

This study showed that student teachers can influence cooperating teachers' views in planning activities and using curriculum materials.

Impact of student teachers on cooperating teachers

by David P. Lopez
and
John I. Thomas

Introduction

Are senior student teachers able to carry out major responsibility for the final phase of their professional preparation? As perceived by their cooperating public school teachers, to what extent can they influence the ways elementary school teachers view teaching? In a recent study the authors, as part of New Mexico State University's instructional team responsible for the training and supervision of senior student teachers, sought to answer these questions. What follows describes their training experiences, significant results of their professional preparation, and the nature of their influence on their cooperating teachers' views of nine process skills of teaching.

The Process Skills of Teaching: Professional Preparation

During the 1981 spring semester, the authors prepared the student teachers to implement nine carefully selected process skills of teaching in public school classrooms selected for student teaching. These consisted of planning appropriate activities for pupils, organizing activities to meet pupils' academic needs and personal interests, employing effective teaching methodologies, using productive curriculum materials, applying techniques for motivating pupils, reinforcing pupils' learning, establishing rapport with pupils, individualizing learning experiences and evaluating the academic progress of pupils.

David P. Lopez is in the Department of Teacher Education at the California State University in Fresno. John I. Thomas is in the Department of Curriculum and Instruction at New Mexico State University.

The Teaching Laboratory

The teaching laboratory established for this preparation included 68 senior elementary student teachers. The authors instructed and supervised 38 of these. A major focus of the laboratory centered on the professional preparation of New Mexico's 46 percent ethnic minority population (36.6 percent Hispanic, 8 percent American Indian, and 1.4 percent Black). Consequently, the students' training was designed to prepare them to teach in culturally diversified classrooms. The development and implementation of the process skills investigated in this study constituted the heart of their preparation.

The student teachers assumed a very large responsibility for their professional preparation. They opted to work for a C, B or A grade by individually selecting course syllabus activities necessary to prepare them to implement the nine process skills effectively in their public school classrooms. As a result of observation, guidance and supervision of their progress by the authors, they arrived at their decisions primarily on the basis of what they sought to develop and improve. For example, student teachers who felt they needed to improve their skills in planning and organizing appropriate activities for their pupils selected those activities in the syllabus designed for these purposes. Thus they were called upon to write lesson plans, present them to peer groups for criticism and suggestions for improvement and submit them to the teaching laboratory's instructors for further assessment. This was followed by implementation of the plans in their public school classrooms.

To earn a grade of "A" only one option beyond those included in the basic requirements and in the "C" and "B" options was required of the student teachers. This option was to implement a project of their own choosing for a period of four to eight weeks in their student teaching classrooms. A partial list of the projects outlined in the course syllabus for this purpose included:

- a. A social studies unit taught through simulation.
- b. An operetta and study of its era.
- c. A program for creative children.
- d. An individualized learning program.
- e. A program for gifted children.
- f. A reading program taught through dance, music and drama.
- g. A learning-centered classroom.

Additionally, student teachers assumed responsibilities for projects other than those stated in their course syllabus. That is, they opted for projects they felt would improve their pupils' academic performance and thereby positively influence their cooperating teachers' views of the nine process skills of teaching which constituted this study.

Integrative Seminars

To note the impact of the student teachers' application of the nine process skills on their cooperating teachers' views of teaching, the authors conducted weekly seminars during the full-time student teaching phase of the semester (eight weeks). Each seminar converged on the successes and problems associated with the student teachers' application of the process skills in their public school classrooms. As supervisors of the 38 students comprising this study, the authors focused their attention on the inte-

gration of the students' personal goals with the process skills implemented in their student teaching.

On-site seminars were conducted in the individual classrooms of the student teachers to better note the varied teaching environments, materials used, classroom organizations, pupil accomplishments and other aspects related to the application of the process skills, especially as they pertained to their individually selected projects for implementation in the schools.

Implementation of the Process Skills

To ascertain the extent to which the student teachers' application of the nine process skills of teaching influenced their cooperating teachers' views of teaching, the authors devised a questionnaire directed to this problem, collected and tabulated the data, analyzed them and interpreted the results.

Collection of Data

Data were collected from all participating teachers. A questionnaire composed of the nine process skills of teaching investigated in this study was designed for this purpose (See Table 1).

The cooperating teachers were asked to rank the extent to which their views of the process skills were influenced as a result of their implementation by their student teachers. A Likert-type scale, ranging from no influence and slightly influenced to strongly influenced was used to measure the degree of the teachers' perceptions. Table 2 shows the data collected and the degrees of influence.

Analysis of Data

To analyze the data, the findings of this study were clustered into two categories as shown in Table 2. One category depicts the number of cooperating teachers who were influenced in varying degrees by their student teachers' implementation of the process skills. The secondary category shows the number of cooperating teachers who were not influenced at all by their student teachers' use of the process skills of teaching.

As shown in the data, the highest degree of influence by the student teachers on their cooperating teachers' views was in the process skill of planning appropriate activities for pupils and in their use of productive curriculum materials. Thirty-four of 38 cooperating teachers were influenced slightly to strongly in the former, and 32 of 38

Table 1
Cooperating Public School Teachers' Perceptions of Student Teachers' Influence on Selected Process Skills of Teaching

Please place a check mark (✓) in the box that best reflects your position on each of the following statements.

MY STUDENT TEACHER HAS INFLUENCED THE WAY I WILL IN THE FUTURE . . .	Strongly Influenced	Moderately Influenced	Slightly Influenced	No Influence
plan appropriate classroom activities for my pupils.				
organize classroom activities to meet my pupils' academic needs and personal interests.				
use effective teaching methods.				
implement curriculum materials productively				
apply techniques for motivating my pupils to learn.				
reinforce my pupils' learning.				
establish rapport with my pupils.				
individualize my pupils' learning experiences.				
evaluate the academic progress of my pupils.				

Table 2
Cooperating Teachers' Responses to the Degree of Influence Exerted by Student Teachers
on Selected Teaching Criteria

Process Skills of Teaching	Strongly Influenced		Moderately Influenced		Slightly Influenced		No Influence	
	Raw Score	%	Raw Score	%	Raw Score	%	Raw Score	%
Planning appropriate activities for pupils	1	2.6	19	50.0	14	36.8	4	10.5
Organizing activities for pupil needs and interests	1	2.6	11	28.9	10	26.3	16	42.1
Using effective teaching methods	1	2.6	9	23.6	18	47.3	10	26.3
Implementing curriculum materials productively	2	5.2	18	47.4	12	31.5	6	15.7
Applying techniques for motivating pupils to learn	1	2.6	8	21.0	14	36.8	15	39.4
Reinforcing pupils' learning	2	5.2	6	15.7	13	34.2	17	44.7
Establishing rapport with pupils	1	2.6	5	13.1	12	31.5	20	52.6
Individualizing learning experiences	1	2.6	4	10.5	13	34.2	20	52.6
Evaluating academic progress of pupils	1	2.6	4	10.5	11	28.9	22	57.8

were influenced similarly in the latter category. The next highest degree of influence was in the employment of effective teaching methodologies, with 28 of 38 cooperating teachers influenced slightly to strongly by their student teachers' teaching methods.

According to the data, the student teachers influenced their cooperating teachers least in the process skills of establishing rapport with pupils, individualizing instruction and evaluating the progress of pupils. More than half of the cooperating teachers stated they were not influenced by their student teachers' use of these teaching skills, as shown in Table 2.

It is pertinent to note, also, that the majority of the 38 cooperating teachers were influenced slightly to strongly in their student teachers' implementation of those process skills related to organizing classroom activities (57.8 percent), motivating pupils (60.4 percent) and reinforcing pupils (55.1 percent).

Summary and Discussion

Two fundamental questions were the focus of this study. Are senior student teachers able to carry out major responsibility for the final phase of their professional preparation? As perceived by their cooperating public school teachers, to what extent can they change the ways elementary school teachers view teaching?

Given the opportunity to freely select and implement projects in their respective public school classrooms, the 38 student teachers comprising this study established enriching and rewarding experiences for the pupils they

taught. Although the achievement of an "A" grade may well have provided the stimulus for these experiences, the results nevertheless were especially gratifying for the pupils. Some of the pupils, for example, participated in the early American westward expansion via role simulation. Others, similarly, moved northward from Mexico in the 1500s with Juan de Onate to explore and settle the Southwest, taking on the simulated roles of wagonmasters, farmers, soldiers, scouts and Indians. Still others learned about dinosaurs through self-instructional activities, such as those implemented in learning-centered classrooms established by the student teachers.

Individualized learning, peer tutoring and self-paced activities for pupils were representative of other projects carried out by student teachers from four to eight weeks during their student teaching phase. Some of their projects were not restricted to the classrooms in which they taught. Three student teachers, for example, went so far as to implement a project of Spanish language instruction cooperatively for pupils across several classrooms.

To what extent did the student teachers influence the ways their cooperating public school teachers viewed elementary school teaching? With respect to the nine process skills of teaching examined in this study, the data showed that better than 50 percent of the cooperating teachers' views were influenced moderately to strongly in planning appropriate activities for their pupils (52.6 percent), and using curriculum materials productively (52.6 percent). These findings have proved useful in the assessment of New Mexico State University's teacher training

program for senior student teachers in elementary education. It may be inferred from the data that the Department of Curriculum and Instruction is significantly training its student teachers in these two process skills of teaching, and that the student teachers have influenced a significant number of cooperating public school teachers to consider changing their ways of planning activities and using curriculum materials in elementary school classrooms to achieve more productive results.

The data have also pointed out the shortcomings of the department's student teaching program in the development of process skills of teaching centered on the establishment of rapport with pupils, teaching in terms of their individual differences, and evaluating their academic progress. More than 50 percent of the cooperating teachers perceived these process skills, as implemented by their student teachers, as having influenced them least to change their views of teaching. Ostensibly, greater attention must be given to procedures necessary to improve the application of these three process skills by student teachers.

Additional research into the nature of the varying degrees of influence shown in Table 2 is clearly in order. What, for example, is there about the ways the student teachers planned activities and used curriculum materials that influenced better than half of their cooperating teachers moderately to strongly to change their views of these two processes of teaching? And, conversely, what needs to be improved in the ways student teachers establish rapport with pupils, teach to their individual differences and evaluate their academic progress that may be of value in influencing cooperating teachers to teach better? It is pertinent, therefore, that the training program for senior student teachers in elementary education take into account these data. There is a need to examine in greater detail the entire dimensions of the nine process skills of teaching that constituted this study with the view of continuing the development of those skills perceived as influential by cooperating teachers, and to develop those process skills of teaching perceived by them as having little or no influence on their views of teaching.