The Teacher Development Program.

This article describes why and how a new approach to education was developed. It explains how it was developed, how it works, and the results

Overview of the Teacher Development Program. The Teacher Development Program to develop a new approach to teacher education at the university and in public schools.

At the university traditional classes were replaced with an objective based program. A central instructional team, supplemented with ancillary experts and specialists were responsible training and retraining the teachers. The initial thrust was to retrain and field test a competency and an objective diagnostic-prescriptive approach to teaching. Working with officials, at the state, university and local school districts, agreements were reached to allow the experimental program to operate in the university and local elementary schools. Teachers of different ages, races, experiences and from rural, urban and suburban school districts were selected for the program. The program ran for three years with two cycles of a year and half for each group. The first group was teachers selected randomly from those that were endanger of losing their job because of desegregation. The second group was randomly selected from outstanding teachers who could carry on the program in their districts. The first part of the program was learning the skills and content necessary for an effective diagnostic-prescriptive education program. The operation of the program at the university and in the public schools was based on the Strong's Model of Objective Formation and Instruction. The second part of the program was a field test of the model in the teacher's classroom. This phase of the program was important as it would answer some critical questions. 1. Did it prepare teachers to conduct diagnostic-prescriptive type of education? 2. Would the program work with ordinary size classes in a regular school? 3. What kinds of problems would the teacher face? 4. Is this type of program economically and fiscally feasible? 5. How do students' achievement in this type of program compare with those in traditional classes? This phase of the program involved a close interaction between the instructional team, classroom teachers and the local school The evaluation results indicated that the program was economically feasible officials. and very successful in training teachers in implementing this approach to education in a normal elementary class. It also indicated students in this type of program did better than those in regular traditional classes. A more detail description of the Program may be found in the web-site "Strongoneducation.com.".

### The Teacher Development Program Development

This Chapter describes the formation, development and research of the original program. on Objectives describes the changes in the Program and how it could be done today.

Section 1. In 1970 a group of local school administrators and university personnel

determined, through a needs assessment, that a program was needed to up-grade the skills and change the attitudes of a large percent of classroom teachers and school administrators. Unless this could be done, many children, especially those from low socioeconomic and different ethnic and racial backgrounds, would have difficulty receiving the kind of education they needed. The problem in the South was further complicated by a mandated desegregation of the schools. There was a need, along with the interest and desire, to correct the situation. I was asked to come up with a plan of action to develop and implement it. After many meetings

with local school administrators, teachers, university personnel, state officials and community leaders a plan of action was devised. Realizing that only a limited number of personnel could be trained, two acceptable approaches were identified. One approach was to select a number of teachers who were in danger of losing their job because of desegregation and the lack of necessary skills to meet the new situation. A second approach, the main thrust of the program was to select teams of teachers from schools and school districts and train them to be resource persons to be used in Teacher Learning Centers to train other teachers in their schools and districts. This would increase a hundred-fold the results of the time and money expended in the initial program.

The plan of action decided on was to be developed by people in the community and education institutions. It was recommended that it be competency based and that persons could earn college credit and a degree if they desired, but not have to attend traditional classes. Dr. Strong was given the task structuring the program and working with local schools, university and state officials to get approval to implement the program. It took over a year to get all parties approval as the program was a radical departure from the traditional program. Approval was obtained and fortunately the US Office of Education agreed to fund the program under the Education Professions Development Act.

#### **OVERVIEW**

The program began in the summer of 1970 and ended in August 1973. During the tenure of the training program 116 classroom teachers and 170 school administrators in 14

independent school districts and 79 schools along with a number of community people were involved.

During the one and half years that each group of teachers was in the Program they had experiences that were specially designed to:

- (1) Meet their particular academic and professional needs,
- (2) Provide them with the background in reading and language development necessary to qualify as specialists in these areas,
- (3) Help them meet the objectives established by schools, state and community people,
- (4) Provide them with the diagnostic skills necessary to diagnose educational needs of individual learners; and the know-how to develop programs that will help the learner progress.
- (5) provide them with human interaction skills necessary to work effectively with all kinds of people,
- (6) Most important was to get them to re-conceptualize their role as teachers.

Through the efforts of several hundred interested individuals including persons from schools, universities, government and business and professional community leaders a list of needs and objectives for education were developed. At the end of Section 1 is a list of skills teachers need, basic weaknesses teachers exhibit, and what they would like the program to do for teachers. These data were obtained through a series of mini-institutes, workshops, conferences with education, government, and community people.

With the cooperation of universities, US Office of Education, school districts, state officials and community groups a wide range experiences, resources and expertise were available to the program and participants. The first step in implementing the program was to assemble an instructional team. Since the team wasn't limited to any set pattern, persons selected had to have the specialized expertise needed and be flexible enough to work in a unique situation. The team was composed of a core of experts in reading and language development, early childhood education, creative and child psychology and elementary education. In addition to the core personnel experts from any field needed were made available. This was extremely important. Regardless of what the learning objective or need was: qualified persons could be obtained from business, community, schools, universities or any other source. Team and participant interaction was determined by the objective and tasks to be achieved. The team normally considered eight hours as a working day. The schedule was always flexible so it could adjust to the particular condition or objective. The program was designed to last one and a half years. The first part would be during the summer with intensive training of the participants. The second part would involve participants in their schools and classrooms where participants would use the instructional model. In addition the participants would be involved with classes, workshops and seminars. Whatever a participant or the team felt they needed the program provided.

The first action was obtaining and training the core team. It was critical that each team member understand the program's objectives and the operational model. Each member must feel that they can accept and follow it. Charts 4 and 5 illustrate the model.

Phase two of the program involved participant training in diagnostic-prescriptive techniques they could use working with children. The first six weeks of summer the participants spent most of the day learning and practicing these skills. They had to be certified by the specialist or instructor that their level of competence met the professional requirements for the diagnostic instruments they were using. The second six weeks of summer involved continued training and the use of their skills and knowledge with actual children. With cooperation of an inner city school the program offered a limited summer school program. Each participant was given a group of children of various ages and grades so they could have the experience diagnosing individual needs and developing a program to meet those needs. Team members helped and monitored the participants.

Phase three of the program was the application of the learning model in a normal classroom. Teachers returned to their school and classrooms. The major differences were that the teacher knew the specific skills the student was to achieve and were able to determine the student's achievement level towards the mastery of the desired skill. This enabled the teacher to select a strategy and materials most likely to enable the student to achieve the level of competency required. The objectives and skills were formulated so that they could be understood and measured. The skills are on a continuum and are two dimensional vertical and horizontal. Vertical skills went from easy to difficult with each

level of skill dependent to a great degree on the mastery of the preceding skill. The skill continuum is open ended so that students may progress as far as their ability will take them. The horizontal skills are correlated to the difficult skill level needed to work effectively with materials and problem at a given skill level. Therefore students are able to work and learn anything up through their level of skill development.

Phase three of the program was important as it determined whether this type of program would work in classes in a normal school and with a normal class load. Other factors that had to be determined were:

- 1. Was the program economical feasible?
- 2. Would the teachers have the necessary resources?
- 3. How would the students and parent react?
- 4. How would it affect student achievement?
- 5. How would teachers cope with the new program?

## **IMPLEMENTATION OF THE PROGRAM**

The following agreements were agreed on by state, university and local education bodies.

- Participants in the Program could attain credit for comparable university courses by demonstrating the competence skill or knowledge level required in the course.
- 2. Participants working on a degree had to take and pass all university examinations required for the degree.
- Participants in the local schools were given the freedom to determine the learning objective, the strategy, materials and time needed for each student.
- 4. Participants would keep accurate records of what they did and the results.
- 5. School officials would provide the teacher with any resources and help they needed and were available in the district.
- 6. The Teacher Development instructional team was free to work with teachers who were participating in the program.
- 7. The Teacher Development Program would provide the participating teachers

with any materials or help they wanted and were not available in the district.

After the agreements were signed a proposal was made to US Office of Education to fund and support the program. Approval and funding was obtained and the program was started.

Step one was selecting an instructional team. Since the program was unique it required persons who were specialist, flexible and creative. It was decided that the core instruction team would consist of specialists in reading and language arts, childhood development, elementary education and a psychologist who was trained in creativity. This team would be supplemented by experts and specialists from any subject or field needed. This enabled the program to utilize people from industry, community, government, and education or any other source if their expertise was needed. A national search was conducted to find personnel that fit the requirements of program. After the team was selected the objectives of the program were finalized.

#### PROGRAM OBJECTIVES

#### A. <u>General Purpose and Objectives</u>

The primary objective of the program was to find a technique for improving learning opportunities for all boys and girls. Other objectives were to explore and test new strategies of education at the university and elementary school levels. Analysis of the educational structure and instructional practices indicated the greatest needs that were within the scope of the Teacher Development Program were associated with teacher improvement. Teachers, supervisors, principals, superintendents, school board members and university professors, business and community leaders were invited to participate in a workshop to come up with some goals and objectives that would improve teachers and education. Lunch and a stipend were given to the participants as they spent most of a day working on the project. Since there were over a hundred people in the workshop they divided into small groups so they could brain storm and discuss the subject. The groups presented their lists to the total body which finally came up with three lists of objectives for the program. They ranked the items on a scale of 1 to 10 with least important to most important. List one was Specific Skills that Teachers Need. List two was Basic

Weakness that Teachers Exhibit. List three was Things I Would Like to See the Teacher Development Program do for Teachers. Using the Delphi technique these recommendations were sent to school principals and P.T.A presidents. They were asked to distribute them to their members for their recommendations and evaluation. The response was not very good, but persons responding tended to agree with the recommendations and ranking.

The following factors were selected as being the most critical: the re-conceptualization of the role of a teacher; the individualization of instruction; a better understanding and working relationship between teachers, students, and adult of different ethnic and social economic backgrounds; and the reorganization of universities' teacher education programs.

### B. Primary Objectives of the Program Were:

- To develop teachers who had the knowledge and skills to do educational diagnosis

   especially in the area of reading
- To help teachers develop the breadth and depth of knowledge of content, skills, materials and instructional programs necessary to formulate specific programs needed by students according to diagnosis.
- 3. To help teachers develop human interaction and communication skills necessary to work effectively with students, colleagues, and parents.
- 4. To facilitate inter-cultural and racial understandings and working relationships.
- To help teachers understand individualized instruction and be able to supply such techniques in classrooms containing large numbers of students and students of different ethnic and socioeconomic groups.
- 6. To develop resource persons for schools and districts to use in their in-service education and teacher learning center;
- 7. To up-date and develop areas of specialization for those teachers who had been displaced or were likely to be displaced because of desegregation so they may be competitive for a teaching position or eligible for a new position.
- 8. To continue and expand our program of cooperative teacher education with other

educational and L.E.A.'s.

9. To enable teachers desiring a Master of Education degree an opportunity to earn one.

# C. Specific Objectives

- 1. The program was designed to improve the teacher's:
- a. knowledge in content areas
- b. skills in these content areas
- c. teaching proficiency in these areas
- d. ability to use the diagnostic and prescriptive method of teaching
- e. knowledge and understanding of self-concept and its effect upon the learner or individual
- f. understanding of the black culture and other cultures in this region
- g. knowledge of materials available to use with other cultural groups and where to find such material
- h. ability to analyze and use teaching techniques (example interaction analysis and micro teaching)
- i. ability to work with adults of different races and socioeconomic backgrounds
- j. ability to work in team situations
- k. ability to organize and direct in-service programs for other teachers
- 1. use of new educational program techniques and media
- m. ability to serve as an instructional leader
- n. knowledge of and use of research and experimentation in their programs
- o. skill in the use of diagnostic instruments for individual and group analysis

2. To work with other departments and schools of Texas Southern University and other universities, local and other educational institutions to coordinate efforts and resources toward improving teacher education.

3. To continue to develop competency based teacher education programs and materials for use at the university level.

4. To provide experiences which allowed the teacher to re-conceptualize his/her attitude toward his/her role in education? Teachers were encouraged to see themselves as facilitators of learning and that each learner is an individual with his own need and rate of development and growth.

5. To improve learning opportunities for all children, especially the disadvantaged, by individualizing instructions.

6. To enable teachers work effectively with different racial, cultural or socioeconomic groups in:

- a. understanding their cultural or social background
- b. knowing how to work with these groups
- c. accepting differences

The Teacher Development Program was officially terminated in 1973 however the Director of the Program continued to work with the participants pursuing a degree and with the school districts implementing the Program into their system.

## **General Findings and Conclusions**

A careful study and analysis of the basic research data from the program appears to warrant the following findings and conclusions about the education programs in public schools and in institutions of higher learning. It is not intended to say these findings or conclusions apply to all teachers or school systems even though the findings and conclusions are based upon a large and fairly representative sample of teachers and school systems. There were fourteen independent public school districts with close to a half million students involved in the program. The racial composition of the schools ranged from an almost all black, all white, or all Mexican American to almost every possible mixture of these groups. In addition these schools represented every possible socioeconomic level, from low inner city to rich suburban areas. The study also included different types of schools such as inner city, suburban, rural, and small town schools. The composition of teachers involved in the program also reflected racial elements general teaching staffs found in most schools. The ratios are not the same as would normally be found since the program worked with teachers who, in general, taught educationally or culturally deprived children. Therefore, the program had a higher percent of black teachers. It is important to remember the primary purpose of the program was development – not research, even though the research turned out to be an important by-product. The racial composition of the Teacher Development participants was 61 percent black, 38 percent white, and 1 percent Mexican American. Today the percent of Mexican American teacher most likely would be higher. Both male and female teachers were included in the program. The majority of these teachers taught in elementary grades although these were a few who taught in junior high and senior high schools. The teachers' ages ranged from twenty years to fifty years. As the data showed the base upon which the following findings and conclusions evolved was large and comprehensive in terms of professional education.

- The average teacher lacks the skills to accurately diagnose individual learning patterns, problems or progress.
- (2) The average professional educator is very reluctant to admit they don't know something. (College and public school.)
- (3) Teachers complain about their role and the system, but are basically satisfied with it.
- (4) Educators, in general, will change only when forced to change.
- (5) Most in-service skill development programs for teachers are a waste of time unless the system is altered to encourage and reward the use of the skills.
- (6) Re-conceptualization of the role of the educator is necessary to effectuate change.
- (7) Teachers, when allowed freedom to determine objectives, methods, and materials and be held accountable for their decisions will produce a better

learning situation and their students will show higher achievement results.

- (8) Teachers in the program were able to master the kinds of skills necessary to modify behavior of student s in the effective and cognitive areas.
- (9) Most of the basic objectives of the Teacher Development Program were achieved.
- (10) Results indicated this approach to education both at the higher education and public levels is more effective than programs now in use.
- (11) Administrators associated with the Teacher Development Program liked it.
- (12) Administrators felt that the Program was instrumental in improving interracial relations.
- (13) Administrators felt that the program prepared the teacher work with individualized instructional programs.
- (14) Teachers can be taught to be more fluent, flexible and original in their thinking and problem solving.
- (15) Teacher education programs can be competency based and not confined to traditional courses and programs.
- (16) Direct involvement with children is necessary for the most effective results. (In fact, it is questionable whether any real change will take place if this involvement does not occur.)
- (17) The school administrators are the key persons to make a program work. Without their cooperation and their support no program or change can be successful over an extended period of time.
- (18) Most school systems and administrators are not read to alter the basic structure of their operation or system to allow teacher the freedom and support they must have to improve education for all learners.
- (19) School administrators and teachers must re-conceptualize their role from dispenser of knowledge to that of facilitator of learning.
- (20) Most, but not all, teachers can be effective in an individualized instructional program.
- (21) Teachers can be changed in both cognitive and effective areas with the right kind of a program.

- (22) The Teacher Development Program model provides a feasible (in terms of cost and resources) teacher education program for in-service teachers. Although, it has not been tested at the pre-teacher training level it should be equally effective at this level.
- (23) External evaluations rated the Teacher Development Program high in terms of program success and as an exemplary model. (See "Excerpts from evaluation report by Human Affairs Research Incorporate, 1972, are at the end of the article.)
- (24) Teachers can become more creative if they are given the right training and environment.

#### **Data-Collection Procedures and Instruments Used**

Data used, or referred to, in this study were collected by observation, questionnaires, rating forms, standardized and specially designed tests and interviews. Pupil achievement data were obtained by the use of a control and experimental matched group design. Students were matched according to the following factors: age, socioeconomic level, intelligence quotient, and pre-reading (standardized) test scores. Comparisons were made on the basis of post reading scores.

The attitudinal changes in teachers were determined by (1) observation and rating by the Teacher Development staff; (2) rating by school administrators and (3) rating of self by teachers. The effective thinking and action changes of teachers was measured by (1) observation and rating by Teacher Development staff and (2) Torrance's Test of Creativity in areas of fluency, flexibility and originality. The change in the skill development of a teacher was measured by pre and post test on specific skills or cognitive elements. Skill utilization was determined by classroom visitation and observation.

The school administrator's attitude toward the program and their evaluation of the program were obtained through (1) an evaluation questionnaire, (2) interviews, and (3) observations and discussion in a series of mini-institutes.

The feasibility of the program in the public school system was determined by having the teachers work in a regular classroom with a normal complement of pupils.

Careful observation of actions, procedures, and types of material needed and supplied were recorded.

In addition to our local evaluation the US Office of Education employed an out of state firm HUMAN AFFAIRS RESEARCH INC. to evaluate the Teacher Development Program. The following are excerpts from the evaluation report submitted by the Human Affairs Research, Inc. to the US Office of Education.

"The Teacher Development Program's approach is important since it means that teachers are not expected to complete their training in one calendar year. Indeed, since the program is highly individualized in its approach, participants have maximum oppor tunity to succeed.

Rather than having the usual success/failure system, the Institute permits teacher-participants either the grade of "B" or "Incomplete". Those who do not work on an acceptable level continue to work on the material until they reach an appropriate level of proficiency, and then go on to more advanced work.

If the system is successful, it may prove to be a model not only for poverty programs but for graduate work. A serious problem, of course, is that some teachers may enroll in an Institute who lack the qualities

necessary to succeed academically, and the 15-month Institute program may not allow enough time to correct these deficiencies.

There is evidence that the project has had an impact on the existing teacher training program at Texas Southern University. The Dean of the School of Education stated that, as a result of the project, the school is committed to developing competency -based programs in all aspects of teacher training. Furthermore, the involvement of the project with the Houston Public Schools and adjacent school districts has led the Dean to

revise the student teaching program, so that larger numbers of faculty members are involved in supervision.

The teamwork approach of the staff in relation to the development and implementation of the project is exemplary. The project director is a model agent of change with unusual enthusiasm, drive and commitment, whose modus operandi has been emulated by the entire staff.

Recommendations: There are no recommendations which would serve to significantly improve this project. It should be noted herein." Research data can be found by going to strongoneducation.com and select Teacher development Appendix.

Chapter 3, The Objective, Diagnostic, Prescriptive Program, explains how that the Teacher Development Program can be implemented today and how the Objective, Diagnostic, Prescriptive, Program evolved.