or unknowingly, make use of only one delivery system and one evaluation system therefore invite failure upon themselves as well as a large proportion of their students.

Teaching Formats

Later we may return to the triangle, but while we are discussing the need for a variety of instructional approaches we might profitably examine the several different settings or formats within which professors "teach." These are at least four. It is likely that few professors will be equally skillful in all four, and in some situations it probably makes sense for a professor to specialize, if not to concentrate exclusively, in one of the indicated formats. In general, however, it seems that professors must be at least reasonably comfortable and reasonably adept within each of these categories:

- 1. Whole-class formats (n=generally uncontrolled)
 - a. Didactic presentation (lecture; demonstration; media-based delivery; debate; panel, etc.)
 - Recitation and/or interrogation (professor inviting or requiring individual responses and/or questions)
 - c) Discussion (structured or open-ended group consideration of a topic or problem)
 - d) Combinations of the foregoing
- Seminar formats (n=controlled, with 12 or 15 as a usual maximum)
 - a) Teacher-directed discussion
 - b) Student-directed discussion

(Note: "directed" in this context may mean either parliamentary management, or responsibility for the substance of discussion, or both.)

- Small-group formats (n=usually restricted to eight or fewer students)
 - a) Interaction-oriented formats
 - b) Work or product-oriented formats, as in the case of laboratory groups, task forces or committees, team-learning situations, and the like
- 4. One-to-one formats
 - a) Professor oversees independent-study and/or self-paced instruction, with or without the aid of media
 - b) Counseling; advising, guiding
 - c) Supervising individual lab work, apprenticeship, or other clinical activity

In general, and primarily because so little trainingfor-teaching is part of their backgrounds, professors tend to feel most comfortable within category 1 (whole-class formats). Lecturing is probably the most time-honored and familiar posture of university teachers and their imitators in the secondary schools. Developed in medieval times when books were less abundant and scholarly vocalizing was seen as a legitimate delivery system, the lecture also had a certain value as entertainment. Over centuries the lecture became virtually an art form, and the lecturers presumably found as many satisfactions in their Thespian skills and accomplishments as in their scholarly revelations. Both ways, they catered to the emotions of their audiences and developed followings in proportion to their ability to capture and hold attention. Even to this day, the ability to fascinate an audience explains the high reputation of many professors; and students themselves may feel disappointment in lackluster whole-class performances by their teachers.

With television and other forms of entertainment now so universal in the experience of young people, it becomes more and more difficult to hold the attention and respect of classes of students on the basis of histrionic skills. Furthermore, didactic presentation is only rarely appropriate as a teaching approach given the numerous means of obtaining information now readily available to students. Whole-class presentations do have occasional value, however, especially when they are more efficient and economical than using small-group approaches. For example, a scientific demonstration that consumes valuable materials, or a lecture by a distinguished campus visitor, will be less expensive if presented only once to a larger audience than if repeated to small groups. Wholeclass formats also make sense when the teacher is introducing or summing up a major unit of study, or critiquing or summarizing material the students have previously examined, or seeking to create a sense of unity and involvement within the student group. As a general rule, however, over-reliance on whole-class formats is one of the most regrettable features of university instruction, and far more effort must be made to reduce their use.

Meanwhile, the least we should do is to arrange for every professor to receive useful commentary and criticism, from students and colleagues alike, with respect to whole-class approaches that continue in use. Techniques to be described later, involving groups of peers conducting "observation cycles," can provide professors with a great deal of feedback as to the efficacy of such approaches along with helpful suggestions for improving them. Mechanisms for gathering student reactions, both anonymous and otherwise, are also abundantly available if professors have merely the sense and the courage to use them.

Studies of public school teachers suggest that most are insufficiently trained and many are actually uncomfortable within formats that require more passive, nondirective behavior of them. Despite powerful philosophical and practical arguments that the best learning occurs when initiatives and responsibility are with the learner, many teachers hate to relinguish direct control over the learning situation and to appear as if they are only spectators, not obviously earning their salary in visible acts of "teaching." It is probable that their discomfort is also caused by the greater intellectual subtleties involved in more ostensibly-passive approaches; and in some instances the possibility that students can do as well as or better when on their own than when dominated by the teacher is interpreted as a defeat or humiliation. For these and doubtless many other reasons, the spread of student-directed seminars, minicourses actually taught by students, independent-study and self-paced instruction, and other efforts to encourage a freer learning environment has been regrettably slow. For somewhat similar reasons and in the same vein, many teachers in the colleges and universities have tended to resist such efforts and developments. On the other hand, enough thousands of public schools and dozens of universities have been adopting such approaches so that abundant advice and inspiration are now available.

Our contention in this conference is that all four of the teaching formats outlined above have strengths and limitations that can be examined and described, and technologies for their effective use are not only known within the literature of Education but also creatable through the collective efforts of professorial teams in every department or unit willing to make the effort. Exercises intended to demonstrate procedures for examining each others' current skills within each format will be included, and suggestions will be made for organizing professors into teams for purposes of collective planning, sharing in the total teaching program, and assessing the effectiveness of the work being done.

ULIGE - A Brief Description

One of the more respected and successful efforts to encourage individualized instruction of American children and to organize schools more efficiently is known by the title. Individually Guided Education (IGE). Associated with both the University of Wisconsin and the Ohiobased Institute for Development of Educational Activities (/I/D/E/A), the latter a component of the Kettering Foundation, IGE is now found in several thousand elementary and secondary schools and its influence is growing annually. In brief, IGE organizes teachers into instructional teams (as opposed to the self-contained-classroom arrangement), and the teachers make extensive use of all four of the teaching formats outlined above. Administrators, teachers, and others involved in IGE are given intensive training designed to help them work in teams and to develop necessary attitudes and skills.

Reasoning that colleges of education (at least) might well provide exemplars for teachers-in-training along the lines of IGE, and also that future teachers should have direct experience with IGE techniques in their own preparation, the College of Education in Texas Tech University plans to develop a university-level version of IGE on its campus beginning with a thirteen-day training program in late summer of 1976. Thirty professors, mostly from Texas Tech but including a few each from six other colleges, will be organized into three training teams of ten members each; and each team will spend two weeks teaching an undergraduate education course under the supervision of specially-qualified /I/D/E/A-trained colleagues.

One of the notable features of the training program is that trainees will alternate each day between actual teaching, segments of which will be observed and critiqued by other trainees, and serving on observation teams doing the critiquing. An elaborate "observation cycle" is used, the five stages of which include:

(1) a pre-observation conference with the teacher to be observed, during which agreements are reached as to the features to be especially examined;

- (2) the actual observation of an episode of "teaching" (based on any one of the four major formats);
- (3) review by the observation team, in a private session, of data collected, followed by decisions concerning feedback to be provided the teacher observed;
- (4) a post-observation supervisory conference with the teacher; and
- (5) analysis of the cycle just completed, in terms of (a) how effectively the observation team carried out its assignment, and (b) lessons learned about teaching and how to improve it.

A fairly sophisticated literature is available for consultation by the trainees, including some very useful books on "Clinical Supervision." The hope is that the summer experience will nurture both enthusiasm and expertise, so that university-level IGE (hence the name, ULIGE) will emerge in the College of Education during the year that follows.

Incidentally, six of the professors-in-training will be from disciplines other than Education (e.g. Engineering, Psychology, Business Administration), and it is hoped that by the summer of 1977 it will be possible to take some first steps toward training their colleagues for purposes of introducing IGE across the university campus.

Summary

College and university teachers, like their counterparts in the public schools, must modify their conception of "teaching" and expand their professional repertoires along the lines of successful systems such as Individually Guided Education (IGE). A lively and continuing personal scholarship plays an important role in good instruction: and much satisfaction and intellectual excitement is to be found in the re-evaluation and in the elaboration of one's posture toward the functions of teaching. Each professor must have a thorough command of all three dimensions of the teacher's work (see the triangle, p. 6) and become more adept within all of the various formats within which instructions may be provided. A new program that aspires to train professors for effective performance within an IGE structure is being developed.

The next step, for which we hope this paper has generated a degree of enthusiasm, will be for NACTA Conference participants to learn about some of the specific tools, including procedures and techniques to be used in the ULIGE training program, available to those professors who agree that these are propitious times for revitalizing university teaching.

NOTES

- (1) Alan Pifer, "Higher Education in the Nation's Consciousness," Educational Researcher, 5 (April 1976), p.1.
 - (2) Ibid, p.2.
- (3) Notably, books using that title and written by Morris L. Cogan (Houghton Mifflin Co.) and Robert Goldhammer (Holt, Rinehart, and Winston).