In 1970 Southwest Minnesota State College was new and was developing a model teacher education program. In an attempt to respond to the question, "What does a teacher need to be able to do?" the education division staff found that teacher education must be competency-based, field centered, individualized, and systematically designed. In organizing the curriculum, the staff decided that the teacher needed competencies in: (a) specifying educational objectives which reflect issues relevant to education and to living in our modern-day democracy; (b) determining conditions of the learner in relation to the specified objectives; (c) selecting, preparing, and using appropriate materials, activities, and reinforcements for the learner; (d) organizing and managing the variety of learning environments which promote individualized instruction; and (e) evaluating students to determine if mastery of the educational objectives has been achieved. The teacher curriculum is organized into competency packages which, together with large- and small-group instruction, and field experiences, constitute the learning blocks in which the student enrolls. After completing the learning blocks (which include one afternoon a week as a teaching assistant in the public schools), the student may apply for student teaching. A student's graduation and certification are dependent on demonstrated teaching competencies. (PB)
Southwest Minnesota State College is new. Five years ago the spot where it now stands was a cornfield near the town of Marshall. Today this cornfield has been transformed into modern structures which house, feed, and provide educational facilities for over 3,000 students. The town has grown so that it now joins the college. Marshall is a growing, thriving young city in a rural area of the United States where out-migration of its citizens has been a reality since World War II. Next June the first class will graduate from Southwest. Half of these graduates will be teachers. Even though there is a current oversupply of teachers, we predict that these beginning educators will be employed. They've had an unusual professional educational program. Their training was not dependent upon courses completed or grades earned. It was based upon each individual's teaching competencies. These competencies have been field-tested in area schools surrounding the college. In this quiet rural Minnesota college a model teacher education program is being developed. This program could be a prototype for teacher education programs in the future.

Teacher education is clearly designed to achieve the mission of the college as it was approved by the legislature in establishing Southwest. This mission is (1) to meet the needs of the public to which the college serves, (2) to be a liberal arts and technical college with certain professional and pre-professional programs, and (3) to serve the state and the nation but particularly the nineteen counties in Southwestern Minnesota.

In accordance with this mission the teacher education program was developed. Studies indicated that Southwestern Minnesota has had a long history of need for pre-service and in-service programs for public school teachers. Major emphasis has been placed upon the development of a program to meet these regional needs.
In developing this program Dr. Richard Wollin, Chairman of the Division of Education, asked the question "What does a teacher need to be able to do?" to teachers and administrators in public schools, to trainees of teachers, to state department of education personnel, and to researchers in education. All expressed that teacher candidates should be provided with experiences which reflect the change forces affecting our present society. These forces - the impact of technology, automation and cybernetics, the complexities of affluence, rapid transportation and communication facilities, trends toward urbanization, alienation of individuals in groups, space and science explorations, and the reshaping of value orientation - were identified. Similar change forces within the schools were identified. There were nongraded continuous progress schools, team teaching, modular scheduling, instructional materials centers, learning laboratories, video tape and TV, programmed instruction, and criterion-referenced evaluation. Obviously, the teacher of the 70's and 80's will be affected by these change forces.

Probably the key idea that emerged from this search was the concept of a competency-based teacher education program. It appeared obvious during the searching for "What does a teacher need to be able to do?" that if the aim of teaching is learning, then there should be evidence that teachers can bring about appropriate learning in children before they assume responsibility for it in the classroom. The development of a teacher education program that generates this kind of evidence is mandatory.

In developing a performance based teacher education program four tasks were identified. One, the pupil outcomes that are desired (the goals of education) must be identified. Two, the conditions which bring about the desired pupil outcomes (the instruction program within the schools) must be identified. Three, the competencies needed by teachers to bring about the desired pupil
outcomes (the goals of teacher education) must be identified. And finally, fourth, the conditions that bring about these competencies (the teacher education program) must be identified. In developing this program the Southwest Minnesota State College Education division staff found that teacher education must be competency-based, field-centered, individualized, and systematically designed. These were new concepts. The idea that teacher certification be based upon tested teaching competencies rather than courses was revolutionary. The idea that these competencies must be tested within the public schools made the program field-centered and at the same time recognized the partnership between public schools and colleges for training pre-service teachers. It became obvious to the staff in planning this program that it must be individualized; as a matter-of-fact the teacher education program began to model what the individualized school program would look like. The design of teacher education was also an important concept. This design had to be purposeful, data dependable, and adaptive. With these concepts in mind the Southwest teacher education program was organized.

The traditional plan of separating elementary and secondary education did not seem appropriate for a competency-based program. Many of the competencies required by elementary and secondary teachers are the same. The abrupt division between these two programs seemed to be quite artificial to the planning staff. Consequently, three learning and research centers were organized within the Division of Education to help a student develop necessary competencies for certification as a teacher. (See Figure 1, page 4)

The Center for Educational Studies is responsible for developing curriculum packages and instructing students in educational psychology, child and adolescent growth and development, learning theory, and evaluation.
# Figure 1

## Organization of Division of Education

**Southwest Minnesota State College**

<table>
<thead>
<tr>
<th>Center for Educational Studies</th>
<th>Center for the Management of Educational Systems</th>
<th>Center for Applied Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Psychology</td>
<td>Classroom Management</td>
<td>Field Experiences</td>
</tr>
<tr>
<td>Child and Adolescent</td>
<td>School Organization</td>
<td>Observation</td>
</tr>
<tr>
<td>Growth and Development</td>
<td>Curriculum Development</td>
<td>Microteaching</td>
</tr>
<tr>
<td>Learning Theory</td>
<td>Selection of Contents, Materials, and Instructional Strategies</td>
<td>Student Teaching</td>
</tr>
<tr>
<td>Evaluation</td>
<td></td>
<td>Internship</td>
</tr>
</tbody>
</table>
The staff of the Center for Management of Educational Systems is responsible for developing curriculum packages and instructing students in classroom management, school organization, curriculum development, and the selection of appropriate content, materials, and instructional strategies.

The Center for Applied Instruction provides the student field experiences so that he can observe, practice, test, and finally develop specific teaching competencies. Time for the pre-service teacher to work in the public schools to observe, to microteach, to student teach, and to intern is provided by this center.

The staffing of these learning and research centers reflects the desire for a new type of teacher education program. All three center directors were experienced public school practitioners. All had worked in innovative school systems. All were experienced in working with in-service education programs. One director had been a team leader who had developed and published a humanities program for an innovative Wisconsin high school. One director was an administrator who had directed a project to nongrade an Ohio school system, K-12. One director was a counselor and change agent who helped a large Minnesota high school initiate team teaching and modular scheduling. None of these men has had much experience in college teaching.

Probably the key step in the development of this program was the initial planning done by the staff of the Division of Education. For three days this group developed a living philosophy for the program. The words "We agree" were written on a chalkboard. A member suggested a statement. The group accepted, rejected, or changed the statement. All aspects of the teacher education program were thoroughly discussed. The following list was generated at this session.
WE AGREE:

1. People are different.
2. The staff of the education department is a team.
3. The individual is important and should be respected.
4. Learning is an individual task.
5. Teacher education is an all-college effort.
6. People learn in different ways.
7. Teacher education should be a cooperative effort between the College and the area.
8. The teacher education program should be open-ended and flexible.
9. Teacher candidates should be able to participate in the change processes.
10. Teachers teach as they have been taught, but they can change.
11. A teacher education program should be organized around the development of teacher competencies.
12. Competency means the demonstrated ability to perform a task.
13. Education is essentially a moral enterprise.
14. Self-actualization is as important as enculturation.
15. The role of the teacher is a manager of learning environment.
16. Instructional strategies must recognize that there is a difference between men and women.
17. A student learns best if he experiences success. Performance objectives should point to success.
18. The teacher education program should recognize that there are variances in levels of competencies.
19. Teacher education should be based on a continuous progress curriculum.
20. Students in teacher education should participate in planned, systematic field activities.
21. Students in teacher education should be exposed first-hand to a culture different from their own (social reality).

22. Students in teacher education must be involved in decisions about planning, executing, and evaluating their own program.

23. Advisors are involved in student decisions about their educational programs.

24. Technological resources provide a means for achieving educational goals more efficiently and economically.

25. The systems approach to analyzing instruction maximizes the opportunities for learning.

26. Human relations are!

The acceptance of a model for instructional management provided a plan for organizing the curriculum for the teacher education program, for teaching these competencies, and for the teacher to use once he is employed in the public school. (See Figure 2, page 8).

The model was used for organizing the curriculum for teacher education. The model helped identify what a teacher needed to be able to do. The teacher needed (1) competencies in specifying educational objectives which reflect issue relevant to education and to living in our modern day democracy, (2) competencies in determining conditions of the learner in relation to the specified objectives, (3) competencies in selecting, preparing, and using appropriate materials, activities, and reinforcements for the learner, (4) competencies in organizing and managing the variety of learning environments which promote individualized instruction, and (5) competencies in evaluation procedures to determine if mastery of the educational objectives has been achieved.

The teacher education curriculum is organized into competency packages (COMPACS) which are classified according to the five steps of the model (i.e., those COMPACS on Specifying Objectives are classified 1.0 for a future computer-
FIGURE 2

INSTRUCTIONAL MANAGEMENT

[Diagram showing a flowchart with steps including:
- Specify Educational Outcomes Desired
- Initial Determination of the Condition of the Learner
- Select Materials, Activities and Reinforcements for Learner
- Organize and Manage Learning Environments
- Evaluate Progress & Assess the new Condition of Learner
- Continued Evaluation of Mat'ls. & Objectives
- Banks of Mat'ls.]
The COMPACS are modeled after the UNIPAC which was developed by I/D/E/A of the Kettering Foundation. The individualized competency packages contain the five steps of the model and in reality are a prototype of the model in action. Students select COMPACS and work on them at their own speed in an individualized program.

In selecting teacher competencies to be included in COMPACS for the Southwest teacher education program, the major studies of elementary teacher education conducted by the University of Toledo, University of Pittsburgh, Michigan State University, Florida State University, and the Northwest Regional Laboratories were used as resources for selecting content for COMPACS. The University of Toledo which trains pre-service teachers to be members of the staff of the multi-unit elementary school was the most helpful of these studies.

The COMPACS are designed to provide a pre-service or in-service teacher the required competencies to teach in the individually guided instructional program of a multi-unit elementary school. This school organization pattern accepts the concepts of nongrading, team teaching, multi-age grouping, continuous progress curricula, and individualized instruction. The model is adaptable to the needs of students and those of the community where it is located. It appeared to the Southwest staff that this organization provided an appropriate model for training elementary teachers for the 70's and 80's. Southwest faculty teach in the same manner as the faculty of a multi-unit elementary school. In this way pre-service elementary teachers not only study so that they can assume a role in individually guided education, they also become a student in such a system.

The COMPACS are written in behavioral objectives that are sequenced from knowledge to application. Almost all COMPAC sequences end with the pre-service
teacher applying his new knowledge with students in the public school as a part of the field experience activities.

Pre-service and in-service teachers also use the model as a plan for curriculum organization within their own classroom. This technique of putting the model into practice is the third way that it is used.

The Southwest teacher education model emphasizes the teacher-scholar concept. Each trainee receives a liberal arts background and the opportunity to specialize in content areas outside of education. Every pre-service teacher in a sense must make certain decisions concerning specialization within the teacher education program. Each trainee must select the age group with which he wants specifically to work: early childhood, primary, or middle school. Each trainee must also select an area of concentration in the academic areas in the other divisions of the college. For the elementary teacher this concentration can be a major in one discipline, concentrations in two or more content areas, or an inter-disciplinary selection of courses which will provide skills to become an effective elementary teacher. The requirements for these concentrations are developed in cooperation with various academic programs. To graduate the pre-service elementary teacher must develop at least 48 quarter hours credit in his concentrations.

One can perhaps better understand the Southwest Teacher Education Program by following a pre-service elementary teacher through this program.

A student does not enter the teacher education program until his junior year. By the time he enters the program he has successfully completed two years of a liberal arts education. At this time the student applies for admission to the teacher education program. The criteria for admission are: (1) success in academic disciplines, (2) demonstrated ability to utilize American language
and communications skills, (3) good physical health, and (4) a recommendation by his advisor that the candidate has coped successfully with personal and social problems and is ready to work with students in a public school.

Once the pre-service teacher is accepted into the teacher education program, he enrolls in Elementary Block I. This is the first of five blocks (each gives 6 quarter hours credits) in which he will enroll. Activities within the blocks include large group instruction, small group instruction in advisory groups, individualized instruction with COMPACS, and field experiences in the public school. This balance of large group, small group, and independent study models the multi-unit school organization.

All students enrolled in a specific elementary block attend a one hour large group class once each week. This large group is primarily an input session. Announcements, lectures, audio-visual materials, resource speakers, student presentations, and demonstrations are activities which are typical of large groups.

The advisory group is one of the most effective and innovative aspects of the Teacher Education program. Once a student enrolls in Elementary Block I, he is assigned to an advisory group of 15-20 students. The instructor of this group becomes this student's advisor. The student is assigned to be in this advisory group for three elementary blocks. This organization gives the student and his advisor a chance to know each other well. It provides a peer group of other students who are studying to become elementary teachers. The advisory group begins with a number of human relations activities so that the members get to know each other well and become more open with each other. This group becomes supportive so that simulation, value clarification, and microteaching activities can be attempted. Sub-groups within an advisory group give students experiences in planning, interacting, and completing tasks similar to those
that members of a teaching team experience.

Much of a student's time is spent working on competency packages. The student does COMPACS in the education laboratory, library, his own room, and the school. Some COMPACS are required; others are student choices. Students work on COMPACS on their own time and at their own pace. Most COMPACS end with one-to-one evaluation between a professor and the student. Professors are assigned to the education laboratory six hours per week to evaluate students. Personalized learning truly occurs during these one-to-one evaluation sessions.

The favorite activity of the pre-service teachers during the elementary blocks is the field experience. Students work in the public schools one half day per week. They work as a teaching assistant to help the school program; they also work on COMPACS which requires the public school program for application level objectives. Many of the students are "turned on" by this experience. They voluntarily work many more hours in the school - preparing materials, tutoring, supervising students, correcting tests, or even teaching as a member of a team.

After the completion of three elementary blocks the student may apply for student teaching. The criteria for student teachers are: (1) academic standing, (2) completion of three or more elementary blocks, (3) successful field experiences in the public school, and (4) recommendation of advisor. (See Figure 3, page 13 - depicts how a student progresses through the elementary education block.)

Another innovative feature of the Southwest Teacher Education program is the teacher education center. As was stated earlier each competency package contains knowledge objectives that can be learned in the college and application objectives which must be learned in the classroom. To achieve a competency-based
FLOW CHART OF SOUTHWEST ELEMENTARY EDUCATION PROGRAM

Complete 2 years LIBERAL ARTS

Application for Teacher Education

rejected approved

Assigned to Advisory Group

Develop Teaching Competencies

ADVISORY GROUP LARGE GROUP COMPACS FIELD EXPERIENCES

Application for Student Teaching

REJECTED APPROVED

Student Teaching

Develop Needed Competencies

Provisional Certification

Graduation

Develop Teaching Concentration (43 credit hrs.)

Major Two or More Concentrations Inter-disciplinary
curriculum such as this, the division of education must staff a laboratory school or develop a good working relationship with the schools of the area. A decision was made that these objectives could be done best in the public schools. The laboratory school was apart and separate from both the college and public education. Working with area schools was congruent with the mission of the college. The teacher education center concept was developed.

The teacher education center had been developed and tested by the University of Maryland. This concept is a unified approach to the study of teaching and supervision. It is a coordinated program of pre-service and in-service experiences planned and administered cooperatively by the college and the public school systems. The program is designed so as to serve the needs and interests of the experienced professional as well as those of the inexperienced undergraduate student. An individualized approach makes it possible for each to become a student of teaching in accordance with his own particular stage of professional development. Organizationally, the teacher education centers in Southwest Minnesota have been five school districts. Coordinating the continuing career development program in each center is a teacher education coordinator who was jointly selected and employed by the college and the public school. His role is to plan an effective program of laboratory experiences for the college student assigned to the center schools and to coordinate an in-service program for the center staff (these are the regular teachers of the school district who work with these students). (See Figure 4, page 15).

The Teacher Education Center approach comes from the mutual desire on the part of the college and the public schools to develop a more effective teacher education program. New commitment from both is required for the center to succeed. The public school must assume an increased and continuing responsibility for pre-service training. The college must assume an increased and
FIGURE 4
SOUTHWEST TEACHING CENTER MODEL

CENTER COORDINATOR

POLICY COUNCIL

COLLEGE

TEACHING CENTER

SCHOOL DISTRICT

COLUMNS COORDINATING COMMITTEE

BUILDINGS WITHIN DISTRICT SCHOOL

PRE-SERVICE EDUCATION

IN SERVICE EDUCATION
continuing responsibility for in-service training.

Many school districts in southwestern Minnesota were interested in becoming teacher education centers. Five school districts were selected. The criteria for selection was (1) commitment to the teacher education center by the board, administration, and faculty; (2) interest of the school district in implementing individually guided education; (3) size of school district; and (4) location of school district in relation to the College.

Pre-service teachers have been assigned to centers for junior year field experiences and for student teaching. A student teacher is assigned to the teaching center as part of the instructional team. He is not assigned to an individual teacher. This gives him the opportunity to associate and work with many faculty members. The student teacher assumes instructional responsibility for some specific aspects of the curriculum. The center coordinator individualizes each student teaching experience using a wide variety of intensive and extensive experiences geared to meet the needs of the particular student. Each center is equipped with video equipment for microteaching and for recording classroom performance. The competency packages and the required support materials are also available for both pre-service and in-service work.

After the student completes the student teaching component, he returns to the college for a final evaluation. A student's graduation and certification is dependent upon demonstrated teaching competencies. These competencies include knowing what to teach, preassessment skills, selecting appropriate materials, choosing effective instructional strategies, and evaluation. Students demonstrate these competencies by completing ComPacs, microteaching, conducting small groups, and actually teaching in the public schools.
Competency based teacher education is a positive trend. We've had too many certificated people who couldn't teach and didn't like kids. Those people with demonstrated competencies may not be that jack-of-all trades generalist that we now produce for the self-contained classroom. A principal is always discovering things these generalists can't do anyway. The principal will find it easy to assign the teacher who has a list of demonstrated competencies, rather than a transcript of courses. Recertification can be based on more competencies rather than fewer.

The Southwest teacher education program is a hopeful solution to the complex problem of preparing elementary teachers for individually guided education.

William M. Bechtol, August 31, 1970