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The Effects of a Self-Evaluation Package on the Presentation, Praise, and Error Correction Skills of Special Education Students

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THE EFFECTS OF A SELF-EVALUATION PACKAGE ON THE
PRESENTATION, PRAISE, AND ERROR CORRECTION SKILLS
OF SPECIAL EDUCATION TEACHERS

by

Patsy Ann Milligan

A thesis submitted in partial fulfillment
of the requirements for the degree
of

MASTER OF SCIENCE

in

Special Education

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ABSTRACT

The Effects of a Self-Evaluation Package on the
Presentation, Praise, and Error Correction Skills
of Special Education Teachers

by

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Utah State University, 2010

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Previous research has shown that various forms of self-evaluation improve teachers' instructional skills. Common among all studies reviewed is the importance of explicit pedagogy linked to improved student outcomes and clear instruction on how to self-assess. Both of these appear critical to sustained change in teachers' behaviors. In this study new teachers were provided initial didactic instruction to improve their presentation skills, praise rate, and error corrections. In addition, the effects of self-evaluation of targeted skills were assessed with one teacher. All three teachers mastered the targeted skills. Two teachers mastered the skills immediately following didactic instruction and practice in a coach's classroom, while one participant mastered the skills following self-evaluation, goal setting, and video. The results are examined relative to the available research. In addition, variables that might have contributed to the loss of experimental control are discussed. (67 pages)

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INTRODUCTION

In the No Child Left Behind Act of 2001 (NCLB), teacher quality is one of the most important factors identified to improve student achievement and eliminate achievement gaps. All students must be taught by highly qualified teachers (HQT) who hold at least a bachelor's degree, have obtained full State certification, and have demonstrated knowledge in the core academic subjects they teach (<http://www.ed.gov/policy/elsec/guid/secletter/051021.html>).

The Individuals with Disabilities Education Act (2004) supports NCLB specifying special education teachers must be highly qualified; meeting the same requirements indicated in NCLB (<http://www.ed.gov>). While the No Child Left Behind Act (2001) and the Individuals with Disabilities Act (2004) address content expertise, neither piece of legislation addresses the pedagogical skill needed to teach students that content. This is particularly important for students with disabilities who often require specialized instruction to reach their potential. The argument of pedagogy versus content in relation to student improvement is not new. Hindman and Polsgrove (1988) argue “*how* one teaches is as important as *what* one teaches.” They, as well as others, suggest that specific, observable instructional behaviors are important contributors to student achievement (Blackhurst & Hofmeister, 1980; Menges, 1975; Redden & Blackhurst, 1978; Welch & Kukic, 1988; Ysseldyke & Algozzine, 1982). These critical behaviors include teacher presentation skills such as cueing a student to respond, pausing until a teacher makes a signal, and signaling a student to respond; praising students for correct responses; and correcting student errors.

The purpose of this study was to examine the effects of didactic instruction, self-evaluation and goal setting on the instructional skills of licensed early career teachers.

Specifically, the following research questions were addressed.

1. To what extent does didactic instruction increase the percentage of a teacher's correct presentation skills in a special education setting?
2. To what extent does didactic instruction increase the rate of teacher's praise in a special education setting?
3. To what extent does didactic instruction increase the percentage of correct teacher correction skills in a special education setting?
4. To what extent does self-evaluation and goal setting increase the percentage of a teacher's correct presentation skills in a special education setting?
5. To what extent does self-evaluation and goal setting increase the rate of teacher's praise in a special education setting?
6. To what extent does self-evaluation and goal setting increase the percentage of correct teacher correction skills in a special education setting?
7. If teacher's correct presentation skill performance is below criterion after self-evaluation and goal setting, to what extent does the addition of videotape feedback increase the percentage of correct presentation skills to criterion levels?
8. If teacher's praise rate is below criterion after self-evaluation and goal setting, to what extent does the addition of videotape feedback increase the rate of teacher's praise to criterion levels?

9. If teacher's correction skills are below criterion after self-evaluation to what extent does the addition of videotape increase the percentage of correct teacher correction skills to criterion levels?

REVIEW OF LITERATURE

The implementation of No Child Left Behind (<http://www.ed.gov/policy/elsec/guid/secletter/051021.html>) mandates teachers become highly qualified in content areas, but there is a connection between the way teachers teach and what students learn.

Changing the pedagogical skills of teachers will improve student learning (Guskey, 1997; McBride, Reed, & Dollar, 1994). To improve their skills teachers require feedback and eventually should learn how to evaluate their own teaching. This review of literature will focus on research in relation to self-evaluation and goal setting as it applies to improving teacher's instructional skills.

“Good teaching demands continuous attention to problems of teacher self-evaluation and its goal – teacher self-improvement” (Crim, 1974). Unfortunately many new teachers, and veteran teachers alike, are unaware of their effectiveness/ineffectiveness in the classroom (Freiberg & Waxman, 1988). To improve one's teaching continuously, the perception of one's behavior must change. Self-perception of behavior needs to come into congruence with their conceptions of their ideal behavior (Irvine, 1983). The goal of self-reflection is to assist teachers to think cognitively about their actions. It is meant to move teachers beyond impulse, intuition and routine, and enable them to critically analyze their own teaching behaviors (Kukanauza de Mazeiko, 2001). Video recording instructional interactions and viewing them with a peer or supervisor can help develop the skills needed to critically analyze one's teaching. In a review of literature, Fuller and Manning (1973) found that change required individuals to identify a discrepancy between their view of reality and an

observer's view of reality. Further, Fuller and Manning suggest that teachers need to learn how to systematically observe their teaching to improve their skills.

Ribich (1974) conducted a self-evaluation study with 30 elementary and secondary education graduate students and examined whether a workshop on self-evaluation would improve participant's self-perception of teaching performance; a panel of experts' perception of teaching performance; and how well the participants and the panel of experts agreed on their perceptions. Participants self-evaluated videotapes of their teaching on three occasions using the Teacher Performance Appraisal Scale (Johnson, 1969). In addition, a panel of experts evaluated videotapes of teachers' instruction using the Teacher Performance Evaluation Scale. An agreement score was calculated to measure the congruence between the individual's score and the panel's score. Participants were randomly distributed into three groups. Group 1 did not receive any augmented feedback and served as the control group. Group 2 received augmented feedback in the form of a transcript which showed how well each participant in the group agreed with the panel of experts about their performance. Group 3 received augmented feedback in the form of a transcript plus oral feedback via participation in a group supervisory conference. The results were measured using pretest/posttest scores. While all participants' agreement scores significantly increased from pretest to posttest, there was no significant difference between groups suggesting that feedback in addition to viewing videotapes had more effect on participants' self-evaluation scores. In sum, the authors suggest that video observations can be a powerful tool for developing self-evaluation skills, but it is not clear if additional written or verbal feedback enhance

participants' self-evaluation. Importantly, this study focused on self-evaluation, and did not provide participants with directions for improving skills. It is entirely possible that if participants were provided didactic instruction on desired teaching behaviors that feedback in addition to video self-evaluation would have a differential effect on participant performance.

Ahuja (1999) examined the effects of structured peer coaching (SC), self-devised peer coaching (SD) and self-evaluation (SE) on elementary teachers' teaching behaviors. Eleven participants in an elementary reading multidisciplinary setting were separated into three groups: one coach and four teachers in the first two groups and three teachers in the last group. This study had three dependent variables and three independent variables. The dependent variables were teacher presentation behaviors, error correction behaviors, and student correct responses. The independent variables were the evaluation procedures; structured observation and feedback/evaluation by a peer coach (SC), self-devised observation and feedback/evaluation by a peer coach (SD), and structured self-evaluation by teachers (SE). The coach in the first group (SC) utilized two forms to evaluate teacher behaviors and student responses, one published by Marchand-Martella, Lignugaris/Kraft, and Pettigrew, (1991) and the other from Miller (1994). The teachers in the third group (SE group) also used these two forms and evaluated themselves by viewing recorded video of their teaching sessions. The coach in the second group (SD) devised a form to evaluate teachers. The teachers in the coaching groups did not view the recorded video sessions of themselves; however, the coaches observed the videoed sessions to expedite feedback during post conference sessions.

Results from this study show that participants in the SE group demonstrated the highest percentage of correct teacher behaviors during the two instructional phases. They also maintained these behaviors during the final test phase. In contrast, only two of the three members of the SD group reached criterion level for the target behaviors during the two instructional phases and also maintained their skills during phase four. Similarly, only one participant in the SC group reached criterion level behaviors, but did not maintain the targeted behavior during phase four. The other two participants in the SC group did not reach criterion level performance during baseline for one and phase two for the other. Ajuha's results demonstrate the strength of self-evaluation when coupled with video recording.

While Ahuja (1999) examined the effects of a self-evaluation intervention package on teachers' instructional skills, Kitsantas and Baylor (2001) studied the effects of self-evaluation on teachers' instructional planning. Using the Instructional Planning Self-Reflective Tool (IPSRT), Kitsantas and Baylor examined pre-service teachers' performance, disposition and self-efficacy beliefs on systematic instructional planning. Eighty six undergraduate pre-service teachers were divided into a control group and experimental group. Both groups received training on instructional planning, but only the experimental group received further instruction on how to self-evaluate their instructional planning using the IPSRT. While experimental group participants created lesson plan units as directed through case studies, they answered questions on the IPSRT that facilitated a reflection of their lesson plan. It enabled the students to assess their lesson plan unit as they were writing them. Both the experimental and control participants were

given a pretest, wrote an instructional plan for an in-class case study and a homework case study, and a posttest case study. The experimental group had the IPSRT attached to the in-class, homework, and posttest case studies, but not attached to the pretest. On the posttest the experimental group ($M = 11.72$) outperformed the control group ($M = 9.32$). Following the introduction of the IPRST, the control group performed better; improving their mean score by 12% ($M = 10.46$). A t test was performed to determine if there were differences between the two groups' attitude toward instructional planning. While there were no differences on the pretest, following the intervention, the differences between the two groups were statistically significant. The participants in the control group were slightly negative ($M = -.094$) toward instructional planning, whereas the experimental group was more positive ($M = .41$). Finally, the researchers examined the experimental participants' self-efficacy beliefs before and after the IPSRT intervention, and found no significant differences. In sum, the results indicated that the self-reflective tool improved pre-service teachers' performance and attitude regarding instructional planning, but did not impact their self-efficacy.

Another form of self-assessment is self-monitoring through the use of vibrating pagers. Petscher and Bailey (2006) conducted a study on self-monitoring of instructional assistants' behavior in a classroom for students with disabilities. Three female instructional assistants were measured managing disruptions, delivering bonus points and prompting appropriate behavior. After participants demonstrated low scores across all three behaviors during baseline, and initial training on the intervention tactics, participants used a pager to signal an opportunity to engage in the targeted skills. During

10 minute sessions, the observer activated the pager through a remote control, indicating to the participant an opportunity to perform each dependent variable at differing times throughout the study. In addition, participants completed a self-monitoring form at the end of each session. The focus of self-monitoring was on teachers' evaluation of how accurate they were delivering or removing points, how frequently they directed students to add points for positive behavior, and how frequently they provided positive directions to students. Participant's responses on the self-monitoring form were compared to an observers form to measure the agreement between participant and observer. After participants responded appropriately to prompts 100% of the time and recorded responses correctly 100% of the time for three consecutive sessions, the pager was removed and participants only self-monitored their behavior. During the maintenance phase the duration of each session expanded from 10 minutes to 60 minutes.

During baseline, all three participants never managed disruptions, and during initial training participants managed disruptions on less than 76% of the opportunities across 13 sessions. When the prompt plus self-monitoring was implemented, two of three participants scored 100 percent for managing behaviors during each session, and one participant scored 100% on two of three sessions. When the pager was removed, each participant scored 100% across all sessions for managing behavior.

For delivering bonus points, the participant's goal was to provide bonus points on at least one occasion during a session. During baseline and initial training, participants never delivered bonus points. During the pager and self-monitoring intervention, Participant 1 delivered up to 5 bonus points, and participants 2 and 3 delivered up to 8

bonus points and 5 bonus points, respectively. During the self-monitoring only condition, the variability in bonus point delivery increased for two of three participants. Participant 2 did not deliver any points once in eight sessions and participant 3 did not deliver bonus points in four of nine sessions.

For prompting appropriate behavior, participants 1 and 2 prompted on less than 40% of the opportunities during baseline and participant 3 never prompted appropriate behavior. During initial training and the pager plus self-monitoring intervention, participants' performance showed slow improvement. When self-monitoring alone was implemented participants 1 and 2 prompted appropriate behavior on 100% of the opportunities across all sessions and participant 3 prompted appropriate behavior on all sessions except one.

During the maintenance phase participant performance on all behaviors was inconsistent. During this phase the observation time increased from 10 minutes to 60 minutes and it is possible that the increased variability in performance is a product of the extended observation period. That is, the self-monitoring procedure alone maintained the behavior for a short period but lost effectiveness over longer time periods. Further research is needed to address the effectiveness of self-monitoring over time without the use of a tactile prompt.

Wright (1998) reported that research on self-evaluation has focused on changes in teachers' perceptions and attitudes rather than reporting changes in teacher behavior. She conducted a study utilizing videotape for teachers as a self-assessment tool. Fifty-one pre-school teachers employed in Head Start Centers in Florida, Mississippi, and Alabama

participated in this study. The measure was frequency of specific and general praise per 5-minute observation segment. A self-evaluation package including observation skills training, self-monitoring, and goal setting served as the treatment. Two experimental groups received training to define and discriminate general and specific praise behaviors, record frequency data, evaluate their performance against a standard and write goals. One objective of this study was to investigate the effect of video-based self-evaluation on teacher behavior, so teachers were videotaped each session, but watched these tapes at differing times. Another objective investigated was the timing of feedback. The immediate self-evaluation experimental group watched their tape immediately after the teaching session. The delayed self-evaluation experimental group watched their taped session immediately prior to the next taped session. Before viewing their taped session teachers completed a questionnaire pertaining to perceptions of their taped session. They completed this same questionnaire after viewing the taped session. A control group was video-taped, but did not receive training nor viewed the taped sessions. Table 1 shows the mean scores between groups and during the recorded session.

The mean frequency of general praise by the delayed group increased from the first observation to the third observation by 3.38 praise statements per 5-minute observation period. The group's mean increase in specific praise frequency was .75 specific praise statements per 5-minute observation period from the first observation to the third observation. For the immediate feedback group the mean increase in general praise was 5.35 general praise statements from the first observation to the third

Table 1

Frequency of Praise by Groups and Time

| Group | Mean | Praise Statements | | Group | Mean |
|----------------|-------|-------------------|------|---------|-------|
| | | Group | Mean | | |
| <i>Delayed</i> | | Immediate | | Control | |
| Day 1 | | Day 1 | | Day 1 | |
| General | 2.43 | | 2.47 | | 1.94 |
| Specific | 0.125 | | 1.47 | | 0.411 |
| Day 2 | | Day 2 | | Day 2 | |
| General | 5.18 | | 4.17 | | 2.35 |
| Specific | 0.875 | | 1.11 | | 0.176 |
| Day 3 | | Day 3 | | Day 3 | |
| General | 5.81 | | 7.82 | | 2.00 |
| Specific | 0.875 | | 1.82 | | 0.235 |

observation. The specific praise increase was .35 specific praise statements per 5-minute period from the first observation to the third observation. The control group decreased their praise by -.17 statements from the first observation to the third observation. The data indicates the largest increase in praise came between day 1 and day 2 when the training package was implemented. The timing of self-evaluation was only marginally related to the teachers' behavior at the subsequent taping even though the teachers in the immediate group did increase their praise statements more than the teachers in the delayed group after self-evaluation.

One of the author's objectives was to examine the effect of video based self-evaluation. Each session included videotape making it difficult to determine if video independently affected teachers' behavior verses being part of the whole treatment

package. It can also be questioned whether or not praise would increase if the self-evaluation component of the package was removed. Changes within the study and more sessions are needed to determine the strongest factor in determining the most significant change agent in teaching behaviors; video-training or self-evaluation.

Reamer (1995) investigated the effects of a combination of self-modeling and self-assessment video package on the increase of instructional skills and the decrease of inappropriate teacher behaviors on three para-educators of children with developmental delays. Unlike Wright's study, Reamer used video and prompted self-assessment as the focus of the intervention. The setting was a large suburban school district in a resource classroom for one participant, a general education classroom for another participant and early childhood classroom for the last participant. Each participant worked with an elementary aged child. The targeted teaching skills for two participants were the same: (1) percentage of steps correct in the task analysis of offering choices to the student, (2) rate of responses per minute of positive student feedback, and (3) rate of student prompts per minute. The targeted inappropriate teaching behaviors were also the same for these participants; (1) rate of negative responses delivered to the student and (2) rate of responses per minute of tasks completed by the para-educator. The targeted teaching skill for the participant in the general education classroom was duration of wait time between her instruction and the student's response instead of rate of positive feedback statements per minute. The negative teaching behavior for this participant was the rate of responses per minute of commands given without the student's attention. During the intervention phase each participant watched four spliced 30 second video vignettes taken

during baseline. The sequence of video segments included in each vignette was: (a) the para-educator delivering a targeted skill, (b) the para-educator displaying a targeted inappropriate behavior, and (c) two segments with the para-educator delivering a targeted skill. After each vignette the trainer asked the participant to describe the behaviors they witnessed themselves doing in the video. If the participant could not identify her behaviors then the trainer modeled the response and repeated the process on the next vignette. During baseline the first participant's rate of positive feedback was zero. During intervention she increased the amount of positive feedback to an average rate of .467 statements per minute (range: .083 to .666 statements). During the withdrawal phase the rate of positive feedback ranged from .363 to .625 statements with a mean of .468 statements per minute. The first participant's frequency of prompts given to students increased from a baseline mean of .231 prompts per minute to an intervention mean of .655 prompts per minute. During withdrawal her mean rate was .679 prompts per minute. Her response to opportunities for choices in the task analyses was 0 during baseline. During intervention her percentage correct increased and remained at 100% on four of the six days. During withdrawal she maintained her accuracy, averaging 100% correct choices provided during task analysis steps. The results for inappropriate teacher behaviors were positive for this participant as well. During baseline she delivered an average of .428 negative statements per minute with a range of .307 to .555 negative statements per minute. Her rate per minute for completing tasks for the student averaged .459 tasks (range .285 to .555). During intervention she decreased her negative statements to an average of .041 statements per minute and her completion of tasks for

the student to an average of .051 per minute. After withdrawal of the intervention she decreased both behaviors to 0.

The second participant's instructional skills included increasing wait time, delivering prompts, and offering choices. During baseline, her wait time averaged 1.35 seconds. After intervention her wait time increased to an average of 7.78 seconds. Upon withdrawal her wait time continued to increase averaging 8.44 seconds. Her student prompt rate averaged .547 during baseline and increased to .685 during intervention. After withdrawal of the intervention, her response prompts averaged .812. During baseline, the second participant had no occasions when choices were provided at appropriate opportunities during task analysis. When the intervention phase was implemented her percentage of choices offered increased to an average of 94%. During withdrawal her average percentage of choices offered was 88%. The second participant's inappropriate teaching behaviors were completing tasks for students and giving commands without the student's attention. Her rate of completing the task for the student averaged .434 tasks per minute during baseline and decreased to an average of .168 tasks per minute during the intervention phase. After withdrawal of the intervention she averaged .166 tasks per minute. During baseline she did not get the student's attention prior to giving an average of .859 times per minute. After intervention she did not get the student's attention prior to giving an average of .160 times per minute. During the withdrawal phase she never gave commands without the student's attention.

The instructional skills targeted for increase for the third participant were positive feedback, delivering prompts and offering choices. Her rate for delivering positive

reinforcement showed variability ranging from 0.0 to .714 statements per minute ($M = .245$). Her rate increased to 1.04 statements per minute, ranging from 1.0 to 1.571 statements. During the withdrawal phase her positive feedback averaged 1.25 statements. Her rate of prompts given to the student increased from baseline ($M = .367$ per minute) to intervention ($M = 1.02$ per minute). After withdrawal of the intervention she maintained an average of 1.25 prompts per minute. Her response to the task analyses for choices averaged 10% during baseline. During intervention she reached 100% each day and during withdrawal she remained at 100% for the three probes. The third participant's behaviors to decrease were completing tasks for the student and negative responses to the student. Her rate of completing tasks for the student was .929 tasks per minute during baseline. She decreased her rate to an average of .108 tasks per minute during the intervention phase and remained just as low during withdrawal. The second participant's rate of delivering negative responses to the student averaged .371 statements per minute during baseline, decreased to an average of .040 statements per minute during intervention and rose to an average of .142 statements per minute during withdrawal.

The withdrawal phase within this study indicates maintained improvement. With the use of self-modeling and self-evaluation via videotape improvement maintained in various areas for each participant in a rather quick amount of time. One question that remains is whether the participants will maintain their teaching skills two or three months after withdrawal.

SUMMARY

There is limited research on teacher self-evaluation of their instructional skills. The available research, however suggests that self-evaluation may be a powerful intervention that will result in acquisition and maintenance of targeted teaching skills. Ribich (1974) examined whether teachers can accurately assess their performance compared to an expert's view of the same performance. He demonstrated that indeed teachers can evaluate themselves accurately. Ahuja extended self-evaluation to teacher presentation skills and error correction skills. His study indicated that teacher's behavior improves more with structured self-evaluation than with peer feedback. Kitsantis and Baylor (2001) showed that using a tool to assess instructional planning improved participant's performance and attitude. Reamer (1995) and Wright (1998) both focused on teacher and para-educators' skills with behavioral feedback and behavioral teaching skills. Both studies resulted in positive outcomes, especially when treatment phases were removed.

Self-evaluation when combined with other interventions such as the Teacher Performance Appraisal Scale (Johnson, 1969), a Direct Instruction research based formal observation form (Marchand-Martella et al., 1991), the Instructional Planning Self-Reflective Tool (Baylor, Kitsantas, & Chung, 2001), vibrating tactile prompts, or didactic instruction and videotape appears to produce improvements in targeted instructional and planning skills.

It is not clear if these skills will be maintained over time or if skills self-monitored during shorter sessions will be maintained over longer instructional sessions.

Common among all the studies reviewed is the importance of explicit pedagogy linked to improved student outcomes and clear instruction on how to self-assess. Both of these appear critical to sustained change in teacher's behaviors.

The current study will examine teachers' abilities to make accurate self-assessments regarding their delivery of explicit instructional skills.

METHODS

Participants

Three secondary special education teachers ranging from 53 to 67 years old participated in this research. Participants qualified if they (1) did not use or inconsistently used, attention cues, pauses prior to requesting responses and response signals during instructional presentation; (2) praised students less than 2 times per minute; and (3) rarely completed error corrections following student errors. In addition participants signed an informed consent form indicating their willingness to participate in the study.

KG had been teaching students with disabilities for three years and had 20 years previous experience in education in various positions. Prior to this study she used *Decoding For All Ages* (Hofmeister, 2003) in her classroom. SH was in education for 25 years; 18 years as a teacher in special education and 7 years as a general educator. Prior to this study she used *Glass Analysis for Decoding Only* (Glass & Glass, 1976), in her classroom. DH had been teaching special education for three years. Prior to this study he used *Decoding For All Ages* (Hofmeister, 2003) in his classroom.

Setting

All observations within this study took place in secondary special education reading courses in a local school district. Each classroom consisted of 12 to 15 students with mixed learning or behavioral disabilities, gender and ages between 12 and 15 years. Participants generally taught reading to all students at the same time.

Materials

Participants implemented Decoding for All Ages (Hofmeister, 2003). Decoding for All Ages is a program that covers phonemic awareness, decoding, spelling, fluency, and comprehension. The program starts with phonemic awareness of the basic alphabet and 22 consonant/vowel and vowel/vowel combinations. It then leads students in to a three part lesson with sound identification, decoding simple words, word meaning, and spelling. Each lesson builds on the previous lesson including review.

Measure

The primary measure was participants' instructional presentation skills, praise and error correction skills. Presentation skills included an attention prompt, a cue or direction to respond, a pause, and a signal to respond. Praise included general and specific complementary statements following appropriate behavior and academic responding. Participants' skill was evaluated on signal error corrections and response error corrections. Signal error corrections were defined as corrections made when individual students or a group of students did not respond to the signal or together after the signal was presented. Response error corrections were defined as corrections made when individual students or a group of students responded incorrectly. Detailed definitions for each component of presentation, praise and error correction are provided in Appendix A. An observer watched participants teach and completed two forms. The first was the data collection Observation Form (see Appendix C). The observer collected data during three separate timed sessions on Teacher Presentation, Praise Statements, and Error Correction

Procedures. During two 1-minute sessions of Teacher Presentation, the observer tallied the number of effective cues, pauses and signals. If an incorrect cue, pause or signal was made, the observer notated that as well. Percentages were calculated for effective cues, pauses and signals. The observer then conducted a 1-minute timing and tallied the number of general and specific praise statements. During the last timed session the observer tallied the number of errors effectively addressed and the number of errors missed or ignored within 5 minutes. Again the observer calculated the percent of errors appropriately corrected and percent of errors missed or ignored.

The second form is the participant's Self-Evaluation Checklist (see Appendix C). The self-evaluation checklist is a summary of the component skills performed by the participant according to his/her observation. Participants circled the percentage (when given a set of four intervals to choose from) of mastery they felt they demonstrated for cues, pauses, and signals during the current day's teaching session. Participants also identified the amount of praise statements they felt they made during the same session and the percentage of time they corrected errors effectively. The checklist provided an opportunity for participants to state whether they met their target goal and to set a new goal for the next session.

Observer Training

A second observer was trained to collect reliability data. The observer was provided the definition, and discussed how to implement each component skill on the checklist. She then watched a videotape of a teacher modeling a lesson from Decoding for all Ages three times. Each time the observer independently completed a checklist on

one component skill: (1) presentation, (2) praise, and (3) error correction. After each segment, the observer compared scores with the primary observer and a discussion ensued to answer questions and clarify misunderstandings. The reliability observer was asked to watch a fourth videotape segment and observed all three skills in one sitting. Again, she compared scores with the primary observer. Videotape observations continued until both observers had 85% or higher agreement for three consecutive opportunities.

Design

Participants' instructional skills were evaluated using a withdrawal design that includes a baseline, didactic instruction and self-evaluation plus goal setting condition. If participants did not meet a criterion of 90% correct on each targeted teaching behavior then a video condition and, if necessary, a video plus coaching condition was implemented. After participants met criterion performance in an intervention condition, then the baseline condition was reinstated. When performance levels decrease on targeted skills then the intervention sequence was reinstated. Each experimental condition is described below.

Baseline

Participants were observed teaching their reading group for a minimum of 2 days. Didactic instruction began when participants' performance was below the criteria of 90% on the observation checklist. KG and DH were observed implementing the Decoding for All Ages program (see Appendix B). SH was observed using the Glass Analysis for

Decoding Only (Glass & Glass, 1976). This program included word lists that were similar to those required in the Decoding for all Ages Program.

Didactic Instruction

At the beginning of didactic instruction participants were presented the instructional formats for sounds, words, spelling words and reading sentences used in the Decoding for All Ages program (see Appendix B). Next, participants were presented with a power point presentation defining and explaining teacher presentation, student response rate, teacher praise rate and corrective feedback procedures (Appendix B). During instruction on each individual skill (teacher presentation, teacher praise rate and error correction), the trainer defined and modeled each skill several times using the participants as “students.” Participants then practiced each component skill in isolation with each other and a coach. During didactic instruction the coach first observed teachers cues, pauses, and signals during two 1-minute timings. The coach addressed student response rate and praise rate after participants demonstrated an average of 80% correct presentation skills across the two 1-minute observations.

When observing praise rate, the coach tallied the number of general and specific praise the participant used. They calculated the number of praise statements per minute and a percentage of general and specific praise used. The coach addressed error correction after participants demonstrated more than four praise statements per minute on two 1-minute observations.

The last practice session covered error correction procedures. When playing the part of the “student,” participants were asked to make a variety of errors to present

opportunities for practice. The coach tallied the number of errors addressed effectively and the number of errors addressed incorrectly or not addressed. They calculated the number of effective error corrections divided by the number of opportunities to address. Participants observed the coach modeling Decoding for All Ages and the direct teaching strategies in her classroom with her students on a day separate from the initial training. If participants' teacher presentation and error correction skills were not at 80% after the opportunities to practice during didactic instruction, they received further opportunities to practice after observing the coach model instruction. Within a week, or when time permits, the participants returned to the coach's classroom and delivered a lesson out of Decoding for All Ages to the coach's students. If participants did not reach 80% mastery on component skills, they again had an opportunity to practice after delivering a lesson in a master teacher's classroom. After participants completed didactic instruction they were observed in their classrooms for a minimum of 3 days using the same procedure employed during baseline. If during observations participant's teacher presentation performance or error correction procedures were below 90% and not trending up then they began the self-evaluation and goal setting condition.

Self-Evaluation and Goal Setting

If participants did not meet targeted performance levels for each skill, they completed a self-evaluation and goal setting form (see Appendix C) immediately after each session. To complete the self-evaluation checklist the participant estimated the percentage of correct cues, pauses, and signals and the percent of student errors they corrected effectively. For the number of praise statements, participants were provided a

choice of praise rate intervals (e.g., 1-2, 2-3, 3-4, 4 or more; see Appendix C). At the end of the checklist participants stated whether they met their previously targeted goal, and defined a new target goal if necessary. Training participants to use the self-evaluation checklist occurred prior to the first session in which the participant used the checklist. At the end of the week participants gave their videotape and checklist to the observer. The observer viewed the videotape and completed a self-evaluation data collection form (see Appendix C). The observer then independently completed a self-evaluation checklist based on the data collected during the observation, prior to viewing the participant's checklist. The observer compared her data to that of the participant's data. She highlighted the range in which her data fell for each section on the participant's self-evaluation data collection form. If the participant was meeting criterion teaching behaviors after three sessions, and the participant/observer did not agree upon the data within teacher presentation, praise statements and error corrections, then self-evaluation and goal setting continued until the participant/observer agreed upon percentage of teacher behavior, number of praise statements, and percentage of errors corrected. If the participant was not meeting criterion teaching behaviors after three sessions, regardless of the participant/observer matching score, then the participant entered the self-evaluation, goal setting, and video condition.

Self-Evaluation, Goal Setting, and Video

During this condition participants watched their teaching video alone, completed a self-evaluation checklist, evaluated whether he met previously set goals and identified new performance goals. Participants then gave the video and completed self-evaluation

checklist to the observer who completed an independent evaluation using the same process as used during the Self-Evaluation and Goal setting condition. Similar to previous conditions, a percentage was obtained between the participant's Self-Evaluation Checklist and the observers rating on the checklist. If the participant's score met criteria for three sessions, then the self-evaluation, goal setting and video condition was withdrawn. If participants did not meet criterion during the self-evaluation, goal setting and video condition, then the self-evaluation with goal setting, plus video with coaching condition, was implemented.

Reliability

During the course of the study, a second observer independently watched one of the video sessions for each phase and each participant and completed an observation form. Interobserver agreement for each reliability observation was calculated on the frequencies recorded for each targeted teaching skill by dividing the smaller frequency by the larger frequency and multiplying by 100. Reliability checks were completed on 20% of observations across conditions and were above 90% agreement.

RESULTS

Closing the achievement gap for students with disabilities requires improving teachers' pedagogical skills. Some of these skills include teacher presentation, praising student responses, and correcting student errors. The purpose of this study was to evaluate the effectiveness of didactic training, self-evaluation, and goal setting on these critical pedagogical skills.

Teacher Presentation

Teacher presentation consisted of three parts: cue, pause and signal. Each behavior was measured as opportunities executed correctly per minute over two minutes and recorded as a percentage. Participants had the same number of opportunities to cue as they did to pause and signal during individual trials. Data for teacher presentation across participants is presented in Figure 1.

During sessions 1 and 2, KG did not cue, pause or signal correctly on any trial. On the third session, after didactic instruction, KG demonstrated effective cues, pauses and signals on 8% of the opportunities. Following didactic instruction KG demonstrated and maintained 100% correct cues, pauses and signals for the remainder of the study.

SH's results were much the same as KG's. During baseline she did not demonstrate effective use of cues, pauses or signals. Once didactic instruction was presented she demonstrated appropriate use of teacher presentation skills across all sessions. Neither KG or SH required further intervention for teacher presentation skills.

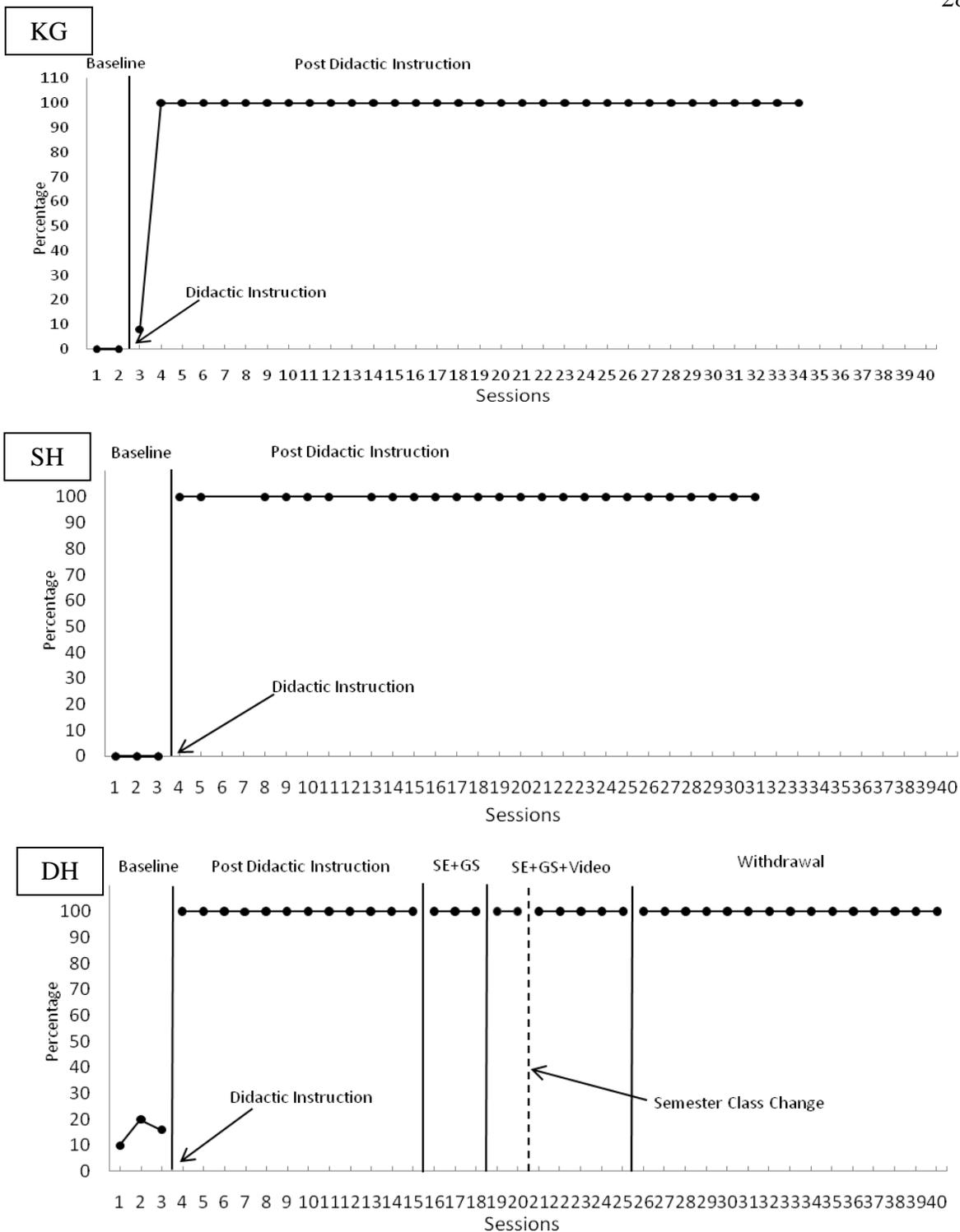


Figure 1. Teacher’s presentation skills.

DH's data shows the highest percentage of effective Teacher Presentation skills of all three participants during baseline. On the first session he had 40 opportunities to demonstrate effective cues, pauses and signals and did so with 10% accuracy. He had 15 opportunities the next session and improved to 20% of effective behaviors. He dropped to 16% during the third session with 18 opportunities to respond. Similar to KG and SH, DH demonstrated 100% effective cues, pauses, and signals on all sessions after didactic instruction.

Praise

Praise rates were measured using a frequency count per minute. Four praise statements per minute were set as criterion, and statements were counted over a two minute period. Data for praise rates across participants are presented in Figure 2.

During baseline, KG's praise rate averaged 2.5 praise statements per minute. Following didactic instruction, KG's average praise rate was 8.7 statements per minute with a range from 4 to 11 statements per minute. KG showed variability in her praise statements; however, she consistently met the criterion level of four praise statements per minute following didactic instruction.

SH averaged 2.6 praise statements per minute during baseline. Once didactic instruction occurred she averaged seven praise statements per minute. SH's highest frequency of praise statements was 10.5 statements per minute and her lowest four statements per minute. Her praise statement rate across sessions had less variability

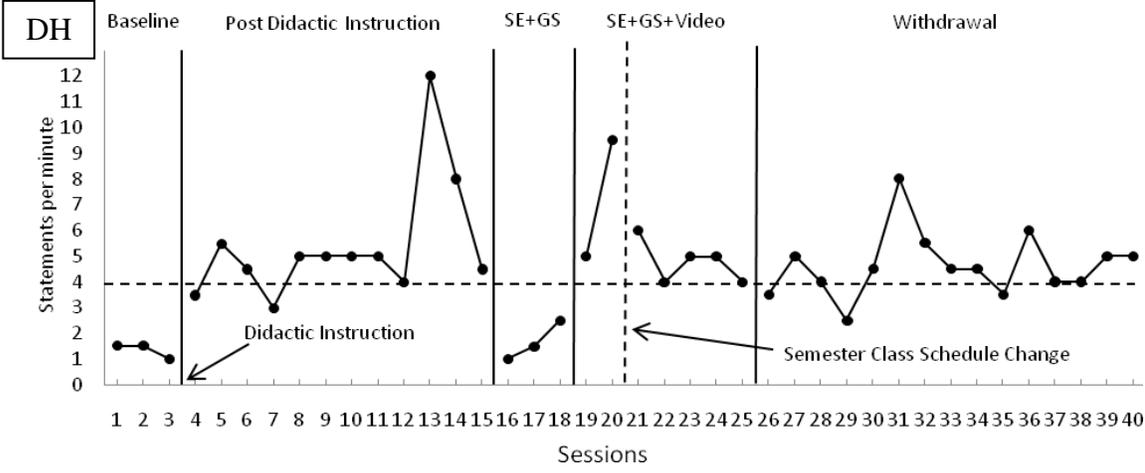
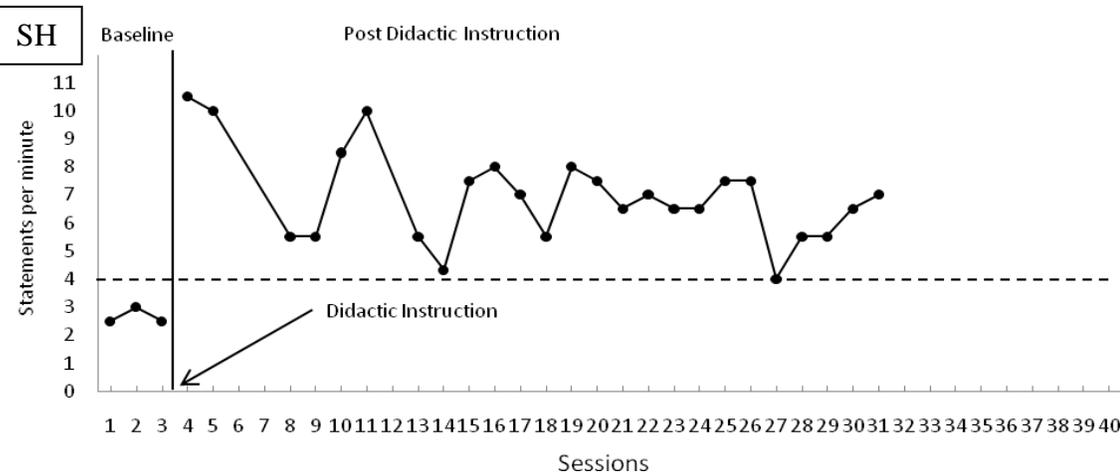
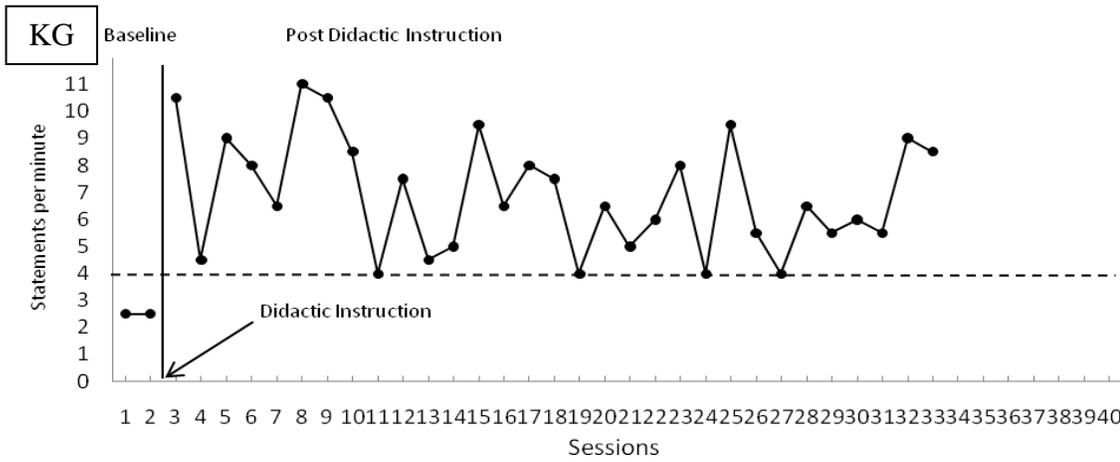


Figure 2. Teacher’s praise rate.

than KG, and her trend line showed a slight decrease. Her praise rate stabilized between five and seven praise statements per minute and similar to KG, following didactic instruction, her performance always met or exceeded four praise statements per minute.

DH averaged 1.3 praise statements per minute during baseline. During post baseline sessions he averaged 4.7 statements, which met criteria, but his performance decreased to 1, 1.5, and 2.5 statements during sessions 16, 17, and 18. Self-evaluation plus goal setting was implemented after session 15 due to error correction behaviors and no improvement was observed, in fact his praise rate declined. Following self-evaluation plus video intervention he met or exceeded four praise statements per minute on six of seven sessions. When feedback was no longer provided he met or exceeded four praise statements per minute on 12 of 15 sessions.

During self-evaluation, DH rated himself as implementing more praise statements than observed. On the Self-Evaluation Checklist (appendix C), DH circled his praise rate as three to four per minute, whereas the observer noted one to two praises per minute, a difference of two rating categories. Again on session 18, he had difficulty accurately evaluating his praise rate. He scored himself as four per minute, yet was only performing at two to three praise statements per minute; a difference of one rating category. From sessions 19 to 25, both the observer and DH scored his praise rates at four or more per minute.

Correction

Error correction was measured as a percentage of errors corrected within a 5

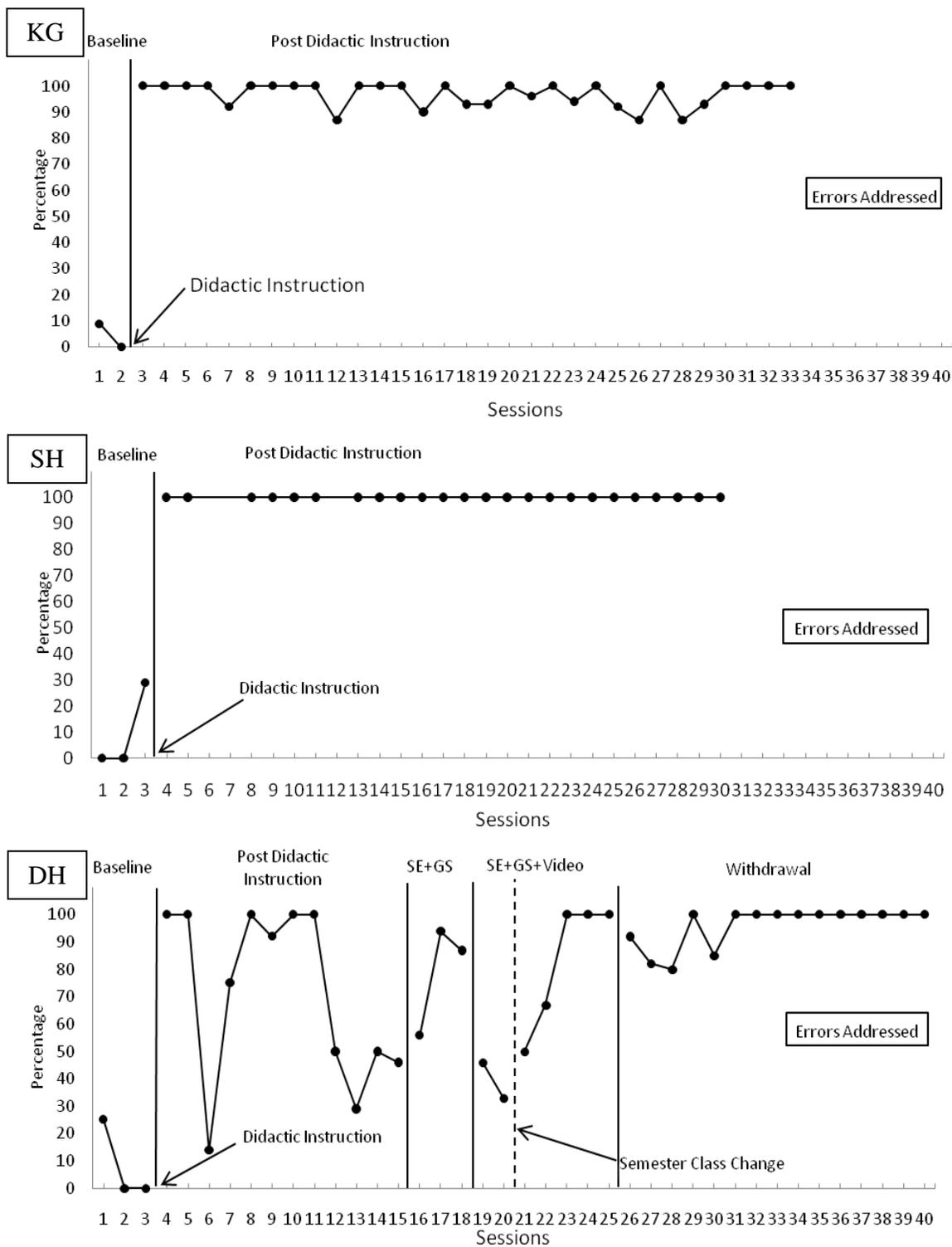


Figure 3. Teacher’s error corrections.

minute period. Data for error correction across participants are presented in Figure 3. During baseline, KG accurately corrected less than 10% of student errors. Following didactic instruction, she accurately corrected more than 86% of student errors for the remainder of the study. Most of the students' errors were signal errors.

During baseline sessions 1 and 2, SH did not provide students opportunities to choral respond. SH also modeled every example prior to obtaining individual student responses. During her third baseline session, SH accurately corrected 29% of student signal and response errors. Upon implementation of didactic instruction, SH identified and accurately corrected 100% of errors across sessions.

Throughout baseline DH accurately corrected no more than 25% of student signal and response errors during reading lessons. After didactic instruction his error correction increased to 100% of the available opportunities and then decreased. During sessions 12 through 15 his error correction ranged from 29 to 50%.

Self-evaluation and goal setting was then implemented with DH. During self-evaluation and goal setting DH accurately corrected between 60% and 90% of student errors. Self-evaluation, goal setting plus video was implemented because DH scored below the criterion level of 90% on sessions 16 and 18. While DH's self-evaluation, goal setting and video observation impacted his praise rate, the effect on DH's error correction was delayed until session 23. It is unclear whether his difficulties can be attributed to response errors or signal errors since the data were not segregated on the observation form. When self-evaluation was implemented, DH evaluated himself as effectively correcting errors at a higher rate than the observer (see Figure 4).

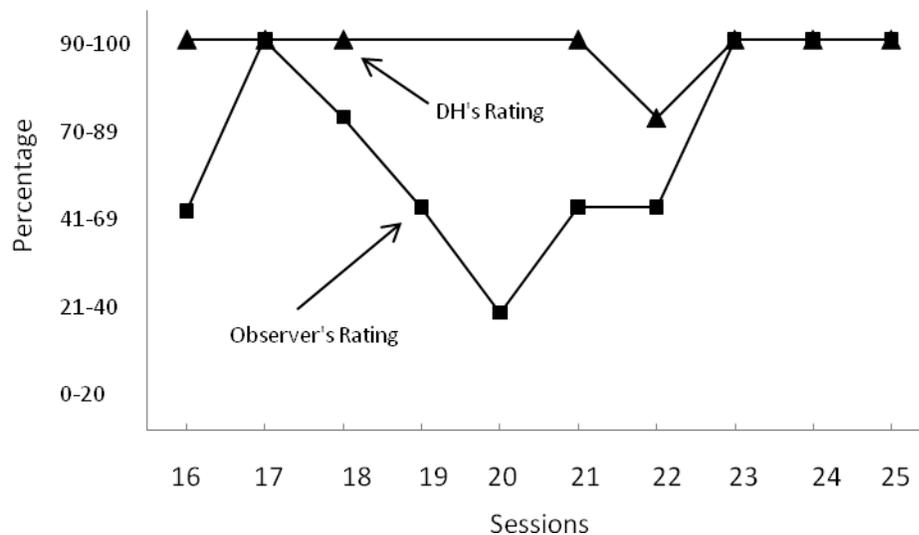


Figure 4. DH's rating compared to the observer rating from session 16 to 20.

While the observer noted him as addressing between 41% and 69% of errors during session 16, DH indicated that he was correcting 90% to 100% of student errors. During session 17 when observed addressing 94% of student errors he accurately rated himself as addressing 90% to 100% of those errors. DH recorded that he addressed 90% to 100% of errors when data shows him correctly addressing between 70% and 89% of errors during session 18. During sessions 19 and 20 he did not evaluate himself for error correction. He wrote on the form that the students made few errors on session 19 and 1 error on session 20; indicating he effectively corrected the errors. The observation record shows he corrected 21% to 40% of the errors during session 19 and 41% to 69% of the errors during session 20. On session 21 DH rated his error correction skills as 90% to 100%, when his observed behavior shows that he correctly addressed only 50% of the student errors. The next session, session 22, DH recorded that he addressed 70% to 89%

of errors while the observer reports that he addressed 67% of the errors. On sessions 23 through 25, DH's rating matched the observer's rating. Similar to praise, DH continued to demonstrate criterion performance on error correction after the self-evaluation, goal setting, and video intervention was withdrawn. Unfortunately, it is not clear whether DH was only evaluating his response error correction skills or his skills correcting both response errors and signal errors. On session 20 he recorded that students only made one error. Student responding was generally quite accurate and DH may have only been referring to student's response errors rather than both response and signal errors. It is also possible that DH was evaluating both response and signal errors and simply did not discriminate the signal errors.

DISCUSSION AND CONCLUSIONS

The purpose of this study was to examine the effects of didactic instruction, self-evaluation and goal setting on the instructional skills of licensed early career teachers. The instructional skills and targeted behaviors consist of teacher presentation, praise rate and correcting student errors. All participants acquired the targeted teaching behaviors. Unfortunately, these results may not be solely attributed to the training due to lack of experimental control. Due to practical considerations it was necessary to conduct the didactic training at the same time with all participants. Thus, it was not possible to use a multiple baseline across participants design. Instead, a withdrawal design was implemented and participants maintained the targeted behaviors when the training was removed. Variables affecting teachers' skill maintenance could be the instructional program used, the quality of the didactic instruction and teachers' application of skills between didactic sessions, managing student behavior, and the natural events that occur within schools, such as class schedule changes which affect classroom dynamics.

The first variable that may have affected the results of this study and the maintenance of teacher behaviors is the curriculum. Decoding for All Ages (Hofmeister, 2003) is a structured program that assists teachers acquire direct instruction skills. Teacher behaviors are stated explicitly and there are many opportunities for teachers to apply teacher presentation, praise and error correction skills. The word lists included in the program provide repeated occasions for teachers to practice cue, pause and signal skills. The word lists also provide numerous opportunities for teachers to praise students' performance and behavior. While accurate error correction skills are more difficult to

acquire, the word lists and choral responding included in the curriculum create numerous opportunities for teachers to detect and practice correcting signal and response errors. Given the ample practice opportunities, teachers obtain skills quickly and they have numerous opportunities to firm up skills so they are maintained even when interventions are withdrawn.

The second variable that may have affected skill maintenance is the quality of the didactic instruction. The didactic instruction included demonstration of each component in isolation and opportunities for guided practice prior to moving to the next component. Participants were provided guided practice in role plays during the training session as well as practice with students in their coach's classroom. This practice continued until participants demonstrated criterion performance in each area. It is possible that the additional guided practice with feedback in the master teacher's classroom was a factor for SH and KG maintaining skills over time without interventions. Additional research is needed that compares role played practice under a coach's direction with practice with actual students under a coach's direction to test this hypothesis.

In addition to practicing in the master teachers' classroom, participants had the opportunity to practice their skills in their classroom prior to completing didactic instruction. Importantly, participants were not told to practice their skills in their classrooms. Rather they initiated this on their own. This created distributed practice opportunities and likely contributed to skill maintenance when instruction was completed. Joyce and Showers analyzed over 200 studies prior to 1980 in which researchers studied various forms of in-service for educators. Of five components

contributing to the impact of trainings, practice in simulated and classroom settings was an efficient and effective way for teachers to acquire new skills or fine tune previously obtained skills (Joyce & Showers, 1980). In these studies as well, it is likely that participant's practice opportunities were distributed over a period of time. In another study, Moulton et al. (2006) found that surgical residents retained their skills when provided distributed practice versus those who were in a massed practice group. The distributed practice group performed significantly better than the massed practice group from pre-test to post-test. They also maintained those skills during the transfer test while the massed practice group showed a decline in skills. The retention of the particular motor skills within this study is not unlike the direct instruction skills we are asking teachers to retain. That is, the surgical residents practiced complex routines. Similarly, the teachers in this study were practicing complex instructional routines (presenting information, praising student responses, and correcting student errors) that they were required to demonstrate over time. In the future researchers may want to compare the effect of distributed practice and massed practice on teachers' acquisition and maintenance of targeted skills.

When in their own classroom, elements of student behavior may also have impacted the results. SH's students were well behaved and only made signal error responses. KG's students appeared resistant to the Decoding for All Ages (Hofmeister, 2003) program, but she demonstrated excellent behavior management skills and error correction skills. This maintained the lesson pace and the number of response opportunities and produced strong results. DH had difficulty with classroom

management, and he had difficulty identifying signal errors consistently. Over time students appeared to resist the program and challenge his teaching and classroom management.

Class schedule changes made during the semester may also have affected the internal validity of the study. SH and KG had students that ranged from 12 years old to 15 years old. Moreover they worked with the same students throughout the study. In contrast, students with reading disabilities between the ages of 12 and 15 years of age were in DH's targeted classroom and his students changed when the semester changed (between sessions 20 and 21). At the beginning of the study, DH implemented the program poorly and it is possible that this produced classroom management problems. During the second semester the students did not have a history of poor program implementation and students' overall classroom behavior improved. It appeared that these students did not resist program repetition and quickly moved from lesson to lesson. Since the intervention condition and the class changed at approximately the same time, it is difficult to determine what impacted DH's behavior, the schedule change, the self-evaluation intervention or both events.

Another event that might have influenced DH's improved performance, and the internal validity of the study is that during sessions 19 through 22, DH was evaluated using the district's administrative evaluation system and given an "N" for his performance as a teacher in several areas. It is unknown whether or not this factor affected his teaching behavior. At session 26 all interventions were withdrawn and his

error correction skills dipped to 80%, but he maintained his correction skills at 100% during sessions 31 through 40.

To test the separate effects of the various intervention components only one strategy should be used to change teacher behavior at any one time. For example, didactic instruction should be provided without the benefit of practice or classroom observation to determine if didactic instruction is sufficient to produce the desired skills. The design of the study would also need to change due to the fact that the initial instruction cannot be withdrawn. A multiple baseline across subjects or behaviors design is an option. Since we are looking at multiple teachers needing to develop the same set of skills this design may lend itself to better experimental control. The disadvantage of a multiple baseline across subjects or behaviors is that participants may practice poor skills for a longer time. In reality, the participants within this study were practicing poor skills for some time. The negative impact of extended baselines is that students are subjected to poor teaching for a longer time.

While experimental control was not demonstrated within this study, positive results for DH's error corrections were observed when self-evaluation and goal setting was initiated. This result is similar to that observed by Kitsantis and Baylor (2001), Reamer (1995), and Wright (1998) when they implemented a package of interventions that included self-evaluation of instructional planning and practice with a variety of teachers. In contrast to the previous studies, in this study, the initial effect of self-evaluation and goal setting on error correction was not maintained. Moreover while self-evaluation and goal setting had an initial positive effect on error corrections, DH's praise

rate decreased. It is possible that focusing on error corrections resulted in a temporary decrease in praise rate. If this was the case then it would be advisable to focus on one behavior until DH developed fluency and then add another instructional behavior to his repertoire.

In conclusion, while all the teachers in this study acquired the targeted behaviors consisting of teacher presentation, praise rate and correcting student errors, it is not clear what instructional components if any were responsible for the changes in the teachers' behavior.

REFERENCES

- Ahuja, R.S. (1999). *The relative effectiveness of two different peer coaching programs and a structured self-evaluation program with elementary teachers using direct instruction*. (Doctoral dissertation). Georgia State University, Atlanta, GA.
- Baylor, A. L., Kitsantas, A., & Chung, H. (2001). The Instructional Planning Self-Reflective Tool (IPSRT): A method for promoting effective lesson planning. *Educational Technology, 41*(2), 56-59.
- Blackhurst, A. E., & Hofmeister, A.M. (1980). Technology in Special Education. In L. Mann & D. A. Sabatino (Eds), *Fourth Review of Special Education* (pp. 199-208). New York: Grune and Stratton.
- Crim, R.D. (1974). *The use of videotape recorder in teacher self-evaluation*. (ERIC Document Reproduction Service No. ED106270)
- Freiberg, H.J., & Waxman, H.C. (1988). Alternative feedback approaches for improving student teachers' classroom instruction. *Journal of Teacher Education, 38*, 8-14.
- Fuller, F.F., & Manning, B.A. (1973). Self-confrontation reviewed: A conceptualization for Video playback in teacher education. *Review of Educational Research, 43*(4), 469-528.
- Glass, G. G., & Glass, E.W. (1976). *Glass-Analysis for decoding only: Teacher guide*. Garden City, NY: Easier To Learn.
- Guskey, T.R. (1997). Research needs to link professional development and student learning. *Journal of Staff Development, 18*, 36-40.
- Hindman, S. E. & Polsgrove, L. (1988). Differential effects of feedback on preservice teacher behavior. *Teacher Education and Special Education, 11*(1),
- Hofmeister, A.M., (2003). *Reading for all learners program*. Logan, UT: Author.
- Irvine, J.J. (1983). The accuracy of pre-service teachers' assessments of their classroom behaviors. *Journal of Research and Development in Education, 17*(1), 25-31.
- Johnson, J. (1969). Changes in student teacher dogmatism. *Journal of Educational Research, 62*, 224-226.

- Joyce, B., & Showers, B. (1980). Improving inservice training: The messages of research. *Educational Leadership, 37*(5), 379-385.
- Kitsantis, A., & Baylor, A. (2001, January 1). The impact of the instructional planning self-reflective too on pre-service teacher performance, disposition, and self-efficacy beliefs regarding systematic instructional planning. *Educational Technology Research and Development, 49*(4), 97. (ERIC Document Reproduction Service No. EJ639613)
- Kukanauza de Mazeika, J. M. (2001). Effects of different types of feedback during microteaching sessions on preservice teachers. State University of New York at Buffalo. Dissertations Abstracts International. (UMI No. 3021911)
- Marchand-Martella, N., Lignugaris/Kraft, B., & Pettigrew, T. (1991). Direct Instruction Observation System. Inter department communication, Department of Special Education and Rehabilitation, Utah State University, Logan, UT.
- McBride, R.E., Reed, J.L., & Dollar, J.E. (1994). Teachers attitudes toward staff development: A symbolic relationship at best. *Journal of Staff Development, 15*, 36-41.
- Menges, R. (1975). Assessing readiness for professional practice. *Review of Educational Research, 45*, 173-207.
- Miller, S.P. (1994). Peer coaching within an early childhood interdisciplinary setting. *Intervention-In School and Clinic, 30*, 109-113.
- Moulton, C.E., Dubrowski, A., MacRaie, H., Graham, B., Grober, E., & Reznick, R. (2006). Teaching surgical skills: What kind of practice makes perfect? A randomized, controlled trial. *Annals of Surgery, 244*(3), 400-409.
- Petscher, E.S., & Bailey, J. S. (2006). Effects of training, prompting and self-monitoring on staff behavior in a classroom for students with disabilities. *Journal of Applied Behavior Analysis, 39*, 215-226.
- Reamer, R.B. (1995). *The effects of video self-modeling and self-assessment training on the delivery of instructional strategies provided by paraeducators working with children with developmental delays*. Dissertation Abstracts International. (UMI No. 9542615)
- Redden, M., & Blackhurst, A. E. (1978). Mainstreaming competency specification for elementary teachers. *Exceptional Children, 45*, 615-617.

- Ribich, F.M. (1974). *The effects of training and feedback on self-evaluation*. (ERIC Document Reproduction Service No. ED 098 230)
- Welch, M., & Kukic, S. (1988). Utah's response to critical issues and needs: An experimental field-based preparation program for teachers of mild to moderately handicapped students. *Teacher Education and Special Education, 11*, 172-175.
- Wright, M. (1998). The effects of videobased teacher self-evaluation on teacher instructional performance. Dissertation Abstracts International. (UMI No. 9834260)
- Ysseldyke, J. E., & Algozzine, B. (1982). *Critical issues in special and remedial education*. Boston: Houghton Mifflin

APPENDICES

Appendix A

Definitions for Component Teaching Skills and Checklist Ratings

Definitions for Component Teaching Skills and Checklist Ratings

Attention:

Effective-

- a. Used a word, phrase or question that focused student's attention on the task ("Everybody, eyes up here."). This should occur on the first 1 or 2 trials of the task.

Cue:

Effective-

- a. Use a word, phrase, or question that directs students to respond. A focus word, phrase, or question prescribed in program format (e.g., "what word?" "get ready," together"). Must be stated positively.

Ineffective- A focus word, phrase, or question not prescribed in program format; or one that is phrased as a question (e.g., "can you spell 'mother?'"); or stated negatively.

Pause:

Effective-

- Paused for at least one second before signaling. Latency of 1 but not more than 2 seconds between cue and signal.

Ineffective pauses: Latency of less than 1 or more than 2 seconds, between cue and signal.

Signals: Hand, touch, or auditory activity that initiates pupil response.

Effective-

- a. Used the correct signal for the activity.
 1. Hand signal: An extension of the arm in front of the body and a quick dropping of the finger/hand/arm to signal pupils' response. Used when students eyes are focused on the teacher and the hand signal.
 2. Touch signal: The use of a finger/pencil/pointer on a visual aid. The teacher's finger(s) should be in front of or on the desired object, but should not obstruct its view.
 3. Auditory signal: A tap (e.g., hand, finger(s), pencil) or clap when pupils' eyes on on their own material (word list, book, etc.) The signal should be visible to all pupils.
- b. Used a hand, touch or auditory response that could be clearly seen or heard by the students. With touch signals the trainees hand should be away from their body and easily seen. The sounds on an auditory signal must be sharp and clearly audible.

c. Only students said the response – students are the only individuals who respond following the signal.

Depending upon how the participants visually present the lessons from Decoding For All Ages will determine which signal they use. If they use an overhead or the words written on the board, then they will need to use a touch signal. If each child has the lesson in front of them on their desk, then the participant will need to use an auditory signal.

Ineffective signals: Hand, touch, or auditory activity not presented, or presented in such a way as to be unobservable, inaudible, or with program items not clearly visible, or with trainee's assistance (e.g., saying words with pupils; mouthing words with pupils).

Praise statements:

Effective-

- a. Participant used praise statements at least four times per minute.
- b. Participant varied praise statement between general and specific statements.
 1. General – Global or broad phrases that reflect a positive response to a desired behavior (e.g., “Good job” “Super.” “Excellent.” “Perfect.”).
 2. Specific – A positive, descriptive response following a desired behavior (e.g., “Nice job saying brother.”; “I like the way you remembered that sound.” “Good following my signal.” “I like how you’re sitting quietly.”).
- c. Participant praised academic responses and appropriate behavior.
- d. Participant made positive praise statements.

Ineffective praise statements – Praise follows an undesirable behavior; praise statement is given as sarcasm (e.g., “Oh, you’re really responding on signal today” when group is making signal errors).

Signal corrections-addressing error:

Effective-

When an individual pupil does not respond or the group does not respond together, the participant tells all pupils within 3 seconds to respond together using a positive statement about what the students need to do (e.g., "I need to hear everyone together").

Ineffective signal corrections-addressing error: When individual pupils does not respond or the group does not respond together, the participant fails to correct pupils within 3 seconds, singles out a pupil, makes ambiguous correction (e.g.,

"again"), or makes a negative statement (e.g., "You were not together, I need you together.").

Signal corrections-repeat:

Effective-

The participant repeats the original presentation (cue, pause signal) to the pupils using a positive statement.

Ineffective signal corrections-repeat: The trainee fails to repeat the presentation or repeats it using a negative statement.

Response corrections: A response error occurs when pupil(s) respond incorrectly.

Effective-

The participant utilized a response error correction procedure within three seconds after error was made.

Response corrections-model:

Effective-

The participant corrects the pupil response error within 3seconds by modeling the correct response and by using positive statements.

Ineffective response corrections-model: Trainee fails to correct the pupil response error within 3 seconds, models to group for individual response or vice versa, models incorrect or different response, or uses negative statements or gestures.

Response corrections-test

Effective-

The participant repeated the original presentation (cue, pause signal) to test the group's/individual's response, using positive statements.

Ineffective response corrections-test and retest- The participant addresses, models, tests or retests to an individual following a group response error or group following and individual response error; demonstrates incorrect response to pupils; participant does not use the original cue or models or tests a different response; teacher models the correct responses when a series of questions (i.e., leads) to guide pupils through the process is prescribed.

(Morgan, Menlove, Salzberg, Hudson, 1994; Becker, Carnine, 1981)

(Marchand/Martella, Lignugaris/Kraft, Pettigrew & Leishman, 1995)

Rating Scale:

Always: Indicates the participant performed the component skill 90 to 100% of given opportunities.

Mostly: Indicates the participant performed the component skill 70 to 89% of given opportunities.

Sometimes: Indicates the participant performed the component skill 69% of given opportunities or below.

Never and No Opportunity to Observe: Indicates the participant performed the component skill 0% of given opportunities.

Appendix B

Decoding for all Ages: A Reading Instructional Program

Decoding For All Ages:
A Reading Instructional Program
by
Alan M. Hofmeister, Ph.D

Decoding for All Ages: Formats

„Format 1: Sounds

„Format 2: Words

„Format 3: Spelling and Writing

„Format 4: Sentence Practice

Format # 1 Teaching Sounds

„Sound Cards: if d m a c u n s r

„A: Model one correct answer for the learner

„B test the learner

„C Retest the Learner and sort the Sound Cards

Format # 2 Teaching Words

„Teaching New Regular Words

„Point to each letter as it is sounded, and say

„“My turn. Listen to me sound out this word the slow way sssaaamm”

„“My turn listen to me say the word the fast way Sam”

„Ask the learner to say it the slow way

„Ask the learner to say it the fast way.

„Teaching New Irregular Words

„Sound out the word with the learner

„“Our turn. Say this word the slow way WWAASS”

„When we say this word the fast way, we say it differently my turn. This word is was (Wuz)”

„Your turn. Say this word”

„Your turn again. Sound out the word the slow way

„Well done. You said the word the slow way but when we say it fast we say it differently

„Your turn. Say the word the fast way” (Wuz)

Format #3 Spelling and Writing

„The learner reads the each word that is to be spelled within the time listed

„The learner then identifies “buddy” words to demonstrate an understanding of the meaning

Format # 4 Sentence Practice

„This format teaches oral reading to a minimum, rate of 120 words per minute.

„The sentences are designed to reduce dependency on guessing from content and to increase dependency on decoding skills.„Remember, the goal is application of decoding skills to achieve reading independence.

Direct Instruction Strategies

We will focus on:

Teacher Presentation
Student Response Rate
Teacher Praise Rate
Corrective Feedback

We will focus on:

Teacher Presentation

“Of Commonly used school-based interventions, focused academic interventions and behavioral instruction show the highest effect in preventing school dropout or nonattendance.” (Lehr, Hansen, Sinclair, & Christenson, 2003)

- Cue:

- A. Correct Cue: a word, phrase, or question used to focus students attention on the task (e.g., “and”, “together”, “what word?”, “next word”, “get ready”, “what did he buy?”)
- B. Typical Errors: No cue is provided; teacher models during cue and format doesn’t indicate this should be done; instruction provided to individual is phrased as a question (e.g., “can you spell mother?”) rather than a direction (e.g., “spell mother, please”)

Teacher Presentation cont’d

- Pause:

- A. Correct Pause: At least 1 –second waiting time (preferably 2 –seconds)
- B . Typical Errors: Insufficient wait or think time provided for the task.

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Teacher Presentation cont’d

- Signal:

- A. Correct Signal: Hand, touch, or auditory response presented by teacher to initiate a pupil response.
 - Hand signal: An extension of the arm in front of the body and a quick dropping of the finger/hand/arm to signal pupils’ response. The signal should be visible to all pupils (i.e., not obstructed by classroom objects or clothing).
 - Touch signal: The use of a finer/pencil, pointer on a visual aid. The teacher’s finger should be in front of or on the desired object, but should not obstruct its view.
 - Auditory Signal: A tap (e.g., hand, finders, pencil, clap) when eyes are on their own material (word list, book, etc.)

Teacher Presentation cont’d

- B. Typical Errors: Auditory signal is not audible to pupils. Hand or touch signal covers word or picture. Teacher mouths or says response with pupils at time of signal or when pupils respond. Teacher uses hand signal when pupil’s eyes are on their own visuals (e.g., book, workbook)

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-Practice Teacher Presentation with coaches (Cue, Pause, Signal)

We will focus on:
Student Response Rate

“If academic opportunities to respond increase, problem behavior decreases. However, observational data suggests that teachers in classrooms for EDBD students rarely provide adequate opportunities to respond.” (Sutherland Wehby, 2001)

Responses need to be averaged at four responses per every minute of instruction.

- Group Response

- A. Correct Group Response: The group responds simultaneously and correctly following the teacher signal. Response may be one –word/number or multi – word/number.
- B. Typical errors: The group responds correctly, but not simultaneously.

- Individual response

- A. Correct individual response: The pupil responds correctly after the cue and/or signal. Response may be one –word/number or multi –word/number.
- B. Typical errors: The pupil responds correctly before the cue or signal.

**Marchant/Martella, Lignugaris/Kraft, Pettigrew and Leishaman, 1991-Rev 9/5/95 We will focus on:

We Will Focus On
Teacher Praise Rate
(page 168 Research into Practice)

“Detecting and praising performance improvements by students, particularly low achieving students who have experienced little academic success, is one of the most important and effective forms of teaching. (Heward, Special Educator, Vol. 25 No. 2)

- Specific Praise

- A. Correct specific praise: A positive, descriptive response following a desired behavior (e.g., “nice job saying brother.”; “I like the way you remembered that sound.” “Good following my signal.” “I like how you’re sitting quietly.”).

Teacher Praise Rate Cont’d

- General Praise Statements

- A. Correct general praise: Global or broad phrases that reflect a positive response to a desired behavior (e.g., “good job.” “Super.” “Excellent.” “Perfect.”).
- B. Typical praise errors: Praise follows an undesirable behavior; praise statement is given as sarcasm.

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Practice Teacher Presentation, Student Response Rate and Teacher Praise Rate

We will focus on:
Corrective Feedback
(Page 96 Research into Practice)

•Two Kinds:

- Signal Error Corrections
- Response Error Corrections

Corrective Feedback

Signal Error Corrections

A signal error occurs when students respond correctly, but not on teacher's signal. Signal error correction consists of two necessary components: (1) address, followed by a (2) repeat

A. Address:

–Correct address: The address occurs within 3 seconds after the signal error and the teacher tell pupils what they need to do (e.g., “I need to hear everyone”; “you have to wait until I signal”; “Let’s do it together.”)

–Typical errors: Individual who made missed signal is singled out; teacher begins address with a negative statement or tell s the group what they did wrong (e.g., “That’s not right!”, “you did not respond together.”); teacher does not tell students what they need to do to respond correctly (e.g., “again!”).

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Corrective Feedback Cont'd

B. Repeat

–Correct repeat: Repeat the original presentation to test the group's response. The repeat should include a cue, a pause and a signal.

–Typical errors: Changes the cue when repeating the trial; does not include a cue, a pause or a signal; does not end with a correct response

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Corrective Feedback Cont'd

Response error corrections

A response error occurs when pupils respond incorrectly. Response error correction may include four components: (1) model, (2) lead, (3) test, and (4) retest.

Model:(required component)

–Correct model: the teacher tells pupils the correct answer within 3 seconds after the response error occurs 9e.g., “That word is polite”).

Lead:(optional component)

–Correct lead: guides pupils through correct response by saying it with them.
Typically used after a repeated response error.

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Corrective Feedback Cont'd Response Error Corrections

Test:(required component)

–Correct test: teacher requests group/individual to respond again by repeating the original cue.

Retest:(required component for multi-word/number responses)

–Correct retest: Teacher retests pupil on a word, sound, number, sentence or math equation (e.g., go back to top of the column of words, work through math problems again, reread a sentence from the beginning following an error).

–Typical response correction errors: Addresses, model, lead, test or retest, to an individual following a group response error or group following an individual response error; demonstrates incorrect response to pupil

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Response Error Corrections

What are the critical elements when correcting student mistakes?

Identify the type of response error (explained in a minute)

Get an independent correct response

Retest later (this increases probability for correct responses)

If we do not get independent correct responses, students will continue to practice mistakes.

Lignugaris/Kraft 2000

Response Error Corrections
Three types of Response Errors
(Page 101 Research into Practice)

1. Student does not respond to teacher direction.
 - Repeat the direction and model the correct response or have peer model the correct response.
 - “Listen. What word? ‘wonderful’”
 - Repeat the response direction to the child
 - “What word is this?”
 - Repeat the direction later in the lesson (mistake made by novice teachers)

Response Error Corrections
Three types of Response Errors cont'd

2. Student Does Not Know the Answer
 - Give the answer
 - “It’s an elephant”
 - Repeat the direction (Independent Correct Response)
 - “What is this?”
 - Repeat the direction later in the lesson

Response Error Corrections
Three types of Response Errors cont'd

3. Student Makes an Incomplete Response -Lead
 - Lead the child by making the response with him
 - “Let’s do it together. Say the whole word.”
 - Repeat the lead several times rapidly (do not make the repetition tedious)
 - Repeat the trial and get an independent correct response
 - Repeat the trial later in the session

Practice Corrective Feedback with coaches

Appendix C

Observation and Self-Evaluation Forms

Observation Form

Name of Participant _____

Date of Observation _____

Teacher Presentation

| | Effective Cue | No cue | Effective Pause | No Pause | Effective Signal | No Signal |
|-----------------|---------------|--------|-----------------|----------|------------------|-----------|
| <u>Minute 1</u> | | | | | | |
| <u>Minute 2</u> | | | | | | |

| | | |
|-------------------------|---------------------------|----------------------------|
| Opp. to Cue _____ | Opp. to Pause _____ | Opp. to Signal _____ |
| % of eff. Cues _____ | % of eff. Pauses _____ | % of eff. Signals _____ |

Praise Rate

Directions: In a period of two-one minute timings tally the amount of general and/or specific praise statements made by the teacher.

| General Praise Statements | Specific Praise Statements | |
|---------------------------|----------------------------|--|
| | | Number of praise statements per minute _____ % general praise statements _____ % specific praise statements _____ |

Error Corrections

Directions: In a period of five minutes tally the number of times the teacher corrects student errors and the number of times the teacher ignores or misses the student errors.

| Addressed Errors | N/A | Ignored/Missed Errors | N/A | |
|------------------|-----|-----------------------|-----|--|
| | | | | Opportunities to error correct per minute ____ % errors addressed _____ % errors ignored _____ |

Self-Evaluation Checklist

Participant's Name _____

Date of Evaluation _____

Targeted goal for this session:

Based upon today's performance circle your level of mastery for effective cues.

| | | | | |
|---------|----------|----------|----------|-----------|
| 0 – 20% | 21 – 40% | 41 – 69% | 70 – 89% | 90 – 100% |
|---------|----------|----------|----------|-----------|

Based upon today's performance circle your level of mastery for effective pauses.

| | | | | |
|---------|----------|----------|----------|-----------|
| 0 – 20% | 21 – 40% | 41 – 69% | 70 – 89% | 90 – 100% |
|---------|----------|----------|----------|-----------|

Based upon today's performance circle your level of mastery for effective signals.

| | | | | |
|---------|----------|----------|----------|-----------|
| 0 – 20% | 21 – 40% | 41 – 69% | 70 – 89% | 90 – 100% |
|---------|----------|----------|----------|-----------|

Based upon today's performance circle the amount of praise statements you feel you made in a one minute period.

| | | | |
|-----|-----|-----|-----------|
| 1-2 | 2-3 | 3-4 | 4 or more |
|-----|-----|-----|-----------|

Based upon today's performance circle the percent of time you corrected errors effectively.

| | | | | |
|---------|----------|----------|----------|-----------|
| 0 – 20% | 21 – 40% | 41 – 69% | 70 – 89% | 90 – 100% |
|---------|----------|----------|----------|-----------|

Was my previous targeted goal met?Y N

Targeted goal(s) for next observation:
