"Icing on the cake."
This is the expression that Tim Slocum, associate professor in Utah State University’s Department of Special Education and Rehabilitation, uses when describing being awarded the 2011 Fred S. Keller Behavioral Education Award by the American Psychological Association.

“I just love doing this work of helping to improve education through research and teaching,” Slocum said. “The real rewards come every day in interacting and collaborating with students and colleagues, doing the research, and promoting effective education.”

Being recognized for contributions in the area of direct instruction and efforts to promote the widespread adoption of effective, empirically validated teaching practices, Slocum joins some of the most well-known applied behavior analysts in the world as award recipients.

The award is even more meaningful to Slocum because it is named for Fred Keller.

“Fred Keller was a legendary psychologist and teacher who was especially concerned with improvement of children’s lives,” Slocum said. “He has been a hero of mine since I was a new graduate student.”

A focus of Slocum’s career has been to advance research and practice on Direct Instruction—the explicit teaching of a skill-set using lectures or demonstrations of the material—and other empirically validated instructional

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<th>The schools and organizations listed below are institutional members of the Association for Direct Instruction. We appreciate their continued support of quality education for students.</th>
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<td>SRA, Michigan  DeWitt, MI</td>
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<td>Alliance Academy of Cincinnati  Cincinnati, OH</td>
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<td>American Preparatory Academy  Draper, UT</td>
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<td>Bancroft - Rosalie School  Bancroft, NE</td>
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<td>Beacon Services  Milford, MA</td>
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<td>Cash Valley Elementary School  LaVale, MD</td>
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<td>Centennial Public School  Utica, NE</td>
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<td>Central Linn SD  Brownsville, OR</td>
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<td>City Springs School  Baltimore, MD</td>
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<td>Coyne and Associates Education Corp.  Encinitas, CA</td>
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<td>Crazy Horse School  Quinn, SD</td>
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<td>Criterion Child Enrichment  Milford, MA</td>
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<td>Exceptional Learning Centre  Ajax, Ontario</td>
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<td>Morningside Academy  Seattle, WA</td>
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The Clarinda Academy is a licensed residential treatment facility located in Clarinda, Iowa. The Clarinda Academy serves over 250 adjudicated youth from approximately 14 states and the US Virgin Islands. Male and female Clarinda Academy students range in age from 12-18 years old and reside at the program from 3-12 months, usually. Most students are adjudicated delinquent and many also have a mental health diagnosis.

The Clarinda Academy uses a normative culture (staff-directed, modified positive peer culture) program, wherein the students are responsible for establishing and maintaining pro-social norms (expected behavior) on campus. Students are expected to “intervene” in negative behavior exhibited by other students through the utilization of a series of non-verbal and verbal instructions. Trained staff oversees student intervention to prevent the misuse of the technique, as well as to “step in” should a student escalate beyond the ability of other students to deal with the offending behavior.

Many students attending the Clarinda Academy have a dismal academic background, which is not unusual for kids in the foster care system. Lack of parental involvement and support in matters pertaining to education, a spotty school attendance record, lack of pre-school or early education participation, frequent school changes, substance abuse, poverty, and ineffective teaching methods have all contributed to the lagging performance of these students.

This “achievement gap” is apparent in the low-level reading skills of many of these students. It is not unusual to find a bright, street-smart, enterprising, and engaging student of 16 or 17 years of age—who struggles to read at a second or third grade level. Many of these students report poor school attendance, expulsions, transfers to alternative education environments, and disruptive behavior as a regular part of their public school experience.

It is imperative that these students are taught to read—in chorus with learning pro-social behavior and having their mental health needs addressed. Even if they leave residential treatment with better behavior and mental health treatment—they still are not employable if they cannot read! Even “blue collar” or minimum wage jobs require the ability to read an employee handbook, complete an application, forming the Cache Valley Learning Center, a private school he co-founded, into a public school. The Bear River Charter School opened its doors in August 2010 and currently serves twice as many children in K-8 as the previous school.

Slocum has been asked to present an invited address at the American Psychological Association convention in Washington, D.C. (Aug. 4-7), as this year’s award winner.
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and follow printed instructions. If these students are not able to secure a job, eventually they will resort to criminal activity or become a burden to our social services systems.

Beginning in March of 2010, the Clarinda Academy—in concert with Fostering Literacy, the Foster Aunt and Uncle Project, Deborah Steely and Polk County Decategorization (who provided the funding)—introduced Corrective Reading (Direct Instruction) to 18 Clarinda Academy students. Five tutors were trained by Deborah Steely and taught small groups of one to six students using Direct Instruction Decoding and Comprehension materials.

The instruction took place four nights a week (from 8 pm to 9:30 pm), and Saturday mornings for two hours, between March 1 and June 30th. Because of the grant funding (Polk County Decategorization money), only Iowa students were allowed to participate in the program.

Students were given the Direct Instruction placement test to determine their decoding and comprehension levels, in addition to a Woodcock Reading Mastery test at the beginning of the four-month program. Students were then given the WRM post-test upon discharge from the Clarinda Academy (for those students who were released prior to the end of June) or at the end of the four-month program, if they were still at the Academy.

For this group of students, the average grade level improvement was 2.8 grade levels in four months, as measured by the WRM tests.

The Clarinda Academy then asked that we expand the Direct Instruction Corrective Reading program during the 2010-11 school year and offer it to eligible students, irrespective of their referring state. The Academy was able to secure funding through Title 1 (Neglected and Delinquent dollars) and incorporated the reading program into the school day.

Deborah Steely monitors progress of the individuals and groups through review of the Lesson Progress Charts, Independent Work Summaries, Check-Out Results and Mastery Test Scores. She provides regular feedback to the tutors in addition to helpful suggestions regarding the performance of individual students and groups of students.

Since September of 2010, 45 students (all male—about half from Iowa and the remaining half from various other states) have participated (or continue to participate) in the DI Corrective Reading program. Again, class sizes are small—one to seven kids in a class each period—which facilitates an opportunity for rapid and meaningful remediation.

As of March 14, 2010, 24 of these students have been posttested using the Woodcock (due to discharge from the facility or completion of the trimester). These 24 students completed between six and 25 weeks of DI (two or three days per week depending upon their class schedule) and enjoyed an average of 2.69 grade levels reading improvement as measured by the pre and post testing (WRM).

Interestingly, none of the DI instructors has a teaching certificate. However, they are well-trained (thanks to Deborah Steely!) dedicated instructors, who have a heart for troubled youth and share a passion for teaching these kids to read!

In summary, Direct Instruction Corrective Reading has proven to be a very effective remediation program for Clarinda Academy youth.

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**Hilton Penn Station, Newark, New Jersey**

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**Immunization and Antibiotics**

I get a lot of emails from teachers, coaches, and principals that ask about exposure to grade level curriculum being ignored in order to provide intensive intervention. This is not only true of the elementary schools, but the middle and high schools as well, where students may be as much as 12 years below grade level. These are children who have missed their inoculations and now desperately need antibiotics. Learning to read, write, think, and calculate on time and on schedule is like receiving immunizations. If you are properly immunized, you should never get the disease the immunization is aimed at preventing. If you are taught to read, write, think, and calculate using scientifically validated methods and curricula like Direct Instruction, you should never fall victim to illiteracy or innumeracy.

Intervention is more like an antibiotic, designed to combat a specific ailment. Intervention as an antibiotic should be short-term, intense, and rely on tests...
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**ALMITRA L. BERRY, Ed.D.**

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Intervention is more like an antibiotic, designed to combat a specific ailment. Intervention as an antibiotic should be short-term, intense, and rely on tests
Beating the Test Stress

We’re heading into “test season,” that period in late winter and early spring when tens of thousands of students in grades 3-12 face the annual ritual of state testing. It’s a time when many students, feeling the tension so prevalent during “test season,” tend to act out. In this age of accountability, pressure to do well on tests affects faculty and staff as well. Sometimes teacher tension gets inadvertently passed on to students, adding to the anxiety they are already feeling.

Looking at testing in a different light can help alleviate tension all around, thus curbing student tendencies for mischief.

As the teacher, you want to avoid viewing the actual test day as the pinnacle of the cycle. Take a look at Figure 1.

In this scenario, instruction starts off slowly and steadily on the first day of school. As the day of the test nears, instructional intensity increases exponentially and then falls off dramatically the day after testing is complete. The remaining weeks (or months in some states) can be so laid back that it may feel as if the school year is over. In the days before the test, tension builds proportionately, increasing the likelihood of misbehavior. After the test, the target has disappeared, leaving behind a lack of structure and a relaxation of productivity that can contribute to increases in acting-out behaviors. Another problem here is the level of intensity—the pinnacle is not only sharp, but high as well. This reflects a level of anxiety so high that, for some children, it can actually generate the physical symptoms of illness.

A more effective way to approach testing is illustrated in Figure 2.

Here, as in the previous situation, instruction begins slowly at the beginning of the school year, but increases faster, building to the apex way before the day of testing. This allows for a period of sustained productivity in the days leading to the test, which buttresses student confidence, thereby alleviating last-minute stress. The dip in the graph represents a period of relaxation in the day or two preceding the test itself. This helps students feel more rested and relaxed on the day of the test. After testing, it is okay to relax for a day or two, but bring your instructional and behavioral expectations back up to where they were before testing and maintain that level until the school year is over. Notice also that the line never reaches the height it does in the previous graph. Thus, students display enthusiasm and energy, but never reach the level of anxiety evident in the previous example.

The trick is to keep a balanced level of productivity—too much instructional pressure can lead to unnecessary stress, too little can lead to idle minds. Either extreme contributes to student misbehavior. Instead, keep your students productively occupied and help them view testing as an opportunity to display what they’ve learned, rather than focusing solely on the score (“What have I accomplished in this class?” rather than “Did I pass?”). Any test should be viewed as a method to consolidate what students have learned.
to define what the ailment is, what will treat it, and whether or not the treatment worked after the prescribed amount of time in treatment.

Typically, when we are impaired and under a physician’s care, we are put on limited activities until the doctor says we can return to normal activities. While students are receiving treatment, intervention as an antibiotic, they should similarly be placed on limited activities. Tasks such as completing all grade level assignments and homework they can’t even read will impede the recovery process. After they are fully recovered, they can return to normal activities.

Yes, the students have to take the grade-level standardized test, but if they can’t read it, how well are they going to do?

• If a fifth-grade student reads at a first-grade level, can they read the test?
• If the student can decode the test but cannot comprehend the information, can they perform well?
• If the student with a three or more year deficit sits through grade-level instruction, but still cannot read the test, how have we served the child?

Time after time, collected data in appropriate intensive interventions reveals:

• Eight weeks of intensive intervention in comprehensive reading skills, a strong antibiotic, can close as much as a one-year deficit.
• Children who can read the test and engage in higher-order thinking about what they read do better on all tests.

It is not the child’s fault s/he is behind, just as it is not the child’s fault s/he caught chickenpox. In both instances, the “patient” was not properly immunized. Understanding the intervention as antibiotic approach, supplanting the core, requires reculturing on the part of the community as a whole. Individual educators may not be able to change anachronistic policy, but they can show strong data to those who can affect policy changes. It’s hard to argue that teaching kids to read is a waste of instructional time when data indicates the antibiotic is working.

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learned and a mechanism to uncover where they need to fill in the gaps.

To fight the tension that students may be feeling and to keep misbehavior in hand, remember to:

- Prepare students well and communicate high expectations.
- Rally student enthusiasm.
- Revisit essential elements of your management plan.

### Prepare Them Well

In general, you should always know exactly what you want your students to know or be able to do as a result of the lessons you teach and the tasks you assign. So, plan your lessons by thinking about how you will evaluate students’ mastery of the content. For example, before you begin a two-week science unit, create the test students will take at the end of the unit (or review it, if you are using a published test that goes with your textbook). By creating or looking at the test first, you will know the key vocabulary words, concepts, and operations that you need to directly teach during instruction. You can then make sure that any tasks you assign will help students practice those vocabulary words, concepts, and operations.

This view of evaluation applies to state testing as well. Familiarize yourself with the concepts and skills evaluated on the tests and prepare your students to master them. For those who question this as “teaching to the test,” consider that a test should cover the material you want students to learn, and so should your instruction. In fact, a clear and consistent match between instruction and evaluation is a hallmark of effective teaching.

### Rally Student Enthusiasm

Try using the motivational tactics of successful athletic coaches—give your students a pep talk. For example, a few days before the test, you might say something like: “Class, in two days we start testing. You’ve been working hard this year, and I know that you can do well! I want you to do three things today and tomorrow that will really help you. First, work to pay attention in class. We are going to review the essential information you need to understand, so keep your attention focused. Second, any time you don’t understand something we are reviewing, ask about it. There are no stupid questions. If you aren’t sure how to ask a question, just ask me to give more information or to explain the idea again in a different way. Third, tomorrow night I want you to do something that takes your mind off the test for a bit—read a good book or watch a movie. Get to bed early and come to school rested, relaxed, and ready for the test!”

### Revisit Essential Elements of Your Management Plan

To rein in misbehavior caused by test stress, revisit these essential elements:

- Re-teach your expectations.
Effective Routine for Using Whiteboards

Whiteboards are an effective tool for formative assessment, written response, and increased engagement and participation. They allow teachers to instantly determine which students understand the concepts, which students need immediate feedback, and which students need to receive additional instruction. Teachers often choose not to use whiteboards because they can distract students; some students prefer doodling to paying attention to the task at hand. Here is a field-tested routine that addresses this problem.

Preparation: Whiteboard Folders

Materials

- letter-size, file folders (1/3 cut) in an assortment of colors for grouping
- laminating machine or service
- dry-erase erasers or old socks
- dry-erase markers

Directions

1. Open the file folder and laminate it.
2. Position the file folder horizontally with the fold at the top and tab at the bottom. Then open the folder and apply the self-stick, dry-erase sheet (the whiteboard) to the inside, bottom half—the half with the tab.

Whiteboard Routine

Direct Explanation

Tell students that they are going to learn a routine for using whiteboards. First they will learn how to set up their desk for whiteboard use. Then they will learn the three-part routine: (1) Write, (2) Show Me, and (3) Erase.

Desktop Set-Up

Position the Whiteboard Folder. Show students how to position the whiteboard folder. Say: Close your whiteboard folder and place it horizontally in front of you on your desk. The tab should be at the bottom facing you and the fold should be at the top.

Set Up “Home Base” Show students how to position the marker and eraser. Say: The place where you put your eraser and marker is called “home base.” Home base is located right above your folder on your desk. Your marker should be capped. (If using an old sock as an eraser, students can store their marker inside the sock for safekeeping.)

Three-Part Routine

(1) Write

Model. Remind students that their marker should be capped and on home base. Say: I will tell you to write your first name and then say the signal word write. After I say write, you will pick up your marker, uncaps it, and write your first name on the whiteboard. Watch me as I demonstrate. Then say: Write. Demonstrate the routine by picking up your marker, uncapping it, flipping open your folder, writing your first name on the whiteboard, and then closing your folder. Finally, cap your marker and put it back on home base.

Lead. Say: Now it’s your turn. We are going to practice together. Listen for the signal word write. When I say the signal word, you will write your first name on your whiteboard. Ask: What’s the signal word? (write) After doing individual checks for understanding, say: Write. Students should then pick up their marker, uncaps it, flip open their folder, write their first name on their whiteboard, and then close their folder. Finally, they should cap their marker and put it back on home base. (If a student doesn’t know the answer to a particular question, encourage participation by having him or her write I don’t know.)

(2) Show Me

Model. Say: Watch as I demonstrate how I want you to show me what you wrote. Hold the closed folder horizontally in front of you with the fold at the top. Then say: Show me. Demonstrate the routine by flipping open your folder to reveal what you wrote on the whiteboard—your first name. Then close your folder and put it back on your desk.

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Lead. Say: Now it’s your turn. We are going to practice together. Listen for the signal words show me. When I say the signal words, you will show me what you’ve written. Ask: What are the signal words? (show me) After doing individual checks for...
**Top Ten Expert Teaching Skills**

Teachers who use and learn from Direct Instruction (DI) programs can develop a skill set that makes them fabulous teachers. Learning how to check for understanding in a way that engages all the students (choral responses) is a powerful teaching skill. Learning to present at a fast pace and move as quickly as possible towards checking for student learning can make one an unusually efficient teacher. Learning how to structure a lesson with a small amount of new learning and a lot of cumulative review can make lesson plans extremely effective.

Coaching of teachers who are using Direct Instruction programs often focuses on the unique skills needed to implement the programs effectively. Coaches must help teachers learn new skills such as how to signal in various situations, how to get a good group unison response, how to distribute individual turns, or how to provide corrections specific to the skills being taught. Teachers are often aware of the need to learn these new skills and so welcome the help of coaches in working on developing these skills.

This article focuses on ten teaching expectations that don’t usually get as much attention. These expectations are very important and can make a huge difference in how well students attend and learn in DI lessons. These are the things that teachers could do to really move their teaching of DI from adequate to excellent. They aren’t often a primary focus of coaching efforts because classrooms can function reasonably well, or appear to, without implementing these objectives.

When teachers do implement these ten things, their classrooms can reach a whole new level of effectiveness and joy. As such they are worth thinking about, either for self-evaluation, or as a school-wide focus on what it takes to become an excellent school.

**Directs questions to all the students.**

The best teachers ask questions in a way that engages all their students all the time. Questions are directed to the whole class in such a way that the teacher is acting to engage all students in formulating an answer. The question should be first asked to the group with clear indication that answers are not to be called out, hands are not to be raised, and volunteers will not be chosen. After think time has been provided, so that all students have time to have formulated an answer, the teacher then calls out the name of a specific student to give the answer—or the whole group can respond chorally. The order in which this occurs is vitally important to keep students’ attention and interest.

**Rationale:** The opposite procedure, calling a student’s name first before asking the question, ensures that the rest of the class will neither be thinking of an answer nor attending to the instruction. Also, when teachers direct the question to a particular student before giving everyone enough think time to come up with an answer, they forestall the thinking of all the other students. Students think to themselves, “Oh, I don’t have to think of the answer to this question, because...”

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**Purposeful Uses Across the Curriculum**

After modeling and practicing the Whiteboard Routine, you can use it for instruction in any content area. It also can be used with instructional strategies such as Think-Write-Pair-Share.

Here are examples of purposeful uses across the curriculum:

- **Comprehension:** In the story we just read, who was the main character?
- **Math:** Show me the slope-intercept formula. \( y = mx + b \)
- **Science:** What’s the first step in the scientific process?
- **Social Studies:** What are two law-making bodies that make up the U.S. Congress? (House, Senate)
- **Vocabulary:** Write a question using the word **coordinate**.
- **Word Recognition:** Write the word **teenager**. Now show me the syllable breaks. **ADP**
Top Ten Expert Teaching Skills

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Rationale: The opposite procedure, calling a student’s name first before asking the question, ensures that the rest of the class will neither be thinking of an answer nor attending to the instruction. Also, when teachers direct the question to a particular student before giving everyone enough think time to come up with an answer, they forestall the thinking of all the other students. Students think to themselves, “Oh, I don’t have to think of the answer to this question, because...”
the teacher already called on Johnny to answer it.” The optimal sequence and timing of how teachers ask questions (first to the group, adequate think time, then call on individuals) can communicate their expectation that everyone is to think of the answer. When students are routinely asked questions as a group, given think time and then called upon for the answer they come to expect that they may be called upon at any time. They then have more reason to pay attention during instruction because they expect they may be asked for this information in a few minutes.

**Calls on students randomly.**

Teachers can motivate all students to pay close attention to the lessons—and to covertly think of the answer to all questions when they call randomly on all students rather than accepting answers from volunteers. Students are more apt to be prepared to answer any question if some systematic way to ensure turns are distributed evenly and randomly is used. Even when teachers feel they are randomly calling on non-volunteers, they are often susceptible to students who make eye contact and provide other subtle cues as to whether they wish to answer. These random individual answers can still be interspersed with choral responses for answers in which the answers cannot vary and are short.

**Rationale:** There are two important reasons for using a systematic method of calling on students for answers. One reason is that random distribution of answering gives the truest picture of the state of knowledge in the classroom. Conversely, calling on volunteers guarantees a skewed picture of how well the students know the information. Because the point of asking questions is to determine how well students have learned the information, it is vitally important that the teacher get a realistic assessment of the level of student understanding. The second reason is that random distribution of turns means that all students are “on the hook” to know the answer. The explicit procedure for systematically being random ensures that students are all aware that they could be called upon at any time. Being “on the hook” increases student engagement and attention and therefore learning.

**Gives delayed checks after corrections.**

When students make errors, teachers should provide a delayed check (asking again after a minute or two) to ensure that the students have the correct understanding. An observer can tell that students have learned the objective when the delayed test demonstrates that fact clearly. In addition, the students are made aware that mastery of this item is important to the teacher because he or she is asking about it again. The delayed test is in addition to the traditional part-firming paradigm, in which teachers repeat a part of a lesson until students are firm—that is, until they go through the part without an error. The part-firming paradigm does provide a re-check on the item on which students made an error. However, the delayed check, after a minute or two is in addition to and comes later in the lesson than the part-firming. Of course, goodbye lists, where errors are reviewed each day until they are correctly answered three days in a row, are the most comprehensive way to do delayed checks.

**Rationale:** Delayed checks are a powerful way to both ensure mastery and communicate the importance of mastery to the students. By going back after a minute or two the teacher can truly be certain that students have learned the correct answer. The extra repetition can help cement that learning. Taking the time to check on it communicates to the students that information is important to know, and therefore motivates students to try to remember it. Remembering to do delayed checks requires teachers to be very focused on the lesson and the student learning. It is the mark of an excellent teacher that he or she is so focused.

**Motivates effectively with positives.**

Teachers who are skillfully using praise and reinforcement consistently motivate children to do their best. When students are motivated by the teacher’s positive interactions, it is clearly observable in the classroom. The student being praised shows pleasure and students around that student show interest in what caused the recognition. When students are interested in how to get the praise that their peer just got they will imitate the good behavior and positive changes begin to occur in the classroom. Teachers are expected to develop the ability to affect their students positively with praise and recognition. When positives are ineffective, students do not react to the teacher’s statements and no change in behavior is seen.

**Rationale:** Teachers learn quickly that they are expected to keep student behavior under control. Those who do not use praise and recognition effectively don’t get the results they need. Instead they come to the conclusion that “positives don’t work.” When administrators or coaches insist on seeing a ratio of 3 to 1 positive interactions to corrections, teachers will use praise statements but their students will not react to the teacher’s use of positive reinforcement. Effective praise and recognition affects student behavior and student reactions are visible. When teacher’s positive reinforcement efforts are effective in managing behavior, they continue to use this technique with all the benefits it provides to the students and the school climate.
Analyzes assessments.
Teachers should be able to analyze test data to look for error patterns, even when there are no forms to assist in the analysis. Teachers should be able to pick out which objectives were not learned well enough across the class. Teachers should be able to distinguish errors which call for whole class remediation from those which only require individual attention to a few students. Teachers should be able to distinguish fact errors from concept errors in math, conventions errors from organizational errors in writing, decoding errors from comprehension errors in reading, fluency from accuracy errors in decoding, etc. The best teachers are able to use error analysis to pinpoint instructional remedies that are efficient and effective so that student progress is not slowed. Excellent teachers analyze test data for error patterns without prompting. They can explain exactly what errors need to be addressed and which do not and they consistently begin effective remedies without prompting.

Rationale: When teachers design their own lesson plans, they also design their own tests. Having made the decisions about how many items they have written to test each objective, they can readily analyze their test results. In scripted material, when tests are already constructed, teachers who do not analyze the results of the tests cannot determine efficient remedies that focus on fixing only the objectives that were not learned. Instead, valuable instructional time is lost by re-doing several complete lessons. And without knowing where to put extra emphasis in re-teaching those lessons it is likely that students will still not reach mastery. Conversely, when teachers can carefully analyze lessons they can determine what needs re-teaching and what does not. Often classes can move on to the next lessons with only a few minutes a day devoted towards firming up the one or two specific objectives that students really had difficulty with. Other times there is no need for specific remedies, only an increase motivation for students to work carefully. Being able to analyze test results enables teachers to teach more efficiently and for students to make far greater progress through programs.

Creates a behavior plan.
All teachers should create and follow a behavior plan. The plan should specify procedures for common issues (Can we have conversations? How do we get help? Are we allowed to move about the room? etc.) and common activities such as bathroom visits, pencil sharpening, turning in assignments, and getting materials. The plan should include plans for positive reinforcement and recognition. The plan should also have specified mild consequences for misbehavior. The behavior plan may be updated as often needed. Observations should show that the plan is being followed.

Rationale: Teachers should have plans when they teach and they need to also plan ahead how they will deal with behavior. Working out effective routines that are efficient and that meet student needs takes considerable forethought. Similarly, good systems of reinforcement for the host of activities and behaviors that are expected in a classroom takes time and planning. Consequences for misbehavior are far more effective if they are planned and taught to the students before being called into use. Behavior plans are almost impossible for new teachers to complete because they are unfamiliar with the problems that will arise in their rooms—so they could be given a template to begin with. After the first year teachers should modify the plan and make sure that they are going to follow through on the plan as written. Behavior plans increase the efficiency and efficacy of behavior management procedures, leaving a better run classroom and more time for instruction.

Actively monitors students working independently.
Active monitoring by the teacher can both keep students on-task and keep them more accurate in seatwork. The teacher is expected to circulate around the room, look at student work and attend to their behavior. The teacher should be reinforcing appropriate on-task behavior and redirecting and correcting off-task behavior. In addition, active monitoring done with the answer key can keep students motivated to be accurate in seatwork. The teacher should circulate around the room, carrying the answer key and marking student work. Students can then receive immediate reinforcement for correct answers as well as prompts to re-examine items that are wrong. The teacher should be circulating, checking students’ written work for accuracy, and praising and motivating students to do excellent work as well as monitoring their on-task behavior.

Rationale: Students take their cue from the teacher as to what is important. An excellent, involved teacher wants to know whether or not students learned the material in the lesson. So circulating with the answer key and checking to see how students are doing—along with little expressions of pride and joy or of sadness and disappointment—communicates the importance of student learning. When teachers breeze around the room only concerned with behavior, they communicate that student academic performance is of no interest to them—and therefore not important enough to motivate students either. Worse yet, when teachers do other work at their desk during independent work the students learn the only thing that is important is that they remain quiet.
Motivates students to work at a quick pace.

Whether or not they are not teaching another group, teachers are expected to ensure that students working independently stay on task and work quickly so as not to waste valuable class time. As often as they are able, teachers should be actively monitoring to see that all students are engaged, set time limits, and set a pace for efficient completion of independent work. The teachers should be imparting a sense of urgency to get the work done as quickly as possible. The time allowed to complete independent work should not be set by the slowest students in the room, but should require slow workers to pick up their pace or do the work on their own time. This is especially important in classes where lesson progress is below expectations.

Rationale: Classrooms in which the students get so much time to finish their independent assignments that even the slowest students are able to finish all of the work will not make maximum progress. An old aphorism applies here: work expands to fill the time available to do it. Teachers can halve the time devoted to independent work by a combination of praising and recognizing fast workers with setting time limits for work to be completed. Time limits should be such that anyone who does anything other than get right to work immediately cannot finish. Students who do not work quickly will need to make up their missing work on their own time.

Many DI classrooms do not complete a lesson each day largely because the teacher does not motivate fast working and allows independent work time to drag on long after most students are finished.

Uses classroom space to motivate students.

Teachers are to actively promote student motivation to achieve academically by devoting classroom space to celebrations of academic achievements. A variety of systematic ways of reinforcing excellence in academics should be visible on classroom walls, such as thermometer charts, posting of excellent student work (and only excellent work), grades, awards, and 90% clubs. Celebrations and recognition of various forms should be in place. This is especially important in classes in which not all students are intrinsically motivated. Students should show pride and readily offer explanations of the various honors being earned on the walls of the classroom.

Rationale: Students are motivated by what others, especially adults, think is important. Displaying accomplishments that are worthy of special recognition on the walls of the classroom is one of the best ways for teachers to let students know what is important. Every display should be about achievement that took real effort by the students. Students should be striving to get their names or their papers up on the wall for accomplishing something—whether it is 100% on a test, excellence in handwriting, or perfect spelling. If the walls are used to recognize extraordinary effort and accomplishment then students then have a reason to do their best.

The teacher’s attitude clearly expresses that the point of the activity is for the students to learn the material, so they are all motivated and engaged to demonstrate their learning of the objectives.

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Constantly checks for understanding.

Teachers are expected to frequently stop their instruction to check and make sure that the students are learning. The DI script may not always ask all of the questions needed to know whether students are on track. Especially when errors are made, the teacher is expected to ask additional questions beyond the ones in the script. Whenever the best teachers are not certain whether their students have mastered a given bit of information, they go back and re-ask the key questions, even if the script does not have them written in. Teaching which does not frequently stop to check for understanding on the part of the students is generally ineffective. The most effective teachers make checking for understanding an integral part of instruction. The teacher’s attitude clearly expresses that the point of the activity is for the students to learn the material, so they are all motivated and engaged to demonstrate their learning of the objectives.

These ten skills or teacher behaviors can transform a mediocre classroom into an achievement powerhouse. To be sure, they are much easier to describe than to do, but they can be learned. More importantly, the payoff for developing these skills (to the point that they are effective) can hardly be overstated. Teachers or schools that work to develop these behaviors as a routine will see extraordinary results from their students.
**BOCES Classroom Shows All Children Can Achieve**

At Dows Lane Elementary School in Irvington, New York, wide hallways sweetly decorated with the artwork of young children lead to a particularly special classroom.

At the door of Room 125, six-year-old Marie isn’t shy about giving visitors a welcoming hug. She wraps her arms around your knees, which is as high as she can reach, and presses her cheek against them. It’s the kind of unconditional loving reception humans are always most in need of—and Marie knows how to give it.

This is the Southern Westchester BOCES Experiential Learning (ExL) class for kindergarten through third grade, where children with mild to moderate mental retardation, cognitive impairments, Down Syndrome and global developmental delays are thriving as they learn.

The ExL class, just one in the family of BOCES special education classes offered at Irvington schools and throughout Southern Westchester districts, provides instruction for these students based on benchmark goals prescribed for them after an evaluation called the Assessment of Basic Language and Learning Skills (ABLLS) provides a curriculum guide and skill tracking system for each student. ExL students typically demonstrate a wide variety of academic functioning levels. One of the most important skills these students learn is how to communicate in sentences that are properly sequenced. While some students are verbal, others, like Marie, have no speech and rely on the GoTalk, an assistive speech device that uses interchangeable picture cards students touch to “talk.” The students can touch a sequence of cards and a recorded voice speaks. The GoTalk devices are “a nice introductory way to learn speech,” said Dr. Steven Coleman, a BOCES consultant psychologist who works in the classroom with Ms. O’Connor and the staff. The staff includes speech therapist Susan Doherty, teaching assistant Tylyn Belton, and 1:1 aide Annette Sanson.

Marie is particularly adept at using the GoTalk device in conjunction with sign language. When she came to the ExL program two years ago, she was using simple sign language to communicate, but had not yet made the connection between pictures, words and meaning. Marie’s progress has been steady; she currently has about 100 words in her vocabulary and is starting to make sound and imitate words. “She really has zoomed ahead,” Ms. O’Connor said. “She definitely understands that language has value.”

Adding to Marie’s success is the SRA Direct Instruction Reading Mastery program used in many BOCES programs. Ms. Belton and Ms. Doherty work with the students two at a time for about 20 minutes daily using this highly sequenced, research-validated Reading Mastery developmental core language and reading curriculum. Janet Lopez, a Direct Instruction consultant supporting the BOCES implementation, recalls that just last year, Marie had difficulty sitting in a chair and focusing on a task for more than just a few minutes. “She now attends to the lesson for the entire 20 minute period, and in fact, will bring her book to the teacher indicating that she is ready and willing for instruction to begin.”

During one lesson, Marie and a verbal classmate were looking at illustrations of a wagon and a tiger. Ms. Belton pointed to in the Reading Mastery Teacher Presentation Book. Prompted by the question, “What is this?” the verbal student responded with the words “a wagon” and “a tiger.” At the same time, Marie used her GoTalk device to find and touch the word “a” and pictures of the wagon and tiger, producing the recorded words. Encouraged by praise from Ms. Belton and Ms. Doherty and a treat of Goldfish, the students responded to simple questions about several illustrations. Later, the children were prompted with, “Say the whole thing,” and responded with complete sentences. Finally, during a teacher directed workbook exercise, the children matched similar images of a girl, a glass, a cow, and fish by drawing a line between them with a crayon.

On the other side of the classroom, Ms. O’Connor and Dr. Coleman were using the Reading Mastery reading component with eight-year-old Dashiel, fondly called Dash. Dash, like Marie, is one of the ExL program’s success stories. Dash has learned to decode some words and now speaks in full sentences. He is progressing to higher lessons in the Reading Mastery program as he successfully masters each skill. Dash was busy during his lesson tracing and reading the words “at,” “at,” and “cat” and “cat” from left to right, growing in his understanding of print words, sound/symbol correspondence, and the left to right sequencing of written language.

“He used to be able to say only two words and now he’s putting together six-word sentences,” Dr. Coleman said. “His articulation has improved tremendously. This is a special class. When you say that one of our kids has increased his sentences from two words to six, that’s tremendous.”

Dash, along with two other classmates, has now acquired enough language to begin math instruction using another Direct Instruction program, Distar Arithmetic I. During a recent lesson, the children worked on matching patterns,rote counting, counting objects, and recognizing numerals. Ms. O’Connor was thrilled when each of the students

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passed the first in program mastery test with flying colors. Marie will also soon be ready to begin the Distar Arithmetic program, where she is expected to thrive.

When the bell rings at the end of the day and the students head home, there is a sense of deep satisfaction among the staff. “BOCES plays an important role,” Ms. Doherty said. “It’s our job to help the students be the best they can be while they’re with us. All kids have the potential to learn, to grow, and to be a productive member of society.”

Southern Westchester BOCES currently has implemented Direct Instruction programs in 48 classrooms serving students aged 6 through 21. Ms. Lopez states, “The progress made by the BOCES students in the Direct Instruction programs just brings tears to your eyes. Parents have been reduced to tears, as well, witnessing their children accomplish academic goals beyond their dreams and expectations. Thanks to Director Mary Ellen Betzler, Literacy Supervisor Phyllis Rizzi, and fiercely dedicated teachers and their staffs, children who previously had no defined curriculum, have been provided the opportunity to truly become a community of learners.” As one BOCES teacher recently remarked, “It’s a beautiful thing.”

Human beings have been learning about reality (learning what exists, how things are connected, what happens when you do one thing vs. another) for thousands of years.

What have we done?

a. We have translated and we communicate what we’ve learned with words, paintings, sculpture, and dance.
b. We have (1) collected; (2) stored (in books, rituals, and other media); and (3) passed on this knowledge.
c. Each generation corrects errors in the stock of knowledge (“We were wrong. Democracy DOESN’T ensure that wise political decisions will be taken.”) and adds to it (“It’s a good idea to have a constitution to GUIDE democracy, so that certain bad decisions CAN’T be taken.”)

These collections of knowledge are KNOWLEDGE SYSTEMS, such as mathematics, literature, physics, medicine, law, family, economics, and many others.

Some knowledge systems are called TOOL SKILLS. Reading, math, logic, writing. These are tools for learning and using (that is, for thinking and communicating) knowledge in all other knowledge systems. Other knowledge systems (chemistry, literature, history) are more ABOUT reality than they are about how to learn and communicate about reality (tool skills). Ask yourself, How is math a tool skill for knowledge systems such as physics, chemistry, engineering, and economics? How is logic (how to think) a tool skill? How is reading a tool skill?

The elements (facts, lists, concepts, rules, routines) in knowledge systems can be tightly coupled or loosely coupled.

The knowledge elements (facts, lists, concepts, rules, routines) in a knowledge system are connected, coupled, or interdependent. In some knowledge systems, the knowledge elements are TIGHTLY COUPLED. That is, to know any one of the elements you have to know the other elements. Reading and math are tightly coupled. Examples:

116 divided by 12. What are the elements?


Multiplication. “11 times 9 is what?...108.”

Subtraction. “116 – 108 is what?...Eight.”

Counting.

Writing numerals.

All these elementary skills work together (tightly coupled) long division. If you don’t know ONE of them, then you can’t do the division routine. Can you do multiplication (an element of long division) if you don’t already know addition? Multiplication is nothing but adding groups of numbers. 3 x 4 is nothing but 4 + 4 + 4. Can you do addition if you don’t know counting? Addition is nothing but counting forward? 4 + 5 is “Start with 4 and count forward 5 more.... 4, now say 5, 6, 7, 8, 9.”

Reading is another tightly coupled system of knowledge elements. Here’s something from John Locke’s Second Treatise on Government.

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What knowledge elements are needed to read this easily and with comprehension?

1. How to say sounds.
2. Which sounds go with the letters.
3. How to decode words—sound out unfamiliar words (segment) and then say fast (blend).
4. How to read words—string words together—into sentences.
5. How to segment complex sentences into knowledge-bearing simple declarative statements.
6. What words mean—equality, reciprocal, jurisdiction.
7. How to identify concepts and rules and the logical flow of an argument or explanation or description.

Look how these knowledge elements are tightly coupled. Can you comprehend #7 if you don’t know what words mean—vocabulary? Can you read sentences if you can’t read words accurately and fast? Can you read words if you don’t know how to sound them out? Can you sound them out if you don’t know the sounds that go with letters? No.

In tightly-coupled knowledge systems (especially tool skills), there are right answers!

The slope of this line is 1. It doesn’t matter what anyone believes.

This English word run says rrruuuunn. Period. No interpretation or discussion needed. If you read it any other way, you are wrong.

Basidiomycetes is a fungus. Not a kind of cheese. Not a rock. If I say, “Is Basidiomycetes a fungus?” and someone replies, “No, it isn’t,” well, that person is wrong.

You have to ensure mastery of every element as it is needed. And the best way to do this is with explicit, systematic, focused, direct instruction.

Put those two rules together—(1) elements in tightly coupled systems are so much a PART of one another (interdependent) that to master one you need to master the others, and to master the whole system of knowledge, you have to master all the elements; and (2) there are RIGHT and wrong answers—and it leads to another rule...

YOU HAVE TO ENSURE MASTERY OF EVERY ELEMENT as it is needed. And the best way to do this is with explicit, systematic, focused, direct instruction.

Explicit = The teacher TELLS what she is doing. “First I…” This way, students can INTERNALIZE what the teacher says, and guide themselves.

Systematic = Lines (words), tasks, and lessons are carefully sequenced so that elements needed for later tasks and lessons have all been taught and firmed up by review; examples are carefully chosen to reveal the knowledge being worked on; work on fluency, generalization, and retention are done at the right time and comprehensively.

Focused = Communication aims at exactly what students are supposed to learn. No blather and meandering talk. One thing taught at a time.

Direct = Teacher models or tells to communicate knowledge. Students are not expected to figure it out or construct or discover knowledge. That is a DIFFERENT objective—like asking students to tell what the main point of a poem is. The poem itself does not tell its main point. You have to figure it out.

Explicit, systematic, focused, direct instruction is most important when teaching TOOL SKILLS, such as reading, spelling, language, writing, and math. Tool skills are skills that are basic elements of most other knowledge systems, such as chemistry, poetry, and history. The elemental skills in tool skills (e.g., the elemental skills in reading) are so tightly coupled (connected with one another, part of one another) that you must ensure that students have mastered certain skills before you teach them the next skill that USES the prior skills. [You can’t cement in the next higher course of bricks on a wall unless the lower course is firm.]

Other knowledge systems are loosely coupled. History, for example. It’s not clear, for instance, exactly how some historical events caused other events. It’s not clear what the causes are for some events. We still need to find out and add that knowledge to the knowledge system. Or consider the knowledge system of literature. Yes, you need the tools skills of reading and thinking, but you don’t need to know poetry in order to learn to read plays. You don’t need to know plays in order to read short stories. In other words, some of the knowledge elements (knowledge needed to learn
poetry, plays, fiction) are somewhat independent of the others.

Also, there are gaps and uncertainties. It’s clear (in the knowledge system of economics) what a sudden rise in demand for gold means (price will go up), but it’s not clear what “To be or not to be” in the play Hamlet means. There is room for interpretation, for inquiry, and discovery.

And, some questions do not have right or wrong answers. You can’t be certain what event, if any, was the final event that started a revolution. Therefore…

You might NOT—in fact, you CAN NOT—use explicit, systematic, focused, direct instruction to teach every fact, list, concept, rule, and routine in other kinds of knowledge, such as literature or history. You can’t tell students a fact statement when there is NO fact! You would use a lot more Socratic methodology, for instance. Students read a passage; you ask questions that have students state and justify what they learned, or how they made sense of the passage; more reading; more questioning; summary and implications for further study. STILL, you would teach much knowledge in a loosely coupled system—like history—in an explicit, systematic, focused, direct way. For example:

“New concept. Monarchy. A monarchy is a political system that involves rule by one person, usually on the basis of heredity or force.

“Say that definition.”

“Here are examples of monarchy.”

“And here are examples that LOOK like monarchy, but are NOT monarchy.”

More here.

http://people.uncc.edu/kozloffm/sixkindsofknowledgeandteachUSE.doc

http://people.uncc.edu/kozloffm/proceduresforteachingthesixkindsofknowledge.doc

Now look at a lesson on beginning reading. Let us see why the lesson will communicate (teach) knowledge quickly and effectively. Hints:

1. Is the information/knowledge (the thing students are supposed to get) obvious or is it hidden behind or among excessive and distracting verbiage (noise)?

2. Do examples, teacher models, and instructions unequivocally communicate knowledge; that is, is there only ONE interpretation of what an example, model, or instruction MEANS—that is, what a student is supposed to DO? [The action-implication or meaning of something is called “pragmatic meaning.” What words refer to—”dog” refers to the class of canines with certain features—is called “semantic meaning.”]

3. Have (a) students been taught, and (b) did the teacher check to ensure that students are firm on pre-skills (knowledge elements) needed to get and use the new knowledge?

4. Are there extra cues that direct the student’s attention and guide the student’s actions?

5. Are enough examples used to teach something new (that is, acquisition of knowledge)?

6. Do later tasks in a lesson integrate knowledge elements taught or reviewed earlier in the lesson and/or in earlier lessons? For example:

a. Students learn to SAY sounds (rrrr), and later

b. Students learn to say those sounds in a word slowly (segment: run -> rrruunn), and then

c. Students learn to say those sounds in response to LETTERS (r -> say rrr), and later

d. Students learn to use knowledge of saying sounds, segmenting words, and reading letters to sound out words.

Use these guidelines to evaluate and suggest changes in the wording in sentences, the sequence of sentences in tasks, and the sequence of tasks in the lesson.

The lesson consists of a number of tasks (a few minutes long) focusing on (objectives relevant to) knowledge items on each strand—phonemic awareness, alphabetic principle, fluency, vocabulary, comprehension. http://reading.uoregon.edu/big_ideas/

Below is systematic, focused, explicit, direct instruction of beginning reading—a tool skill.

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**Lesson 40**

**Task 1. Review of phonemic awareness. Rhyming.**

For example, mmman. fffan rrran

**Design features.**

Explains why it’s done this way.

Firm up prior knowledge needed for the current lesson. This is a phonemic awareness skill. http://reading.uoregon.edu/
“Boys and girls. Eyes on me. Ready to learn!”

“Let’s practice rhyming.”

“Listen. I’ll rhyme with…iiiinnnn. What will I rhyme with? iiinnnn

“Here I go. fffff…in sssshhhhh...in.

“Your turn to rhyme with….in. Start with fff….[wait time]

Get ready. GO!” ffff…in

Yes, ffff..in. You rhymed with…in.

Diagnose and remedy any difficulties or errors.

1. Doesn’t remember rhyme part—in? fff… uh

2. Trouble pronouncing? fff…in

3. Trouble putting together? iiinnn

1. “We’re going to rhyme with in. What are we going to

rhyme with? in

ffffff…..in. Say it. ffff….in

“Yes. Listen. shshsh…..in. Say it. shshsh….in.

“Excellent for rhyming with….in!”

2. “Look at my mouth. Listen. iiiiiinnn

“Open your mouth like this… Say it with me…iiiiiiinnnn

“Excellent. Your turn. (signal) iiiiiinnnn.

“Oh, you’re sooo smart!”


“Say it with me. ffffffffffffffffffin

By rhyming, kids segment words. fffan. This skill—

segmenting—is an ELEMENT of the larger skill of sounding

out a WRITTEN word.

fan “Sound it out.” fffaaannnn.

Gain and focus attention.

Frame instruction. Tell what they will learn or do.

Check to make sure students are prepared for what’s coming.

Model the information.

Immediately test/check to see if student’s got it by giving them a

turn.

Verify correct response.

Correct every error and firm any weak response immediately.

Practice weak spot

[part-firming]; then go back to examples. Use model-lead(?)-test.


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Task 2. Letter-sound correspondence. Review s, a, t, r, i, m, p

“Eyes on me, you sweet kids. Let’s review ALL of our sounds.”

s a t r i m p

m

“What sound?” (signal) mmm

“Yes, mmm.”

This is one alphabetic principle task.
http://reading.uoregon.edu/
Knowledge of sounds that go with letters is an element of the la of decoding words (sounding them out--segmenting, and then saying them fast--blending)

Gain attention and focus.
Before introducing a new sound, review earlier ones.

Note scaffolding to focus attention and guide response.

Touch the ball on the left; say “What sound?”; loop to the ball under the sound; child says the sound; loop back to the starting ball to communicate “Stop.” Verify correct response.

Immediately correct errors.
The letter is m. Joe says, rrr. Teacher says (points) “That sound is mmmm. (model) “What sound?” (test) mmm Teacher backs up several items (starting over) Teacher comes back to m later to make sure Joe has it.

Task 3. New letter-sound f. [Teach with format = gain attention-frame-model-lead-test.]

“Boys and girls.....GOOD! Now you’re ALL ready to learn.”

Gain attention and focus.
Frame instruction. Point to sound—focus.
Task 4. Review sounding out earlier-taught words = retention.

man, sat, the, on, it, can.

"You did great! Eyes on me and we’ll READ!"

"Let’s review our words." [points to words]

"First you’ll sound out a word, then you’ll say it fast. When I touch under a sound, you say the sound. When I slash across the word, you say it fast…. (wait time) Wait for my signal. Get ready.”

Model sound that goes with letter. Touch ball on left. Loop to sound and say sound. ffff

Then loop back and stop.

Repeat model to ensure students saw/heard it.

Immediate acquisition (did they get it?) test/check.

Note: Tell students it’s their turn; give instruction; give wait time (3 seconds); give signal (touch ball on left and loop to the sound).

Verify correct response.

Correct errors using model—lead—test/check—retest.

This is the second alphabetic principle task. Student uses knowledge of letters-sounds (elements) to decode words (a routine that uses the elements)—sound out words (segment) and then say fast (blend).

Gain attention, frame task, and focus.

Instruction. Note 3-second wait time and then the signal.

"New sound.”

Listen, ffff.”

Again, ffff.”

Your turn. Say the sound when I touch under it. Keep saying it as long as I touch under it. …. (wait time) Get ready.” (signal)

Again.”

Yes, ffff.”

[Correct all errors.]

This sound IS f. What sound?” fff. [point to several more f’s and repeat.

Return to the first f the kid missed.]
Task 5. Sounding out new words, using newly-taught sounds. fit, fin, sat, pin, pat, tin, tan

Did we review sounds?
Let’s pretend we didn’t.
Write a format for reviewing and firming f and n.

“Boys and girls. We’re going to sound out these NEW words. THEN we are going to say them fast.”

“My turn.” [Touch the ball on the left, loop under each sound and say the sound. Do not stop between sounds.]

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  o
f i t
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“ffffffffit”

“Say it with me. fffffffit

“Say it fast! [Slash under the word] fit!

“Yes, fit.”

Task 6. Fluency. Use a word list of most of the past words decoded. the fit sit sat on can man Read fast.

“Boys and girls. You are SO smart. Now let’s read our words the FAST way.” [Point to the word list.]
Task 7. Fluency with connected text made with words they can already read (100% decodable)

“I am soooo proud of you, class!! Now let’s read a story. Get ready to learn.” [Point to story.]

\[the\] man \sat\ on a \can.  

“First you’ll sound out each word. Then you’ll say it fast.” [Point to each word.]

“Sound it out” [Start with the ball on the left and loop under each sound]… (wait time) Get ready. \_thth\_the

“Say it fast.” [Slash across the word.] \_the\_

Repeat with each word.

“Yes, the man sat on a can.”

Correct any errors with model-lead-test. “That word is…What word?…Start over.”

“Now let’s read the story the fast way. When I touch under a word, you say it fast…..Wait for my signal. Get ready.”