Implementation of Effective Instructional Routines, Praise Statements, Response Opportunities, and Error Correction through Professional Training, Coaching and Observation

Sallie Richardson
Utah State University

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Implementation of Effective Instructional Routines, Praise Statements, Response Opportunities, and Error Correction through Professional Training, Coaching and Observation

By

Sallie Richardson

Utah State University

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

M. Ed. with Administrative Supervisory Licensure

December, 2014

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Charles Salzberg     Tim Slocum
Head Committee Member    Committee Member

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Susan Turner
Committee Member
Abstract

Professional development opportunities can range from a single workshop to long term ongoing training. Research shows that an inspiring and informed teacher is one of the most important school related factor influencing student achievement. The best professional development for new teachers is ongoing, experiential, and collaborative, while providing an opportunity for practice, reflecting and mentoring for successful development. Most professionals involved in professional development would agree that the goal of staff development is to produce a change in participant’s knowledge, behaviors, understanding, skills, values, and beliefs (Hord, S. & Monk, B. 1997).

The purpose of this creative project was to evaluate the effectiveness of professional development and observations on the implementation of instructional routines and response opportunities. Participants learned how to effectively introduce reading and writing skills during small group using instructional routines and to provide response opportunities for teachers and students. The professional development outcome was measured with an instructional routine observation form that focused on 8 instructional routine procedures and a response opportunity observation form that focused on praise statements, opportunities for student response and error correction procedures. Trainees also took an effective instructional practice pre-post quiz and completed a professional development questionnaire at the conclusion of training.
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Implementation of Effective Instructional Routines and Response Opportunities

Through Professional Training, Coaching and Observation

Introduction

Have you attended a professional development training session and wondered, what the heck am I getting out of this? How am I expected to go back to the classroom and implement this exact training in my classroom? Professional development is a strategy that many school districts and schools use to ensure that educators use effective, research based practices within the classroom. The most effective professional development directs teachers to focus on students and student outcomes.

Alan Hofmeister (1999) states the important question is not “What I am doing?”, but “What am I doing to create learning experiences that result in positive student outcomes?” In the past, most professional development focused on a theory or on a description of a new skill or behavior. There has been limited emphasis on demonstration, practicing, feedback and support on learning a new skill (Hord, S. & Monk, B. 1997). When educators learn a skill in a professional development training session, little transfer of the skill from the professional development setting into the classroom setting happens. Some studies report that less than 10% of these skills transfer to the classroom environment (Hofmeister, Carnine, & Clark, 1994).

Staff Development Models

The Joyce and Showers (1995) staff development model includes the following components: (1) presentation of theory or description of a new skill or behavior, (2)
simulated setting, (3) prompt and open-ended feedback, and (4) coaching. The professional development model that Joyce and Showers describe in their book, “Educational Leadership,” will be used for this project. Effective and explicit instruction can be viewed as providing a series of instructional supports or scaffolds by breaking down the content into manageable instructional steps. Instructional routines will be used with participants during the professional development training, so they get a better understanding of the effective instructional routines: I (teacher models), we (teacher guides practice), and you (students work independently), review/closure of the lesson; coupled with classroom observation and feedback (Archer & Hughes, 2011). Participants engaged in effective instructional routines for reading and written language using the Joyce and Shower’s model, was shown simulated practice by trainers, and conducted small group instruction with peers while receiving support and feedback (Allen & Ryan, 1969).

Procedures

For this project, two district staff members provided training on effective instructional routines and response opportunities. The training focused on using effective instructional routines and provided response opportunities in written expression and reading comprehension instruction (Archer & Hughes, 2011). The hope was that participants would generalize good effective instructional routines and provide response opportunities to students in all educational settings. Results of this final project will be shared with district supervisors, coordinators, teacher leaders and instructional coaches to support their efforts to provide ongoing quality professional development instruction. The Special Education Department in Davis School District supports efforts to improve
quality professional development instruction and positive student outcomes through

Teaching effective instructional routines, coaching, observation and feedback.

**Review of Literature**

The purpose for the review of the literature was to establish a theoretical

framework that focuses on improvement in teachers’ instructional practices and increases

student outcomes. The initial review of literature examined studies that addressed the

traditional staff development such as a conference or workshop without trainer follow-up.

During sequential searches, the focus was on professional development that focused on

modeling, observation, mentoring and coaching feedback.

This literature search yielded approximately 249 articles. Articles were located in

journal reviews, computer searches, coaching and mentoring books, and explicit

instruction book and articles. Key words used in the search included: special education,

coaching, professional development, staff development, instructional routines, explicit

instruction, mentoring, instructional observation and reflective practices for professional

development. The studies were reduced to several articles that significantly align to this

project and address professional development through explicit training that focused on

modeling, coaching, observation and feedback. Fourteen articles were included in the

literature review.

**Theoretical Framework**

Training formats for staff development vary a great deal and include large

group/small group presentations and discussions, workshops, seminars, demonstrations,

role-playing, simulations, and microteaching (Gusky, 2002). The effectiveness of the

models vary greatly, but the most effective training typically includes an exploration of
theory, demonstration or modeling of skills, simulated practice, feedback about performance and coaching in the workplace (Joyce & Showers, 1996).

**Professional Development without a Follow-up Component**

It appears that traditional staff development, such as workshops and conferences, without follow-up do not produce lasting change (Bush, 1984). Researchers suggest that the more traditional staff development models generate less than 10% transfer to classroom practice (Hofmeister, Carnine & Clark, 1994). Bush found that when participants were given a description of the skill, only 10% of the people could transfer or use the skill in their classrooms. When modeling or demonstration was included, 2-3% more participants transferred skills to their classroom. When practice was added, another 2-3% of participants transferred that skill to the classroom as well. When feedback was added, another 3% of the participants transferred even more of the skill learned into their classroom. Thus, when four components were included, only 16-19% of the participants transferred the new skill to their classroom.

The objective for training should be explicit and should be used to lead trainers to program specific training activities and design evaluation procedures (Guskey, 2000). The training objectives or participants’ outcomes typically include awareness, knowledge, and skill development, although changes in attitudes, transfer of training, and executive control (the consistent and appropriate use of new strategies in the classroom) may be considered as well (Joyce & Showers, 1995).

The desired outcomes of staff development are typically either information transfer, skill acquisition, or behavior change (Korinek, 1985). Of these three, the longest-lasting effects are derived from behavior change type of staff development
programs (Korinek, 1985). The order of change in teachers’ practices is as follows: 1) teaching practices change, 2) student learning improves, 3) teachers attitudes and beliefs change (Guskey, 1999). This is very different from the traditional approach of staff development where the focus has been on influencing teachers’ attitudes towards new information (Guskey, 2002). The desire was to have teacher behavior change based on the workshop or conference. Seldom has there been follow-up or accountability for participants. Joyce and Showers (1995) suggested that teachers’ acquisition of desired skills is more likely when staff development included multiple demonstrations of content coupled with immediate opportunities for practice. Further, Joyce and Showers noted that behavior change occurs prior to the change in attitude and belief.

**Professional Development with Follow-up Component**

In contrast, staff development that has some form of coaching or mentoring is positively correlated with lasting change (Bush, 1984; Showers, 1995). In his study, Bush (1984) examined the effectiveness of a workshop model that includes presentation of theory or description of a new skill or behavior, demonstration and modeling of a new skill, initial practice in a simulated setting (typically a workshop setting), structured and open-ended feedback about the performance of the practice, and peer coaching (Joyce & Showers, 1995). When the fifth component of coaching, was included, up to 95% of the participants transferred the new skill into their classroom. Clearly, coaching was critical in effecting change. As teachers knowledge, skill, practices improve, eventually their attitudes and beliefs about student’s learning improves, which should be a primary focus of staff development (Guskey & Sparks, 1991).
Guskey (2002) suggested that one of the best ways to learn is by observing others, or by being observed and receiving specific feedback from the observer (Guskey, 2000). In additions, teachers are likely to keep and use new strategies if they receive coaching (either expert or peer) while they are trying new ideas in their classroom (Gschwend, 2000). Researchers also noted that when staff development moves away from the isolation most teachers experienced in the work place and moves toward collaboration, there is an increase in the likelihood of classroom implementation of the strategies learned throughout training (Joyce & Showers, 1980; Sparks & Hirsh, 1997). The microteaching elements included in this project are based on this principal. Participants practice new skills while being observed and while observing others, and they receive specific feedback from peers and curriculum coaches as they are learning the new skills. In addition, coaching is provided in the participant’s classrooms as they practice their new skill when working with students.

In the other staff development research, effectiveness depended on matching content to teacher’s classroom by providing teachers with curriculum that was used in training and also given to the teachers for their use in their classroom (Dillon-Peterson, 1981) and by having a thorough presentation of ideas including the theory for the strategy, demonstration with interactive activities and visual media, and by providing initial practice, and skill coaching in the session (Johnson, 1990; McLaughlin et al., 1997; Showers & Joyce, 1996; Sparks, 1983). Rosenholtz (1984), in a review of research on a staff development in “learning-impoverished” and “learning-enriched” schools, concluded that the amount of positive feedback teachers receive is positively correlated with change in their teaching behavior. She found that “to perceive them as
knowledgeable” and to believe in their efforts, teachers need frequent opportunities for positive feedback (pg. 49). In addition, she noted that, “acknowledgement of workplace efforts is directly related to the amount of performance feedback people receive” (pg. 45). Participants must also have ready access to appropriate information and expertise so they can make knowledgeable and well-researched decisions when they are learning new skills (Guskey & Peterson, 1996).

**Professional Development Coaches Role**

Coaches must keep in mind how difficult it is for teachers to change their behavior (Sprick, Knight, Reinke, & McKale, 2006). Teachers can learn new skills, but applying them comes in stages. Effective teaching requires that a teacher do many things at once. Through the microteaching model, teachers are able to perfect effective teaching methods through simulated practice prior to engaging a real classroom setting.

Teachers’ classroom practices greatly influence student achievement, and so more attention “needs to be paid” to improving classroom practices (Darling-Hammond, 1997). Student achievement increases when students have a teacher who is skilled in “how to teach” and there is a need for content-specific pedagogy (Wise, 1999). In addition, as teachers become more confident about their professional practices, they devote themselves to greater instructional effort and involvement, particularly with low-achieving students. This in turn strengthens their expectations that these children can learn (Ashton & Webb, 1986).

Instructional coaches employ the following seven practices (Knight, 2007). First, the coach conducting a one-to-one interview with each teacher prior to professional trainings. The purpose of the prior meeting with a teacher is to build rapport, learn about
the collaborating teacher’s particular interests and concerns so that professional development can be tailored or customized, and explain how the new teaching practice to be learned might address teacher’s concerns. Second, the coach engages in collaborative planning with the teacher; the coach meets with the collaborating teacher to discuss how a new teaching practice can be implemented effectively. Then, working collaboratively the coach and teacher co-construct an observation form to guide teacher observations of the coach, and coach observations of the teacher. Third, the coach models the lesson. The coach models a lesson in the collaborating teacher’s classroom while the teacher observes the lesson while using the co-constructed observation form that was developed during the previous practice. Fourth, the collaborating teacher and coach meet for the purpose of teacher-directed post conferencing. The coach and teacher meet to discuss what the teacher observed the coach doing while modeling the lesson. Fifth, the coach observes the lesson being taught by the teacher. The coach observes the teacher as he/she applies the new teaching practice. While observing, the coach uses the same co-constructed observation form that the collaborating teacher used while observing the coach model the lesson. Sixth, the coach and teacher collaboratively explore the data. The coach and teacher discuss the data gathered during the mutual observations, discussing what each observed. Last, the coach provides continued coaching while the teacher implements. The coach continues to provide support until the teacher is fluent and habitual in their use of the new teaching practice (Knight, 2007). The seven practices are embedded into all elementary special education instructional trainings provided by Davis School District.
METHODS

Participants

Trainers

Professional training was conducted by two special education district staff members that specifically work with elementary mild/moderate teachers. The first special education district staff member holds a Master of Education degree from Utah State University and has the title of Induction Specialist. Her position is primarily working with first year teachers. The second district special education district staff member is currently completing M. Ed with Administrative Supervisory License from Utah State University. She serves as a teacher specialist for the elementary mild/moderate department; providing support to special education teachers, parents and school teams for 60 elementary schools. The two elementary district staff members have been providing training for the district special education department for over 9 combined years.

Trainees

Trainees included 14 new special education teachers hired for the 2014-2015 school year having or working towards a mild/moderate endorsement and employed by the Davis School District. All teachers work with special education students in a resource setting in grades Kindergarten through 6th. For this project, the data focuses on 5 teachers with varying backgrounds and teaching experience. Experience ranges from prior teaching experience in the district, teaching experience in another state or district, attending an alternate route in obtaining a teaching license, teaching in a private or charter school, or no previous teaching experience. The specifics for each of the 5 trainee participants are as follows:
Trainee KD

KD is a female teacher in her mid-30’s that served in the U.S. Army. Upon leaving the army, KD was hired to teach general education in a charter school located in Utah. In 2006, KD earned a dual teaching license in Elementary and Special Education from Weber State University. She continued to teach in various charted schools until May of 2013. In August of 2013, KD took a variety of substitution potions in Davis School District. From March 2014 through June 2014, KD took a long term substitute teaching position that resulted in her being hired as an elementary special education teacher starting the 2014-2015 school year. She currently co-teaches full-time with another resource teacher with a combined caseload of 54 students.

Trainee SB

SB is a female teacher in her late 30’s. She is in her fifth year of teaching special education. SB obtained her Special Education K-12 teaching license in the state of New Mexico. In the summer of 2014, her family relocated to Utah. In July 2014, SB was hired as a full-time K-6 resource teacher in a Title One school. She is one of two resource teachers servicing approximately 53 special education students. The classroom also has a para-educator for half the day.

Trainee JP

JP graduated with a Bachelor’s degree in Human Development and Family Studies from the University of Utah several years ago. After working as a social worker for a few years, JP took time off to raise a family. Her oldest child is 16, has an intellectual disability and is on the autism spectrum. JP’s involvement in special education for her son’s disability led her to back to school through an alternative route
teacher preparation program at Utah State University to earn a teaching certification in Mild/Moderate Special Education. She is teaching full-time in an elementary resource setting with a caseload of approximately 30 students. She also has a half time para-educator.

**Trainee TR**

TR is a female teacher in her late 20’s. She is in her first year of teaching as an elementary mild/moderate resource teacher. TD earned her teaching degree through Weber State University. Prior to earning her teaching certificate, TR worked as a para-educator in a functional skills classroom in Weber School District for 10 years. She was awarded the Teacher’s Assisted Path to Teaching Scholarship (TAPT). TR attended night classes while still working as a para-educator in the day time. TR was hired in July 2014 and currently co-teaches K-6 elementary resource students in a Title One school with teacher SD.

**Trainee AO**

AO is in her first full year of teaching elementary resource to K-6th grade students. She is in her mid-30’s and chose be a stay-at-home parent after earning her degree many years ago at University of Utah. AO was hired in January 2014 to take over for a teacher who left her assignment mid-year. The district felt it would be valuable to have her attend training for new teacher this year since she has been out of the profession for several years. AO is currently teacher half-day. There is a full-time teacher in the classroom as well. Her current caseload is approximately 23 students.
Settings

The lecture and simulated practice trainings were conducted in two half-day sessions at the Vista Training Center. Trainees were provided a handout outlining the two half-day training sessions (see Appendix A). The training site can hold approximately 150 people. The training room was divided into two smaller rooms and the training took place in one of the smaller training rooms. An overhead projector was used for small group training. Tables and chairs were in groups of no more than three participants per table for the lecture portion of the training. The two trainers and 14 trainees were present during the professional development training. Pre and Post training observations were conducted in the trainee’s classroom. The first observation took place prior to the trainees attending the two half-day professional development training sessions and the second observation was conducted after the two half-day training sessions concluded.

Measurement Procedures

Three measures were used to evaluate the effectiveness of the professional training on the participants. The first measure included the Instructional Routines and Data Summary Observation Form (see Appendix B). The second measure was the Response Opportunity Observation Form (see Appendix C). A Pre and Post Quiz were the third measure for this project (see Appendix D). The information gathered from the quizzes was used to examine whether the trainees understood the relationship between teacher performance, student learning experiences and how they related to student outcomes. Further explanation of the pre and post quiz can be found in the intervention section of this proposal. See the following table for a description of Instructional
Routines and Data Summary Observation Form, Response Opportunity Observation Form, and Pre/Post Quiz.

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Appendix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Routines and Data Summary Form</td>
<td>Used as a professional development tool to improve teacher practices for instructional routine while increasing student engagement time and performance</td>
<td>B</td>
</tr>
<tr>
<td>Response Opportunity Form</td>
<td>A professional development tool used to help teachers increase the level of teacher-student interactions through questioning, provide students an opportunity to respond in groups or individually, and to check for understanding while providing immediate corrective feedback in a non-threatening environment</td>
<td>C</td>
</tr>
<tr>
<td>Pre/Post Quiz</td>
<td>An instrument to help teachers understand effective instruction, teaching skills and student learning experiences that a teacher can use to increase instructional effectiveness</td>
<td>D</td>
</tr>
</tbody>
</table>

Observation Measures

The district teacher specialist conducted pre-observations and provided feedback to the 5 trainees for this research project, while the other trainer focused on observing and providing feedback to the other trainees not selected for this project. Two observations using the Instructional Routine Form and the Response Opportunity Observation Form were conducted. The first observation was administered in participants’ classrooms prior
to attending the professional development training. The second observation was conducted in participants’ classrooms at the conclusion of the professional development training (see Appendix B & C).

**Instructional Routine Measures & Pre-Observation**

Pre-Observation of each teacher’s instructional routines was conducted in the trainees’ classrooms. The instructional routine observation time was approximately 30 minutes. The observer focused on 8 components of an effective instructional routine. The 8 instructional routine components are presented in the table below.
<table>
<thead>
<tr>
<th>Description</th>
<th>Criteria</th>
<th>Observed</th>
<th>Not Observed</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Starter</td>
<td>Materials Ready for Students when they enter classroom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson Object./Rationale</td>
<td>Written and Stated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review</td>
<td>Ask and state what was learned from previous lesson</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Model (I)</td>
<td>Teacher Model at least 3-5 Examples (Correct Examples and Non-Examples)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guided Practice (We) How Measured?</td>
<td>Student Support: Visual Prompts, Verbal Prompts, Physical Prompts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review</td>
<td>Quick review of current lesson</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Practice or Return to Guided Practice How Measured? (Data)</td>
<td>Student masters his/her percentage or above on IEP goal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Assessment of Concept (no support) How Measured? (Data)</td>
<td>Student masters his/her percentage or above on final assessment (Shows goal mastered)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Post Observation Conferences
In addition to marking each component “observed” or “not observed”, the observer took specific notes to be shared as part of the feedback during the post observation conference. Post observation conferences lasted approximately 15-20 minutes. The trainer reviewed information from the observation form with the participant. The trainer provided teachers with feedback and suggestions on ways to improve instructional routines with their students. While all 8 components of the observation are important, trainees focused on the most valued components of the observation form to show mastery of instructional routines during in the second observation. The critical points of the observation form are: Review, Teacher Model, Guided Practice, Independent Practice, Review/Closure of a lesson and Individual Assessment of Concept and how these were measured. Additional observations could have been scheduled at the trainee’s request or if the observer believed further support was needed, but this information is not a part of this report. After all of the pre and post observations were conducted, it was determined that one trainee in particular will need further ongoing guidance and coaching. This Instruction Routine and Data Summary Form is found in Appendix B.

Response Opportunity Observation Form

Praise Statements

The Response Opportunity Observation Form was used in conjunction with the Routine Observation Form (see Appendix C). This form was also used during the 30 minute classroom observations. The Response Opportunity Observation took place for approximately 15 minutes of the 30 minute classroom observation. During the guided practice portion of the teacher directed lesson, the observer used the Response
Opportunity Observation Form to observe praise statements, student opportunities to respond and error correction procedures.

Praise statement tallies were reported on the observation form when the trainee gave a positive academic and/or positive behavior praise. Praise statements were recorded using 2 one-minute timings. The target for teachers is to have 6-8 praise statements per minute. For this project, praise statements were defined as specific verbal statements provided by the teacher to the student when the student provides a correct response to a question or to a behavior command. Examples of praise statements include: “good job reading, right, correct, you did it, thank you for raising your hand, nice job, thank you, and way to go on following directions.” The observation form is presented in the table below (see Appendix C).

<table>
<thead>
<tr>
<th>Praise Statements</th>
<th>Academic Minute 1</th>
<th>Behavioral Minute 1</th>
<th>Academic Minute 2</th>
<th>Behavioral Minute 2</th>
<th># Praises/Min.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Opportunities to Respond**

Student opportunities to respond were tallied for group and individual responses to teacher directed questions. The target for teachers is 6-8 opportunities to respond per minute. Students were asked to respond to a question and then given a cue or signal from the teacher to indicate the correct time to respond. Student responses can be one word, multiple words, or a physical or written responses. Only student responses were recorded, not the number of teacher questions asked. The target is for teachers to
produce 80% group response opportunities and 20% individual response opportunities.

The observation form is presented in the table below (see Appendix C).

<table>
<thead>
<tr>
<th>Opportunities To Respond</th>
<th>Group Response</th>
<th>Individual Response</th>
<th>OTRs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minute 1</td>
<td>Minute 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Error Correction Procedure**

Error corrections was also a part of the Opportunity to Respond Form. Error correction can occur when a student produces a response other than the correct response for the question being presented. Teachers were expected to conduct an error correction procedure for each identified error. A correct error correction requires teachers to: 1) identify the error, 2) model the correct response, 3) get the student to produce the correct response to the same question immediately following the teacher’s model, and 4) to do a delayed test for the same response from the student later in the lesson to check for understanding and to promote retention of the correct response. The observation form is presented in the table below (see Appendix C).

<table>
<thead>
<tr>
<th>Error Corrections</th>
<th>Error</th>
<th>Model</th>
<th>Test</th>
<th>Delayed Test</th>
<th># of Corrections Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**Conditions**
Pre-Quiz

Participants were given a pre-quiz for this professional training (see Appendix D). The quiz checked the participants knowledge of the effective instructional cycle, praise rates, student response and error correction procedures. The quiz is adapted from the 1999 “Research into Practice” book by Alan Hofmeister and Margaret Lubke. Participants were given a copy at the end of day 1 training and asked to read chapters 3 & 4 prior to the second day of training.

Pre-Observation

The pre-observation is about building relationships with teachers as much as it is about improving instruction. Pre-observations gave the trainer baseline data on the teacher’s understanding of instructional routines, student response opportunities and the error correction process. Pre-observations were conducted before teachers attended the professional training by a district trainer in the teacher’s classroom. The first 10-15 minutes prior to the pre-observation allowed conversation between the teacher and trainer regarding the lesson objective, teaching strategies used, and any specific areas that the teacher liked to be observed beside the targeted Instructional Routine, Response Opportunities and Error Correction Process. A series of questions were used to initiate the pre-observation conversation (see Appendix E).

Sample pre-observation questions:

1. What subject will you be teaching?
2. What is the lesson objective?
3. How many student will be in this class?
4. How will student learning be assessed?
5. What resources will be used during the lesson?

6. What special characteristics of the students’ do you want highlighted?

**Observation**

There were a minimum of three observations for this project. The first observation took place in the trainee’s classroom prior to the professional training to gather baseline data on the Instructional Routine Form (see Appendix B) and Response Opportunity Form (see Appendix C). The trainer observed the instructional lesson for approximately 30 minutes. The trainer marked “observed” or “not observed” on the Instructional Routine Form (see Appendix B), while taking any specific notes on the lesson for feedback and teaching suggestions. The trainer also used the Response Opportunity Form (see Appendix C) to record student’s oral response, teacher praise rates and error correction procedures. The observation data was used as a part of this project. The second observation took place during the second day of the professional training. The observation was conducted by a trainer and peers. This observation session lasted 15-20 minutes. The information gathered from this observation was for feedback purposes and was not used as part of the data collection for this project. The third observation took place within a week after the final professional training concluded. The post observation took place in the trainee’s classroom. The trainer observed the instructional lesson for approximately 30. The trainer marked “observed” or “not observed” on the Instructional Routine Form (see Appendix B), while taking any specific notes on the lesson. The trainer also used the Response Opportunity Form (see Appendix C) to record student’s oral response, teacher praise rates and error correction procedures. The observation data is used as a part of this project.
Post Quiz

Participants were given a post quiz (see Appendix D) at the end of training day 2. This quiz is adapted from the 1999 “Research into Practice” book by Alan Hofmeister and Margaret Lubke. The post-quiz tested trainee’s increased understanding and knowledge of the effective instructional cycle, praise rates, student response and error correction procedures after attending two half-day trainings, provided three observation opportunities, as well as, being provided lecture and reading material on effective instruction.

Post-Observation

While conducting the post observation, trainers needed to ensure that the Instructional Routine Forma (see Appendix B) and Response Opportunity Form (see Appendix C) were completed with summary data to support instructional suggestions to improve effective teaching routines.

The post-observation took approximately 15-20 minutes. At the conclusion of the lesson, the teacher and trainer reviewed the Instructional Routine Form (see Appendix B) and Response Opportunity Form (see Appendix C). A series of questions were used to initiate a follow-up to the post-observation (see Appendix E). Sample Post-Observation Questions:

1. How did you feel the lesson went?
2. Did the students accomplish the goal you had planned and how do you know?
3. What were your teaching strengths?
4. What do you feel you need to improve on?
5. What do you know about instructional routines and student response opportunities?

A copy of the completed Instructional Routine Form and Response Opportunity Form were made available to the teacher. The trainer ended the post-observation by leaving suggestions for instructional improvement and scheduling any further observations if needed. Observations are not evaluations visits; rather they are developmental processes providing data and descriptive feedback to enhance teaching and learning effectiveness.

**Professional Training Procedures and Materials**

Two half-day training sessions were provided to trainees. Each session lasted approximately 4 hours (see Appendix A for training outline). The two half-day trainings consisted of lecture with a power point, pre & post quiz, modeling of lessons by trainers, and small group activity of presenting a mini-lesson to peers and trainer by each trainee.

**Material**

For training purposes, trainers used writing material from “Framing Your Thoughts” (Language Circle Enterprises, 2005). This writing material focuses on basic sentence structure for beginning writers. A trainer presented a mini-lesson using this material, while implementing the correct instructional routine cycle, opportunities to respond and the correct error correction procedures. “Wonder Works” (McGraw-Hill, 2014) is the new reading curriculum that the district started using for the 2014-2015 school year. A trainer used materials from this curriculum program to model a mini-lesson, while implementing the correct instructional routine cycle, opportunities to respond and the correct error correction procedures.
Trainees were given previous training on resource classroom curriculum, including the curriculum that was used for this particular training.

Trainers provided a copy of “Research into Practice” (Hofmeister, 1999) and “Explicit Instruction” (Archer, 2011) to all trainees. Both of these materials were used in the assigning of homework after Day 1 training.

Copies of the pre-quiz, the power point from lecture, along with handouts of the Instructional Routine Form and Response Opportunity Form were also provided to the trainees.

Day 1 Training

The first day consisted of lecture, demonstration and modeling. A power point was used as a guided format to the lecture. Information from “Research into Practice” (Hofmeister, 1999) and “Explicit Instruction” (Archer, 2011) were used to create the power point. The opening activity started with a group welcome and the pre-quiz (see Appendix D). After quickly reviewing the quiz, the trainers introduced themselves to the trainees. The trainers stated their names, locations and job titles/descriptions within Davis School District. Next, the trainees shared their names, school/settings location, and something interesting about themselves.

Second, the trainers presented the course objectives and rationale. They are as follows:

Objective:

- “I CAN” Describe and demonstrate knowledge of the 8 components of effective instructional routines (see Appendix B)
• “I CAN” Demonstrate how to incorporate effective instructional routines while increasing student response opportunities, praise statements and follow error correction procedures across all curriculum as measured by Instructional Routine Form (see Appendix B) and Opportunity to Respond Form (see Appendix C)

Rationale:

To increase quality instruction that produces positive student outcomes.

Third, trainers used a power point to guide the lecture portion of the training. The power point is called “Effective Instruction….what does good teaching look like”? The power point was derived from information obtained from the “Research into Practice” and “Explicit Instruction “books. The power point took approximately an hour to review and discuss with trainees.

Fourth, trainers reviewed the 8 components of the Instructional Routine Form (see Appendix B) and the components of the Opportunity to Respond Form (see Appendix C); while explaining the specific criteria and examples of each component.

Fifth, trainers provided a quick overview of the writing and reading curriculum. Trainees had prior expose to curriculum before attending the “Effective Instruction Training”. “Framing Your Thoughts” (Language Circle Enterprises, 2005) was used to model the first lessons. This lesson lasted approximately 20 minutes in length. The next trainer led the second mini-lesson using the “Wonder Works” (McGraw-Hill, 2014) curriculum. This lesson also lasted approximately 20 minutes in length. Materials for training were selected based on the fact that they are researched-based, the district had purchased the curriculum for teachers and stocked all elementary resource classrooms.
throughout the district with this curriculum. Trainees were encouraged to complete the instructional routine and response form during the modeled lessons. At the end of the modeling, trainees were able to ask questions and trainers provided additional feedback and support as needed for understanding.

Sixth, trainees were assigned the homework that needed to be completed prior to Day 2 training. Homework assignments are as followed:

1. Read chapters 3 & 4 from “Research into Practice” (Hofmeister, 1999) to prepare for the post quiz given during training Day 2.

2. Review “Explicit Instruction” (Archer 2011) book and find information to share with peers during next training day.

3. Develop a reading or writing lesson with a delivery time of 15-20 minutes. Trainees will need to use the 8 components of instructional routines in their lesson as well as provide student response opportunities, praise statements and error corrections during your lesson.

Peers and trainers used the Instructional Routine Form (see Appendix B) and Opportunity to Respond Form (see Appendix C) to provide feedback during the mini-lessons on Day 2 training.

Finally, trainees were asked to write down three “Ah-ha’s” on an index card from the training and leave these on the table prior to leaving for the day. These were shared at the opening of Day 2 training.
Day 2 Training

The second training day started with a welcome and quick review. Some of the “Ah-ha’s” from training day one were shared and discussed. Trainees also used this time to ask any question for clarification purposes.

After the welcome and review session, trainers played a review game with trainees to reinforce learning and understanding of materials previously taught and read. Trainees were put into two rows of seven. Two trainees came to the front at one time. Trainer one ask a question and whichever trainee hit the “that was easy button” and answered the question correctly got to pick a prized from the prize basket that trainer two was holding. The game went quickly until all participants were able to earn a prize. The trainees enjoyed the review game and became competitive during this activity.

Next, trainee’s watched an Anita Archer video titled “Instructional Routines in the Classroom”. The video reinforced the information provided in this professional development course and the importance of maintaining such practices within the classroom setting to help the teacher and the student be successful.

Upon the completion of the video, trainees shared their important findings from the “Explicit Instruction” book (Archer, 2011). This sparked good conversation between trainees and trainers.

After the sharing time, trainees were divided into two small groups of 7 trainees and one trainer to prepare for mini-lessons. Trainers quickly reviewed the observation forms before mini-lessons are conducted. Trainees took turns delivering a lesson to their peers and trainer for 15-20 minutes. Trainees rotated between students and peer observers for all lessons presented. Throughout the lessons, trainers provided immediate
error correction to help improve the flow of the lesson. After each trainee presents his/her lesson, the trainer and peers provided 5-7 minutes of quick specific feedback on the use of instructional routines, praise statements, student response opportunities and error correction procedures. If the error correction procedure was used on the trainee during their first presentation, trainees were given 15-20 to present their lesson a second time to practice without errors. Specific feedback again was given immediately following the lesson by trainer and peers.

After all trainees had presented to their peers and trainer, the group of trainees had the opportunity to ask clarifying questions. Trainers then schedule a time with their assigned trainees to come to the trainee’s classroom for a second observation. Trainers observed a reading or writing lesson within the following week of last training date.

Once all groups completed their mini-lesson activity, the two small groups came back to whole group. At this point, the trainees were given the post-quiz. Scores from the pre and post quiz were emailed to the trainees so they could see how well they increased their understanding during the last two training sessions.

Training concluded with trainees completing a formal training evaluation (see appendix F). A fun drawing of simple prizes completed the two day training. In addition to training and observations, additional support can be provided through further observations, school visits, email and/or phone contact.
Results

The purpose for this project was to evaluate the effectiveness of professional training for mild/moderate special education teachers in an elementary setting that included lecture, quizzes, simulated trainee practice and feedback through observations. The data is divided into three subsections. Each subsection reflects the pre-post mean and the gain or loss mean for the areas of instructional routine, response opportunity items and the quizzes associated with this training.

Subsection One

Table 1 in subsection one reports the eight components of the Instructional Routine Observation form for the pre and post observation. Data in this table is presented across all participants and is reported as a percentage. Five of the eight instructional components show a gain. Three of the areas show no gain or a loss. The biggest gain was in the area of objective/rationale. All five of the participants failed to incorporate a lesson objective/rationale in their lesson during the pre-observation. During the post-observations, four out of the five participants effectively provided a written lesson objective/rationale and stated it during the opening of their lesson. The next highest gain was component review/closure. During the pre-observation, 40% of the participants remembered to end their lesson with a review/closure of the lesson. During the post-observation, all five participants embedded a review/closure into their lesson. This is an overall gain of 60%. The components of review and model had a gain of 40%, while guided practice had an overall gain of 20%. The reason for the overall minimal gain for these components is because participants had a high rate effectiveness during both the pre and the post observations. The class starter shows a pre and post mean of 80% and an
EFFECTIVE INSTRUCTIONAL ROUTINES AND RESPONSE OPPORTUNITIES

An overall gain of 0%. Four out of the five participants had a class started ready for students when they entered the class during the pre and post observation. Overall, this was neither a gain nor loss from the pre to the post observation. Independent practice and independent assessment both reflect a mean of 0% for the pre and post observation. During all participant observations, students were still in the guided practice phase and not ready for the independent stage. The means for pre/post and gains/loss are 0%. As a whole, the post observations show that all participants are effectively using the “meat” of the instructional routine (review, model, guided practice and Review/closure) during instructional lessons.

**Pre-Post Means the 8 Components of Instructional Routine Across All Participants**

<table>
<thead>
<tr>
<th>Instructional Routine</th>
<th>Mean No. Observed Pre</th>
<th>Mean No. Observed Post</th>
<th>Mean No. Observed-Gain (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Starter</td>
<td>80%</td>
<td>80%</td>
<td>0%</td>
</tr>
<tr>
<td>Objective/Rational</td>
<td>0%</td>
<td>80%</td>
<td>80% Gain</td>
</tr>
<tr>
<td>Review</td>
<td>60%</td>
<td>100%</td>
<td>40% Gain</td>
</tr>
<tr>
<td>Model</td>
<td>40%</td>
<td>80%</td>
<td>40% Gain</td>
</tr>
<tr>
<td>Guided Practice</td>
<td>80%</td>
<td>100%</td>
<td>20% Gain</td>
</tr>
<tr>
<td>Review/Close</td>
<td>40%</td>
<td>100%</td>
<td>60% Gain</td>
</tr>
<tr>
<td>Independent Practice</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Independent Assessment</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Table 1**

Table 2 in subsection one presents data for each of the five participants individually. It is clear that all five made gains in the use of instructional routines. Again, percent’s presented, rounded to the nearest tenth. Even though there are 8 components of the instructional routine cycle, scores reflect percentages based on only 6 components.
The reasoning for this that is no students were working on independent skills or assessments during the pre and post observations.

Participants AO and TR had the lowest means during the pre-observation. Both participants only incorporated two instruction components during their lesson, giving them a mean of 33%. KD and JP both had a mean average of 50% during the pre-observation. Both teachers used three instructional routine components during their lesson, while SB had a mean of 83% incorporating five instructional components correctly.

During the post observation, SB, JP, and TR increased their mean of instructional component to 100% on the post observation. They used 6 instructional components correctly during this observation. Students were getting the “meat” of the instruction and were engaged throughout the lesson; increasing student knowledge and understanding of skills. AO increased her post mean to 83% using 5 out of 6 instructional routines components in her post observation lesson. KD made minimal growth based on her post observation. She only increased the use of instructional components from 3 to 4 during her lesson.

Gains were made by all participants. TR made the largest gain with an across the board gain was 67%. JP made the next highest gain. She made a total gain of 50%. SB and KD made the smallest amount of gain. Even though both teachers made minimal gains, the difference between these two teacher’s gains is substantial. SB started with a higher mean (83%) on her pre-observation and achieved 100% on post observation, while KD had a pre-observation of 50% and only increased on the post observation to 66%.

For the instructional routine observations, I would assert that all teachers were successful
in the effective use of instructional routines with the exception of KD. The instructional coach and KD determined that ongoing coaching and observations are needed to increase the use and understanding of instructional routines. KD will also go to a master teacher’s classroom and watch her teach using the effective use of the instructional routine components.

**Pre-Post Mean on Instructional Routines per Participant**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Mean No. Observed Pre</th>
<th>Mean No. Observed Post</th>
<th>Mean No. Observed-Gain (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KD</td>
<td>50%</td>
<td>66%</td>
<td>16% Gain</td>
</tr>
<tr>
<td>SB</td>
<td>83%</td>
<td>100%</td>
<td>17% Gain</td>
</tr>
<tr>
<td>JP</td>
<td>50%</td>
<td>100%</td>
<td>50% Gain</td>
</tr>
<tr>
<td>TR</td>
<td>33%</td>
<td>100%</td>
<td>67% Gain</td>
</tr>
<tr>
<td>AO</td>
<td>33%</td>
<td>83%</td>
<td>50% Gain</td>
</tr>
</tbody>
</table>

**Table 2**

**Subsection Two**

This subsection reports pre-post data on the Response Opportunity items (praise statements, OTR and error corrections). Praise statements and opportunities to respond (OTR’s) are reported in number per minute while error correction is based on percent of errors identified and correctly corrected during the lesson using the error correction cycle (identify, model, test and delay test). Table 2 reports the means across all participants.

During the pre-observations participants had an overall mean of 5.6 praise statements per minute. To master the criteria for praise statements, participants must achieve a minimum of 6-8 praise statements per minute. Based on the pre-data, participants fell below the minimum criteria. Based on post observation data, participants increased their mean minimal praise statements per minute to 7.3. This is an across the
board gain of 1.7 praise statements per minute. While this is a gain, 7.3 meets the minimum criteria for praise statements per minute.

Opportunities to respond (OTR’s) also have a minimum criteria of 6-8 OTR’s per minute. OTR’s can be measured in group or individual responses. Data for this project is averaged together for an overall group praise rate per minute. The mean for the pre-observations shows that participants had an average 7.3 OTR per minute across all observation. This data is within the minimum requirements of OTR per minute. During the post observations participants had a mean of 7.1. This is reflected as a .2 OTR loss. Even though it is a loss of ORT per minute, participants fell within the overall criteria of 6-8 OTR per minute.

Error corrections seem to a challenging area for participants. Data for this section is represented in percent. During all five pre-observations, 5 student errors were identified, but none of the five participants completed the correct error correction cycle. The mean of 0% is reflected in the graph below under the section for the pre-observation. During the post observations, participants increased their error identification and error correction process. Across all participants, 10 errors were identified and 7 were completed using the whole error correction cycle (identify, model test, delay test). This information is represented as 70% in the post observation section of the table. This reflects an overall gain of 70%.
Pre-Post Means for Response Opportunity Items (Praise, OTR, Error Correction)

Across All Participants

<table>
<thead>
<tr>
<th>Response Opportunities Item</th>
<th>Mean No. Per Minute &amp; % Pre</th>
<th>Mean No. Per Minute &amp; % Post</th>
<th>Mean No. Per Minute &amp; % Gain (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Praise Statements</td>
<td>5.6</td>
<td>7.3</td>
<td>1.7 Gain</td>
</tr>
<tr>
<td>Opportunities to Respond</td>
<td>7.3</td>
<td>7.1</td>
<td>.2 Loss</td>
</tr>
<tr>
<td>Error Corrections</td>
<td>0%</td>
<td>70%</td>
<td>70% Gain</td>
</tr>
</tbody>
</table>

Table 3

The following three tables (4, 5, & 6) in subsection two present pre-post data on the Response Opportunity items (praise statements, OTR and error corrections) for each participant individually. Praise statements and opportunities to respond (OTR’s) are reported in number per minute and error correction is based on percent of the errors that were identified and then corrected during the lesson using the error correction cycle (identify, model, test and delay test).

During the pre-observations, only two participants met the minimum criteria of 6-8 praise statements per minute. SB had the highest number of praise statements per minute with a mean of 8.5, while TR maintained 6 praise statements per minute. JP had the lowest rate of only 4 praise statements per minute. AO and KD also did not meet the minimum requirements of 6-8 praise statements per minute during their pre-observation. AO had 4.5 praises per minute while KD had 5. On the post observation, all participants gained in their praise statements per minute with the exception of SB. SB went from 8.5 praise statements per minute based on the pre-observation to 8 praise statements per minute based on the post observation, still a very high rate well within the criteria of 6-8 praise statements per minute. JP made the most significant gains. She went from 4 praise statements per minute in her pre-observation to a mean of 8.4 in her post
observation. This is an overall gain of 4.5 praise statements per minute. TR went from 6 praise statements to 7 per minute, maintaining the criteria. AO went from 4.5 during the pre-observation to 6.5 during the post observation. In the first observation, AO she did not maintain the minimum criteria for praise statements, but on the post observation increased to the minimum requirements. KD is similar to AO. She had a rate of 5 praise statements per minute on the pre-observation and increased to a mean of 6.5 on the post observation. KD did did meet the mastery criteria.

**Pre-Post Means for Number of Praise Statements per Minute**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Mean No. Praises Per Minute Pre</th>
<th>Mean No. Praises Per Minute Post</th>
<th>Mean No. Praises Per Minute Gains (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KD</td>
<td>5</td>
<td>6.5</td>
<td>1.5 Gain</td>
</tr>
<tr>
<td>SB</td>
<td>8.5</td>
<td>8</td>
<td>.5 Loss</td>
</tr>
<tr>
<td>JP</td>
<td>4</td>
<td>8.4</td>
<td>4.5 Gain</td>
</tr>
<tr>
<td>TR</td>
<td>6</td>
<td>7</td>
<td>1 Gain</td>
</tr>
<tr>
<td>AO</td>
<td>4.5</td>
<td>6.5</td>
<td>2 Gain</td>
</tr>
</tbody>
</table>

Table 4

Opportunities to respond (OTR’s) seem to be the easiest area for participants to achieve success. Based on the data in the Table 5, all but one teacher met the minimum criteria for OTR’s during the pre-observation. Data in Table 5 is based on the means for each individual participant. KD had the most OTR during the pre-observation. She elicited 10 student responses per minute during the guided practice portion of the lesson. However, during the post observation, KD’s ORT’s declined to 6.5 per minute. Even though both scores meet the minimum requirement of 6-8 OTR per minute, the data reflects a loss of 3.5 OTR’s per minute. AO made the second biggest gains in the area of OTR. AO went from only 4 OTR per minute in the pre observation to 6.4 in the post observation. This is a gain of 2.5 OTR per minute. JP made a .5 gain in OTR when she
went from 6.5 OTR in the pre-observation to 7 OTR in the post observation. She too met
the minimum requirements of 6-8 OTR per minute. SB maintained 8 OTR per minute
during both the pre and post observations. She met the criteria for OTR of 6-8 per
minute. TR showed a loss from 8 OTR per minute in the pre-observation to 7.5 during
the post observation. Even though this is a loss, she met the minimum requirement for
OTR as well.

### Pre-Post OTR’s per Participant

<table>
<thead>
<tr>
<th>Participant</th>
<th>Mean No. OTRs Per Minute Pre</th>
<th>Mean No. OTRs Per Minute Post</th>
<th>Mean No. OTRs Per Minute Gains (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KD</td>
<td>10</td>
<td>6.5</td>
<td>3.5 Loss</td>
</tr>
<tr>
<td>SB</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>JP</td>
<td>6.5</td>
<td>7</td>
<td>.5 Gain</td>
</tr>
<tr>
<td>TR</td>
<td>8</td>
<td>7.5</td>
<td>.5 Loss</td>
</tr>
<tr>
<td>AO</td>
<td>4</td>
<td>6.4</td>
<td>2.5 Gain</td>
</tr>
</tbody>
</table>

Table 5

The final table in this subsection presents the data for error correction. Error
correction was a tough area for improvement for all but one participant. All participants
made significant gains. During the pre-observation none of the participants correctly
identified and completed the error correction procedure correctly. TR made the most
substantial gain during the post observation. TR identified two student errors and
appropriately corrected them receiving a 100% on the post observation. SB and JP made
a gain of 60% for error corrections, while KD and AO made 50% gains. All participants
will continue to work towards improvement in this area.
Pre-Post Error Corrections per Participant

<table>
<thead>
<tr>
<th>Participant</th>
<th>Mean No. Error Corrections Pre</th>
<th>Mean No. Error Corrections Post</th>
<th>Mean No. Error Corrections Gains (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KD</td>
<td>0%</td>
<td>50%</td>
<td>50% Gain</td>
</tr>
<tr>
<td>SB</td>
<td>0%</td>
<td>60%</td>
<td>60% Gain</td>
</tr>
<tr>
<td>JP</td>
<td>0%</td>
<td>60%</td>
<td>60% Gain</td>
</tr>
<tr>
<td>TR</td>
<td>0%</td>
<td>100%</td>
<td>100% Gain</td>
</tr>
<tr>
<td>AO</td>
<td>0%</td>
<td>50%</td>
<td>50% Gain</td>
</tr>
</tbody>
</table>

Table 6

Subsection Three

This subsection presents the data from the pre-post quizzes given to participants during the two day training sessions. The data reports the level of knowledge prior to training and the gains following the training. This quiz is adapted from the 1999 “Research into Practice” book by Alan Hofmeister and Margaret Lubke. The focuses was on chapter 3 and 4 from the book. Two tables present the data from this subsection. Table 7 reports the mean percentage of quiz questions correct across all participants and table 8 reports the pre and post scores for each participant.

According to the pre-quiz, questions 1, 2, 6, 7, 13, and 14 seemed to be the most difficult questions for participants. All five participants for this study missed the following questions.

1. The concept of overlearning is associated with:
   a. guided practice
   b. independent practice
   c. daily reviews
   d. monthly reviews
2. List the major teaching functions/Instruction Routines:
   a. ______________________
   b. ______________________
   c. ______________________
   d. ______________________
   e. ______________________

6. To increase the opportunities for student responses, __________ __________ is used to provide lots of group practice.

7. The steps of error correction include the following:
   a. ______________________
   b. ______________________
   c. ______________________
   d. ______________________

13. When referring to effective instruction, the “T.G.I.F” means:

   T=
   G=
   I=
   F=

14. The effective instructional cycle includes the concept of re-teaching in what phase(s) of the instruction:
   a. review
   b. learning set
   c. new material
   d. guided practice
   e. all of the above
   f. 7 d only
   e. b, c, & d only

The pre-quiz average is 27%. Questions 3, and 9 on the pre-quiz had the highest percent with (100%) across all five participants. The mean post-quiz score was 87%. During the post-quiz, question 7 deemed the most difficult.
7. The steps of error correction include the following:
   a. ____________________
   b. ____________________
   c. ____________________
   d.____________________

Questions 4, 5, 8, 10, 11, 12 14 and 15 were answered with 100% accuracy. There were mean improvements in all questions with the exception of questions 3 and 9. The highest gain was for question 14 (a 100%) and lowest gains were for questions 3, 9, 10 and 15 with (a 20%).

### Pre-Post Quiz Across All Participants per Question

<table>
<thead>
<tr>
<th>Test Questions</th>
<th>Pre-Quiz</th>
<th>Post Quiz</th>
<th>Gain (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>0%</td>
<td>80%</td>
<td>80% Gain</td>
</tr>
<tr>
<td>Question 2</td>
<td>0%</td>
<td>60%</td>
<td>60% Gain</td>
</tr>
<tr>
<td>Question 3</td>
<td>100%</td>
<td>80%</td>
<td>20% Loss</td>
</tr>
<tr>
<td>Question 4</td>
<td>40%</td>
<td>100%</td>
<td>60% Gain</td>
</tr>
<tr>
<td>Question 5</td>
<td>60%</td>
<td>100%</td>
<td>40% Gain</td>
</tr>
<tr>
<td>Question 6</td>
<td>0%</td>
<td>80%</td>
<td>80% Gain</td>
</tr>
<tr>
<td>Question 7</td>
<td>0%</td>
<td>40%</td>
<td>40% Gain</td>
</tr>
<tr>
<td>Question 8</td>
<td>60%</td>
<td>100%</td>
<td>40% Gain</td>
</tr>
<tr>
<td>Question 9</td>
<td>100%</td>
<td>80%</td>
<td>20% Loss</td>
</tr>
<tr>
<td>Question 10</td>
<td>80%</td>
<td>100%</td>
<td>20% Gain</td>
</tr>
<tr>
<td>Question 11</td>
<td>60%</td>
<td>100%</td>
<td>40% Gain</td>
</tr>
<tr>
<td>Question 12</td>
<td>80%</td>
<td>100%</td>
<td>40% Gain</td>
</tr>
<tr>
<td>Question 13</td>
<td>0%</td>
<td>80%</td>
<td>80% Gain</td>
</tr>
<tr>
<td>Question 14</td>
<td>0%</td>
<td>100%</td>
<td>100% Gain</td>
</tr>
<tr>
<td>Question 15</td>
<td>80%</td>
<td>100%</td>
<td>20% Gain</td>
</tr>
</tbody>
</table>

Table 7

Table 8 reports quiz scores for each individual participant on the pre & post quizzes. The lowest score was 26% and the highest was 53%. On the post-quiz, the average score was 81%, with the lowest score being 66% and the highest score being 93%. The overall average gain of 36%. All participants increased their knowledge and
understanding of effective instruction and instructional routines. TR and AO made the biggest gains with (47%). JP had a 27% gain, while KD had the smallest gain of only 13%.

**Pre-Post Quiz per Participant**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Quiz Mean No. Correct Pre</th>
<th>Quiz Mean No. Correct Post</th>
<th>Quiz Mean No. Correct-Gains (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KD</td>
<td>53%</td>
<td>66%</td>
<td>13% Gain</td>
</tr>
<tr>
<td>SB</td>
<td>46%</td>
<td>93%</td>
<td>47% Gain</td>
</tr>
<tr>
<td>JP</td>
<td>53%</td>
<td>80%</td>
<td>27% Gain</td>
</tr>
<tr>
<td>TR</td>
<td>46%</td>
<td>93%</td>
<td>47% Gain</td>
</tr>
<tr>
<td>AO</td>
<td>26%</td>
<td>73%</td>
<td>47% Gain</td>
</tr>
</tbody>
</table>

**Table 8**

**Discussion**

The primary purpose for this study was to evaluate the effectiveness of professional training that focused on increasing teacher’s implementation of effective instructional routines, praise statements, opportunities to respond, error correction and an overall increased knowledge base for effective instructional practices. In this project, trainees increased their effective instructional routines, response opportunities, error corrections and instructional knowledge by receiving training that incorporated lecture, simulated practices, quizzes, observations and coaching. Overall, the results of this study indicates that when teachers are provided knowledge, ongoing practice, reflecting and mentoring, they improve their skills at delivering instruction. Based on the data gathered, all participants increased their knowledge and instructional practices, thus resulting in positive student outcomes.
Limitations

Even though the data shows that this type of professional training can be successful, the study is not without limitations. The following limitations are noted.

First, there were only 5 participants. Because having a limited number of participants, the results in this study cannot be assured to present the same for a larger population of teachers. Possible that if more participants were included, the pattern of results might present differently.

Second, there were only two observations conducted during this study. One cannot assume that teachers will maintain effective instruction practices without ongoing observations and data. It is also possible that with only one pre and one post observation, that the data do not accurately reflect the reality.

Third, the trainings was only 2 half days. Due to budget cuts, trainings have been scales back in many districts, include Davis School District. In the past, the Special Education Department for Davis School District provided similar professional training on several training dates throughout the year. By limiting the number of training days and pushing more information into shorter days, are teachers going to retain and maintain skills taught in simulated practices and through observation feedback?

This study will be shared with district special education supervisors to determine the direction of future effective instruction trainings for new elementary special education hires.

Further Research

As a result of this study suggests that further research should be conducted to evaluate whether trainings have a lasting effect on teacher’s instruction practices and
most importantly whether these improve effective instruction practices are creating better student outcomes. This study creates further questions for research. How would data be impacted if more participants were included in similar studies? What would be the lasting effects on teacher practices if there were more observations conducted over a longer period of time? Would teacher’s instruction routines continue to improve with continued support and feedback? After this study, I hope to continue to conduct further research to help answer some of these purposed questions.
References


Kutztown Distribution Center


*Educational Leadership*, 59 (6) 45-51.


*Educational Leadership*, 49(3), 73-76.


Washington, DC: National Council for Accreditation of Teacher Education.
Appendix A

Professional Development Training Day 1 Agenda

Welcome

Pre-Quiz

Introduction of Trainers

Introductions of Teachers

Course Objectives/Rationale

Power Point of Effect Instruction

Review Observation Forms (Instructional Routines & Opportunity to Respond Form)

Quick Curriculum Review

Lessons Modeled By Trainers

Assign Homework/Questions

Complete “Ah-ha’s” for out the door
Professional Development Training Day 2 Agenda

Welcome

Review of Day 1 Training

Review Game

Anita Archer Video “Instructional Routines in the Classroom”

Sharing activity from “Explicit Instruction” book

Small Group Teaching Activity

Schedule 3rd Observation with assigned coach

Post Quiz

Training Evaluation

Prize Drawing

Questions
### Instructional Routines and Data Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Criteria</th>
<th>Observed</th>
<th>Not Observed</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Starter</td>
<td>Materials Ready for Students when they enter classroom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson Object/Rationale</td>
<td>Stated and written</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review</td>
<td>Ask and state what was learned from previous lesson</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Model (I)</td>
<td>Teacher Model at least 3-5 Examples (Correct Examples and Non-Examples)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guided Practice (We)</td>
<td>Student Support:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How Measured? (Data)</td>
<td>Visual Prompts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verbal Prompts</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical Prompts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review/Closure</td>
<td>Quick review of current lesson</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Practice (You) or Return to Guided Practice</td>
<td>Student masters his/her percentage or above on IEP goal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How Measured? (Data)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Assessment of Concept (no support)</td>
<td>Student masters his/her percentage or above on final assessment (Shows goal as mastery)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>How Measured? (Data)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Observation Response Form (15 Minute Observation)

**Teacher:** ________________  **Date:** ________________  **Time:** _________

**Observer:** ________________  **Class:** ________________  **Activity:** _________

**STEP 1:** Consult with teacher and discuss teaching expectations/focus for observation.

**STEP 2:** During a 15-minute observation period, record simple tally marks for each behavior.

- **Praise Rate:** Teacher should have 6-8 praise rates per minute
- **Opportunities to Respond Rate:** Teacher should give students 6-8 opportunities to respond per minute
- **Error Correction:** Teacher needs to complete the whole error correction process to get credit

<table>
<thead>
<tr>
<th>Praise Statements</th>
<th>Academic Minute 1</th>
<th>Behavioral Minute 1</th>
<th>Academic Minute 2</th>
<th>Behavioral Minute 2</th>
<th># Praises/Min.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Total: _____</td>
<td>Total: _____</td>
<td>Total: _____</td>
<td>Total: _____</td>
<td>Total: _____</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Opportunities To Respond</th>
<th>Group Response Minute 1</th>
<th>Group Response Minute 2</th>
<th>Individual Response Minute 1</th>
<th>Individual Response Minute 2</th>
<th>OTRs</th>
</tr>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Total: _____</td>
<td>Total: _____</td>
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<td>Total: _____</td>
<td>Total: _____</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Error Corrections</th>
<th>Error Minute 1</th>
<th>Model Minute 1</th>
<th>Test Minute 1</th>
<th>Delayed Test Minute 1</th>
<th># of Corrections Completed</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Appendix D

Effective Instructional Practices – Pre/Post Test

1. The concept of overlearning is associated with:
   
   e. guided practice  
   f. independent practice  
   g. daily reviews  
   h. monthly reviews

2. List the major teaching functions/Instruction Routines:
   
   a. ___________________
   b. ___________________
   c. ___________________
   d. ___________________
   e. ___________________

3. Examples of praise statements could include which of the following:
   
   a. nice job, well done, sound it out, almost there  
   b. nice job, beautiful, awesome, sound it out  
   c. well done, awesome job, correct, yes  
   d. well done, correct, sound it out, yes

4. Students should be given the opportunity to respond a minimum of how many times per minute during the acquisition of new material:
   
   a. 2-3 correct responses per minute  
   b. 3-5 correct responses per minute  
   c. 6-8 correct responses per minute  
   d. students do not need to respond correctly

5. When teaching students to respond, a __________ is used to encourage unison responding.

6. To increase the opportunities for student responses, __________ __________ is used to provide lots of group practice.
7. The steps of error correction include the following:
   a. ____________________
   b. ____________________
   c. ____________________
   d.____________________

8. “What,” “where,” and “when” questions would be characterized by:
   a. high-level questions
   b. difficult questions
   c. easy questions
   d. low-level questions

9. A firm, correct response by a student should be followed by:
   a. extensive praise and quick movement to the next question
   b. prompting and re-teaching
   c. a short confirmation and a quick movement to the next question
   d. a praise statement and a quick review of the reason the answer is correct

10. A hesitant, correct response by a student should be followed by:
    a. extensive praise and quick movement to the next question
    b. prompting and re-teaching
    c. a short praise statement and quick movement to the next question
    d. a praise statement and quick review of the reason the answer is correct

11. If using a combination of choral and individual responses:
    a. stress individual responses in the initial stages of learning
    b. stress choral responses in the initial stages of learning
    c. use choral responses only with independent practice
    d. use choral responses only with guided practice

12. An effective correction procedure is often characterized by:
    a. re-teaching and prompting
    b. a teacher response to student misbehavior
    c. teaching students to correct other students
    d. inconsistent responses to different students for the same error
13. When referring to effective instruction, the “T.G.I.F” means:

\[
T = \\
G = \\
I = \\
F = 
\]

14. The effective instructional cycle includes the concept of re-teaching in what phase(s) of the instruction:
   
a. review  
b. learning set  
c. new material  
d. guided practice  
e. all of the above  
f. 7 d only  
e. b, c, & d only

15. The most appropriate time to identify student error is during:
   
a. independent practice  
b. home work  
c. guided practice  
d. overlearning
Appendix E

Pre and Post Observation Questions

Pre-Observation Questions

1. What subject will you be teaching?
2. What is the lesson objective?
3. How many students will be in this class?
4. How will student learning be assessed?
5. What resources will be used during the lesson?
6. What special characteristics of the students’ do you want highlighted?

Post-Observation Questions

1. How did you feel the lesson went?
2. Did the students accomplish the goal you had planned and how do you know?
3. What were your teaching strengths?
4. What do you feel you need to improve on?
5. What do you know about instructional routines and student response opportunities?
Appendix F

Davis School District
Special Education Department
Training Evaluation

Training: _________________________  Date: _________________________

Trainers: ____________________________________________________________

What information in this training was particularly helpful to you?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

What information did you hope to receive, but did not?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

What learning activities used in this training did you find most helpful for you?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

How can this training be improved?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Do you feel you were given positive support and feedback?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Other comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________