This study attempted to determine the feasibility of preparing and using video-tapes in a small college in connection with the preparation of prospective secondary school English teachers. At Knox College, Illinois, the teaching sessions of an experimental group of five student teachers were video-taped and their teaching effectiveness was compared with that of five student teachers whose sessions were not taped. Although statistical tests were not performed on the data to determine significance, an examination of course grades, the supervisory comments, and self-evaluations indicated that video-taping techniques did help students perform slightly better in student teaching. In a second part of the study, three college professors were video-taped presenting a model demonstration in teaching certain concepts. The use of the tapes for adaptation to secondary school English classrooms and for discussion purposes in the methods class indicated that even though the tape utilizing a professor as a teacher model has been used with some success in methods classes, the general principle of adapting college teaching techniques and approaches for use in secondary classrooms is not advised.

(Author/LH)
INTERIM REPORT

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ILLINOIS STATE-WIDE CURRICULUM STUDY CENTER
IN THE PREPARATION OF SECONDARY SCHOOL
ENGLISH TEACHERS (ISCPET)

A Study of the Use and Feasibility of Video-Tape Techniques in the Preparation of Secondary School English Teachers

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The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare and to a subcontract with the Illinois State-Wide Curriculum Study Center in the Preparation of Secondary School English Teachers, University of Illinois, Urbana, Illinois. Contractors and subcontractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the projects. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.
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INTRODUCTORY SUMMARY

This study was designed to test the feasibility of a small college preparing and using video-tapes in connection with its preparation of prospective secondary school English teachers. The project consisted of two phases:

1. The video-taping of segments of teaching sessions of an experimental group of five student teachers and comparing their teaching effectiveness with that of a control group of student teachers whose sessions were not video-taped.

2. The video-taping of college English professors as teacher models and the use of the tapes for adaptation to secondary school English classrooms and for discussion purposes in the methods class.

The first phase of this study yielded some positive results. Those students who were video-taped appeared to perform slightly better in student teaching than those who were not video-taped. In the second phase, however, even though the tape utilizing a professor as a teacher model has been used with some success in methods classes, the general principle of using a college teacher as a model for prospective high school teachers seems unwise.

The technical problems, the need for specialized personnel, and the subsidiary costs seem almost prohibitive for the development of professional quality video materials at a small college. Smaller institutions might better consider the use of lightweight, portable, less professional equipment in working with prospective teachers.
INTRODUCTION

The use of video-tape techniques for the improvement of teacher education has been the subject of considerable study over the past decade. However, most of this research has been conducted by larger institutions such as Stanford, Syracuse, the University of Illinois, and the University of Missouri. Almost no attempts have been made by small colleges. A combination of two research projects at Knox College—a Kettering Foundation grant and Knox College's participation in the Illinois State-Wide Curriculum Study Center in the Preparation of Secondary School English Teachers (ISCPET)—seemed to provide an excellent opportunity to test not only the value of these tools but also the feasibility of their use by smaller institutions. Members of the Knox staff had had some limited contact with an Associated Colleges of the Midwest consortium video-tape program and were therefore not totally unfamiliar with the procedures of such an activity. Arrangements were made to rent Ampex 66GB-2" video-tape equipment available through the Kettering Program.

The ISCPET Special Research Study undertaken by Knox College attempted to determine the value of two specific uses of video-tape techniques in the preparation of prospective secondary school English teachers. First, the study wanted to determine whether teacher effectiveness could be improved if segments of a prospective English teacher's student teaching experience were video-taped for analysis and criticism by the student teacher himself and his college and secondary school
supervisors. Second, the study hoped to demonstrate the value of video-tapes of college-level teaching models for the use of prospective secondary school English teachers in translation-techniques and for discussion in English-teaching methods classes.

METHOD

Phase I: Five students preparing to become secondary school English teachers were selected as an experimental group. An equal number of students comprised the control group. Theoretically, the only variable in the study should have been the use of the video-tape procedures. This is obviously an untenable assumption. Each of the students had a different student teaching assignment. Placements ranged from 7th grade to 11th and 12th grade English. Supervisors differed in ability. However, an attempt was made to equate the situations. It was determined that the ten students in the study could be reasonably equated on grade point averages in English and education course work and in overall grade point averages.

Segments of the student teaching experience of only those prospective English teachers in the experimental group were video-taped.

Improvement in teaching effectiveness was to be determined by comparison of the grades obtained by the students in both the control and experimental groups and by a comparison of the self-evaluations and the evaluations of the high school supervisor and the college methods course instructor.
Phase II: College English teachers were asked to prepare model demonstrations in teaching certain concepts to college freshmen. These sessions were taped. A student teacher of English viewed the tape and attempted to translate this model for presentation in a secondary school English classroom. This presentation was taped. A panel consisting of the college English teacher, the college supervisor of student teaching, the student teacher, and the student teacher's public school supervisor viewed both taped sessions and prepared a panel discussion on the effectiveness of the college model in the public school classroom. This session was also taped.

RESULTS

Phase I: From very meager evidence, it appears that the use of videotape techniques accompanied by objective evaluation devices, i.e. Flander's Interaction Analysis, does improve the teaching quality of the student teachers.

Table 1 reports a comparison of English and education course work and overall grade point averages. No statistical tests were performed on these data because of the small number of students involved. An examination of the scores reported indicates that the students of the experimental and control groups are closely matched.

The grades obtained by all students in the study in their student teaching experience are reported in Table 2. Again, no statistical tests were performed on the data, but an examination of the scores indicates that the students of the experimental group did perform slightly better than those of the control group.
TABLE 1

ENGLISH AND EDUCATION COURSE AND OVERALL GRADE POINT AVERAGES
OF STUDENTS IN EXPERIMENTAL AND CONTROL GROUPS

<table>
<thead>
<tr>
<th>English GPA</th>
<th>Education GPA</th>
<th>Overall GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Control</td>
<td>Experiment</td>
</tr>
<tr>
<td>Student GPA</td>
<td>Student GPA</td>
<td>Student GPA</td>
</tr>
<tr>
<td>A 3.4</td>
<td>AA 3.5</td>
<td>A 4.0</td>
</tr>
<tr>
<td>B 3.5</td>
<td>BB 3.4</td>
<td>B 3.5</td>
</tr>
<tr>
<td>C 3.1</td>
<td>CC 3.0</td>
<td>C 3.0</td>
</tr>
<tr>
<td>D 2.5</td>
<td>DD 3.0</td>
<td>D 2.5</td>
</tr>
<tr>
<td>E 2.8</td>
<td>EE 2.9</td>
<td>E 3.0</td>
</tr>
<tr>
<td>Mean 3.1</td>
<td>Mean 3.3</td>
<td>Mean 3.3</td>
</tr>
</tbody>
</table>

TABLE 2

ENGLISH STUDENT TEACHING GRADES OBTAINED BY STUDENTS IN
EXPERIMENTAL AND CONTROL GROUPS

<table>
<thead>
<tr>
<th>EXPERIMENTAL GROUP</th>
<th>Student</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades</td>
<td>3.5</td>
<td>4.0</td>
<td>4.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTROL GROUP</th>
<th>Student</th>
<th>AA</th>
<th>BB</th>
<th>CC</th>
<th>DD</th>
<th>EE</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades</td>
<td>3.5</td>
<td>3.5</td>
<td>4.0</td>
<td>3.0</td>
<td>2.5</td>
<td>3.3</td>
<td></td>
</tr>
</tbody>
</table>
Students in the control group were asked to do a Flanders Interaction Analysis on short segments of their tapes and to discuss the results of this tape with their college supervisors. A series of conferences was held with students of both the experimental and control groups. It was an almost unanimous opinion that video-taping gave students a better insight into their own shortcomings and strengths. This is reflected in such comments as "I really didn't get that across, did I?"; "I really blocked that board out!"; "Why didn't I follow through with a real evaluation?"; "I couldn't believe my Flander's chart--87% teacher talk; and that was supposed to have been a discussion." Most of the comments were prefaced by "I wouldn't have believed that if I hadn't seen it."

**Phase II:** Because of the excessive amounts of professorial time and efforts required, and because of the lack of complete applicability of college methods to high school problems, it was the consensus that attempting to adapt a college-level teaching model for use in the high school is inadvisable. However, the prospect of model-translation-discussion video-tapes as a tool in methods classes has immense potential. Well-prepared tapes from which a student teacher can draw ideas to try in his own classroom, followed by analysis of the results, could develop insights not usually available in a traditional student teacher-supervisor relationship.
CONCLUSIONS AND RECOMMENDATIONS

On the basis of the data obtained in this study and on the experience obtained by using the materials and techniques of the study, the following conclusions and recommendations are made:

1. The technical aspects of video-taping, at least for classroom tapes suitable for wide distribution, were beyond the capabilities of our institution. Technicians and professionals to produce a top-quality tape are almost nonexistent or at best overtaxed.

2. Use of video-taping for student teaching appears to be highly desirable, even if the values are not statistically verifiable. The availability of small 1/2" portable units which produce adequate, non-distribution video-tapes and require almost no technical assistance makes it possible for even small institutions to move into the field. For example, Knox College has purchased two 1/2" tape machines which are maintained by the audio-visual specialist. The quality of reproduction is sufficiently good for discussion purposes. Knox College now tapes all of its student teachers, with the college supervisor operating the equipment, as a routine procedure.

3. Smaller institutions can produce video-tapes of reproducible quality in a studio situation. However, there is some question as to whether or not the cost justifies
this type of activity.

4. The development of classroom models for teacher education has some potential for smaller institutions. However, the recommendation is made that these be purchased from larger institutions.

5. A corollary conclusion which is only incidentally related to the study is that video-taping activities by one department may rapidly spill over into the other areas of the institution. In our case, the expansion was so rapid that the college budget could not support it and outside funds had to be sought to carry a great deal of the cost. Fortunately, this activity is sufficiently dramatic that concerned organizations can be encouraged to support the program.