The Competency-Based Teacher Education program at San Diego State University is a self-paced, individualized program utilizing learning modules designed to develop specified, critical teaching skills in reading, social studies, and the learning process. Media and materials are available in an Individualized Study Center where the student is assisted by the instructor to complete successfully the performance requirements. During the initial weeks of the semester, the student schedules minimal work with children in a public school in order to concentrate on developing the competencies required by the modules. When these competencies have been successfully demonstrated, full-time student teaching is initiated so that the student can demonstrate his ability to integrate the developed skills and assume responsibility for children's learning for an extended period of time within an accountability framework. (Author)
SAN DIEGO STATE UNIVERSITY

COMPETENCY-BASED TEACHER EDUCATION PROGRAM

A Report Submitted for Consideration

for a

Distinguished Achievement Award

from the

American Association of Colleges for Teacher Education

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The Competency-Based Teacher Education Program was initiated in September, 1972 at San Diego State University to explore the feasibility of an alternate model to the regular teacher education program. Basic knowledge and teaching competencies were identified in the regular second semester courses—the learning process, reading and social studies methods. Learning modules were used as vehicles to individualize the program and to assess, develop and evaluate teacher candidates on the basis of demonstrated competencies.

An on-campus individualized learning center was one component of the instructional model. The second component was the public school wherein student performances were evaluated in a realistic educational setting.

Student teaching was defined as performance demonstrating competency and consisted of two types of experiences. The initial on-site teaching experience was used to develop a set of skills specified by learning modules. Only when this individualized work was completed could the student begin a full-time teaching assignment. At this time, the student developed a contract stating the learning objectives to be accomplished with children during the teaching block. The contract was negotiated with the cooperating teacher and university supervisor and based on the demonstrated effectiveness in fulfilling this contract. In a classroom setting, the student demonstrated an ability to integrate the previously developed competencies and assumed responsibility for managing the learning environment of a group of children for an extended period.
SUMMARY OF THE PROGRAM -2

All aspects of the program were developed and revised through the efforts of the university faculty and the administrative and teaching personnel at the on-site schools.
II. COMPREHENSIVE DESCRIPTION OF THE PROGRAM

The Competency-Based Teacher Education Program at San Diego State University was designed to focus on the teacher-candidate's acquisition and demonstration of specified teaching skills in the areas of reading, social studies and the learning process. The acquisition of these skills occurred within the context of a learning center – laboratory instructional model. The demonstration of the competencies occurred in classrooms at Chesterton and Barton elementary schools in the San Diego Unified School District.

To facilitate the development of the specified teaching competencies, the pre-service professional program was divided into three phases. The time sequences for these phases are illustrated in Figure 1, and were carefully orchestrated through the cooperative efforts of the staffs of the teacher training institution and the public schools. A deliberate attempt was made to accommodate varied learning styles and rates within the time structure of a second semester of teacher training for 31 pre-service students.

In initial weeks of the semester the student concentrated on developing skills required by instructional modules and minimal classroom student teaching was required. Gradual movement into full-time student teaching in Chesterton and Barton Schools was initiated for the student as he successfully demonstrated competency in the identified teaching skills.
Figure 1.
During Phase I the student's pre-service training consisted of concentrated work in the Individualized Study Center focusing on the development of the competencies as specified in the instructional modules. These learning modules consisted of a series of related teaching behaviors and a series of learning tasks designed to achieve the specified behavioral objectives. Also, they were organized to provide the student with the knowledge and skills needed to perform the specified competencies required in each course.

Each of the modules was consistent in format and incorporated six basic components to guide the students to the successful completion of the behaviors required by the module and included (1) the behaviorally stated objectives; (2) the prerequisites that the student must have completed for entrance into the present module; (3) a pre-assessment device by which the student and the instructor could gauge the entering proficiency of the student in the area under consideration thus allowing for a more efficient selection of tasks to meet the objectives; (4) the instructional alternatives that were designed to provide choices for the student in terms of learning tasks in order that varied styles of learning and pacing could be accommodated; (5) the post-assessment device that determined whether the level of competency in the specified behaviors had been reached; and (6) remediation choices for the student who did not meet the specified level of competence as designated in the objectives of the module.

During Phase I no regular teaching requirements were made. Students, however, participated as assistants in classrooms on the opening days of schools in order to gain experience in opening day procedures. Toward the
end of Phase I, the students returned to the school sites and selected a classroom in which they would participate for the remainder of the semester.

Phase II was organized to allow the student to continue in the development of specified teaching competencies in the learning center and to practice and demonstrate specified competencies in structured classroom situations. Additionally, the student was assigned responsibility for limited observation, assistance and participation in their selected classroom. During this phase the student was responsible for familiarizing himself with the routines and procedures of the selected classroom and gaining rapport with the students. Ideally, each student was to complete the required set of instructional modules and their related tasks that necessitated direct work with children during this phase. Finally, by negotiating with the cooperating teacher and the university supervisor, the student teacher prepared a general master plan for the full-time student teaching experience and contracted to meet the learning objectives of this plan.

Phase III was designed to allow the student to assume full-time student teaching responsibilities (8:00 a.m. - 1:00 p.m.) if they had not already done so. The student was responsible for demonstrating his ability to integrate the previously developed competencies into the classroom situation. Also, the student assumed the management aspects of the learning environment for the total group of children for an extended period of time. Continued close cooperation between the university and public school personnel occurred in order to insure the implementation of the teaching techniques developed during the previous instructional phases and to allow for remediation of identified weakness.
A crucial element for the successful functioning of the Competency-Based Program was the close cooperation of the faculties of the public schools and the teacher training institution. A series of communication and planning sessions were utilized, during which explication of the program and modification of procedures were discussed and agreed upon by the participating members.
III. ANALYSIS OF THE PROGRAM

The analysis of the program can be separated into several categories such as: overview of student attitudes toward the competency-based instructional technique; module evaluations; student teachers' accountability evaluations; and instructors' performance ratings.

Overview of the Competency-Based Instructional Technique:

Strong trends in the data were observed when students reacted to questionnaire items on the competency-based instructional technique. On a semantic differential, students reacted to "Modularized, Competency-Based Instruction" by responding that it was interesting rather than dull, humanistic rather than mechanistic, good rather than bad, relevant rather than trivial, flexible rather than rigid, demanding rather than "Mickey Mouse", required mastery instead of shuffling through, definite rather than indefinite, valuable rather than valueless, personal rather than impersonal, pleasant rather than unpleasant, original rather than unimaginative, and interactive rather than isolative. Very few responses were in the middle area or opposite ends of these continuums.

On another item, all of the following aspects of the competency-based program were rated "very valuable," as opposed to "somewhat valuable" or "not valuable," by most (about 80%) of the students: individualized (self-paced) testing based on objectives, grading practices, development of skills rather than only knowledge, availability of pre-assessment, use of remediation instead of a low mark, emphasis on mastery learning, integration of course work and student teaching, emphasis on classroom performance, and use of performance contracts for student teaching.
Additionally 75% of the students either agreed or strongly agreed with the following statements:

1. I would like to have had the opportunity to go through additional competency-based programs. (82%)
2. I would like to model my own teaching into a style that is based on competency-based instruction. (75%)
3. I believe that I have learned more via competency-based instruction than I would have in the usual block of lecture-discussion classes in elementary education. (31%)

There were no items in this part of the evaluation of the programs which were marked unfavorably by any significant number of students. In fact, during informal rap sessions on improving the program, these data were strongly supported by comments from sizeable numbers of students praising the program.

Module Evaluations

The competency-based modules used in the program were evaluated using three different instruments: (1) an anonymous module evaluation form; (2) a module checklist form; and (3) several Likert scale items on a general questionnaire. All of the modules had been written, revised and validated before the data for this program were collected, and responses to these materials were very favorable.

The module evaluation form was filled out by each student and turned in to the supervisor of the Individualized Study Center as each module was completed. Precautions were taken to insure that responses could not be associated with particular students. This form asked for responses to the following kinds of questions: Were the objectives clearly stated? Was the pre-assessment clear? Were the directions for the learning activities clear? Were the learning activities adequate and the varied alternatives
appropriate for attaining the objective? Was the post-assessment clear? Also included were general comments on the module. Since there were twenty-four modules used in the program, it is not feasible to present detailed data on each module in this report, however, in nearly every case excellent reviews were achieved.

The module checklist form consisted primarily of a list of the instructional activities which a student could select within the module. Each student would date any activity completed in the module as he finished it. This information was summarized to show which instructional activities were being utilized and which were not. Such information is valuable when a module is revised since activities which are seldom (or never) used should perhaps be deleted from the module. Additionally, since the activities are dated by the students as they are completed, it allows the module developer to determine an average amount of time normally needed for students to complete the work. This allows the instructor to devise a recommended time schedule in order to help students plan and budget their time in working through the self-paced, competency-based program. It should be emphasized that the schedule is only recommended, and not required. An additional advantage of knowing average time taken to complete a module is that it allows the instructor to realistically plan how much work he can legitimately ask students to complete during the course of a semester.

At the end of the semester, students also responded to a number of general questions about the modules used in the program. The percentages shown below after each item indicate the proportion of the class that either agreed or strongly agreed with the statement.
1. The instructional modules presented material in a clear and logical manner. (93%)
2. The instructional modules focused on basic principles of teaching and/or learning. (95%)
3. The instructional modules helped students apply these basic principles. (96%)
4. The competency-based materials usually made the subject matter interesting to me. (89%)
5. The instructional modules adequately and fairly assessed how well students mastered the material. (89%)

The detailed evidence, as well as the more general data presented here, seems to indicate that nearly all of the competency-based materials worked well and were satisfactory to students. Since all students were able to achieve a level of mastery required in the objectives of each module, and since in most cases very little outside remediation was required, the instructors considered the materials to be validated (mastery levels achieved).

Student Teachers' Accountability Evaluations

An accountability system for the evaluation of student teaching was used which employed the same procedures as those followed in the San Diego City Unified School District. Students initiated contracts for objectives which they proposed to accomplish with children in those classrooms to which they were assigned. After discussion and negotiation each contract was signed by both the cooperating teacher and the university supervisor.

At the end of the semester, the documentary evidence obtained from children on each objective for each student teacher was reviewed in conference with the university supervisor and cooperating teacher, and
teaching success for each objective was rated by the supervisor using the following scale:

3 - Perfect in all respects
2 - Essentially correct, but with minor discrepancies
1 - Unsuccessfully completed

These ratings for each objective were then averaged for each student and the following distribution resulted:

<table>
<thead>
<tr>
<th>Average Rating</th>
<th>No. of Students</th>
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<tbody>
<tr>
<td>3.0</td>
<td>17</td>
</tr>
<tr>
<td>2.9</td>
<td>0</td>
</tr>
<tr>
<td>2.8</td>
<td>4</td>
</tr>
<tr>
<td>2.7</td>
<td>1</td>
</tr>
<tr>
<td>2.6</td>
<td>1</td>
</tr>
<tr>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>2.4</td>
<td>0</td>
</tr>
<tr>
<td>2.3</td>
<td>0</td>
</tr>
<tr>
<td>2.2</td>
<td>2</td>
</tr>
<tr>
<td>2.1</td>
<td>2</td>
</tr>
<tr>
<td>2.0</td>
<td>2</td>
</tr>
<tr>
<td>1.9 and below</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>31</td>
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The grand average for all students was 2.74, and both supervisors and cooperating teachers believed student teachers' performance to be very successful.

After this process had been completed, student teachers were asked to respond to several questionnaire items and the percentages following each item below indicate the proportion of the group which agreed or strongly agreed with the item.

1. It did not take too much time to prepare and negotiate the contract. (89%)
2. The contract helped define my student teaching role. (78%)
3. Efforts to satisfactorily meet my student teaching contract consistently caused me great anxiety. (75% disagreeing)
4. The contracting procedure should remain as part of the competency-based program. (85%)
In the light of the data provided by the questionnaire, it can be concluded that using an accountability system for the evaluation of student teaching was successful and desirable. Additionally, it should be noted that the supervisors observed a subtle change in the day to day comments from student teachers. Heretofore, supervisors heard student teachers remark on their performance and how things seemed to go that day (process evaluation). However, under the accountability system student teachers were discussing what their children were able to do (product evaluation). This child-centered thinking would appear to be one of the most important attributes to be achieved.

Instructors’ Performance Ratings

Each instructor was evaluated using an accountability system, as well as an attitude questionnaire. Since each instructor was able to meet all objectives with every student during the course of the semester, all instructors must be given good ratings.

The student attitude questionnaire summarized below is the same one utilized by all professors in the department. The percentages shown in the table for each instructor indicate the proportion of the class agreeing or strongly agreeing with each item.

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<tr>
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<tbody>
<tr>
<td>1. The objectives for this course were adequately defined by oral or written means.</td>
<td>97%</td>
<td>93%</td>
<td>97%</td>
</tr>
<tr>
<td>2. There was an obvious relationship between the activities and assignments of the course and the course objective.</td>
<td>93%</td>
<td>93%</td>
<td>97%</td>
</tr>
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</table>
ANALYSIS OF THE PROGRAM

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<tbody>
<tr>
<td>3. The professor's teaching style was appropriate for the concepts, skills and materials presented.</td>
<td>90%</td>
<td>83%</td>
<td>93%</td>
</tr>
<tr>
<td>4. Contemporary and/or innovative approaches were evident in this course.</td>
<td>90%</td>
<td>90%</td>
<td>97%</td>
</tr>
<tr>
<td>5. My thinking was stimulated by the material presented, assignments made, and the experiences provided within the course.</td>
<td>90%</td>
<td>83%</td>
<td>93%</td>
</tr>
<tr>
<td>6. Opportunity was provided for me to become actively involved in the learning process through activities, assignments and other types of classroom participation.</td>
<td>90%</td>
<td>90%</td>
<td>97%</td>
</tr>
<tr>
<td>7. Opportunity was provided within the course for me to pursue areas of particular interest or concern through the variety of assignments or through the optional ways in which assignments were completed.</td>
<td>90%</td>
<td>84%</td>
<td>90%</td>
</tr>
<tr>
<td>8. The professor was available for conferencing or help through scheduled office hours, special seminar sessions, individual appointments or incidental meetings after class.</td>
<td>47%</td>
<td>59%</td>
<td>70%</td>
</tr>
<tr>
<td>9. There was sufficient feedback from the professor throughout the course so that I had the opportunity and direction for improvement.</td>
<td>83%</td>
<td>72%</td>
<td>73%</td>
</tr>
<tr>
<td>10. The professor communicated a sincere concern or interest in my personal as well as my academic and/or professional well-being.</td>
<td>76%</td>
<td>73%</td>
<td>73%</td>
</tr>
</tbody>
</table>

The above table lends support to the idea that students were receiving high quality instruction. One problem area is identified in Question 8. This deals with the availability of instructors outside of regular class hours. It was found that competency-based instruction takes considerably more professors' time than traditional methods. It is estimated that a
A professor must be willing to approximately double his time commitment to students in using this technique. However, the results achieved with students appear to make it well worth the effort. The criticism in Question 8 is softened somewhat, however, by Question 9 which indicates that although students would have preferred to have the instructor available more, their progress through the material was not unduly impeded.