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ABSTRACT

Recent literature indicates that supervision at the secondary level in physical education has had little significant impact on the overall experience of a student teacher. Two factors contributing to these results have been the type of setting and the nontraining of the cooperating teacher. Recent studies have also shown through objective data that the effectiveness of the student teacher could be changed through various supervisory techniques. Thus, by incorporating the use of objective data, a trained supervisor could alter the experience of a student teacher towards effectiveness. Research in physical education teacher education has also supported the use of qualitative methods to enhance a student teaching experience. Therefore, a field study was conducted in which a trained public school cooperating teacher recorded the overall experience of supervising a student teacher, incorporated various observation methods, and used the data collected to positively change teacher effectiveness. Through the use of both quantitative and ethnographic techniques, the final result of this study could contribute to the current research on the supervision of student teachers and effective teaching. (Author/JD)

Improving Criterion Process Teaching Skills During Student Teaching

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INTRODUCTION

Recent literature indicated that supervision at the secondary level in physical education had little significant impact on the overall experience of a student teacher(Tannerhill, D. & Zakrajsek, D. ,1988). Two main areas effecting these results had been the type of setting and the non-training of the cooperating teacher. Recent studies also showed through objective data that the effectiveness of the student teacher could be changed through various supervisory techniques(Mosher and Purpel,1972; Paese,1984; Siedentop,1981). Therefore, by incorporating the use of objective data, a trained supervisor could alter the experience of a student teacher towards effectiveness. Research in physical education teacher education had also supported the use of qualitative methods to enhance a student teaching experience (Templin,1983). Thus, the purpose of this field study was for a trained public school cooperating teacher to record the overall experience of supervising a student teacher and to incorporate various observation methods and use that data to positively change teacher effectiveness. Using both quantitative and ethnographic techniques, the final result could contribute to the current research concerning the supervision of student teachers and effective teaching.

SUBJECTS AND SETTING

For this study, a twenty-four year old male student teacher from a medium size college in central Texas was observed for a thirteen week experience at a secondary high school in the Austin area. The assigned cooperating teacher was a male with eleven years of experience. The assignment involved two coeducational individual sports classes, each with 18-22 students. Class time was 55 minutes.

DATA COLLECTION AND OBSERVATION

A variety of techniques and instruments were incorporated by the supervisor throughout the student teaching experience. Quantitative data were obtained through use of the OSU observation system (Siedentop,1983). The public school cooperating teacher would first target a behavior, set a baseline, and then intervene. During the baseline phase the supervisor would record the targeted behavior while using the OSU recording system. The cooperating teacher would then discuss the results of the observed lesson and set maintenance or target goals.

Additional data were collected using ethnographic research techniques (Bogan, R. & Bilken,S., 1982). With varying degrees of detail, the cooperating teacher would record experiences of the student teacher during observation, conferences, and informal conversation.

Both qualitative and quantitative information was recorded and/or shared during 1) the daily conferences with goal setting, 2) weekly summaries(unit planning), 3) field notes, 4) public school cooperating teacher's weekly journal, and 5) the OSU observation instrument.

The student teacher observed the cooperating teacher during the first week of the assignment. The second week, the student teacher was allowed to assist in various aspects of the lesson and during the third week was assigned specific parts of each daily lesson. From the fourth week until the end of the experience, the stu-

dent teacher assumed the role of full time teacher and the responsibilities associated with that position. The formal observation instrument (OSU) was implemented at this time and explained prior to its use. Informal observation techniques were also incorporated.

Two psychometric instruments were also used to collect data on the student teacher's perceptions/feelings on teacher efficacy and teacher stress.

Definitions:

Teacher Efficacy- any teacher is severely limited by external or contextual factors such as student motivation, home environment and large social influences(Gibson & Dembo, 1984).

Personal Teacher Efficacy- teacher's personal perception that he/she possesses the skills and abilities to promote student achievement.

The Teacher Efficacy Scale(Gibson & Dembo, 1984) was used to measure teacher efficacy and personal teacher efficacy. The Teacher Stress Scale(Pettergrew & Wolf,1982) was used to measure three areas of teacher stress: role-related, environmental and task-based stress. Each instrument was given to the student teacher at the beginning of the experience, at mid-term, and during the last week of student teaching.

TARGET BEHAVIORS

THE OSU observation instrument provided data on managerial, activity, and instruction time. Targeted behaviors were to 1) decrease managerial time, specifically the beginning and ending managerial episodes, 2) decrease the length of managerial episodes, 3) increase activity time, and 4) use of the word "okay". Feedback statements were also targeted with efforts to increase specific corrective comments.

While using the instrument, as well as during informal observation and conference time, other targeted behaviors changed without the setting of a baseline were : 1) more frequent eye contact with class, 2) effective methods of class control(discipline), and 3) effective timing of lesson.

RESULTS

After one week of instruction, the student teacher was recorded fourteen times using the OSU observation method. The initial goal set through observation recording was the use of the word "okay" during instruction. The student teacher went from a baseline of 30 to an average of 7 after intervention. The goal of a 75% reduction was obtained and the idiosyncrasy became rarely evident in his speech pattern(Graph 1 goes here).

Although transitions during activities were efficient, the beginning and ending segments of each lesson were lengthy and awkward. This behavior increased average time per episode. A goal was set to decrease the first managerial episode by 25% initially and once achieved then another 25% decrease was set. Intervention occurred immediately due to the unnecessary time wasted in this area. The first managerial activities had a baseline of 7 minutes 52 seconds. After intervention the episodes averaged 4 minutes 54 seconds. One episode of 14 minutes 32 seconds was recorded raising the average. Without this situational episode the average time dropped to 3 minutes 42 seconds, a 47% decrease. A second intervention and a goal of a 10% decrease was set and obtained. The ending managerial episodes had a baseline established at 3 minutes 43 seconds. Similarly, a 25% goal was set and easily obtained with a 53% decrease. Another goal of 10% decrease was set after a second intervention. The goal was nearly met with a 6% reduction. The overall time per episode went from a high of 4 minutes 17 seconds to a low of 1 minute 2 seconds which leveled off at approximately 1 minute 40 seconds per episode. The number of management activities averaged out to 6.6 per lesson. The percentage of managerial time fluctuated with a high of 60% and a low of 11% and an overall decrease into the 20-25% range(Graph 2 goes here).

Activity percentages ranged from 25% to 79%. The goals set in this area concentrated on variety of activity as well as maintaining a high percentage time. Various units of instruction were more conducive to variety in activity during practice sessions.

Instructional percentages ranged from 0% to 66%. The low instructional percentages were due mainly to tournament play, practice sessions, or difficulty in recording the instructor's verbal commands.

Specific corrective feedbacks obtained a maximum of 27 with a steady increase as the experience progressed. A baseline of 0 was set. An intervention goal was set to increase feedbacks by 10 times the baseline. Initial results showed a 70% increase. A second intervention was needed to concentrate on this area. Goals were set to double the results and this was nearly accomplished. However, this area of recording resulted in the greatest degree of difficulty and therefore inconsistency(Graph 3 goes here).

The target behaviors of eye contact, dealing with disruptive behaviors, and timing of lesson (when to progress or retreat) were focused on as the situation dictated and as the cooperating teacher subjectively determined through informal observation. These particular behaviors were usually improved within a one week period , but maintenance was needed periodically.

The only area in the stress scale where there was a significant change was in the area of role overload from the beginning of student teaching to mid-term ($p<.03$). Role overload was reduced from mid-term to the final but not significantly. There was no significant change in role overload when comparing the beginning to the end of student teaching. There were no changes in any other areas of the stress scale(role ambiguity, role preparedness, job satisfaction, life satisfaction and illness symptoms). Personal Teacher Efficacy changed significantly in a positive direction from the beginning of student teaching to mid-term ($p<.01$) and then returned to initial levels by the end of student teaching. Teacher Efficacy did decrease, but not significantly ($p>.10$).

DISCUSSION

The results indicated that through a clinical model of supervision specific goals could be set to achieve direct progress in regards to teaching behavior through goal setting. Using the time-analysis observation, the student teacher was able to decrease the use of the word "okay" to unnoticeable levels, to decrease managerial activities by 8%, decrease the length of managerial episodes, decrease first managerial episodes by 5 minutes 45 seconds, maintain or increase activity or instructional percentages, and increase use of specific corrective feedbacks.

Although the results were not outstanding in some areas, the direction of progress was for the most part in the desired direction. The clinical model clearly showed that goal setting with the quantitative information led to positive teaching behavior change. Therefore, the public school cooperating teacher considered the study to be successful according to the initial purpose.

In using the time analysis observation tool, the cooperating teacher discovered a few areas that caused difficulty. The first and foremost problem was the recording of feedback statements during the lesson. The student teacher's low toned delivery, as well as the tendency to give individual instruction, made recording such instances nearly impossible without being in the immediate proximity. This positioning was not always possible nor convenient. The findings in this area therefore were inconsistent. An increase in specific corrective feedback was recorded (from 0 to 27 times), but the cooperating teacher had set goals in this area so particular focus on this variable was questionably biased. Another recording concern was found differentiating time sequences when instruction was being given during activity sessions. The decision to time instructional time (individual) during activity was confusing. Similarly, managerial episodes intermixed with instructional information became timing situations that may have been approximated.

The observation tool was not used on days during which testing, quizzes, assessment or tournament play occurred. The cooperating teacher subjectively decided that this type of information

would not be a true indicator for the types of goals which were being set. These particular lessons either had little to no instruction or activity time and would improperly represent the student teacher's efforts. Notice was made to particular activities or units that tended to create an environment which would lend itself to more appropriate results using this instrument. Also the timing of the observation immediately following a daily conference usually set the stage for a more effective lesson.

The cooperating teacher-student teacher relationship was strong and the results and implications of this instrument were discussed openly. Both the student teacher and cooperating teacher felt they were on course with the goals in relation to overall teacher effectiveness.

The qualitative information recorded by the cooperating teacher suggested the invaluable relational patterns established for open communication. The daily conferences were the key to establishing rapport, comfort and a productive, professional relationship. The conferences also provided clues (both verbal and non-verbal) as to what the student teacher felt he could handle. The cooperating teacher felt that once the lines of communication were established that the daily conferences were the most important part of the student teaching experience. By gradually introducing the student teacher into full teaching responsibilities, the following areas were covered as needed prior to complete class take over: student names and behaviors, class methods and procedures, grading and grade book procedures, lesson and unit planning, objective skill testing, a variety of discipline methods, assessment and subjective grading, voice fluctuation, equipment set-up and take down, and timing of lesson during the class period. The informal observations in conjunction with daily conferences provided immediate feedback. Therefore, as formal observations were introduced the quantitative data were subsequently well received. This progressional time period allowed for creativity, initiative, and comfort level. The cooperating teacher was challenged to provide the appropriate level of responsibility for the student teacher at the right time. The daily conferences provided the opportunity to interact with the student

teacher and discuss this progression. From the cooperating teacher's perspective, the student teacher seemed to respond favorably to any input and showed concern if specific feedback was not given. The use of general criticism became moot in light of direct correction and specific feedback. Areas of concern observed during both formal and informal observation were wordy explanations, adjustment to off-campus setting, managerial time, difficulty in performing without proper preparation, and rainy day lessons (specific to physical education).

Use of the stress scale determined a significant change in the area of role overload from the beginning of student teaching to mid-term. This increase could partially be due to the full teaching responsibility given to the student teacher during this time and the overwhelming responsibilities associated with that assignment.

The Personal Teacher Efficacy increased by mid-term which certainly seemed common for some student teachers as they assumed the initial control of the class and the expectation to produce. Subsequently, this level returned to its initial point at the end of the experience. Also teacher efficacy went down from the beginning to the end suggesting that outside factors hurt the teacher's effect. Student realization seemed to have effected this student teacher. The results indicated a somewhat low teacher efficacy, fairly good personal teacher efficacy and no stress. The student teacher appeared to approach teaching with a positive attitude thereby effecting the experience in a productive manner.

The overall experience was one of constant input, evaluation, and feedback. The necessary responsibility became automatic throughout the experience. The positive growth of the student teacher countered the necessary time commitment involved in this type of cooperating teacher study. The results supported the effort put forth in this much needed area of teacher education. Further study in this area is needed so student teachers in conjunction with trained cooperating teachers can be provided positive and informative experiences to prepare them for the teaching field. Recommendations to make effective use of video cameras to reinforce teaching behavior is suggested. Also further study on the im-

pact of daily conferences with various communication techniques toward teacher effectiveness is urged. Finally, study into the types of cooperating teacher versus student teacher personalities that provide for the best communication and subsequently the best experience is needed.

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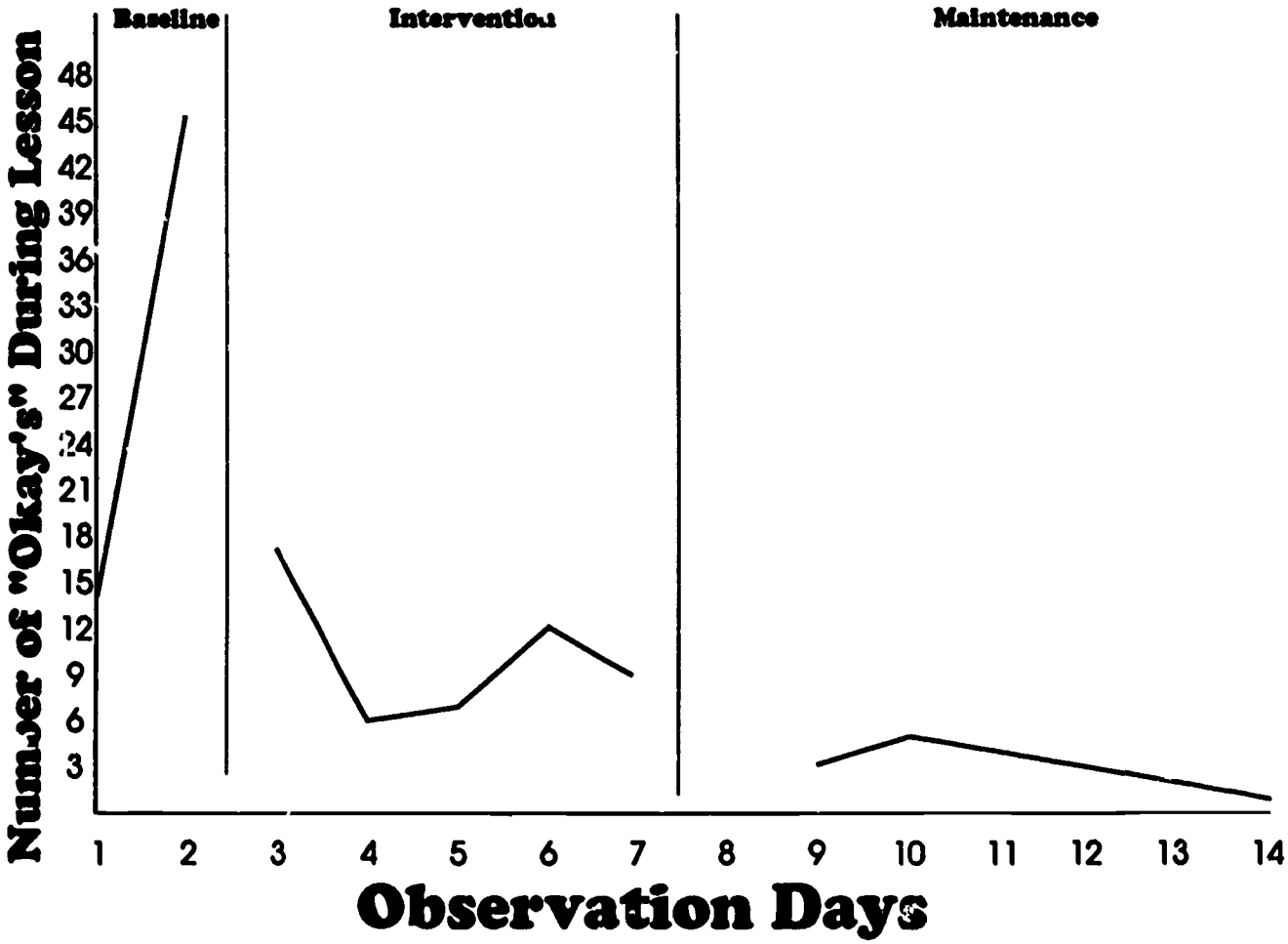
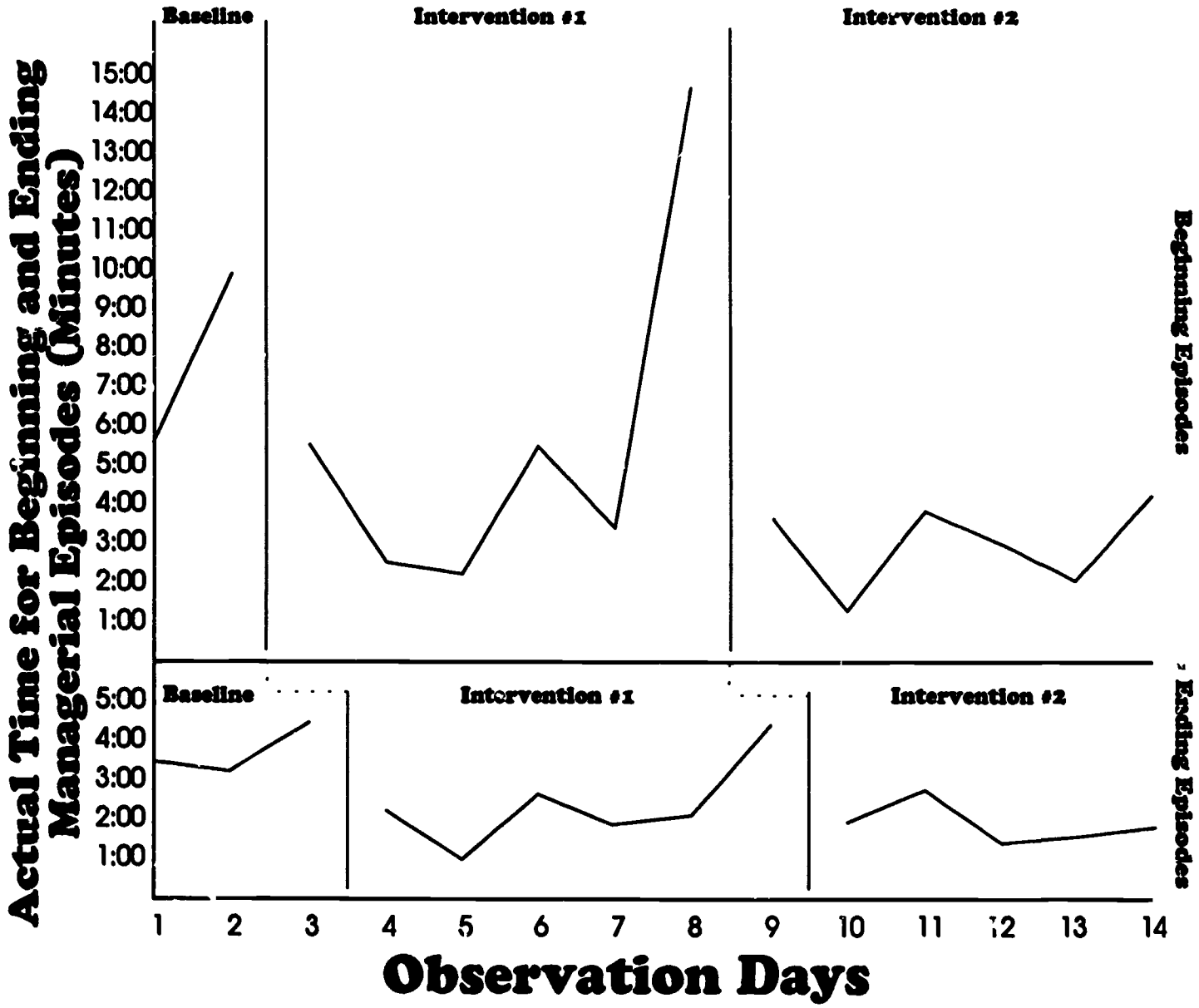
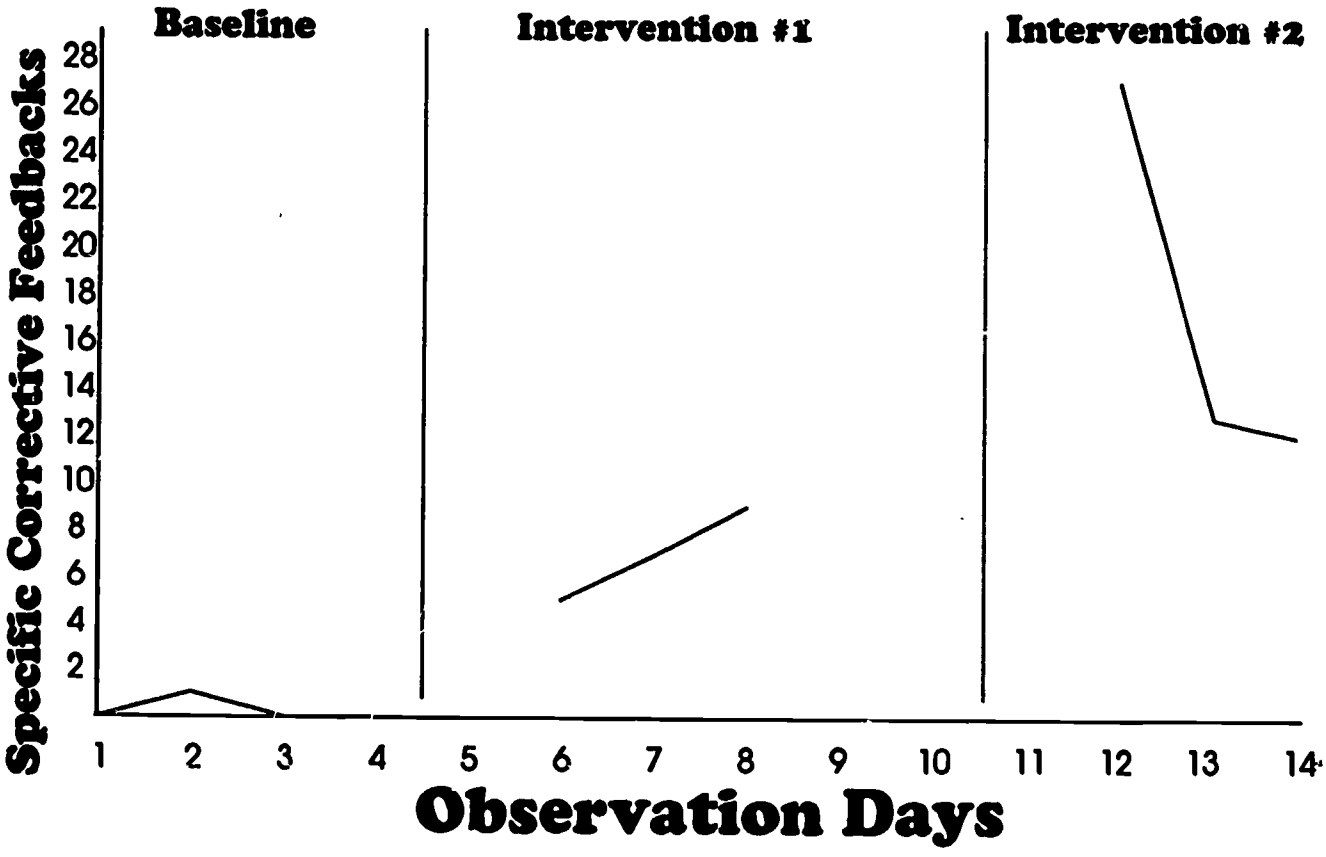
Graph #1


Baseline
Intervention
Maintenance
Number of "Okay's" During Lesson
48
45
42
39
36
33
30
27
24
21
18
15
12
9
6
3
1
2
3
4
5
6
7
8
9
10
11
12
13
14
Observation Days

Graph #2


Baseline
Intervention #1
Intervention #2
Actual Time for Beginning and Ending Managerial Episodes (Minutes)
15:00
14:00
13:00
12:00
11:00
10:00
9:00
8:00
7:00
6:00
5:00
4:00
3:00
2:00
1:00
Beginning Episodes
Baseline
Intervention #1
Intervention #2
5:00
4:00
3:00
2:00
1:00
Ending Episodes
1 2 3 4 5 6 7 8 9 10 11 12 13 14
Observation Days

Graph #3


Baseline
Intervention #1
Intervention #2
Specific Corrective Feedbacks
28
26
24
22
20
18
16
14
12
10
8
6
4
2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
Observation Days