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ABSTRACT

Proceedings of the Region IV Conference on Teacher Education for Allied Health and Nursing are reported in this document. (The conference was concerned with the identification of essential competencies for instructors in health care preparatory programs.) Included are group session reports, the conference program, list of participants, and texts of the presentations, which are titled as follows: "Teacher Education: Emerging Approaches," "Practitioner to Teacher: A Challenge," "Teacher Education: The Health Professional's View," "Teacher Education: A Professional Educator's View," "A Perspective on Higher Education," and "Alternative Strategies for Staff Development (Role of the State Department of Education, Role of the College of Education, Role of Professional Organizations, and Role of Continuing Education)." (HD)

PROCEEDINGS:

CONFERENCE ON TEACHER EDUCATION FOR ALLIED HEALTH AND NURSING

September 22-25, 1974
Georgia Center for Continuing Education

PROJECT DIRECTOR: Mary Elizabeth Milliken, Ed.D.

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FOREWORD

On July 1, 1974 the University of Georgia entered into a contract with the Region IV Office of the Health Resources Administration, Office of Management Support, to establish a Regional Center for Teacher Education--Allied Health and Nursing. Responsibility for the project was assigned to the Health Occupations Teacher Education Program in the Division of Vocational Education, College of Education.

The Mission of the Center is to assist as needed in establishing in each state within Region IV a mechanism to provide teacher education activities specifically designed for health professionals who function primarily as instructors. In order to fulfill this mission, the Center will conduct a variety of activities, including--

1. Workshops related to specific instructional competencies;

2. Workshops related to specialization in selected functional areas;

3. Conferences related to the identification of essential competencies for instructors in health care preparatory programs;

4. Organization of a Teacher Education Council;

5. Identification and preparation of health professionals to function as teacher educators.

The first major activity conducted by the Center was a Regional Conference on Teacher Education for Allied Health and Nursing, held at the Georgia Center for Continuing Education September 22-25, 1974. Participants represented a wide variety of health disciplines, educational personnel involved in teacher education, and administrative personnel with responsibilities for health professions educational programs.

The Conference was noteworthy for the enthusiasm and very positive attitudes of the participants. Numerous comments were made about the unusual "mix" of disciplines and health preparatory programs at several different levels. Evaluations submitted on the final

day of the Conference confirmed that this opportunity to interact with persons from other disciplines and other types of educational programs in discussions of a common concern--what makes up effective teaching--was perceived by many of the participants as highly beneficial in terms of professional growth. Unfortunately, the dynamics of interaction and enthusiastic sharing of viewpoints cannot be committed to paper. The primary beneficiaries inevitably are the participants themselves. Yet, it is hoped that others may share in the benefits of the Conference through the printed word. To that end, this Proceedings is dedicated.

Mary Elizabeth Milliken
Project Director

Claire B. Keane
Project Coordinator

ACKNOWLEDGEMENTS

Grateful acknowledgement is accorded to all those persons who, through their interest, cooperation and participation contributed to the success of the Regional Conference.

Sincere appreciation is extended to the presentors at the Conference. Their thoughtful and challenging presentations were the soul and substance of the Proceedings and provided a wealth of ideas and issues for meaningful discussion among the participants. The success of their efforts can be measured by the positive attitude and enthusiasm of the participants who brought to the Conference a diversity of talents and experiences and who generously shared their expertise.

During the planning stages of this conference Linda Self and Sandra Baugh assisted in the preparation and dissemination of announcements and handled a voluminous amount of correspondence in addition to their routine office duties. Margaret Singleton and Verna Jane Muhl provided valuable input in regard to the planning and organization of content for the Conference program. A number of persons contributed substantially to the preparation of this publication. Sandra Baugh acted as recording secretary during each of the presentations and typed the rough draft of the entire Proceedings including the written reports of the group sessions. Final editing and design of the format was done by the Project Coordinator. Mrs. Joan Hoffman typed the final draft.

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TEACHER EDUCATION--
EMERGING APPROACHES

DR. J. EUGENE BOTTOMS

As you seek to formulate programs to prepare allied health and nursing teachers, set your goals on emerging effective approaches in teacher education rather than current or past efforts. Of course, glean the best from the past and present, but if the past has not been so glorious, new approaches can alleviate past weaknesses of teacher education.

Trends in the South are setting the stage for more effective teacher education regardless of level or setting. Because education is becoming the bridge between man and work, education no longer serves our economy best by selecting at an early age those who are to pick cotton, plant crops, or perform the unskilled jobs. Higher education has not escaped this shift.

What are the emerging approaches in teacher education that offer promises for more effective teacher/student behavior?

First, a major problem of teacher education in the past and present is its diffused and vague state. Too often teacher education resembled the "Columbus Theory" of education--no one knew where they were going, no one knew when they had arrived, and no one knew when they got back where they had been. However, the system approach in teacher education offers considerable promise in specifying desired goals, means to achieve goals, and ways to determine when goals are achieved. Considerable research evidence indicates the system approach is significantly superior to traditional approaches in achieving desired teacher behavior and in helping interns achieve improved student learning (Peck and Tucker, 1971).

The system approach is characterized by a series of steps: (1) precise specification of the behavior expected of the teacher trainee; (2) planned training procedure aimed explicitly at eliciting the expected behavior of the teacher trainee; (3) measuring the consequence to determine whether or not the expected behavior was achieved; (4) immediate feedback to the trainee of the measured results; (5) recycle through the training procedure; and (6) measurement and feedback of the results following the repeated training. It is easier to talk about the system approach than it is to do it. The movement of teacher education toward competency-based programs and the corresponding teacher certification based on performance will help the parts of the system work together.

The system approach has its critics who say it is too rigid, that it stifles creative thinking and that it prevents the individual from developing problem solving skills. However, as evidence continues to mount regarding its effectiveness, both in cognitive and affective learning, it could well become the mode rather than the exception. Presently, substantial evidence shows that specifying objectives and teaching to them is effective. Further, the research evidence consistently confirms the utility of giving immediate objective feedback about the trainee's performance. It seems clear that the observation and feedback has to be done by a trained person rather than relying on self evaluation or technology.

You should consider the possible implication of the system approach on the nature, setting and delivery of teacher education in the future. By their nature, teacher preparation programs will be individualized to start with the individual's assessed needs rather than the professor's notes. Time will give away to performance as the basis for credit. In setting the scene, the scene will shift to the environment where the individual will teach. Certainly cognitive knowledge about methods, human growth and development and subject matter can be acquired on campus. However, as teachers are required to demonstrate for certification, they can elicit desired student behavior, then much of teacher education can only be done with direct student contact under direct observation. This presents a dual problem

because a teacher must be able to perform both in a health occupation as well as a teacher. The expectation that you produce a professional teacher in four years is a myth. It has not, nor can it be done. Preservice training must extend into the initial employment years. Employing agencies and teacher preparation institutions will share responsibility for the individual meeting his or her assessed needs where he or she is employed. Greater efforts are needed by teacher education programs to formulate off-campus preparation and follow through.

Second, teacher education has been plagued with a "do as I say, not as I do" syndrome. Many teacher trainees have sat through lectures on how to involve students in the learning process, how to use student ideas, how to apply cognitive knowledge and skills in real life situations and how to foster creative thinking. Evidence shows teachers adopt the style of teaching by which they were taught.

I would strongly urge you to consider designing a teacher education approach that works the way you expect teachers to behave. You should not limit this principle to just the teacher education phase, but extend it to both general education and subject field preparation phases of the teacher training. The most damnable practice in education today is public school teachers who use only the teacher-centered lecture mode of their college professors.

A third problem plaguing teacher education is that theory and practice are taught separately. Many students hate education courses because they have no experience. For example, research has shown for some time that practical experience results in a higher level of performance and retention. Despite this knowledge, most teacher education today is divorced from the actual employment setting and only in a few programs are simulated experiences being provided. There is a substantial body of evidence suggesting results in student teacher classroom shock and less than desired behavior. Abstract ideas about teaching methods, classroom management and appropriate attitudes toward students are quickly dismissed in the face of real experiences and are substituted with more

traditional approaches and attitudes. The cry of teachers today is "don't tell us how to do it, help us do it!" It will tax your ingenuity, energies and resources to develop a program of health teacher education that uses real experiences to develop understanding and desired performance from both potential and existing teachers.

Fourth, the term paper remains today the primary method through which the individual makes any decision about what he or she is to learn.

Recently I was stunned to learn that kindergarten students scored higher on a decision-making scale than fifth grade students in a study made in this state. When confronted with this information, teachers gasped and then said "no wonder, we don't allow them to make any decisions." Teachers who learn through independent study combined with guided, individual conferences at their own pace later as teachers spend less time lecturing and more time questioning students. They solicit and use student ideas more than teachers taught in the traditional way. As you plan teacher education programs for the allied health and nursing field, you should give consideration to designing a program that provides for a maximum of self-directed learning on the part of the student under the guidance of the professor.

Fifth, graduate level preparation has been, for the most part, unrelated to the setting where the teacher works. It is common to hear both teacher and school administrators express disappointment with the relevance and transferability from graduate education to practice. Yet the content of graduate teacher education is determined by certification standards and colleges without regard to changing needs in local school systems. It is time to admit there does not exist a standard graduate program to meet the needs of all persons. Maybe the basic framework for graduate teacher education should emerge from local goals, objectives, needs and projected improvements. At least the program could then be directed toward implementing specific program improvements in local school systems. Recommendations from several studies point toward field-based graduate education. By field-based, I do not mean carrying courses to the field but tailoring specific activities to

achieve specific local system improvements and follow through to see that the new skills are being practiced. As you consider graduate teacher education, consider the field-centered approach.

In summary, the more promising approaches to teacher education include a more systematic process, well planned and coordinated early involvement of potential teachers in actual teaching, modeling the teaching methods and attitudes desired of student teachers, deploying greater flexibility and variety, choice in learning experiences provided the student and a shift to field-based teacher education.

I have purposefully avoided the mythical argument about whether or not teacher education is, in fact, needed. Personally, I don't think this is even an issue because I have observed the results of good teacher education. I have experienced it and I have seen sufficient research evidence to support its effectiveness. So whether or not teacher education is needed is not the issue addressing you: rather the issue is what level of effectiveness you are willing to settle for.

PRACTITIONER TO TEACHER--
A CHALLENGE

DR. GREG TRZEBIATOWSKI

I want you to think about the question, and I hope I can convince you that faculty education and methods of teaching in health science really do make a difference. I want to convince you of the need for faculty caring, . . . when faculty care, education can be different. . . and make some suggestions for how you might start in some of the areas that might need to be worked on.

Education is both exciting and frustrating because of rising costs and changing programs. Students keep adding to the list of needs and their needs will become demands if we do not listen to them. Needs are in the current service areas and inservice areas. There is a need to change and grow. Health Resources Statistics published by HEW lists 923 health related job titles. It is a challenge to train people to fill these jobs. There are a lot of new programs; the list of new areas is endless. Trying to keep coordination between all of these programs is a tremendous job. The challenge is in curriculum development and program planning.

The challenge is also in instructional methods, the search for new methods in individualized instruction. America will go down in history as the first nation to educate the masses. We have a great challenge to educate the masses on an individualized basis. We are trying such things as computer systems, independent study, computer-assisted structured programs, the Keller method, all kinds of simulations, academic games, etc.

The challenge is also in new methods of accountability. We now feel the pressure of accountability. In the area of PSRO's physicians are very nervous about Federal legislation in this area. In evaluation we talk about

mastery learning, competency-based education, credit for experience. We talk about universities and colleges without walls, re-licensure and re-certification patterns. It is a tremendous challenge just to keep up with what is happening in evaluation.

Now, how do you expect a faculty member who is primarily a practitioner to keep up with the new curriculum developments, instructional methods, and evaluation and accountability? He needs your help. I feel very strongly that the key to these challenges is a good faculty. If we do not have a good faculty, we do not have a good program. Technology is only as good as the faculty that puts it into operation.

You need to train faculty in three areas: curriculum development, methodology and evaluation. Curriculum is simply asking the question "What do we teach?" and that is a steady debate. The debate over what to teach is a constant one. Once it is decided about what to teach you should have a written document of goals and objectives in your hand.

But the ball game doesn't stop there. You have to ask "how do we best teach this?" Do you use the traditional lecture method? If that is the only option available to you, then instructional development is not really much of a problem at all. You just simply put your best speaker in front of an auditorium and turn him loose. If he has to use the chalkboard, you must teach him to write large.

The next question is "How well did we do?" You need to have base line data to know where you were when you started. You need to have your faculty trained in methods of educational research and evaluation. The key ingredient is to take a program approach. We have workshops on how to produce instructional packages. The main effort is to get the faculty involved in program development. Get them involved in computer systems instruction. My goal is to give a distinguished teaching award to a faculty member who has never stood before a class to lecture.

We use computers in four ways: (1) To give new information to practitioners in community hospitals. There are computer terminals in these hospitals and we have about

six hours instruction in these terminals. Those wishing to update their information can take advantage of the computer as a tutor. (2) To provide remedial work. Students who are having trouble can go to the computer for assistance. (3) For independent study. (4) To enlarge the structure of study. We made this available through the National Library terminal and you can tap into these programs. We give demonstrations and our program is used all over the country.

PROJECTOR

We have about 50 CAI programs in the allied health field. This one in medical records is to help the students to look at charts and get the information from them. The students learn to interpret these records. It is making a real impact on the records now in the hospitals.

This one teaches laboratory skills. The computer program sustains interest. We combine it with audiovisual media. We also use a mannequin. CAI is a good way to get a faculty member involved. The approach we use most commonly to teach the faculty member.

After studying, this student can get interested in other areas. We changed from anatomy courses to body structure. In the whole curriculum the student did not lump all the parts of the body together. We get four years of education into three--there are no rest periods. Combine phase 1 and phase 2--function of the human body. Phase 3--introduction to clinical study. Phase 4--clinical study.

Students begin courses on emergency care at the beginning of school. To change the program, the faculty is open for new experience. Ohio State University faculty members--both men and women--are gentlemen. They all had the same amount of time for their particular area, working on objectives for gynecology and obstetrics. I hope everyone will look at the objectives and decide what is most important and what should take the most time.

Our numbers of students are increasing and the number of programs are increasing. The pressure on the faculty to change is great. They are frustrated. We developed an

independent study program to help all of these students. We began in 1962-63 to assign students on a random basis to lecture or independent study. It did not work. As a result we got into developing an independent study program. Working with the computer has an impact on students. We now break down student groups into two parts. First independent study at their own rate. One student went through school in 30 months. Before independent study, students spent 80% of their time studying textbooks. Now they learn by module. There are no lectures. He can go by his own learning style. Students teach each other much of the time. Interaction sessions are held with the faculty and both like it. They can talk about problems. After the student has mastered the module, he can test himself with the computer. The self-evaluation takes about an hour or an hour and one-half and he gets feedback from the computer. If he does not do well, he can go back and study again. He can go to the faculty member with the printout and discuss the problems. There is no punishment involved. The faculty member does not have to find the student's weakness. Reports come out every week to show where each student is and how he is progressing on the scale. The computer shows him where last year's class was. He then knows if he is ahead or behind on the program. A student may get behind in some areas and ahead on others.

Something else that is on a documented curriculum--modules represent about a week's work on the curriculum. What happened was that on the first year of the curriculum, most students were on module E. On the same date the next year they had moved up two modules. Two years later they were to module I. The students go to lectures to find out what is important. If you spend five minutes in one area and 40 minutes in another area, the students think that the longer areas are more important. The students try to interpret what the faculty member means. If you assign a chapter on rickets or a chapter on childhood diseases or give a lecture on rickets, these are different levels of importance.

From year to year my lecture on the same topic varies much. But when it is a recorded lecture, it will remain the same year after year. Education will never become efficient, but it should be effective. Here are the results of two groups of students. One program is a

lecture program. The other is the independent study program. Look at the comparison.

Anatomy is a strong area. Students do well in lecture or independent study. In behavioral science there is 100 points difference in the scores of the students. In microbiology, there is a fairly wide gap. In pathology, there is a gap in the scores of the students but their department has been without a chairman. In pharmacology, there was a great deal of difference in the scores. In physiological chemistry--average students--class average was 545 with one percent of the class failing. With the same faculty in 1968, 60 percent of the class failed. We have a new department chairman. He is excellent.

The Keller-Method--more computer based independent study--objectives are carefully specified. There are 22 units of study and each unit takes about five days. The units are mastery oriented. They have review questions with detailed answers.

The mastery system. The student cannot go on until he has mastered a unit. He gets some delay and can take many quizzes without penalty. In a group of students, 64 did independent study and 167 went to lectures. The 167 students were divided into two groups--B and C. Group A predicted score 535, group B--545, group C--513. Actual scores for the Keller group--585. The other groups did not perform as well as expected. How do the students like it? Group A--50 said that a friend should go into the independent study group. One said he would not like independent study again. In the other groups, more said that the independent study was a better program. Program strength--increase in national performance. Students did very well in the programs of physiology and anatomy. Performance in these areas increased because they could vary the emphasis. It is important that the faculty are happy and the students do well on examinations. It is important that a student keep up after he gets out of school. The area changes rapidly. He must be trained to keep himself up-to-date. He is more likely to do this if he has learned previously by independent study. Our students are taught from kindergarten not to study independently. I hope the statistics and my pleading will convince you that it does make a difference when faculty members are concerned about teaching. Medical students

are happy and relaxed. They do not have to attend a lecture. If they are night owls, they can study at night or if a student wishes, he can study in the morning. The students do better but they spend less time studying. Lectures are inefficient.

Role of Schools of Allied Health In Teacher Education

Dr. Raymond C. Bard

The panel assembled here this morning has been asked to discuss teacher education from the health professional's view. Specifically, I have been asked to describe the role of schools of allied health in teacher education, as it is today and as it may emerge in the future. Such an assignment implies a high degree of certainty concerning the role mentioned, as though it is a ready answer to the question: What is the role of schools of allied health in teacher education? Until quite recently schools of allied health had no role in teacher education, a deficiency recognized by the Kellogg Foundation when a few years ago it awarded grants to several universities in support of teacher education in allied health. Wisely, these grants were awarded to allied health schools in collaboration with schools of education, an essential ingredient if any success was to be expected. Thus, a subsidiary question should be posed first, and answered, which asks; Why have allied health schools been so slow in assuming responsibility for the preparation of teachers for allied health educational programs?

The practical answer can be provided that there had been no great need for the preparation of allied health teachers in the numbers that became necessary over the past five years or so. Until the mid-sixties, there were very few schools of allied health, with whatever educational programs then operative being appendages to schools of medicine and dentistry in academic health centers. Poorly nourished financially, generally overlooked in the preparation of health manpower, and hardly viewed with distinction, allied health programs survived in spite of receiving so little attention.

The awareness developed that allied health practitioners would be needed in very large numbers. This awareness was stimulated primarily by manpower shortage reports from federal agencies and by some minor, though essential, federal financial support. What followed was an explosion in the number of allied health programs, arising not only in academic health centers, but also in many four-year and two-year colleges as well as technical institutes. As student enrollment expanded at an accelerating rate, new programs were established, and schools of allied health were organized as separate academic and administrative units.

The result of all this expansion, with its attendant suddenness, created the need for faculty members in the many new programs and schools. Numerous practitioners became teachers, with little or no preparation for teaching and, even more meaningful, little or no appreciation for the need to acquire teaching skills.

It must be recognized that much of allied health education involves on-the-job training, the development of skills, in line with the models of the older health professions. Much of this training is essential to assure preparation of a competent practitioner, and it will always remain an important part of health education. So the doers became the teachers. According to these teachers who were armed with a significant body of knowledge and an array of skills, all the students had to do was to listen, to repeat what they heard in classes on their examination papers, and to copy the skills practiced by the teacher. What else was there, or indeed is there?

To understand what has been happening, we must look into the preparation of college teachers to comprehend why allied health schools have not assumed, except until recently, any role in teacher education. After all, when a college teacher has earned an advanced degree, and certainly with the Ph.D. degree, what else is there to learn? Powerfully equipped in terms of knowledge, the college professor talks and all the students have to do is to listen and to imitate what he does. Isn't that how the professor got to be a professor? And if the professor wanted to climb up the academic ladder, did anyone bother to evaluate his teaching . . . except

maybe the students? To progress and to succeed, the professor becomes even more a scholar, engaging in creative and investigative works, which are evaluated by his peers on campus, in extramural support agencies, on editorial boards, and on the selection committees of prestigious professional societies.

These observations are not made to restate the too often presented argument of research versus teaching. They are merely made to describe reality and to emphasize the fact that no teacher ever taught the college teacher to teach, except the teachers in schools of education who mostly teach teachers to teach elementary and secondary school pupils.

After all, everybody knows that he who can do, works for business and industry, and that's why he is so highly rewarded. Those who cannot do, teach in colleges. And those who cannot teach, teach teachers. You have all heard this old saw, and we try to ignore it. But those involved believe it . . . and it shows up in how they behave.

Now I can say these rather awful things in public because I was one of those who believed and behaved as just described. As a hot-shot university basic scientist, loaded with a first-rate Ph.D., I was an equally hot-shot teacher. I had a select group of students, small in number, blessed with devoted graduate students who handled my laboratory teaching chores while I conducted lots of timely research, and there never was any doubt in my mind that I was a splendid teacher. Across the campus, there was a school of education. I didn't know what went on there, didn't care, and couldn't imagine it had anything to offer me.

This personal confession relates to a period of my life over twenty years ago. By this time, certainly things have changed. Heck no! A few years ago, two young faculty members at my institution offered to teach a course for graduate students in the basic health sciences to prepare them to become collegiate teachers. The whole idea was considered atrocious by the powers that be though, bless their hearts, these two young fellows conducted the course informally anyway and the graduate students who took it considered it to be one of the best learning experiences they had while in school.

What has all this got to do with the role of allied health schools in teacher education? It's very simple. Allied health teachers modeled themselves after their own teachers, the PhDs, the MDs, the dentists, the allied health practitioners, and too few of the latter group of teachers were ever taught to teach. So it's a very new idea that indicates teachers should learn something about teaching, more significantly about the learning process.

And this idea emerged just as schools of allied health were bulging with students. The mere mass of numbers opened minds to find effective, even economic ways, to teach, with all the technics, modalities, and equipment currently available. Yes, I had to admit, not too long ago, that to me the changing of the color of the chalk board from black to green was not the latest advance in educational technology.

So, allied health teachers had to learn to cope with large numbers of students, and they started to learn how to use the large variety of learning aids becoming available. And in so doing, they ran into media specialists and educational specialists who seemed to know what they were talking about, though their dialects were strange and hard to understand. An increasing number of allied health teachers began to appear with the master and doctoral degrees in education, and they began to infect the environment with new jargons. The hard-pressed practitioner-turned-teacher began to listen and to hear these foreign lingos, and then cross-infection occurred, almost to epidemic levels. Some of these new breeds of allied health teachers with formal backgrounds in education started to become allied health department chairpersons and even deans. Good God! was the reaction, there must be something in this learning business!

And the students had their say as well. Appearing in large numbers, well-prepared academically, and exhibiting dedication to the professions of human service, students became a force with which allied health teachers had to deal. So workshops and seminars for allied health teachers came into existence, and the established allied health teachers started to attend. And terms like behavioral objectives, course outlines, curriculum review

and revision, self-analysis, evaluation, and all that new stuff got to be understood and the processes they represented got to be applied. The silent majority underwent some kind of greenish revolution, often with grumbling protest, but the parade moved on.

Allied health teachers in baccalaureate degree programs, [illegible] top of the pile, had to take notice of the [illegible] and even one-year allied health programs which were producing graduates with very real competence. These teachers, being sensible, practical, and by this time increasingly aware of reality, began to realize that their four-year graduates had better have certain talents that the lower level graduates did not possess if their graduates were to enjoy success, indeed to earn a good living.

So the baccalaureate program teachers did some analyzing, and they learned that holders of the B.S. degree were expected to be supervisors, administrators, and lo! teachers. Even as practitioners, the B.S. graduates were expected to keep on learning via continuing education in the rapidly changing health fields. They were expected to teach the lower level allied health practitioners through continuing in-service programs and, in certain areas, were also expected to participate in patient and client education.

Moreover, B.S. graduates were sought as teachers and, when they filled such roles, they became aware of their deficiencies. As faithful alumni, they forwarded messages of distress to their alma maters and their by now astute professors heard the messages and instituted changes. As a result of all this, many baccalaureate allied health programs incorporate courses in education, in teaching and learning, as integral parts of these programs.

Now, more and more, master's degree programs are becoming operative, usually involving an additional year or so after completion of the B.S. program. These programs generally include advanced professional courses to expand the body of knowledge the future teacher brings to students. In addition, courses are offered in the

theory and practice of education, coupled with supervised teaching experiences. This sort of program has boggled the minds of graduate schools and the professional schools since they do not conform to the usual graduate and doctoral professional degree programs. Indeed, schools of education were also sort of confused though, by and large, they have jumped into the game and have cooperated effectively.

Perhaps, at long last, we can try to describe the role of allied health schools in teacher education. The long-winded presentation to which you have been subjected has, in fact, described this role, albeit one rather recently assumed by allied health schools. Stated in more lofty terms, the role of allied health schools in teacher education incorporates responsibility and provision of the means for the preparation of allied health teachers, in consort with schools of education and with such other professional and graduate schools, necessary to assure appropriate learning opportunities for future teachers in the several allied health disciplines.

The history through which I have led you depicts, I believe, a true statement of the actual events. But, more important, I believe it is a valid account of the attitudes and behavioral responses of those involved, an account which must be understood if one is to accept the historical results. Throughout this discourse, I have exhibited a sense of humor which is a necessary ingredient of the trait of humility that prepares the mind to view reality and the future in a productive fashion. When efforts were made to convert the, until then, effective teachers into real teachers, one was willing to accept only behavioral change, leaving changes in attitude as accomplishments for the future. It took both humor and humility for these teachers to change and, by and large, allied health teachers have changed their behavioral patterns. But being dedicated to human service, both as teachers and health practitioners, attitudes of established teachers also changed, almost simultaneously, very much to their credit. I include myself among those who had to undergo both types of change, as I have already confessed, so I too have come a long way to reach where I am today, an advocate of allied health teacher education. It was indeed a

revolution because so much happened in so short a period of time.

What else is there in the future? Looking at the qualifications of allied health school faculties, a very large number of the teachers on such faculties still only hold baccalaureate degrees. A significant percentage of these teachers have learned reasonably well how to teach, through self-learning and attendance at workshops and seminars, but they yearn to acquire formal education as teachers. Yet, most faculty members in allied health schools are assigned to departments whose total personnel population is too small to allow for academic leave to attend formal courses away from home. Schools cannot afford to replace them during their absences, even if such replacements were available and willing to serve as substitutes. But even if such leaves were allowable by these short-handed and financially depressed departments and schools, the faculty members concerned could not afford the education involved, the costs associated with moving, getting settled down temporarily and so forth. There are no fellowships available to meet the needs of the large numbers of baccalaureate degree-holding teachers who wish to enroll for a year or so as full-time students in education. The results of this state of affairs are the frustration and the depression felt by allied health faculty members following newly discovered idealism.

The solution to this problem is not easy. At my institution we have taken a seemingly radical approach to the situation, an approach that had to survive internal opposition and one only now being put to the test. We have agreed to permit, indeed to encourage, our allied health faculty members to enroll as students in our Master of Health Education program, without loss of salary and benefits. As graduate students, such faculty members pay the usual in-state resident fees, while receiving full faculty salaries. They enroll for a course or two per quarter, doing more during the summer quarter, on schedules that do not interfere with their usual assignments. Obviously, adjustments have to be made within the employing department, with associates shifting responsibilities if needed to accommodate the colleague-student. I anticipate such adjustments will occur amicably, with give and take throughout.

As structured, the Master of Health Education program includes four courses in education currently offered by the School of Nursing as part of its Master's degree program. The professional courses taken by program students will be those offered by the School of Medicine and the School of Dentistry under the aegis of the School of Graduate Studies. These courses involve advanced offerings in line with the allied health discipline in which the faculty member-student is already qualified as a professional. Thus, for example, the medical technology faculty member turned graduate student can enroll in courses offered by the Department of Cell and Molecular Biology in microbiology, immunology, genetics, biochemistry, and so forth. If such a student wishes to take courses in hematology or immunopathology, existing courses in School of Medicine clinical departments are available. By these arrangements, faculty members turned graduate students are not taught and evaluated by their own departmental colleagues, avoiding concerns about favoritism or other inappropriate relationships. The rest of the Master of Health Education curriculum involves practicuum experience as a student teacher, under the direction of educational specialists at the institution. The remarkable situation may occur that the student will examine the very course he teaches as a faculty member, while his efforts will be evaluated by educational specialists who view him as a student. Could there be more immediate interest and reward in such a process?

Incidentally, this sixty quarter hours Master's degree program does not require competence in a foreign language nor a formal thesis. The program will be tailored for each student to advance his professional knowledge content and know-how and to teach him how to teach. We believe this whole approach to be worthwhile, sensible, practical, and conducive to faculty development. Let's pray it will work out as designed.

But all this hardly helps the baccalaureate degree-holding allied health faculty members who are not on our campus or on any other campus where our approach can be implemented. For these less fortunate, albeit far more numerous people, we dream of the time when resources will become available to send our faculty

members off to them, as circuit-riding professors; to send them self-learning materials by which they can gain the competence that can be evaluated by supervising professors; to bring such students to our campus between quarters and during summers for intensive learning; and so forth. Many of our own alumni are in such situations. Indeed, it was their pleading for teacher training that stimulated us to design the graduate program just described. When it came time for implementation, institutional funding was not available nor were any funds forthcoming from federal and private agencies when requested. So, as I said, it's still only a dream.

No doubt other strategies to train allied health teachers to become educators will emerge. I hope today's meeting will bring one or more to my attention. As a teacher, I can still learn; so I shall be listening.

The die is now cast and the future is both clear and exciting. We in allied health are well-known for our many alliances with all the other health professions with which our success and future are so intimately joined. I am confident that our alliance with education, as represented by schools of education, professional organizations, and individual educators will be equally rewarding, and we look forward to these new alliances with increasing enthusiasm.

TEACHER EDUCATION--

THE PROFESSIONAL'S VIEW FOR NURSING

DR. WILMA B. GILLESPIE

Dr. Milliken has asked that I speak to you about Teacher Education--The Professional's View for Nursing. Let me explain some things in relation to the topic. I am a professional nurse (a graduate of a diploma program with a baccalaureate in nursing education) with experience as a practitioner, teacher, and administrator of nursing services in staff development. My master's major was in educational administration. The doctoral program focused on educational administration at the community college level. While at Ohio State as a research associate, I did some work with the comprehensive career education project--the school based model. I am currently Chairperson of a Division of Allied Health in a community college. I shall attempt to relate nursing, career education and administration to teacher education.

Someone has said that a forecast falls somewhere between a prediction and a prophecy. It lacks the divine guidance of the latter and the empirical foundation of the former. Putting myself on empirical thin ice, I would like to express a view about the educational setting where learning for nursing takes place.

Since in Allied Health we try to make some diagnoses, one diagnosis that I would like to share with you in terms of nursing/teacher education is that I believe we have an expectation-reality gap. I think there is a disparity between the expectations of learners who come into the programs and with the people who are facilitating the learning--the teachers. Further, there is a disparity between the program completers and wherever else the

graduate goes, whether it is to higher education, to job entry, to inservice education or continuing education.

What we have done to instruction in recent years reminds me of a very well-known aspirin commercial. Through technology we have pulverized and compressed it, we have scored it and divided it, we have flavored it, we have encapsulated it to deter its action, and buffered it to get to the head faster. We have done all of this in our effort to make it more marketable. But according to the U.S. Pharmacopeia, five grains of aspirin is still five grains of aspirin. Whether it is flavored, buffered, or coated.

Accordingly, I am going to address my remarks to the word "instruction" because the word is a commonality that binds all of the allied health programs. The word "instruction" implies certain things: (1) that you need a learner, (2) a facilitator for the learning, (3) a design of the learning, (4) management of learning, and (5) evaluation of learning. So, think in terms of the characteristics of adult learners (which is the group of learners that we are dealing with) and andragogy instead of pedagogy. This supports the framework of what I would like to say.

The mission of the allied health/nursing teacher is to assist the learner to do several things. Career education implies that the educational delivery system provides the learner with life-long learning. The mission of the teacher educator is to provide experiences so that teachers can assist learners to make career decisions and to relate competency skills to life skills.

One of the life skills that these learners need is in the area of productive thinking. Learners need to have exposure to problem solving. They are going to need people-knowledge skills as well as inner-feeling skills or skills in emotional management. In addition teachers will need to help each learner in the maturing process along several dimensions and to assist the learners to engage in self-inquiry so that the life-long learning can take place.

What is the role of the teacher going to be in this type of a setting? We know that educational change is occurring, and we didn't need Toffler to tell us that we are being bombarded with the shock that occurs with educational

change. The role of institutions in the delivery of health services is changing. And so the role of the teacher who is managing learning within those institutions is changing. Allied health programs are unique to the extent that the teachers in allied health must have skills along two dimensions: (1) they have to continue with professional skills and (2) they need teacher competency skills. That, I think, makes them kind of unique. The role of the teacher then, has to do with the values and expectations of the individual learners and the resulting social behavior and the values and expectations of institutions.

The institutions themselves have certain expectations and needs that they are telling us about and this is where the expectation-reality gap comes in. The type of social behavior that results when the allied health teacher is managing learning experiences in one institution with certain expectations may vary in another clinical institution which has different expectations. Sometimes these expectations (individual and institutional) are incongruent. And there are contradictions among the professions which have a bearing upon the practitioner who is also a teacher.

Bob Burrups has told us that there are really six roles that the teacher has and they all have an impact upon the nurse teacher and on the teacher education program: (1) role of the teacher as a director of learning. This involves planning, implementation of the plan and evaluation of the plan; (2) the role of the teacher as guide and counselor. It refers to the specialist; the extent to which the teacher wishes to allow himself to become involved in the active performance of this role and the voluntary versus the involuntary involvement of the teacher; (3) role as a mediator of the culture. There are certain cultural factors in relation to professions, and the teacher is supposed to be the mediator of those; (4) the teacher role as a member of a school community. There are teacher-teacher relationships, teacher-administrator relationships, teacher-board of education relationships, and teacher-policy relationships; (5) role of the teacher as liaison between the school and the home. There is a public relations role here, and there are decisions which are related to the creation and projection of images and the modeling that Dr. Bottoms was

talking about, i.e., the model that the teacher is portraying; (6) the role of the teacher as a member of a profession. With each of the professions there are certain contradictions that are apparent. So it means that as the teacher of nursing is trying to fill these six roles, we are really talking about two dimensions of this person: (1) the professional skill areas, and (2) the teacher competency areas. Each individual teacher has certain expectations in the role as a professional and in the roles as a teacher.

Now let me share with you some of the things about the expectation-reality gap as it relates to the design and management of learning activities. As Dr. Bard said, my role at the community college is as a chairman of Allied Health Division and that means that when teachers are soliciting a job, I have certain expectations in relation to the job and I feel that I must communicate those expectations to the applicant. I attempt to interact with these teachers about the roles of the teacher in general and the role of the teacher as liaison between school and community and as director of learning. The role of the teacher as a director of learning then and as a liaison between the school and clinical agencies becomes extremely important. (In fact, we were just organized as a new division the first of July and I have taken those two roles of the teacher to serve as the thrust for the inservice education for this next year.)

In allied health programs each teacher serves as a coordinator of the clinical learning experiences. This is what we expect of the teacher of allied health. So let's talk about the role of the teacher as director of learning. It involves five things: (1) The design and management of learning requires that the teacher be attuned to the purpose of the educational institution. It is not something that is just printed in a catalog. (2) Setting a climate for learning is an important aspect in relation to this teacher. (3) Establishing a structure for mutual planning. By that I mean that we must see each learner as an individual. The emphasis should no longer be on what the teacher is doing but on what the learner is doing. We should judge the worth of our program not by the amount of teaching that is done but by the amount of learning that has taken place. Mutual planning implies that you are going to get the learner and the facilitator of learning

together to do some planning so that the learners can identify the learning gaps and be willing to verbalize about those learning gaps. There is a certain unwillingness there. Sometimes this is very difficult for adults to admit. So part of the mutual planning thing would be to get them over that particular hump. (4) The fourth part is diagnosing the need for learning. This is extremely important and I do not think we do enough of this. In other words, we are saying to an incoming class of 65 freshmen students in the nursing program, "Well, we think you are all at the same level of learning and so this is the way we are going to present it." There is no diagnosis of the learning need and this is why the learning mastery and the reality in relation to learning, and the learning module become important. (5) Evaluation is the last point, but a continuous process. Provision should be made for recycling for learning. The definition which I particularly like is "evaluation is the process of delineating, obtaining, and providing useful information for judging decision alternatives." If you can think of evaluation, as Greg pointed out earlier, you are going to establish some criteria for evaluation and then apply these criteria to the data that you collect. We need to think about, in establishing a total evaluation system for the program, what information is going to be useful. The role of the teacher as director of learning involves the teacher in evaluation.

Now information seeking behavior on the part of facilitators of learning becomes very important. Much information we gather has no utility and yet we continue to gather it. I think it is very important for a division or faculties, or individual groups to allow the process of decision making to be examined in terms of the results we have. This forces us to look at the information gathering devices which we have used. Sometimes we are gathering the wrong information or maybe we are making decisions based upon information which has no utility. Then we see that the information we gather, or the instruments we use to gather the information, should be changed. So, the evaluation process serves decision makers. If the decision makers do not have the right information in order to make the decision, we should change the instruments we use for gathering the information. With the certification and licensure factors that we have in relation to allied health the information

system is a very important one and it must be broad enough in scope to serve the types of decisions that we need to make. If we broaden the information dimension of evaluation, we can delineate and gather the information needed in order to evaluate our program in terms of accountability.

So in summary I would say we need (and remember--this is not a prediction or a prophecy but a kind of "thin ice" kind of thing) sensors to help us determine how to shorten the expectation-reality gap between program completers and wherever these persons go. We need sensors in relation to establishing linkages from feeders into our programs. And this is especially true in relation to the community college. We are almost ignoring what secondary schools are doing in health occupations. We are almost saying to them that we are going to repeat what you have done. We are overlooking those linkages of the feeders into our programs and to a lesser degree the linkages of programs into either employment or inservice education and the continuing education.

I think there should be provision in teacher education programs for teachers of nursing and allied health to examine their decision making processes. They have to make decisions and they need to learn in teacher education programs what to do in order to judge decision alternatives. Also the process of research which is needed to evaluate the process of educational change. We need to build this in before we make the educational change so that we will know whether we have really done what we set out to do.

Now I started out with that little analogy about the aspirin advertisement and I would like to end with that. I think that the educational system should provide for life-long learning for individuals so that they can have a changing career. The educational system should be so organized that people are not penalized when they exit from the system or when they wish to reenter. So in terms of career education, I think it should be as available as aspirin but because not all people can take aspirin or do not wish to take aspirin, I think alternatives in education should be provided.

Within varying types of educational settings, the teacher of nursing must seek to assist learners to bridge the expectation-reality gap from the educational institution to the health care institution. Teacher education, then must prepare teachers to assume these roles.

TEACHER EDUCATION--

THE HEALTH PROFESSIONAL'S VIEW FOR DENTISTRY

DR. EDWIN M. SPEED

I want to share with you a significant experience that I had as a student pilot in the Air Force. I was enrolled in a relatively short course in which I was to learn to fly an airplane. Our instructors used a variety of teaching aids, they were well grounded in the subjects they taught. Their objective was to graduate us, not to flunk us out. They gave definitive and accurate examinations. So that in this "cram course," so to speak, after seven months we were given the responsibility of flying a million dollar bomber plane with a crew of ten. I was impressed with their efficiency in teaching. I was so impressed that I asked on my return from combat duty to be put into the training command. There the Army taught me how to teach. I had practice teaching, learned to prepare lesson plans, to write lessons, to use and understand audiovisual equipment.

I felt sure that after this the Universities would pick up the Army's systems. I was wrong. Even today there is no communication between the Department of Education and all other departments. One can go to the College of Education and come out knowing all about teaching but down the hall they are still teaching as they did in 1904 --or maybe 1804. It is still assumed that if one becomes a Ph.D., has a nice voice and will take a low salary, he can become a teacher. It is no wonder that many of the medical schools, dental schools and nursing schools follow this pattern. Our teaching situation, historically, has been atrocious. It is a credit to the health field that we are moving further into the field of education.

I want to talk about some of my observations in dentistry. The average dentistry student has a college degree plus. The first two years of dental education is almost parallel to that of medical education. The basic science courses are much the same. In fact, some schools use the same basic science department within the university system. Theoretically, once the dental and medical students have completed the basic science courses, they move into clerkships, the medical student into the hospital and the dental student into the dental clinic. There is where the variation occurs. The dentist is more technically oriented than the physician. The medical student needs more knowledge. The dentistry students need a considerable amount of knowledge and a broad technical ability to perform the things they do.

The biggest criticism I would have of Greg's system of teaching is that, though I am confident it takes care of the body of knowledge, I am not too sure how well it does on the technical end. When I teach a student how to give an injection, I warn him of the consequences of his not doing it correctly. I tell him his patient may die. He can read that in a book, or he can type it out on a computer, but I am not sure it will have the same impact as my telling him. We are working toward the end product of a man who performs a service. Handling a dental patient is a learned process and takes much experience. There has never been a patient who walked into a dentist's office because he loved to. We have to prepare a student by giving him a lot of knowledge, a lot of technical expertise (which takes practice, practice, practice), an ability to reason using the knowledge he has gained, and I think probably most important, an attitude of service. The role of the teacher is to help each student form a good attitude.

I believe in computers, in programs, but also in a good teacher. I think most of our teachers do not teach as well as they know how. If we could overcome whatever it is on the part of a teacher that makes him resistant to change; if we could make him believe that these new ideas and methods are possible and workable; if we had a strong administration that would require that they attend seminars on educational techniques, evaluation, etc., they would improve. Administration should set up a program whereby the staff could assist each other in the development of curriculum. It might take six months, a year or

two years. But then it would be complete. It will take some adjusting from time to time, but not that much. It is easier to change something that is established than it is to start from scratch.

In dealing with young people we are concerned with more than training technicians. If we put a little more emphasis on the complexities of living, if we taught our young people the things they need to know, knowing full well they are not going to be perfect, but if we teach them how to learn, and then to learn how to use their lives, we might be better off than getting up tight about whether they spent x-number of hours using this machine, or their grade point average is 92.6.

We need to look at our faculties and the way we are doing things and first improve what we have and then look at all the innovations that are going to make our jobs easier.

TEACHER EDUCATION--

A PROFESSIONAL EDUCATOR'S VIEW

JAMES D. McCOMAS

You should note a slight modification in the title of my talk. Few professionals have complete agreement or singular points of view.

Very few of us would want to board an airplane with a pilot who was not licensed and who had not completed a supervised program of flight training. None of us would want a completely self-taught and non-licensed pharmacist dispensing prescriptions. Even barbers and beauticians in most localities and most states are certified or licensed.

Can one be a "born teacher?" Is teaching an art or a science? Do the method and the medium make a difference? Is there a best way of teaching? Can teaching effectiveness be measured?

Teaching has always been a vital process. The Hebrew translation for Rabbi is teacher. Teaching has been a way of transmitting religion, culture, arts, crafts, and learning to earn a livelihood. The act of teaching is carried on from the time of birth by parents and significant others--from peers on the playground to the teacher in the classroom. Nearly everyone with whom we interact may effect learning.

Almost everyone has had some kind of an educational experience, good, bad, average, or below average; therefore, it is somewhat logical that most everyone would have definite ideas as to what needs to be done to improve the educational process.

For many years, professional schools of education were accused of being more interested in how something was taught than the teacher's basic knowledge of the subject being taught. I believe there are few who would hold such views today. One can no more teach about that which he or she is not knowledgeable than one can describe a place where he or she has never been.

Teaching should be based on a sound knowledge base which encompasses knowing as much as possible about that which is to be taught, knowing as much as possible about learners and their needs, and knowing as much as possible about strategies for organizing and implementing effective teaching. Suggested as well is a knowledge of how one can analyze and determine the effectiveness of teaching and learning approaches.

A. PHILOSOPHY--THE FOUNDATION

Fundamental in the teaching and learning process is the educational philosophy of the teacher. What are the teacher's basic beliefs about teaching? What are the teacher's basic beliefs about that which is to be taught? Does the teacher subscribe to the curriculum and procedures which are expected by those evaluating and administering the program? What general and specific expectations does the teacher have for each learner? What responsibility does the teacher expect the learner to assume?

A philosophy regarding a school or course should be stated in terse and simple terms quickly and easily communicated. A basic problem of many schools, institutes, or courses is that there is an absence of an identifiable philosophy. Thus, there is great difficulty in building curricula and planning courses from available alternatives. Curriculum development should be a rational process whereby alternatives available may be weighed for congruence with program philosophy. A well thought-out philosophy should be a basis for making wise choices. Some school curricula contain indiscriminate additions which indeed at times may be contradictory and counterproductive.

B. CONCEPTUALIZING A TOTAL CURRICULUM

Those of us who have developed new programs are aware that we have a tendency to plan on a course-by-course basis, deciding what should be added as we near the time when the next new course and the next skills and experiences are to be provided. Such ad hoc planning in curriculum building may be limited by specific recent experiences which may have an exaggerated importance on the curriculum sequence being developed. Too, unless those teaching see and understand the relationship of the parts of the curriculum to the whole, a determination of what is important to be taught and learned and in what sequence it should be observed, discontinuity, overlap, redundancy, and even contradictions may occur.

We have learned in a negative way how threatening a new curriculum or elements of that curriculum may be when the teacher is not comfortable with the content and process. Some of us saw such abuses in moving inexperienced teachers into modern math programs when they knew very little about it. Parental frustration level is still very high in those cases where they understand very little about modern math. Similar difficulties have been experienced with new methods in developmental reading. Curriculum development should provide the framework for the subsequent planning of special courses and experiences. The planning of courses suggests moving from more global and general goals and objectives to greater specificity and at best a variety of learning alternatives from which both the teacher and the learner may choose.

C. KNOWING THE LEARNER

The more the teacher knows about the teaching-learning process and the learner, the greater advantage for each. It is axiomatic that the better one knows a person as an individual, the more difficult it becomes to maintain prejudice against him because of his age, social status, sex, or race. Those of us who have taught skills to

adults know that many older persons are inhibited in attempting a skill for fear of failure; fearing that their rate of learning will be slower than others, or that they will not do as well as teachers and peers expect. Adult learners frequently feel that they know less than many of their peers. Recognizing the characteristics and special needs of the adult learner enhances the teaching-learning process.

The values and beliefs of the teacher and the learner are important elements at play in teaching and learning. The traditional relationships between the medical and nursing profession, racial perspectives, sex orientations are all factors which are important considerations. Rosenthal has found that the expectations which the teacher has for the learner have a profound impact on the teaching-learning process. If the teacher's expectations for the learner are low, more often the learner's performance will be lower than his actual potential.

Verbal and non-verbal rejection of the student diminishes opportunities for teaching and learning. Imagine how well black students can learn from teachers who reject them or tell them in a variety of subtle and not so subtle ways that they should be happy because Blacks have better opportunities than in previous years. Psychologists and educators have learned much about non-verbal communication and its importance in teaching and learning.

The teacher who knows the learner is in a better position to assume the perspective of the learner, whether it be tying a tie or assembling a piece of equipment. Just think of trying to learn the keyboard of the typewriter from a chart where the keyboard is toward the teacher rather than the learner.

D. DEVELOPING INSTRUCTIONAL OBJECTIVES AND GOALS

Considerable progress has been made in psychology in specifying expected behavioral outcomes and abilities. More and more teachers are concerned about how to organize their courses and to specify what students should know. The development of good course outlines helps the teacher to share expectations with students so that students can pace themselves to accomplish what is expected

of them. Too, sharing expectations with the student at the outset causes the teacher to plan more and better and to be less arbitrary. The absence of plans often leads to great subjectivity in grading, considerable "windmilling or waffling" on the part of the teacher and sometimes almost a hidden approach to grading.

E. ANALYZING TEACHING AND EVALUATING LEARNING

Teacher use of media, especially new media such as TV to analyze their own teaching, affords new and exciting opportunities. Taping and immediate viewing, even if self critiqued, is a powerful and persuasive influence. Micro-teaching affords opportunities for improving teaching. Techniques in questioning can add much to the teaching-learning process. The analysis of teacher talk is an effective device for the teacher to alter patterns of classroom interaction.

Diagnostic approaches in analyzing through student evaluation are available. Both student- and teacher-made learning packages are opportunities for creative teaching.

It is amazing how little most teachers know about test construction, what types of questions to use when, and how to know when a test is testing what it is supposed to test.

It is encouraging that we can learn from each other. We in education should often be reminded of how nursing considers individuals in delivering health care while we in education teach toward group norms rather than individualize. On the other hand, it is important to see education joining with medical schools, colleges of nursing, and colleges of allied health in providing elements related to teaching and learning. I am pleased to report that our own College normally has two professors of education based in Memphis teaching students in nursing and allied health selected courses.

F. WHAT WE KNOW ABOUT THE ADOPTION OF NEW IDEAS

Considerable educational, medical, agricultural, and sociological research has been conducted to determine factors which influence the adoption or rejection of new

ideas. Some of these factors include: complexity of the idea or practice, compatability with existing values, whether the practice or idea can be adopted in stages or must be totally accepted or rejected, and the economic or relative advantage of the new idea or practice. Research by Mort, Miles, Spicer, Everett Rogers and others focuses on why people adopt or reject ideas.

In view of the rapid changes in medical technology and the proliferation of innovations in teaching, we would do well to study and apply research data on change and its acceptance or rejection. The challenge to all of you in the fields of health education and teacher education is to facilitate change and ease the transition from the old to new. Such transitions are inevitable in today's society.

DR. WILLIAM L. HAYS

(BANQUET SPEAKER)

Dr. O'Kelley, Dr. Milliken, Ladies and Gentlemen:

I was pleased to be asked to speak to you tonight at this session of your Regional Conference on Teacher Education for Allied Health and Nursing. I came prepared to share with you my vast fund of ignorance in this area. However, even though I can't add anything directly on your topic, I would like to speak to you very briefly as a teacher and as a member of the higher education community.

As I was thinking about what to say tonight, it occurred to me that exactly twenty years ago this month I took my first step up the academic ladder when I became a post-doctoral instructor at the University of Michigan. (Although my degree reads 1955, I actually finished everything in August of 1954.) Like Georgia, Michigan wasn't too keen on hiring its own former students, but I had a few special skills that they happened to need, and I was asked to stay.

What a time it was. Maybe the sky wasn't bluer, maybe the grass wasn't greener, and maybe the students weren't even the docile lambs we all like to remember. But as the years go by we all seem to remember that time as through a sort of golden haze. With my princely $4,000 a year salary, supplemented by the $2,500 dollars my wife made teaching high school, we were on top of the world. Naturally, we had expenses. For example, there was the three room, fully-furnished apartment, including utilities, that we rented for $60.00 a month. As it happened, it was on a 35 acre farm at the edge of town, and most of the year the landlord used to embarrass us by giving us more fruits and vegetables than we could eat, so that we had to sneak them out at night to give to our friends. But outside of such minor inconveniences, it was a great time, and college teaching was a great profession.

What if we had had a little crystal ball back in those long-ago golden days? What if we might have foreseen what those twenty years were going to hold? Would we have believed it? Would we even have understood it? I doubt it. I have lived through every agonizing minute of it, and I'm not sure I understand what has happened.

Who would have thought, for example, that teachers, those fine, dedicated, wholesome, self-sacrificing, frugal people would turn militant and join unions? Who would have thought that college presidents, those silver-haired, golden-voiced phantoms who appeared only to the common people at faculty receptions and commencement, would be turned into combination policemen, ward politicians, and plant managers when the ivy fell off the walls. Who would have thought back in those days when a smirky little comedy called "The Moon Is Blue" was barred from many college campuses for simply suggesting some hanky-panky in an apartment that a time would come when unlimited visitation goes on in many dormatories.

Now things may be coming full cycle again. But you know, I have a feeling that many people think that just because some familiar things are reappearing, they may be lulled into thinking that the "good ole days" are coming back. Sure, students are once again quiescient, and much less inclined to be concerned with the great issues than their predecessors in the sixties. Sure, there are some hopeful signs of recovery from financial disaster at some of the colleges across the country. Even unionization in higher education may be slowing down a bit, or at least becoming more routine. On the surface, at least, higher education goes on much as before, in spite of all our recent soul searching.

We have had no lack of people telling us what is wrong with what we do, and how universities must change if they are to survive. I hesitate to add even one small voice to that enormous, and largely discordant chorus. Even so, it seems to me that there are some simple lessons to be learned from the experiences of American Higher Education in the last decade or two, and that universities particularly are taking an awfully long time to learn them.

The first lessons is so obvious that I am almost embarrassed to point it out. I would put at the top of the list

the fact that most young people have a natural and perfectly understandable desire to learn how to do something. Something which provides a set of skills, something which is marketable in the form of a job or profession, and last, but not least, something which gives a sense of accomplishment and of service to others.

This, I believe was one of the enduring messages of the 1960s. Universities must satisfy this desire for most, if not all, of their students. From several points of view this conclusion makes sense. Someone once said that a university is an institution dedicated to the indefinite postponement of experience. From the average student's point of view, this was and is all too true. Maybe it is asking too much to ask vigorous young people to learn all the theory before any of the practice, especially when the world around them cries out for practical solutions to vitally important problems. In this connection, one of the most interesting by-products of the turmoil on campuses during the sixties and seventies are the campus street people. I have the impression that on axes of major college campuses running from Berkeley to Harvard, and from Minnesota to Texas, thousands of these young people still wander, often living at a shockingly low level of subsistence. Athens is a bit off the regular circuit, but we have our examples, too. At a time when this kind of "way-out" behavior is no longer really the thing among students, why are there still thousands who go from campus to campus, living as best they can? Who are these people who have dropped out and can't seem to drop back in? A large number of them have been students at one time or another. Studies suggest very strongly that a significant number were children of lower middle-class families with strong upward mobility, children of families who took the well-known attitude that "I never had a chance to go to college, and you are going to succeed where I failed." However, by temperament, interests and sometimes by the kinds of abilities they possessed, these people could not or would not fit into the traditional college pattern. On the other hand, family and American social pressures generally being what they are, they never saw the vocational-technical schools or trade schools as meant for them. Ordinary "straight" jobs violate their own, and their parents', expectations, and so they hang suspended in a kind of abyss, driven perhaps by years of training to want to be "around"

but not in college. Do we really know how many others there are who have not taken the full counterculture route? Do the colleges get off scot-free for letting this human waste occur?

I don't think so. At the center of power in almost any American college or university has usually been a group dedicated to the proposition that if it's applied, and if it's useful, and if you can do it without a doctor's degree, then the university has no business teaching it. Now, in part they are right--since any university must maintain its scholarship and research, and train new people to be scholars and researchers. There is, and will be, a significant part of the student body who find this their cup of tea. But not every bright and willing youngster sees it this way, nor does society. Witness President Ford's speech of a few weeks back. Actually, the history of American higher education is a history of the breaking away, often with considerable hard feeling, of the practical sciences and arts from the basic sciences and liberal arts. Even so, the influence of the liberal arts tradition on curriculum and requirements is strong in all of these schools. And, just as soon as each new professional school was born, it set about establishing its own fences to keep other poachers out. Practically and politically, teaching individuals how to do something and particularly something new, is still not easy in most American universities.

Sometimes, especially on bad days, I am reminded of Jonathan Swift's Gulliver on the third of his famous voyages. On this adventure, he visits the island of Laputa. Here, the rulers and the intellectual establishment live on a kind of floating island up in the air. Each adopts an air of complete abstraction and deep thought, while he solves difficult scientific and mathematical problems such as the conversion of cucumbers into sunlight, and how to soften marble so as to be suitable for pillows. Meanwhile, down on the ground the common citizens suffer from houses that fall down and crops that will not grow, because they can do nothing without the study and consent of those on the floting island. Naturally these savants are much too preoccupied with abstract matters to pay any attention to them. Now I am not trying to say (as Gulliver was) that universities are just floating islands indifferent to public needs. For most

schools at most universities, nothing could be further from the truth. It is hard even to calculate the effects that most universities have had on the public well-being because of their research, and their training of high level practitioners. On the other hand, universities have very deep and difficult practical and philosophical problems connected with the training of the middle-level practitioner in almost every field. About the surest way to provoke an argument on any campus is to propose such a thing. Why should the universities devote their resources to this kind of enterprise in the first place? Cannot the vocational-technical schools, and junior colleges and specialized colleges, and the private sector take up this slack? Many think so, and they may be right.

I think not. Among other things, more attention paid to the needs of the practitioner might be good for the universities themselves. I think we have good psychological evidence that learning practical skills at points during a college career might well serve to cement and make meaningful the general education that we all piously hope to give to our students. You all, however, don't have to be told that most colleges are notoriously bad at this. Secondly, as you all know, in a wide variety of areas a genuine social need is emerging for the middle-level practitioner. The level of competency required may not involve all of the years of training of the specialist, but it does require a level of instruction and a constellation of expertise and facilities that will not often be found outside a university setting.

Just for example, consider the case of the nursing profession. As I understand it, there is presently a roughly equal division of student nurses among hospital-based diploma programs, junior and community-college programs, and baccalaureate programs, with about 70,000 students in each group. As yet, only a small fraction of the nation's nurses are working on master's or doctor's programs. I understand that hospital-based training is declining rather rapidly, with a rapid rise in enrollment in associate degree-level programs. The situation is greatly complicated by the uncertainty about the actual numbers of nurses needed, and by the rapidly changing character and aspirations of the nursing profession itself. There is apparently a growing public demand for the intermediate-level physician's assistant or the nurse-practitioner.

However, as yet this role is not, I believe, fully defined; even less well defined is where and how these intermediate level people are to be trained. Could and should the universities be actively involved in preparing for these programs? If they do so, how are they going to do it well? Perhaps there is an even more basic problem for the baccalaureate programs? What roles do general education and basic science really play in this preparation? As one nurse was quoted in Chronicle of Higher Education as saying: "To what avail anatomy and physiology if the nurse may only sponge it, roll it over, or assist it out of bed?" I'm surprised that the nurse-educator quoted doesn't already know the answer to that. Perhaps after one hundred years of education for nurses, it is apparent that this problem is nowhere near a solution.

And what of the other allied health professions, not to speak of the various and sundry other service professions, where mid-level people are equally in demand.

I believe that the universities are going to have to resolve, and resolve mighty soon, the place of the explicitly-applied, intermediate-level programs within their curricula. This is where a major demand will be, and here, I believe, is where student interest will continue to lie. If this takes some new attitudes in the professions, well and good. If this takes some reorganization of the University, then I say so be it.

In a way, the recent emphasis upon competency-based evaluation may be a good move in this general direction. Once we know what our students do indeed need to know in a particular setting, maybe we can begin to build realistic and ample curricula. On the other hand, sure as shooting we will be accused of abrogating the general education and liberal arts tradition of the University. To this, I have two responses. I believe that liberal art attitudes can be taught in large part within the context of almost any course, and by the example set by the teacher himself. An open mind, a reverence for truth, a respect for human values--these things are not the exclusive domain of Humanities 101. I also tend to hold the rather radical idea that general education can be rendered in a wide variety of settings. A liberal education is both a context for and a quality of a person. It is not just a

Good Housekeeping seal of approval. Second, I tend to agree with those who think that the emphasis on general education and liberal arts may be chronologically misplaced. In some curricula why not teach skills early on, to be followed by, and placed in context by more general education. Why does the sacred ritual of two years of general education followed by two years of specialization have to constitute the basis for every baccalaureate degree. Conversely, who do advanced and graduate curricula have to be so liberal-arts-poor? Don't we get a lot of mileage out of that first two years? I am happy to say that some are asking this question, and a few are actually doing something about it. I believe it is long overdue.

Oh, for the good ole days of twenty years ago, when life was simple in the education business! Some prophets of doom say that higher education is going to continue to decline in relative importance to students and to the public, and that great retrenchments are coming on every front. In view of the cloudy economic picture generally, this may well be. I tend to believe that although the future may be dim from the traditional perspective, higher education itself is going to change, and that it will manage to adapt to new needs and new challenges.

If it does not, perhaps we will become more and more like the wise men of Laputa, and quietly float away. Jonathan Swift was nobody's fool!

ALTERNATIVE STRATEGIES FOR STAFF DEVELOPMENT

ROLE OF THE STATE DEPARTMENT OF EDUCATION

JOAN E. STODDARD

I will, first of all, indicate some of my personal beliefs related to health and to education. I think this will give you a better appreciation of where I am coming from and why and how I am involved in health occupations teacher education. Being a nurse, I believe very much in the curing attitude as related to patients. Now, being in education for a number of years, particularly with the state education department, maybe at some point I will study the aging process as it is related to employment in such a setting. I also believe in the curing attitude as related to students. I believe in the concept of career education as applied to the health field and I think many of you are aware of the program, "Comprehensive Career Education Program" we have in our state. I believe in the systematic approach through educational program planning and delivery which can be responsive to changing needs. I also believe in evaluation and accountability in terms of cost effectiveness, but mostly from a program improvement standpoint. And perhaps most of all I believe in the concept of professional development. Further, I believe that through planned professional development activities, based on defined needs, meaningful and positive changes can and will occur which will benefit the teaching-learning process with impact on teacher behavior and program design.

As the health occupations specialist for the State Department of Education in Oregon, my job summary statement is something like: plans, develops, and evaluates health occupations education programs--kindergarten through grades 14; provides for services such as curriculum development, teacher education and special projects. What this means more literally is that a major portion

of time is spent assisting both local schools and community colleges with program development and improvement activities.

The reason I wanted to share with you some of the specifics about the job is that I travel about the country with various groups both in education and in health. I find that many people do not understand the role of the state health occupations education specialists, and that this is a rather obscure, vague, ill-defined area in their minds. Direct services are also provided in the same areas of program development and improvement to higher education and to health service agencies to promote and facilitate coordination and articulation of program activities.

In our state system of higher education, I do not have a counterpart except one person who at the medical school was assigned by the chancellor's office some responsibilities for coordination of allied health programs within the state system. Dr. War and I have worked very closely together and I have also been directly involved in program planning activities with the vice-chancellor's office for academic affairs and so we have established coordination and communication and liaison in those areas. The same is true for the health service areas as they have inservice needs, particularly now with the movement toward continuing education. Sometime, however, sufficient time is not spent in program assessment activities of a formal nature both at secondary and community college levels. I mention these areas because through both program development and program assessment activities one common need continues to surface--professional development for teachers. It is for that reason, primarily in terms of prospective and priority, that I allocate one-fourth to one-third of my time to teacher education activities. I point this out because the time I spend may be in a higher proportion, perhaps, to the time that other state specialists spend in these activities. As part of this time I also do some proposal writing to seek outside funding to support some of the teacher activities which we have conducted and are currently conducting. I am also approved by two universities to teach graduate level courses.

Again, I think you can see the kind of communication and cooperation that has been developed in this area outside

the state department itself, in terms of both internal and external support. In describing the state department of education role in teacher education, in many states the state education agency for career and vocational education has a key role to play in teacher education. First of all, most state departments set minimum standards for both programs and also for teacher certification. This is an area that we sometimes overlook in the planning process. However, moving from the regulatory role of the state department, let us look at it from a leadership base. As I see it, the state department might provide leadership in teacher education both pre-service and inservice through needs assessment, through planning and development, implementation, evaluation, and research. In addition the state department of education staff may deliver direct services to institutions or to individuals or provide for such needed services.

Now to move to some of the specific activities that we have planned or planned and implemented. Evaluation, of course, has been conducted for all of the activities and is developed as an integral part of the goal and objective setting. Because at the present time we do not have a program to prepare health professionals for the various education roles, a number of approaches have been utilized in attempting to meet broad regulations of the formally assessed and informally stated needs of health occupations educators. Again, we see two things coming together as we set some priorities. Both those needs that relate to program priorities need to be established at the secondary level and at the community college level. For example, for encouraging both groups to develop long-range, five-year plans. And so this is an area where we want to provide some input to teachers and administrators who are involved in this planning process. Also priorities relating to individual and group needs need to be established. For example, if the nursing educators have a specific need, we attempt to focus and set some priority in this area; if the dental auxilary areas have a need, we attempt to do the same here.

If there are individual needs to be met, then we work in a little different manner. We offer both credit and noncredit activities and in the past we have held one- and two-day individualized, orientation workshops for

new teachers and again we do some preassessment to see where that person is coming from in terms of professional background and preparation and what they see as their immediate needs for meeting student needs in the classroom. I believe very much in a developmental approach. In other words, we try not to make instant experts out of them or assume that we do. We try to take some critical areas, both based on our experience and based on the stated needs, and plan a program that will give them the immediate working tools to get off the ground, particularly in a new program and particularly if this is the first teaching experience for many of them.

Then we plan from there for continued development and follow-up. We have one- and two-day workshops and conferences on specific topics. We have had one- and two-week general and specialized curriculum workshops in which the focus is on application of process. We have offered one-term courses and seminars. Also, in the realm of professional development we have provided for planned observation visits of newer teachers with experienced or master teachers. We have provided opportunities for teachers to work on state ad hoc planning or advisory committess or task forces, or serve as members of an assessment team.

One of the things that is fairly new in terms of the formalized approach in our state is a professional development policy adopted this past year by the state board of education. Primarily, it relates to community colleges. It now mandates each community college to have its own professional development policy, which means that there must be a professional development policy on file for each faculty member. It is moving away from saying that there is only one way to continue your professional development and that is through formalized academic credit courses. This provides the institutions with much more flexibility. The same type of policy is available to secondary schools, however, administrators have really been slow to implement it. They can request approval of noncredit activities, for example, if some of the secondary teachers or maybe a nurse wishes to spend a summer working in a health care facility to learn more about the other health occupations which she is teaching. There is a procedure for getting this experience approved and accepted by our certification department.

I am not sure why there has been a lag in implementing this policy because I certainly think it is needed and would better meet needs of both individuals and programs.

Some of the areas in which we have had workshops or conferences include science. Last year we had a one-day workshop on the relationship of science content to the health cluster program. And again this is based on what we know. It is based on feedback from community colleges saying that the students that do come are very weak in science, first of all, and secondly, they are weak in math. So I think we will be looking at the math area in the future to show some relationships and also to promote some interdisciplinary activity at the local level. We have had workshops on media--some of the basic hardware and soft-ware. We have had some activities in both the dental and medical technology areas and these have been in the form of clinics, primarily for the secondary teachers to teach them some of the basic tasks related to these activities, and to teach them how to teach students. If they are not going to do the direct teaching, but will use resource people, we hope that we are giving them enough background information so that they can effectively work with resource people coming in to teach these units. We have had some conferences on trends in the various occupational fields and innovations in teaching such as in the mental area. We have had some activities in the expanded duties and the implications for educational program change and also for teacher preparation and for continuing education.

ALTERNATIVE STRATEGIES FOR STAFF DEVELOPMENT

ROLE OF THE COLLEGE OF EDUCATION | DR. STANLEY AINSWORTH

We begin in education with basic assumptions. Some of these assumptions are that (1) you have the basic knowledge and skills in your areas to become a teacher. (2) No matter how much you know about your field that is not enough to be an effective teacher. You need other knowledge and skills to be a good teacher. (3) These extra understandings can best be learned in a context of teacher education rather than in an isolated situation. (4) Good teaching involves more than technical knowledge even in the field of teacher education itself.

These assumptions are in contrast to certain statements we often hear from "experts." One of the assumptions is that "everyone can teach." This is true. Anyone can teach something to somebody, but you have to do more than that if you are to do a good job. Another assumption is that "you cannot teach anyone to teach." This is not true. You can improve a person's teaching. You cannot rely solely on a person's natural ability to teach. You cannot select him properly or predict who he will be. Athletes--all of us have some athletic skill. You can run or pole vault. You can do all these things but some people can do them a lot better. They are the natural athletes. They may start on a higher level of skill than we are and they can go to other skills easier than we can, and they will be more consistent than most of us will be. The natural athlete improves his skills to an unusually high level. Look at singers. Most of us can sing but most professional singers continue to work hard over the years to improve their singing. Sometimes only the singer or the most professional listener can tell the difference. To say that you cannot teach anyone to teach or improve his ability to teach just is not so.

Another statement is that "professional education is only teaching methods." Methods is a part of what we teach but it may be the least important in the long run. In the short run we know that it is important. We have done a study in language education. Surveys were sent to experienced teachers of English and foreign languages. The results of the study showed that, overwhelmingly, these teachers want ways to improve methods of teaching and management of the classroom.

Let us take a look at the nature of teaching. Teaching is a special kind of human relationship, and learning grows out of that relationship. I want to talk about some of the characteristics of this relationship. You must function in a wide variety of roles. You have to extend the number of roles that you can function in comfortably: motivator, stimulator, supervisor, resource role. Another characteristic of the teaching relationship is that you are facilitating the learning of others rather than yourself. This is what makes it a professional role. The conditions under which you are doing the facilitating are very complex. There is a need for planning and organizing with a certain kind of perspective. Being aware of long range and short range goals, you integrate them. You need special help to do this more effectively.

Still another characteristic is the importance of stimulating and motivating people's interests. Those are two different words. Both have distinct problems. It is different when one person comes to you and asks for help with one thing in mind. This is easy. You do it and it is done. But in teaching you need to be thinking of attitudes and an orientation for learning.

Another characteristic which I think is one of the most important involves self-evaluation. Your flexibility and judgment cannot be developed without self-evaluation. What you are, what you think, how you look at a student are all important. You have to be open to other things which may affect the kinds of learning the student is acquiring outside. The teacher should not try to control the whole process. The part of the learning that is most important is what takes place inside the child's head. You cannot control this, but you have a central status in the process. When you stand aside, you are

standing aside by choice, but you still have an important ingredient in the learning process. Another characteristic in the teaching relationship is that it brings about many changes simultaneously. The "Ah ha!" phenomenon. The student suddenly becomes aware. Then you realize that the insights tie in with his previous experiences and this opens up new avenues of learning. It may be a growth or a desire to learn more. These things happen to the students we are trying to teach. They add variety to the learning process.

Let us talk about the components of professional education--what we are trying to provide people who want to become teachers.

1. Knowledge of the principles and general process of learning. Teachers need to understand these so they will know how students are affected.

2. Knowledge of human development and what the characteristics of human development mean for learning.

3. Knowledge of the principles of motivation. Motivation isn't something that you can "do to" somebody. This is the way we talk about it sometimes, but it isn't. It is something that happens, again, within the person. And how do you stimulate that?

4. Ways of organizing the content for teaching. This is different from the organizing of content for use. You take what you know in your own professional field and reorganize that knowledge for teaching purposes. Some naive but very well-prepared people in certain fields do not know this, so they try to teach the information as they use it. But it doesn't work that way.

5. Knowledge of the measurement principles and how to evaluate the results of your teaching. This is a woefully weak spot for many teachers because measurement is much more complicated than appears on the surface. We assume (if we are naive) that our tests really measure what the pupil knows. Very often they do not; they only measure a part of what they know.

   We assume that if we ask people to tell us how good or bad they think a course was, that we will know--and yet we may not know very much. So this is a field that needs a lot of improvement.

6. Then there are specific methods for teaching. I think each of you knows this. You can create your own methods and very often the methods you create are much better than those you can be taught. All efforts should be toward a creative approach to methodology rather than teaching what the methods are as if you had this didactic listing of things to do, and once you know how to do and once you know them--"now I know how to do it."

   Under methodology we have accountability, competency-based teaching, mastery teaching, behavior modification, the use of various kinds of media--the teaching of methods is much more complicated than it used to be.

7. Provide experiences in various aspects and levels of teaching. We have moved a great deal to field-based experiences. You can't be a sponge and soak up how to become a teacher. You have to do it and with supervision and guidance, evaluate it. You are simultaneously the teacher and the learner. You learn your own field of expertise more thoroughly and with a different perspective when you try to teach it. The best way to learn anything is to try to teach it to someone else.

   Another thing that you learn when you teach is that just because you tell a student something, it doesn't mean he has learned it. Something must happen within the learner for him to learn it, and telling doesn't make it happen.

8. Self-analysis for the attitudes and assumptions and personal characteristics that need development or de-emphasis. Example: Teachers need patience and we talk about it as if it is something you pour in a lot of. I do not think patience exists as a thing, as an entity. Patience is a name for a certain kind of behavior. This behavior is the outcome of maintaining a problem-solving attitude. As long as you are looking at what is happening as a problem to be solved, and approach it from all possible angles, you are "patient"--people think you have a "lot" of patience. You don't have "a lot of" anything, you just have an attitude--a way of thinking--which you act out. And nearly always, when you find people are "losing their patience," they are threatened.

> They become identified with the learning process of the student and if he doesn't learn what they teach him, they get angry with him because he doesn't do it. This is an example of what I meant--how you need to learn the attitudes and assumptions that will facilitate learning.

Even an experienced teacher can profit from exposure to this kind of program I'm talking about. These facets are mechanisms by which you can learn to function in the many roles of the teacher. You can learn something of the interaction of these components for effective learning. For instance the combining of the organization, the methods in order to enhance motivation. These things that I listed for you aren't separate, they all have to be integrated for teaching purposes. The best motivation comes not from trying to motivate them, but from organizing your work and choosing methods of the type where motivation is no problem. That's a much better way of approaching it.

Now you might ask does the College of Education do all these things? Yes, to some degree. Limited by practical considerations. It depends on which professors you get, what you are advised to take, the perspective you bring as a student, your effort, and many other things. It is our hope that those who are planning to teach will begin to appreciate the intimate and personal rewards that are associated with teaching. And like the best rewards in life, these come as by-products. You don't go into teaching because these rewards exist. You have them come to you. It's like happiness. If you try to seek happiness, it eludes you. You find happiness by becoming involved with something larger than yourself.

Another thing you can learn is to know what it is to become consciously dedicated. This is a term I think is very important. The consciously dedicated teacher is quite different from the compulsively dedicated teacher. Some people appear to be dedicated only because they are driven by their own needs and desires. This is not the kind of thing I'm talking about. You see teaching as a way of expanding and enriching yourself in ways that will lead steadily and satisfyingly to a high level of function.

So you should come to the education program with the understanding that you could know all there is known and it still wouldn't be enough. And if you see teaching as one way and a unique way to apply the best that there is from your own special field, and if you see your main role as a teacher as acting as a synthesizer of a multitude of factors and elements that arise from the content of your field, from the relationships to other broadly based knowledge, to the student and all that he is and to yourself and all that you are as a person, then any course, any experience that you encounter in your training program can be a source of valuable learning to enhance your potential as a teacher.

ALTERNATIVE STRATEGIES OF STAFF DEVELOPMENT

ROLE OF THE PROFESSIONAL ORGANIZATION | DR. BEULAH ASHBROOK

People often ask me what does the Director of Education do. Perhaps I can better answer that question by talking about our responsibilities to the membership of the professional organization for which we work. Directors of education have a responsibility to the membership for identifying the needs of that membership in terms of their educational needs. They also have a responsibility to identify the needs of the professional as related to providing better patient care. This can be done through effective task analyses and the development of efficient methods both in teaching and in the performance of the task. They also have the responsibility to help their membership to meet the need of society in terms of their professional competencies. This is a big role.

How can we as directors of education do this? Some of the ways are through cooperative efforts with colleges of education, through cooperative efforts with state departments of education by bringing the need to them, and through cooperation with a continuing education program of a professional society through their annual meetings, conferences, and workshops. We also have the responsibility to help identify issues and new strategies in:

1. Continuing education.
2. Degree programs.

In the arena of continuing education, we work with the practitioner and the educator in areas that are common to each of the groups or to all of the groups which are affiliated with our organization. We are not in competition but rather complementary in our approach. In ASAHP (American Society of Allied Health Professions) we are now

ready for our first ten-day faculty development workshop. These workshops have been approved for 3 semester hours of graduate credit as a part of the American Society for Medical Technology--Central Michigan University external degree program--M.A. in Education. These ten-day workshops are a new endeavor for ASAHP. Previously, we have conducted a number of two-day programs. However, from the evaluations, there seems to be a need for more than we are able to provide in such a short time.

Since the approach we had taken was apparently not fulfilling the need, I began to seek other avenues. A former graduate student had told me about the Faculty Development Branch at Fort Sam Houston. This program was designed to develop the faculty for the Academy of Health Sciences of the U.S. Army. Upon visiting the Academy and particularly the Faculty Development Branch, I discovered that they had systems engineered their courses. This means that they had identified the tasks which their graduates were to perform and had developed the course objectives upon these tasks and at the same time developed their evaluation strategies. In talking with the students enrolled in this program, I found them to be very enthusiastic and were finishing the course with a great deal of confidence. They really felt good about what they were doing. This is the approach we are taking with our own Faculty Development Workshops. In addition to using the military model, we have also incorporated the ICARE Workshop, a process co-developed by Dr. Bill Smith in Arizona for objectively observing teacher performance. ICARE stands for Instrument for Comprehensive and Relevant Education and was a modification of the IOTA (Instrument for Observation of Teacher Activity). Both of these instruments incorporate a definition of what a top-level teacher does. In the ICARE process, one learns to objectively observe activities.

To briefly describe the ten-day workshop, the first thing the students will do after the welcome and course orientation is to teach a ten minute lesson as they normally teach. This is the pre-test for performance. Both the pre- and post-tests in performance will be evaluated by the ICARE evaluation to determine if there has been a change in teaching performance as a result of the ten-days of instruction. A follow-up questionnaire is being planned for use for a six month evaluation.

Ideally, we would like to observe each on the job and again rate them with the ICARE evaluation, but this is not feasible. In addition to the performance pre- and post-tests, we are also giving pre- and post-written cognitive tests. Another type of evaluation will come from the observations of the faculty member each day. At the end of the institute, the participants will be asked to complete a written evaluation as well as participate in a brain-storming session on where do we go from here.

The areas of instruction will build upon the teaching competencies which are identified in the ICARE Definition. Some of the topics in addition to the ICARE workshop will be principles of learning, performance objectives, steps of instructions, methods of instruction, questioning techniques, communication techniques, management control, instructional aids, clinical teaching, and student counseling. In addition, the students will develop their own lesson plans for both lecture and demonstration, and will present these lessons in a series of micro-teaching sessions which will be critiqued by both their peer group and the instructor. The whole approach is to give some good guidelines, an overview, a base on which to develop future competencies and some self-confidence. It is not our intention to teach a four-year course in ten days but to deal with basic teaching techniques.

The faculty will role model the attitudes and performance techniques they wish the students to adopt. Also by organizing their material and helping the participant to organize his or her material, through the use of objectives, and better evaluation techniques, a more efficient method of teaching will be developed.

I think the approach we are taking in helping to develop allied health faculty, is one of the roles of the professional organizations. The ten-day Faculty Development Institute is one of the ways that ASAHP is trying to provide an alternative strategy in the development of staff.

ALTERNATIVES FOR STAFF DEVELOPMENT

ROLE OF CONTINUING EDUCATION

JAMES A. THORSON

Continuing education is a very broad and loosely defined term which can encompass any and all types of learning in a variety of settings. It can include everything from reading newspapers and watching T.V. to going back to school or attending a conference or workshop. In short, continuing education can be what you want it to be.

I would like to talk about planned and purposeful continuing education. If you are involved in continuing education programs I would hope that you have clearly defined and specific goals and objectives for the learners enrolled in your programs. Ideally, these goals and objectives are based on the expressed needs of the learners and are realistic in terms of time, available resources, and probability of success in achieving the desired ends.

The responsibility for continuing education in institutions and agencies primarily concerned with the delivery of health care should be assigned to individuals who have an orientation to education. That is, they see themselves as educators and have a high degree of proficiency in the competencies needed to plan, conduct and evaluate effective training programs. Training duties should not be added, almost as an afterthought, to a busy person's schedule. Those persons who have administrative responsibilities or those involved in direct patient care frequently cannot give teaching responsibilities priority over other, more pressing duties. The result more often than not is a token effort toward educational programs with unsurprisingly poor outcome in terms of effectiveness.

We are living in an age of accountability; it is a pervasive force that is felt in both the health care delivery system and in education. Accountability for monies spent and effort expended demands that there be measurable outcomes which justify such expenditures. The implication for continuing education is that there be well planned and realistic programs with built in procedures for evaluation and follow-up to determine the effectiveness of the programs.

The role of continuing education in providing alternatives for staff development promises to expand in the future. It is anticipated that within a few years maintenance of licensure or certification to practice in medical and allied health occupations will depend upon the practitioner's participation in continuing education programs designed to update their knowledge and skills.

This increased demand on those involved in continuing education can easily lead to confusion and ineffectiveness unless there is a cooperative effort and mutual planning among the educators and the practitioners desiring continuing education programs.

What are the essential components of a teacher education program designed specifically for health professionals?

The design of the program, and its content, will be greatly influenced by whether or not it is assumed that the teacher trainee possesses the knowledge and skills of the practitioner upon admission to teacher education.

Organized body of content should encompass -

- Curriculum development
- Testing and evaluation procedures
- Developing educational philosophy and objectives
- Developing human relations skills
- Functioning in the dual role of professional educator and health clinician
- Legal aspects of teaching and of representing one agency (education) when supervising learning experiences in another agency (health)
- Developing communication skills to the level of precision
- Techniques for providing guidance in association with theory ~~and~~ practice
- Teaching procedures and techniques
- Selecting and organizing content for courses of study
- Procedures for updating and validating curriculum content

How might potential teachers for health preparatory programs be identified and recruited for preservice teacher education activities?

Teachers should have sufficient experience as a practitioner to test their own educational preparation and to experience application of their own skills and knowledge to a wide variety of problems prior to entering faculty positions. Therefore, recruitment and selection should be conducted among practitioners.

There should be a combination of employer selection and self-selection for teaching, i.e., the employer's criteria should be explicit and the practitioner should have a sincere interest in teaching.

Specific procedures for recruiting prospective teachers include -

- Posting notices in health agencies and professional journals/newsletters
- Involving members of advisory committees in identification of superior practitioners
- Contact directors of inservice education programs
- Provide workshops for persons who are interested in teaching
- Establish an ongoing public relations program

Criteria should include proficiency as a practitioner, intellectual curiosity, ability to model the desired practitioner behaviors, interest in teaching, interest in people; do not assume every "good" practitioner will make a "good" teacher.

How might present faculty members of health preparatory programs be involved in teacher education activities?

- Provide teacher education activities for practitioners, and encourage participation prior to accepting teaching responsibilities
- Build courses around the needs of teachers at each level
- Encourage a close working relationship among the various faculty groups in a single area
- Hold a curriculum retreat to get full involvement in activities
- Provide credit and noncredit courses

Conduct survey of health occupations to collect data for updating

How can the curriculum for various health preparatory programs be kept current with practices and trends in the field?

Plan strategies for bringing about greater unity and closer working relationships between the service agency and the educational agency

Use advisory committees

Obtain feedback from students on discrepancies between curriculum and the requirements of the clinical setting

Use data from accreditation visits

Obtain input from supervisory personnel in the work setting

Teachers should be involved in clinical practice

How can health preparatory programs be made meaningful to students, so that transition to the role of practitioner will be facilitated?

Plan for clinical practice to involve gradually increasing degrees of responsibility for self-direction

Provide exposure to the work setting early in the educational program

Where should teacher education for health professionals be provided?

In those institutions which are willing and able to develop the necessary linkage between practitioner faculties and teacher education faculties

As close as possible to where teaching is taking place

Where there is access to reference materials for education and for health

Who (positions) should be involved in cooperative planning and coordinated implementation of teacher education for health professionals?

Professional educators

Faculty members from all levels of health preparatory programs

Prospective employers of graduates (i.e., of the teacher education program)

Representatives of the state Department of Education

Teachers from programs at various levels

Representatives of health agencies

Representatives of funding agencies (e.g., local school system, state agencies, colleges)

What resources in your state could be made available for teacher education (for health practitioners) activities:

Schools of education for consultative assistance
- providing programs
- conducting workshops and other inservice activities

Members of faculties (health preparatory programs) who have had advanced preparation in education and/or related disciplines

Media specialists

State affiliates of national professional organizations

Private foundations which support educational and/or health programs

Many available, but someone should be identified to coordinate statewide activities

Who (specific individuals) should assume leadership for developing teacher education for health professionals?

Joint responsibility of professional educators, health professionals in educational positions, and health practitioners

Advisory representative of diverse viewpoints--health professions and levels

Leadership should be provided by someone with preparation as an educator

TUESDAY AFTERNOON SESSIONS

Working with Disadvantaged Students

Consultant: Marion E. Franken

Overview of the problem -

Students who have physical or mental handicaps, who are academically handicapped, or are socioculturally disadvantaged, are frequently directed into dead-end occupations. Many of these--perhaps, most of them--could be helped to develop their potential to a higher level and thereby become more productive adults.

Medicine and health tend to be crisis and prevention oriented, but give little attention to rehabilitation. There is a great need for supportive resources to help special students make adaptations. They should not be placed in situations where failure is almost certain; they should be given opportunities and provided supportive services to increase the probability of success. They may need guidance and continued follow-up, even after placement in a job situation.

There are jobs in the health field in which persons classified as "disadvantaged or handicapped" by current criteria could be utilized, but the admission standards of many preparatory programs in health exclude those students who have special needs. Rather than "select out" such persons, the educational program should provide for those special needs insofar as possible. Many have attributes which are highly desirable in a health worker, such as the empathetic attitude which comes from "having been there."

GROUP DISCUSSION -

In the high school programs, health careers teachers encounter many students who lack basic skills for learning, have low reading levels, or are slow learners.

In Florida, the migrant workers flood the schools with children who are functionally illiterate. Pressure is put on vocational schools to accept these persons, when their real need is for learning basic skills. The vocational programs cannot be modified to the extent necessary to serve this group; remedial--actually, basic--education is needed. Generally, there is no follow-up to determine whether or not this group has benefitted from the program provided for them.

Faculties can use a variety of strategies to improve the instruction offered to handicapped and disadvantaged students, such as -

Provide remedial study, encourage other students to serve as tutors;

Develop individualized materials so that students can participate, regardless of low reading levels or learning rate

Learn to recognize students with need for special services

Learn some simple diagnostic approaches (administering pretests, determining the reading level of texts and references)

Provide realistic standards of achievement

Become learner-oriented; avoid conveying expectation of failure to any student, but rather encourage each student to strive for short-term goals until some success expectation has built up

Sequence the instructional program so that students can proceed toward terminal performance objectives by achieving a series of intermediate objectives

Pretest to determine readiness for a specific module, as well as to determine student's "right" to exempt the module (having already learned through some prior experience whatever performance makes up the terminal objective of that module)

Competencies needed by faculty members in order to provide effective instruction for students who are disadvantaged or handicapped -

Can identify a student who meets the criteria of "disadvantaged" or "handicapped"

Can use classroom procedures to diagnose learning needs

Can personalize a student's program of study -

Provides attainable objectives

Provides resource maferials appropriate to the learner's basic skills

Provides a supportive climate for learning

Accepts the learner as he is and strives to meet his "special needs"

Adapts instructional techniques to provide a meaningful learning experience; this will probably require multimedia resources and a large proportion of concrete experiences.

RECOMMENDATIONS

Provide opportunities for faculties of health preparatory programs to learn how to provide effective instruction for disadvantaged and handicapped learners;

Provide opportunities for faculties of health preparatory programs to learn how to use classroom procedures for diagnosing learning difficulties and prescribing appropriate learning activities;

Provide opportunities for faculties of health preparatory programs to deal with their biases insofar as intercultural differences and learner limitations are concerned;

Provide opportunities for faculties of health preparatory programs to learn new strategies for facilitating learning, for using multimedia resource materials, for personalizing programs of study for "special needs" students, and for developing the materials needed for individualizing all or part of a program which prepares personnel for the health field; This requires -

Accepting students as learners with different learning rates and various learning styles,

Providing options for students (i.e., permitting students to make some decisions about their learning activities),

Using human resources from other disciplines and from other programs as needed to provide "expertise" regarding some components of the program.

The Clinical Area As A Setting For Learning

Consultant: Dr. Miles Anderson

FIRST SESSION

All agreed that clinical experience is essential. Concerns expressed:

1. Some educational programs conducted in settings where good clinical experiences are not available.
2. Even when clinical environment is available, there are certain learning experiences which cannot be provided.
3. There is lack of communication between the classroom or institutional teacher and the clinical teacher.
4. Burgeoning increase in number of students in allied health programs may lead to financial reimbursement to clinical facilities affiliating with institution of learning.

Multidisciplinary planning and teaching of allied health programs could help eliminate some problems and promote the team concept.

SECOND SESSION

Clinical experience and on-the-job training are essentially the same.

Problems in clinical area--getting everyone in the clinical setting to accept the responsibility of teaching.

Clinical experience--can be any setting where the job takes place.

Sometimes we don't select the settings carefully so that they are in line with learning outcomes.

Simulation helpful--particularly in making transition from laboratory to clinical area, but it is not the "end all" of education.

Clinical teaching--as in general education--the higher the level, the poorer the teaching. There often is no organized approach to planning clinical experiences.

Identifying objectives for clinical experience would be helpful.

The operational analysis approach and the task analysis approach may give us the tools to deal with problem-solving, the affective domain and the socialization and communication dimensions.

APPENDICES

REGIONAL CONFERENCE ON TEACHER EDUCATION FOR ALLIED HEALTH AND NURSING

SEPTEMBER 22–25, 1974

Georgia Center for Continuing Education

P R O G R A M

SUNDAY, SEPTEMBER 22

4:00 - 6:00 p.m. **Registration, Conference Lounge**

6:00 **Buffet, Executive Suite of the Georgia Center**

7:30 **Opening Session, Auditorium**

Presiding - -Dr. George L. O'Kelley, Jr.
Welcome - -Dr. S. Eugene Younts
Teacher Education - -Effective Approaches - -Dr. J. Eugene Bottoms
Announcements

MONDAY, SEPTEMBER 23

9:00 a.m. **General Session, Auditorium**

Presiding - -Dr. Mary Elizabeth Milliken
Practitioner to Teacher - -A Challenge - -Dr. Gregory Trzebiatowski

10:30 **Refreshment Break, Lobby Lounge**

10:45 **General Session, Auditorium**

Presiding - - Dr. Raymond Bard
Teacher Education - -The Health Professional's View
. . . for Allied Health - -Dr. Raymond Bard
. . . for Nursing - -Dr. Wilma Gillespie
. . . for Dentistry - -Dr. Edwin M. Speed

12:30 p.m. **Lunch, on your own**

1:30 **General Session, Auditorium**

Presiding - - Ms. Verna Muhl
Teacher Education - -The Professional Educator's View
- -Dr. James McComas

2:45 **Refreshment Break, Lobby Lounge**

3:00 - 4:15 **Small Group Sessions**

Group 1 - -Dr. Conrad Welker, Room E
Group 2 - -Dr. V. B. Hairr, Room F
Group 3 - -Dr. Tom Abercrombie, Room M
Group 4 - -Mr. Gordon C. Smith, Room N
Group 5 - -Dr. William Hourigan, Room O
Group 6 - -Ms. Karen Atkins, Room R

4:30 **Staff Meeting with Group Leaders and Recorders, Auditorium**

6:30 **Dinner, Banquet Area**

Presiding - -Dr. George L. O'Kelley, Jr.
Introduction of Guests - -Dr. Mary Elizabeth Milliken
Speaker - -Dr. William L. Hays

TUESDAY, SEPTEMBER 24

8:30 a.m. - Noon **General Session, Auditorium**

(10:15 - -Refreshment Break, Lobby Lounge)

Presiding - -Ms. Claire B. Keane
Alternative Strategies for Staff Development
. . . role of the State Department of Education
- -Ms. Joan E. Stoddard
. . . role of the College of Education - -Dr. Stanley H. Ainsworth
. . . role of Professional Organizations - Dr. Beulah Ashbrook
. . . role of Continuing Education - -Mr. James Thorson

Noon **Luncheon, Banquet Area**

Speaker - -Dr. William H. Hale, Jr.

1:30 - 4:15 p.m. **Group Sessions on Competencies for Effective Teaching**

(2:45 - -Refreshment Break, Lobby Lounge)

Human Relations Skills - Dr. George M. Gazda, Room I
Learners with Special Needs - Ms. Marion F. Franken, Room I
The Clinical Area as a Setting for Learning
- -Dr. Miles H. Anderson, Room M
Conducting Short-Term Activities - Dr. Beulah Ashbrook, Room N

4:30 **Staff Meeting with Group Leaders and Recorders, Auditorium**

WEDNESDAY, SEPTEMBER 25

8:30 a.m. **State Caucuses, Rooms A,C,D,E,F,G,M, and N**

10:15 **Refreshment Break, Lobby Lounge**

10:30 **General Session, Auditorium**

Presiding - -Dr. Mary Elizabeth Milliken
Summary of the Conference - -Dr. Keith Blayney
Report of the Roving Evaluator - -Dr. Howard C. Bailey

12:30 p.m. **Conference Adjourns**

1:30 **Meeting of the Advisory Committee, Center for Teacher Education - -Allied Health and Nursing, Auditorium**

(Adjournment by 3:30)

Paul R. Kea, Coordinator of College of Education Programs in Continuing Education, represents the Georgia Center staff for this conference group.

REGIONAL CONFERENCE ON TEACHER EDUCATION FOR ALLIED HEALTH AND NURSING

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