Increase Equity by Creating More Engaging Instructional Environments for All Students

Part 1

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Gratitude

- Collaborations with OrRTI: http://www.oregonrti.org/
- Drs. Anita Archer, Doug Carnine, Linda Carnine, Kathy Howe, Dave Howe, Jerry Silbert, Ed Kame’enui, Rob Horner, Kent McIntosh
- You!

Table 1
Overview of Instructional Strategies and Selected Supporting Evidence

<table>
<thead>
<tr>
<th>Instructional Strategy</th>
<th>Purpose</th>
<th>Evidence Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Explicit Instruction</td>
<td>Clarifies student learning expectations and teaching objectives</td>
<td>• Hill (2010)</td>
</tr>
<tr>
<td></td>
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<td>• Swanson (1989)</td>
</tr>
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<td></td>
<td></td>
<td>• Reimers, Pach, Pacht, Mathe, &amp; Hodge (2005)</td>
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<tr>
<td></td>
<td></td>
<td>• Whyte, Carnine, &amp; Edison (1998)</td>
</tr>
<tr>
<td>Build and Prime Background</td>
<td>Creates shared foundational schema to optimize student learning</td>
<td>• Akin, K. &amp; Linfield (2013)</td>
</tr>
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<td></td>
<td></td>
<td>• Johnson (1996)</td>
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<td></td>
<td></td>
<td>• Rowe &amp; Shepard (1967)</td>
</tr>
<tr>
<td>Increase Opportunities to Respond</td>
<td>Provides high-degree of student engagement and more practice</td>
<td>• Anderson &amp; Urben (2001)</td>
</tr>
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<td></td>
<td></td>
<td>• Parks, Pacht, Mulia, &amp; Sherman (1997)</td>
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<tr>
<td></td>
<td></td>
<td>• Hayes, Hand, &amp; VanCompern (2004)</td>
</tr>
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<td></td>
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<td>• Clarke, Humm, Mathie, Norbee, &amp; Miltenburg (2002)</td>
</tr>
<tr>
<td>Provide Performance Feedback</td>
<td>Structures teacher knowledge of student progress and provides opportunities to correct misunderstandings</td>
<td>• Conlin, Sit, Good, &amp; Lee (1987)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reedy, Sabat, Dabir, &amp; Hau (2013)</td>
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<tr>
<td></td>
<td></td>
<td>• Palmer &amp; Thompson (2007)</td>
</tr>
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</table>

Examples and Questions

Examples of Engaging Instruction to Increase Equity in Education

Questions to Guide Instruction
- Did I model for the students how to use each step of the task with a practical example?
- Did I lead students through doing it on their own?
- Did I reteach the steps students were not successful with on their own?

Questions for Guiding Instructional Planning

Questions to Guide Lesson Planning and Preparation
- Do I have a basic understanding of my students’ cultures and how that might affect their background knowledge, participation, or understanding of new knowledge?
- How can I relate new concepts to previously-taught concepts?
- How can I make these concepts more relevant for students?
Video Example of Explicit Instruction

- Dr. Anita Archer
- Explicitinstruction.org

Think. Pair. Share.

- What did you see in the this video that is similar to the classrooms in your school?
- What features could be used and could help improve the quality of instruction in your school?
- What resources would be needed to help teachers increase the use of these instructional strategies?

One District’s Story

Slides provided by Oregon RTI

Tigard Tualatin School District

- Suburban Portland School District
- 12,800 students K-12
- 60% White, 26% Hispanic, 6% Multiple
- 10 Elementary, 3 Middle, 2 High Schools
- 36% Economically Disadvantaged
- 9% Limited English Proficient
- 9.5% Special Education

PBIS in Place at all schools since 1997

Office Discipline Referrals per 100 Students per Month

![Office Discipline Referrals Graph]

RTI in Place Since 2001

Effective Behavior and Instructional Supports (EBIS)/RTI
Core Components

• 90 minutes per day uninterrupted Core Instruction for all students
• Curriculum has a focus on Big 5 of Reading with culturally appropriate materials
• Material aligns across years
• Teachers are trained in and use effective instructional strategies (explicit instruction, multiple opportunities to respond, feedback)
• Review data regularly and adjust as needed.

ICEL

I – Instruction
C – Curriculum
E – Environment
L – Learner

What impacts student achievement?

<table>
<thead>
<tr>
<th>Effective teaching variables</th>
<th>Effect size</th>
<th>Other variables</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formative Evaluation</td>
<td>+0.90</td>
<td>Socioeconomic Status</td>
<td>+0.57</td>
</tr>
<tr>
<td>Comprehensive interventions for students with LD</td>
<td>+0.77</td>
<td>Parental Involvement</td>
<td>+0.51</td>
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<tr>
<td>Teacher Clarity</td>
<td>+0.75</td>
<td>Computer based instruction</td>
<td>+0.37</td>
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<td>Reciprocal Teaching</td>
<td>+0.74</td>
<td>School Finances</td>
<td>+0.23</td>
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<tr>
<td>Feedback</td>
<td>+0.73</td>
<td>Family Structure</td>
<td>+0.17</td>
</tr>
<tr>
<td>Teacher-Student Relationships</td>
<td>+0.72</td>
<td>Whole Language</td>
<td>+0.06</td>
</tr>
<tr>
<td>Direct Instruction</td>
<td>+0.59</td>
<td>Retention</td>
<td>-0.16</td>
</tr>
</tbody>
</table>


Focus on ICEL

Instruction:
- *How* you teach
- *What* you teach

Curriculum:
- *What* you teach

Environment:
- *Where* you teach

Learner:
- *Who* you teach

Focus on Closing the Achievement Gap

Tigard-Tualatin School District
High School OAKS Reading Achievement Gap

Latino Gap

- 2007-08: 30.1%
- 2008-09: 30.4%
- 2009-10: 30.4%
- 2010-11: 30.4%
- 2011-12: 30.4%
- 2012-13: 30.4%
- 2013-14: 30.4%
Alterable Variables to Intensify Instruction

<table>
<thead>
<tr>
<th>Alterable Variable</th>
<th>Level of Specific Enhancement (example reading)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options</td>
<td>1. Use comprehensive reading program to systematically &amp; explicitly teach priority skills 2. Use intervention core with students well below grade level 3. Use supplement program with the comprehensive reading program 4. Place students not making adequate progress in comprehensive reading program into an intervention core program</td>
</tr>
</tbody>
</table>

Program/Instruction

- Schedule & deliver 90 minutes of daily reading instruction during protected reading block
- Increase OTR during 90 minute reading block:choral responding, increase pace, call more often on low performers
- Increase reading block to 120 minutes or added supplemental period daily (90 min. + 30 min. or 90 min. + 45 min.)
- Schedule two intervention sessions daily (a double dose of 90 min. + 90 min.)

Time (Opportunities to Respond)

- Schedule group placement & provide combination of whole & small group instruction
- Reduce group size to 6-8 or to 3-5.
- Provide individual instruction if needed

Grouping for Instruction

- Walk to read
- Schedule additional small group instruction (9-10 students) for specific skill practice

INCREASING INTENSITY

Modification of Kame’enui, Simmons, Coyne & Harn © 2003

Explicit & Systematic

How instruction is delivered

- New skills/concepts introduced in direct manner: “I do, we do, you do”
- Teacher carefully controls use of language
- Corrective feedback procedures

A feature of time

- Connected series of lesson plans over time
- Moves from explicit to implicit over time
- Set of instructional routines from simple to complex
- Cumulative review

Explicit Instruction

**Scaffold Learning**

Definition:
Temporary devices and procedures used by teachers to support students as they learn strategies.

Modeling

Teacher demonstrates how to perform the task:

- Teacher performs all steps in the task
- Teacher performs the steps in the proper order
- Teacher performs the steps at the proper pace

Elements of Explicit Instruction

- Clear purpose for learning
- Clear presentation of strategies
- Scaffolding student learning
- Identified critical details that define the concept being learned
- Provide immediate error correction
- Providing sufficient examples for instruction and practice
- Connects new learning to previously learned concepts and content

Carnine, Howe, Silbert, Chaparro, & Jankowski, 2008
Explicit Instruction

Scaffolding: Gradual Release of Responsibility Model

“I do, We do, You do”

1. Teacher Modeling
2. Guided Practice
3. Independent Practice
4. Application

Types of Scaffolding

- **Prompts**: specific devices that can be employed for learning an overall cognitive strategy—something that students can refer to for assistance while working on the larger task. (graphic organizers, cue cards, checklists)

- **Think Alouds**: teacher’s direct modeling of the strategy, including self-talk, that enables students to explicitly witness the strategy in use (i.e., an authentic set of cognitive behaviors/actions that can be learned to assist in problem solving.)

Explicit Instruction

Tips for Effective Scaffolding

- Anticipate and precorrect for student errors
- Conduct teacher guided practice
- Provide immediate feedback
- Recognize when it is appropriate to gradually release or retain scaffolds

Types of Scaffolding

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Why Background Knowledge is Important

- **An Example:** I approached the carnival game hesitantly. The goal was to throw a ping pong ball toward a table on which sat dozens of small bowls. If your ball landed in a bowl, you won one of the enormous stuffed bears that lined the top of the booth. Three throws for a dollar. The bowls seemed close together—how could I lose? The man working the booth was old, and had uneven, tobacco-stained teeth. When he noticed me lingering nearby, he winked and said, “Come along. You look like a winner.”

- **What background knowledge does a student need?**
Activating Background Knowledge

- How?

Step 1: Prepare & Identify Background Knowledge

**Step 1** Teacher pre-reads material for the upcoming lesson to determine background knowledge students need to maximize understanding of the text.

**Example:** HM Level 2.1 Theme 3 Around Town

**Background Needed:** cities, community, family, subways, transportation

Thanks to WRRFTAC (Carnine, Jankowski, Chaparro, Howe) and Dr. Anita Archer

Step 2: CRP Provided Background Knowledge

**Step 1** Teacher pre-reads material for the upcoming lesson to determine background knowledge students need to maximize understanding of the text.

**Step 2** Teacher determines if comprehensive reading program provides sufficient background knowledge.

**Example:** Jamaica Louise James
- CRP provides: “Preparing to Read” - Subway stations
- Ask yourself is this enough information for my students?

Thanks to WRRFTAC (Carnine, Jankowski, Chaparro, Howe) and Dr. Anita Archer

Step 3: Introduce or Front Load

**Step 1** Teacher pre-reads material for the upcoming lesson to determine background knowledge students need to maximize understanding of the text.

**Step 2** Teacher determines if comprehensive reading program provides sufficient background knowledge.

**Step 3** If Yes, introduce background knowledge as outlined in the comprehensive reading program. Actively engage students in this process.

If No, prepare to “front load” by:
1. Teaching additional background knowledge needed to better understand the passage and/or,
2. Selecting and reading aloud a short story or passage that provides the necessary background knowledge.

Thanks to WRRFTAC (Carnine, Jankowski, Chaparro, Howe) and Dr. Anita Archer

Step 4: Activate Necessary Background Knowledge

**Step 1** Teacher pre-reads material for the upcoming lesson to determine background knowledge students need to maximize understanding of the text.

**Step 2** Teacher determines if comprehensive reading program provides sufficient background knowledge.

**Step 3** If Yes, introduce background knowledge as outlined in the comprehensive reading program. Actively engage students in this process.

If No, prepare to “front load” by:
1. Teaching additional background knowledge needed to better understand the passage and/or,
2. Selecting and reading aloud a short story or passage that provides the necessary background knowledge.

**Step 4** If students have prior knowledge, choose a procedure to activate that knowledge:
1. Ask students questions and engage them in a discussion to activate their background knowledge.
2. Activate prior knowledge using the KWL strategy.
3. Brainstorm the topics/questions that might be covered in the upcoming reading selection.

KWL Chart

| What we know | What we want to know | What we learned |

Thanks to WRRFTAC (Carnine, Jankowski, Chaparro, Howe) and Dr. Anita Archer
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- Stephens, Fuchs, Fuchs, Mathes, & Schumaker (1998)  
- Stein, Carnine, & DIcaterino (1998) |
| Need and Prioritize Background Knowledge | Create shared foundational schema to optimize student learning | - Allik & Sarama (2015)  
- Johnson (2015)  
| Increase Opportunities to Respond | Prioritize high degree of student engagement and more practice | - Amundson & Umeda (1999)  
- Fuchs, Fuchs, Mathes, & Schumaker (1998)  
- Outevsky, Onew, Marston, Nelson, & Williamson (2012) |
| Provide Performance Feedback | Structure teacher knowledge of student progress and provide opportunities to correct misunderstandings | - Cifuolo, Sugai, Good, & Lee (1987)  
- Bradley, Bakker, Duker, & Irwin (2002)  
- Katta & Temperley (2007) |

### 3. Increase Opportunities to Respond
Multiple Opportunities to Practice

Students’ rates of learning are proportional to the rate at which they respond correctly. Giving students more opportunities to respond is a way to increase their rates of learning.

We can increase opportunities to respond by:

- more rapid pacing of instruction
- choral responding facilitated by signals
- calling on low performers more often

A Simple Model of Learning

Systematic Instruction

- practice the skill correctly
- practice it correctly a sufficient number of times to develop fluency
- review the skill enough to maintain it

Stages in Skill Development

Students’ rates of learning are proportional to the rate at which they respond correctly. Giving students more opportunities to respond is a way to increase their rates of learning.

We can increase opportunities to respond by:

- more rapid pacing of instruction
- choral responding facilitated by signals
- calling on low performers more often

How Much Repetition is Needed?

Number of correct repetitions in a row of a new word needed to “automatize” the word - NICHD

<table>
<thead>
<tr>
<th>Type of Learner</th>
<th>Number of Repetitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Able</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Average</td>
<td>4-14</td>
</tr>
<tr>
<td>Least Able</td>
<td>20+?</td>
</tr>
</tbody>
</table>

(R. Lyon, 1997; Reitsma, 1983)

How Many Practice Events are Needed?

Each time a teacher gets a student to practice a skill correctly, it helps the student learn the skill!

That’s right! Joe Torgesen calls each practice event a positive instructional interaction.

Vince Knows Learning

Students learn new skills by correctly practicing the skills repeatedly until the skills are mastered.

“Practice does not make perfect. Only perfect practice makes perfect” - Vince Lombardi

Positive Instructional Interaction (Pii)

Instructional Interaction -

- The teacher explicitly explains and models a skill while students are engaged
- The teacher guides students while they practice the skill and, if needed, provides corrective feedback
- The teacher provides opportunities for students to perform the skill themselves and reinforces their correct responses

Positive -

- The students perform the skill correctly
Joe Torgesen defines **Intensity of Instruction** as the number of Positive Instructional Interactions (Pii’s) per day.

For example:

A day of instruction that includes 200 Pii’s is more intensive than a day that includes only 100 Pii’s.

How are you helping teachers to increase the amount of positive instructional interactions per day?

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**Engaging All Students: Passage Reading 1**

- **Choral Reading**
  - Read Selection with your students
  - Read at a moderate rate
  - Tell your students, “Keep your voice with mine.”

- **Cloze Reading**
  - Read Selection
  - Pause on “meaningful” words.
  - Have students read the deleted words.

- **Silent Reading**
  - Pose pre-reading question
  - Tell students to read a certain amount
  - Ask them to re-read material if they finish early
  - Monitor students’ reading. Have them whisper-read to you.
  - Pose post-reading question.
  - Note: Use whisper reading with a large group.

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**Engaging All Students: Passage Reading 2**

- **Partner Reading**
  - Assign each student a partner and a role.
  1. Reader whispers read to partner/Coach. Students alternate by sentence, paragraph, page, or time (3 minutes).
  2. Coach corrects errors.
     - Ask: Can you figure out this word?
     - Tell: This word is ______. What word?
  3. Reader reread the sentence.

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**Engaging All Students: Individual Turns 1**

- **Less desirable practices**
  - Calling on volunteers.
  - Guideline: Call on volunteers when the answer is the result of personal experience. Don’t call on volunteers when the answer is a product of instruction or reading.
  - Calling on inattentive students. Instead, use proximity, partners, or call on everyone to chorale respond.

- **Individual Responses**
  - **Option #1.** Have students share answers with their partners. Then call on a student.
  - **Option #2.** Ask a question. Teacher raises hand to indicate silence. Give think time. Then call on a student.

---

**Engaging All Students: Individual Turns 2**

- **Procedures for calling on student to insure that all students are involved.**
  - **Procedure #1.** Call on students in different part of the room.
  - **Procedure #2.** Write names on card or sticks. Draw names. Usually after a chorale or partner response.

- **Individual Responses**
  - If student is called on and says, “I don’t know.” Scaffold his/her response.
  - **Procedure #1.** Have student consult with his/her partner.
  - **Procedure #2.** Have student refer to his/her book or notes.
  - **Procedure #3.** Have the student tell the best of previous answers. (Answers heard from other students)
  - **Procedure #4.** Tell student the answer.
  - **Procedure #5.** Ask a question to lead the student to the correct answer.
4. Provide Performance Feedback

**Explicit Instruction**

**Supporting Mastery**

1. **Model** – demonstrate task to students
2. **Lead** – perform task with students
3. **Group Test** – have all students perform task
4. **Individual Test**
5. **Delayed Test** – to insure they’ve retained mastery

**The Feedback Link**

• Correction can’t happen without feedback
• Feedback can’t happen without monitoring
• Monitoring can’t happen without student responses through active engagement

**Explicit Instruction**

**Error Correction/Corrective Feedback**

• Immediate correction
• Clear and concise
• Model when appropriate
• Scaffold when appropriate

**Generic Template Card**

<table>
<thead>
<tr>
<th>Steps</th>
<th>Task</th>
<th>Preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explain Task</td>
<td>Do</td>
<td>Say</td>
</tr>
<tr>
<td>2. Model Response</td>
<td>Do</td>
<td>Say</td>
</tr>
<tr>
<td>3. Provide Practice Using Whole Group</td>
<td>Do</td>
<td>Say</td>
</tr>
<tr>
<td>4. Correction Procedures</td>
<td>Do</td>
<td>Say</td>
</tr>
<tr>
<td>5. Individual Turns</td>
<td>Do</td>
<td>Say</td>
</tr>
</tbody>
</table>

**Example**

<table>
<thead>
<tr>
<th>CARD 3</th>
<th>Template for Practicing Word Reading (Regular and Irregular Words)</th>
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</thead>
<tbody>
<tr>
<td>Steps</td>
<td>Explanation/Script</td>
</tr>
<tr>
<td>TASK</td>
<td>Regular and irregular word reading</td>
</tr>
<tr>
<td>PREPARATION</td>
<td>Write words from the lesson map on the board.</td>
</tr>
<tr>
<td>SIGNALING PROCEDURE</td>
<td>Use appropriate signals to elicit student responses.</td>
</tr>
<tr>
<td>1. Explain Task</td>
<td>You’re going to practice reading words. When I point to the left of a word, figure out the word in your head. When I slide my hand under the word, say the word.</td>
</tr>
<tr>
<td>2. Model Response</td>
<td>Model your first few times you do this template.</td>
</tr>
<tr>
<td>3. Provide Practice Using Whole Group</td>
<td>Practice using the procedure above.</td>
</tr>
</tbody>
</table>
Example Continued

3.** PROVIDE PRACTICE USING WHOLE-GROUP RESPONSES UNTIL KNOWLEDGE APPEARS TO BE SOLID**
   Use effective signaling, monitoring, and pacing techniques.

4.** CORRECTION PROCEDURES**
   - To correct students for regular words:
     
     Say: My turn. The word is ________. Your turn. Word?
     
     Have students blend the word using the appropriate blending routine for your group and then say the whole word.
     
     Back up two words and continue.

   - To correct students for irregular words:
     
     Say: My turn. The word is ________. Your turn. Word?
     
     Say: Start _____ tap under each letter as students spell the word aloud.
     
     Word?
     
     Back up two words and continue.

5.** INDIVIDUAL TURNS**
   When it appears that the group is consistently answering all items correctly, provide individual turns as a check. Say: When I point put to the left of a word, everybody figure out the word in your head. When I call your name, say the word. Point to the left of the word, pause several seconds, say a student’s name, then wait under the word. Call on students in an unpredictable order. Call more frequently on students who make errors.

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**Gratitude**

- Many thanks to you for your work and sharing your stories!

  - echaparr@uoregon.edu
  - @ErinChaparro

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**Priming/Building Background Knowledge**

Students, we’re about to read a story about a boy that meets a seal that lives at the beach that the boy visits. Here I want to show you a brief video of a beach. Notice the sounds. The waves crash on the beach one after the other. Sometimes there is not a sandy beach that meets the ocean but a cliff or a rock wall where people have built a road or a pier.

There are many types of animals that live in the ocean but many of those creatures stay hidden to us if we’re walking on the shore. Seals are one kind of ocean mammals that are curious and not afraid of people. Here’s a picture of one swimming in the ocean and a group of seals lying in the sun on the rocks.

In our story the beach is at the ocean but there are also beaches on lakes, rivers, and creeks. Beaches are often like big parks where people can walk and explore nature. Other beaches have shops and restaurants on them. The beach in the story is described as more of a park and less like a city or town.

Before we read the story there are some important words that will help us understand the story better. Let’s read these three words together: Basal – faded – ventured.

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**Think. Pair. Share.**

- With the colleagues next to you discuss these questions.
- Why would this type of approach work or not work for your school system?
- What resources would you need to help increase the use of explicit and engaging instruction?
- What questions do you have for Erin based on your discussion?