This brief overview of the current stage of research at the Research and Development Center for Teacher Education at the University of Texas at Austin focuses on the effectiveness of individualizing teacher education programs to prepare teachers who will be able to teach their students how to deal with change. Three successive methods of individualizing instruction for large groups of students which were developed by the University over the last decade are capsuled: student completion of a battery of University-developed personality tests, the use of the results of these tests in counseling sessions, and the individual assignment of student teachers to cooperating teachers with characteristics similar to their own. A case history of the development of a junior year secondary education major who enrolled in a year-long experimental program (with six weeks of pre student teaching classroom experience, pre- and postprogram personality and attitude tests, assessment feedback counseling, and pre- and postclassroom experience video taped teaching sessions with feedback counseling) is presented in the major portion of the document as an example of current methods in practice. (SM)
TEACHING OUR TEACHERS:
Excerpts from a speech
by Dr. Robert F. Peck

and

SANDRA SMITH: AN
INDIVIDUAL STEPS OUT

Dave Wilson

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"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED
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Teaching Our Teachers

To begin with we need to set up experiments which take as their ultimate criterion measures of diversified gains in child learning and child behavior. That's the product we are shooting for.

Working backward from here, we need to identify teacher behaviors which maximize those gains. Working still further backward, we then need to find out what behavior on the part of teacher educators will maximize effective behavior in the teachers they instruct.

Only after such "three-generation" studies which conceptually and operationally link the teacher educator to the teacher and then to the pupil can we properly claim to have scientific evidence that one particular procedure in teacher education is more or less effective than some other procedure."

---This quote, indicating a portion of the vast scope of problems open to researchers in education is taken from a speech by Dr. Robert F. Peck to a national conference on "Research and Action Imperatives in Teacher Education," October, 1967. The conference was sponsored by the State Departments of Education of California, Michigan, New York and Texas, the U.S. Office of Education, and the University of Texas at Austin, and supported by the Ford Foundation.

In an era when it is impossible to know what types of jobs most of our young people will have 20 years from now, "teaching children that there is only one right answer, and that it is in the back of the book," or having children memorize "facts" which they will probably never use is about as useful as storing ice cubes on a hot sidewalk.

To meet the needs of this changing society, the role and goals of education must themselves change. A new definition of purposes, suggested by Dr. Robert F. Peck, Director of Research and Development for Teacher Education at the University of Texas at Austin, would be to "help young people develop personal habits of openness to new experience, skill in identifying unanticipated problems, and courageous initiative and autonomy in figuring out what to do about them."*

How then do we set about to train our teachers to teach children the intangible but essential ability to cope with change?

And how can we plan a "best program" when so little is actually known about the learning process? Learning in this case does not mean simply "absorbing facts"—the intellectual grasp of what a good teacher is— but the process of becoming a good teacher.

People can act a prescribed role or follow other simulated roles for short periods of time, but in the long run and particularly in spontaneous interactions, the determinant of behavior is what the person basically is.*

The news that serious research into the learning process has been begun is indeed welcome. And, it would appear that preliminary results of these studies are providing answers to questions of the future, as well as to those of the past.

That these studies were not begun earlier is attributable not so much to unresponsiveness of laziness on the part of educators, but to the previous lack of facilities and means with which to carry them out. For example, it is only recently that funds have been available—such as the federal, state and private foundation monies that have supported much needed research through grants. And only recently have we had a real

*Dr. Robert F. Peck, "Personalizing and Individualizing Education: A Progress Report."
science of human behavior with appropriate methods for collecting data, and the advanced mathematics and computer facilities for making sense of complex results. Only in the last few years has there been video tape equipment which could be easily managed in the classroom.

Evidence from studies so far points strongly in the direction of the effectiveness of providing individualized instruction. This too has been previously impossible in a mass university setup.

In earlier research in our university, which was reported in The Hogg Foundation book, Personality Factors on the Campus, we found strong evidence for the proposition that only a humanized, personalized contact of student and instructor is likely to reach the majority of college students, so that they can learn anything at all in a lasting manner so as to use it years later. Their intrinsic need for a personalized relationship—and that need is a fact of their natures—opens or closes their perceptual systems, and greatly facilitates or deadens their learning.*

For a decade now, The University of Texas has been developing methods of individual instruction which could be effective and feasible in teaching the large numbers of education students who pass through the university system. Three successive methods have been used with surprisingly effective results.

The first procedure was the development of an assessment battery of tests. Then, trained faculty counselors who could use the test results to understand the individual student's makeup had one or two discussions with the student about his characteristics, the way these characteristics would probably come into play in a teaching situation, and the probable consequences. In many instances, as Dr. Peck points out, "we have observed teachers doing things of which they were unaware, but which the children saw perfectly well."* The results, even a year later, of just a few hours of consultation were encouraging beyond expectations. The experimental students tended to regard their own students more as individuals than as a group. They also became "more organized, more imaginative and more optimistic about the possibility of handling teaching problems effectively; while control subjects became actually less organized, less imaginative, and less confident about their ability to handle teaching problems."*

The third procedure was to have the students carefully and individually assigned to cooperating teachers, whose methods and approach to teaching most nearly corresponded to the students' own characteristics. For example, quiet and deliberate students were not assigned to flamboyant teachers, since little would be gained by their trying to imitate methods which they could never use naturally. Results so far have shown students in the experimental program to be "more open, more imaginative, more accurately self-aware and more effective in their teaching behavior."*

Studies often produce more than one set of useful data. In the many-faceted process of individualizing teacher education, Dr. Frances Fuller has been researching teacher concerns at various stages in their professional development. The assumption in beginning the study was that "students are functionally deaf to the content directed to them in their professional courses because they are preoccupied with other concerns, such as finding a mate."**

Empirical data from the study showed a number of stages of concern. Beginning student teachers at first had self-centered and practical worries: what their school would be like and how they would fit in—just how much they would be expected or allowed to do. In the middle stages they became concerned about their pupil's behavior, and why they acted the way they did. They also wondered about the opinions of those who were evaluating their own progress.

These concerns may not seem to be of primary importance to teaching, but until they have been resolved, it is clear that academic course content is not likely to be the focus of a student's concentration.

With this preliminary knowledge of teacher concerns, it is hoped that actual changes may be made in course content to prepare beginning teachers to meet initial teaching problems before they arise. And once these problems are resolved, other course content may seem more meaningful.

Students themselves are making positive suggestions towards course improvement. Their comments also reflect the need to have courses answer the questions and problems they encounter at the time they are confronted with them. Some examples of suggestions are: earlier observation of actual classrooms, perhaps in the freshman rather than junior year; coordination of methods courses and actual teaching; and beginning student teaching earlier. This way, students would understand firsthand the questions the courses are answering. It would also mean that those who find they cannot stand teaching would not have to wait until they are seniors to teach and discover this.

More research is still to be done—and many areas still need to be considered. This article has tried to give at least a glimpse into the current stage of research.

An example of current methods in practice may be read in the story on the next few pages. Sandra Smith's experience illustrates the education of one teacher and her progress towards becoming an excellent one.

![Image: The editor wishes to express sincere gratitude to the many educators who took time from busy schedules to make this article possible. Special appreciation is reserved for Dr. Charles Dent and a number of his students, who patiently dispelled some of the author's grievous misconceptions about education courses, and provided their suggestions and insights.]

THE TEXAS PARENT-TEACHER
Sandra Smith
An Individual Steps Out

By Dave Wilson

Sandra Smith was an average University of Texas coed—attractive, a competent scholar, active socially, and lost among more than 30,000 other students on the sprawling Austin campus.

She then registered for the 1967 spring semester, and unknowingly signed on as a subject for an education research project. Sandra Smith was about to drop out of the crowd.

Sandra was a junior, secondary education major in the university's College of Education. Her subject concentration was history, and she wanted to teach social studies to junior high school students.

A common problem in training young teachers like Sandra arises out of the ever-increasing number of university students. Behind each of the 30 or more faces in a college classroom is a unique personality with a unique manner of responding to experiences. How can one method of teacher education pretend to reach each of these individuals?

The Research and Development Center for Teacher Education at The University of Texas at Austin has been wrestling with the question. The answer may never be complete, but partial answers have begun to emerge from ten years of study, begun by individual researchers and added to the center's projects in 1965. Major investigators include Drs. Carson McGuire, Robert F. Peck, Oliver H. Bown and Frances F. Fuller.

These investigators have hypothesized that by helping an individual become more aware of his motives, his actions and their consequences, he will become more receptive to experiences. Further, as the student teacher comes to accept his own behavior, he will become more aware of the actions and feelings of the children he teaches. He will become more autonomous, more responsible, and assert more initiative as a teacher.

As the researchers probed deeper into the question, it became evident that one method of education alone could not reach diverse individuals. The solution, then, had to be a method of teaching each individual in a unique manner. The search began for a method of Individualizing Teacher Education.

This research has isolated a method for recognizing each student in his unique particularity and for creating educational experiences which will meet his individual needs. The program is based on counseling procedures coupled with technology.

Hundreds of University of Texas education students have been through one phase or another of this program as it has evolved. One young lady, Sandra Smith, 20, from Pasadena, Texas, recently emerged from the process with a teaching certificate and outstanding prospects for a successful teaching career. Her story serves to tell of these procedures and their effects.

Sandra was typical of other coeds her age: she worried occasionally about grades, boyfriends, what to wear on Saturday night, and the future. She was happy and healthy, enjoyed an active social life, and made respectable grades. She sometimes wondered how she would be able to manage a classroom full of children, but this was a passing concern. She believed that her interest in history and her enthusiasm for teaching the subject would make up for any lack of experience she may have had with children.

In the spring of 1967, Sandra enrolled in a specially combined section of two required education courses—Educational Psychology and Education Curriculum and Instruction. The first day of class, Sandra and 25 other coeds learned they were to observe and teach in actual junior-high classrooms that semester—activities not a regular part of the junior-year program in secondary education at UT. Not only were they to begin teaching a year earlier than they had expected, but they were to be tested, filmed while teaching, counseled, and studied through the end of their teacher training and even into their teaching careers.
First step for the new research subjects was that of expressing themselves as individuals through a series of written personality and attitude assessment tests. These tests are not new in the UT College of Education. They have been required of all students applying for admission to teacher certification programs since the tests were developed by researchers early in the individualized education experiments. Sandra had taken some before as a freshman. Several were new to her. She was to take them all again a year later, at the close of her teacher training.

Sandra and her classmates began an unusual approach to course work. Only the first week of the special Educational Psychology-Education Curriculum course was spent in the university classroom before they spent six weeks of observation-teaching at a junior high school.

When Sandra started as a "teaching assistant" at the school, she was assigned to a businesslike, knowledgeable social studies teacher. She worked with two classes, two days a week, for the six weeks she was at the school. Starting out immediately by helping with classroom clerical work and paper grading, Sandra moved on to giving individual assistance to students, and then took the major step of instructing the entire class.

Those experiences were not easy for Sandra. She began by getting lost in the school hallways and found that each learning step thereafter had its trials. Her first time in front of a class is a vivid memory.

"The teacher asked me to lead the first-period class in their weekly review of a current events newsletter. That was the first time I ever got up in front of a class. I was scared and I was terrible. And, of all times, my supervisor came in to observe! That hour lasted for centuries. I was later given a copy of the supervisor's comments: 'You didn't pay any attention to the kids . . . you didn't give them enough time . . . you didn't use any logic . . . you looked grim.'"

Soon after Sandra had begun to adjust to the teaching experience, she took the second step in the experimental program. She went for her first "assessment feedback" counseling session.

The counselor who conducted the interview had read over Sandra's responses to the personality and attitude assessment tests and had made some preliminary notes.

"Using these notes, and others as a guide, the counselor's job was to get to know Sandra. Sandra's understanding was important; indeed, it was the essential object of the counseling session.

During the hour Sandra was asked if she knew much about children. The counselor felt she was frightened of them and might not teach.

The counselor's records reveal that the interview lasted for about an hour and covered much more ground than the possibility of Sandra's becoming a teacher. In fact, the counselor mentioned a number of Sandra's traits that were encouraging signs of her potential as a teacher, including her enthusiasm for her subject area. But Sandra remembered only one thing about the conversation.

"She said I probably wouldn't actually become a teacher. It was frightening. Here was a professional telling me I wouldn't do something I really thought I wanted to do. It started me thinking about myself."

The counselor had noticed in Sandra's tests a definite uncertainty concerning children and had mentioned it in the feedback session. Sandra had entered the College of Education because she wanted to teach a subject—social studies. She was subject oriented and had given no real thought to the fact that she would be teaching children. She was an only child, never having had an opportunity to learn how to communicate with children.

"I was anxious about how kids would react to me," she said later.

By the time of her test interpretation, however, Sandra had begun to meet children and to discover that "they wouldn't rise up in a body and throw me out of the room for making a mistake." Therefore, one of Sandra's greatest obstacles to teaching had begun to dissolve in the face of experience. Her understanding of the problem could speed the process.

Sandra left the counselor's office determined to prove that she would succeed as a teacher. She soon had an opportunity to test her determination. Shortly after her counseling session, Sandra was video-taped while teaching a second-period social studies class.

Early in the research program, 8 mm sound movie cameras had been used to record student teachers in action, but by the time Sandra and her classmates entered the program, television videotape equipment had been acquired and techniques had been developed for using it in the classrooms to record both the teachers in action and the reactions of their pupils.
Sandra's first television exposure was marked by the nervousness and self-consciousness typical of most young people who have been through the experience. She had become accustomed to being in front of a class by then and the children weren't so intimidating. "But I was nervous about being in front of the camera," she said.

A week or so later, Sandra sat down with her supervisor and the counselor to study her own videotape. "I was very anxious about seeing that film," Sandra said. "I think it was worse to watch it than it was to do it. I was awful." The supervisor encouraged self-criticism. "That wasn't very hard! I could see that all I had done for an hour was lecture. It wasn't a bad lecture, but I was just following my notes, not the kids. I saw things in the film that I should have noticed in the classroom. They had, for example, a shot of one boy yawning. I can hardly blame him after seeing my performance."

Following the viewing of her tape, the supervisor asked if Sandra had seen anything good on the television screen. "I couldn't remember anything good. He mentioned a few details, like interesting subject and good techniques. Then he finished by saying something like, 'I smell the very good smell of a smashing classroom success.' I floated home."

Sandra's supervisor wasn't the only one who saw success at that feedback session. The counselor who sat in the background during the critique, remembers an incident that Sandra passed over as insignificant. "Sandra brought up a problem that wasn't in the film," she recalled. "She had been interested in a project being done by one of her pupils, and was worried about whether it was all right to concentrate her attention on a particular student. This was a new concern expressed by a girl who had been subject oriented. Now she was concerned about her relationship with individual pupils. It indicated a step forward."

In the few weeks that remained of her teacher observation following the taping session, Sandra continued to work with the social studies classes. Much of the time was spent observing and practicing the use of classroom equipment—visual aids and other modern electronic devices as well as more traditional teachers' tools like the chalkboard, maps, and textbooks.

After six weeks at the junior high school, she moved back to the university classroom to conclude the semester reviewing and expanding on lessons learned in the live classroom experience.

When Sandra returned to the same school for her semester of student teaching in February, 1968, a new Sandra Smith walked into the school. With a change of hair color—from blonde to brunette—she didn't even look the same. There were changes important to her teaching as well. She was confident and eager to work with children. And she was not a social studies teacher any more. She had asked to student teach in English.

Sandra's change of subjects came as a surprise even to her. She was asked to fill out a routine form that requested information about preferences for student teaching assignments. "When I came to the blank that asked what subject I wanted to teach, I just couldn't put down social studies. I couldn't picture myself as a history teacher. I decided to find out if I could teach another subject better. I also had a course concentration in English, so I just put that down."

The change signalled another step in Sandra's evolving attitudes toward teaching. "Sandra had started out in teaching because of a strong subject interest," the counselor said, "and that interest was social studies. She really hadn't thought about the children when she made that decision. But when she changed her subject area from social studies to English she was searching for a way to do a better job. She was demonstrating the change in her attitude toward teaching—rather than teaching a subject, she was interested in teaching a subject to children."

Student teaching, for Sandra, was a continuation of the learning experience she had begun the year before. This time she assumed more control over her class. She was responsible for the day-to-day routine, examinations, clerical work, and discipline when necessary.
Ultimate responsibility still lay with the cooperating teacher who stayed in the background and was called on mostly for advice in situations that were outside the range of Sandra's steadily growing experience.

Sandra noticed a change in her own attitude from the very beginning. "During my first day of student teaching," she said, "I was allowed to observe and do as I wished. I had to decide which of the periods I wanted to teach. The kids were working in groups that day, so I walked around and visited with each of the groups and met the boys and girls. I realized later that I would never have had the nerve to do that a year earlier."

As the semester neared a close, Sandra again had to face the videotape cameras and personality test batteries. But these had become old friends; the fear was gone. She greeted the television cameras with professional calm, but even more apparent was the change in her teaching style. The young teacher seen in the final tape moved easily through an hour with her class, scarcely lecturing, instead directing and working with individual students while never losing contact with the rest of the class. She saw and responded to the moods and interests of her pupils.

There were new responses in the tests too. And new evaluations. "This young woman," the counselors had written, "who looked on teaching with unanswered questions and doubt, now shows she is warmly involved with children and has strong professional identity." A year earlier the same counselor had suggested that Sandra's uncertain attitude toward children could prevent her from becoming a teacher.

How much of Sandra's change can be attributed to the experimental counseling and film feedback used with her is not absolutely certain. But Sandra admits that the counseling helped her to think about her motivations and attitudes toward teaching.

Sandra thought the film feedback was of the greatest significance to her. "There was a unique opportunity to see myself as I really am," she said. "When I look into a mirror I see what I want to see, but that isn't true with videotape. I see mannerisms, nervous habits, and other distractions from my teaching. I could see just how dull that first lesson really was, and I decided never to cling to a set of notes in class again. I now try to stay away from set lectures and instead work more freely with the kids."

"The film feedback also helped me appreciate the constructive criticism offered by my supervisors. For instance, I was told that I looked grim in front of a class. Well, I just couldn't accept that and I asked my friends, 'Do I look grim?' They said, 'No.' So I just thought my supervisor was mistaken. Then I saw the film. I looked grim. I couldn't rationalize it away when I sat there looking at it on the TV set, so I had to do something about the problem itself."

Sandra's perception of the film feedback closely parallels the view expressed by the R&D Center's co-director, Dr. Oliver H. Bown, in a recent speech:

"Both our subjective reactions and our research data suggest that the impact of the film feedback is both profound and beneficial. For most students this is the first time they have had the experience of seeing themselves as others see them, and, generally speaking, the student is most often an intelligent and perceptive critic of his own performance. We are intrigued by the fact that, through this medium, a student is often able to see for the first time what a supervisor has pointed out to him many times but which he has not been able to really see or hear. We have little doubt that this is a very valuable experience in the training of a teacher, and our data suggest that it is more effective when it is combined with other kinds of feedback experiences such as the assessment feedback."

The unique opportunity for junior-year teaching incorporated in the R&D project was also important for Sandra. During the six weeks of her teaching-observation she discovered that she wasn't satisfied with the job she was doing in social studies. She would not have had the opportunity to change to English, where she has now found a satisfying niche, if she had not participated in the junior-year teaching program.

Also, by the time she went back to the same school for her senior-year student teaching, Sandra had already resolved important concerns about the way the school treated student teachers, the location of classrooms and buildings—seemingly minor concerns that had to be resolved before she could concentrate on learning to become a teacher.

During the course of a year Sandra changed from an uncertain girl with a dream into a teacher with a career. The changes she experienced were unique, like all of the changes that have occurred in students participating in the research program. Some changes are dramatic, some are simply the appearance of adult ideas in naturally maturing young people. Each changes in his own way, and to his own degree. The individualized attention each receives helps to direct and support change.

Sandra is now through with her teacher training, but she is not yet through with the R&D Center for Teacher Education. As she settles into a professional teaching career, Sandra will be contacted as a consultant by R&D personnel in order to hear her suggestions for teacher training and to find out how things are going with her personally and professionally. Her contribution to research continues as her films and tests are examined, scored, and combined with others in an effort to discover new ways of helping more Sandra Smiths find the road to teaching excellence.

Dave Wilson is a journalism graduate of The University of Texas at Austin, currently Coordinator and Disseminator of information for the U. T. Research and Development Center for Teacher Education. He is also a free-lance writer with a special interest in history and Indians of Texas.