Quality Instruction

All Teachers, All Tiers, All Learners
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www.explicitinstruction.org
Quality Instruction

“The quality of teachers is the single most important factor in the educational system.”

Wiliam, 2012
Quality Instruction

Student
2\textsuperscript{nd} grader at 50\textsuperscript{th} percentile
2\textsuperscript{nd} grader at 50\textsuperscript{th} percentile

3 years
high teacher
low teacher

Outcome
90\textsuperscript{th} percentile
37\textsuperscript{th} percentile

Sanders and Rivers, 1996
Quality Instruction

• Benefits of high teacher quality greater for low performing students than higher performing students.

Slater, Davis, and Burgess, 2008
“The quality of an education system cannot exceed the quality of its teachers.”

Barber and Mourshed, 2007
Desired Level of Performance

Current Level of Performance

Curriculum Instruction

Feedback

Scaffolding

Practice
Desired Level of Performance

Current Level of Performance

Curriculum
Instruction
Video Lesson

Record any good practices.
What is Explicit Instruction?

• Explicit instruction is a systematic instructional approach that includes a set of delivery and design procedures derived from effective schools research……..

  *Ideas that Work*

• ...unambiguous and direct approach to teaching that incorporates instruction design and delivery.

  *Archer & Hughes, 2011*
## Explicit Instruction and Discovery

*Not an either or - but a when.*

<table>
<thead>
<tr>
<th>Explicit Instruction</th>
<th>Discovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little or no background knowledge</td>
<td>A great deal of background knowledge in the domain</td>
</tr>
<tr>
<td>History of difficulty, of failure</td>
<td>History of success</td>
</tr>
</tbody>
</table>
## Explicit Instruction

Hattie & Yates, 2014

<table>
<thead>
<tr>
<th>Teacher as Activator</th>
<th>$d$</th>
<th>Teacher as facilitator</th>
<th>$d$</th>
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<tbody>
<tr>
<td>Teaching students self-verbalization</td>
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<td>Teacher clarity</td>
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<td>Metacognitive Strategies</td>
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<td>Direct Instruction</td>
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<td>Web-based learning</td>
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<td>Mastery Learning</td>
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<td>Problem-based learning</td>
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<td>Providing worked examples</td>
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<td>Discovery method in math instruction</td>
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<td>Providing goals</td>
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<td>Whole language</td>
<td>.06</td>
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<td>Frequent effects of testing</td>
<td>.46</td>
<td>Student control overlearning</td>
<td>.04</td>
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<tr>
<td>Behavioral organizers</td>
<td>.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average activator</strong></td>
<td>.61</td>
<td><strong>Average facilitator</strong></td>
<td>.19</td>
</tr>
</tbody>
</table>
Structured discovery should be used when introducing new skills, strategies, and concepts to students.
Design of Instruction
Curriculum and Instruction

★ Focus instruction on critical content.

Emphasis is placed on skills, strategies, vocabulary terms, concepts, and facts that will empower students in the future and align with State Standards.

Example

• Reading
  – Phonemic Awareness
  – Decoding words
  – Reading fluently (accurate, appropriate rate, expression)
  – Understanding vocabulary (General and Domain-Specific)
  – Understanding passages (comprehension)

Motto for Tier 2 and 3: Teach the stuff and cut the fluff.
Curriculum and Instruction

★Utilize well-designed, evidence – based curriculum materials in Tier 1, Tier 2, and Tier 3.

- The standards are not a curriculum.

- Teachers and students need well-designed materials that include formative assessments, clear learning intentions, systematic instructional routines, and appropriate practice.
Curriculum and Instruction

★ Provide systematic instruction on critical content.

Lessons:
1. Are organized and focused

2. Begin with a statement of goals (Learning Intentions)

3. Provide interactive review of necessary preskills, recently taught strategies, content, or knowledge.
Curriculum and Instruction

★ Provide systematic instruction on critical content.

4. Provide step-by-step demonstrations

5. Provide guided and supported practice

6. Use clear and concise language

7. Provide scaffolding as needed to increase student success
Provide systematic instruction on critical content.

What we teach:
1. Facts and information
2. Skills and Strategies (How to do it)
3. Vocabulary and Concepts (What it is)
Curriculum and Instruction

Explicit Instruction of Facts/Information

- Attend
- Intend
- Rehearse
- Retrieve
Retrieval Practice

“Practice at retrieving new knowledge or skill from memory is a potent tool for learning and durable retention.”

Curriculum and Instruction

Explicit Instruction of Skills/Strategies

Demonstration  I do it.
Guided Practice  We do it.
Check Understanding  You do it.
Explicit Instruction of Concepts (Vocabulary)

1. Introduce the word.
2. Provide a “student-friendly explanation.”
3. Illustrate with examples.
4. Check understanding.
Video Lesson

Record any good practices.
Delivery of Instruction
Curriculum and Instruction

★ Elicit Frequent responses.

Why beneficial?

Contributes to a positive learning environment
- increases engagement
- increases on-task behavior
- increases accountability
- promotes desired behaviors
- reduces inappropriate behaviors
- keeps class moving along
Curriculum and Instruction

★Elicit Frequent responses.

Why beneficial?

Check for understanding (Embedded formative assessment)

- allows the teacher to monitor understanding, 
  adjust the lesson based on responses, and 
  provide feedback to students
★ Elicit Frequent responses.

Why beneficial?

Promotes learning
- focuses students’ attention on critical content
- provides rehearsal of information and concepts
- provides retrieval practice of skills, strategies, concepts, vocabulary, and information

retrieve - respond - retain
Elicit frequent responses.

**Preview of Procedures**

★ Elicit frequent responses.

**Verbal Response Procedures**
- Choral
- Partners
- Teams/Huddle Groups
- Individual

**Written Response Procedures**
- Types of writing tasks
- Whiteboards
- Response Cards/Response Sheets

**Action Response Procedures**
- Acting out/Simulations
- Gestures
- Facial Expressions
- Hand Signals
Curriculum and Instruction

★Elicit frequent responses.

The active participation procedure should:

1. Involve all students
2. Be structured
3. Allow adequate thinking time
When thinking time was extended beyond 3 seconds these benefits occurred:

1. Greater participation by all learners
2. Length of student responses increased
3. Use of evidence to support inferences increased
4. Logical consistency of students’ explanations increased
5. Number of questions asked by students increased
Common but less desirable practices

#1. Calling on volunteers

Disadvantages:
- Specific students volunteer.
  - high performing students
  - assertive students
  - students proficient in English
- Non-volunteers over time don’t think or participate

Limit calling on volunteers.
Common but Less desirable practices

#2. Calling on inattentive students

Disadvantages:
- Inattentive student unlikely to have correct response
- Answers of inattentive student unlikely to add to richness of class discourse
- Attention is given to inappropriate behavior

Don’t call on inattentive students.
## Curriculum and Instruction

<table>
<thead>
<tr>
<th>Response Type</th>
<th>Action 1</th>
<th>Action 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choral Responses</td>
<td>Listen to all</td>
<td>Hone in on low performing students</td>
</tr>
<tr>
<td>Partner Responses</td>
<td>Circulate</td>
<td>Look at responses</td>
</tr>
<tr>
<td></td>
<td>Look at responses</td>
<td>Listen to responses</td>
</tr>
<tr>
<td>Individual Responses</td>
<td>Listen carefully</td>
<td></td>
</tr>
<tr>
<td>Response Slates</td>
<td>Look carefully</td>
<td></td>
</tr>
<tr>
<td>Response Cards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand Signals</td>
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<tr>
<td>Written Responses</td>
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<td></td>
</tr>
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</table>
Monitor

Walk around.
Look around.
Talk around.
Desired Level of Performance

Current Level of Performance

Curriculum Instruction

Feedback
“In the visual learning synthesis, feedback was associated with an **effect size of 0.73** indicating it is one of the most powerful factors implicated in academic learning and resultant achievement.”

“Feedback refers to the process of securing information enabling change through adjustment or calibration of efforts in order to bring a person **closer to a well-defined goal**.” Hattie & Yates, 2014
Feedback

• Praise/Acknowledge

• Encourage/Support

• Corrective Feedback
  – Correct errors with the individual or the group.
  – Correct with a neutral affect.
  – Use: I do it. We do it. You do it.
Feedback

Feedback embedded within lesson
Given to the entire class
Given to individuals as the teacher monitors
Given to individuals in small group instruction

Feedback on assignments
Teacher provides feedback
Self-corrections under teach guidance
Self analysis of performance
Partner feedback on performance
“Instruction is more effective than feedback. Feedback can only build on something; it is of little value when there is no initial learning or surface information.”  (Hattie & Timperley, 2007)
Scaffolding

Provide scaffolding that enhances success
In this section of the chapter, a number of critical points were made about ...

First, the authors pointed out that...

This was important because...

Next, the authors mentioned that...

Furthermore, they indicated...

This was critical because...

Finally, the authors suggested that...
In this section of the chapter, a number of critical points were made about Alfred Wegener's theory of continental drift. First, the authors pointed out that Wegener believed that all the continents were once joined together in a single landmass that drifted apart forming the continents of today. This was important because it explained why the outline of the continents as they are today fit together. Next, the authors mentioned that Wegener argued that there were many pieces of evidence supporting his theory of continental drift. Furthermore, they indicated that Wegener used evidence of similar landforms and fossils on different continents to prove his theory. This was critical because other scientists could validate this evidence. Finally, the authors suggested that despite this evidence, other scientists did not accept Wegener's theory because he could not explain the force that pushes and pulls the continent.
... and ... are similar in a number of ways.

First, they both......

Another critical similarity is ...

An equally important similarity is ...

Finally, they ...

The differences between ... and ... are also obvious.

The most important difference is ...

In addition, they are ...

In the final analysis, ... differs from ... in two major ways: ...
Narrative and informative written products are similar in a number of ways. First, they both have an author intent on sharing his/her ideas. Another critical similarity is the goal of informative and narrative writing: to communicate to a reader or group of readers. An equally important similarity is that both genre’ utilize the words, mechanics, and grammar of the author’s language. Finally, both are read on a daily basis across the world.

The differences between narrative and informative written products are also obvious. The most important difference is their purpose. Narratives convey a story, real or imagined, while informative products transmit information that the reader needs or is interested in learning. In addition, they are structured differently. The structure of a narrative is based on the elements of a story: settings, characters, the character’s problems, attempts at resolving the problem, and finally its resolution. In contrast, when writing an informative product, authors organize the information into paragraphs each containing a topic and critical details. In the final analysis, narratives differ from informative text in two major ways: content and structure.
Desired Level of Performance

Current Level of Performance

Curriculum Instruction
Feedback
Scaffolding
Practice
Practice

Practice
Practice
Practice

Retrieval Practice
“It is virtually impossible to become proficient at a mental task without extended practice.” Willingham, 2009

“Development of basic knowledge and skill to the necessary levels of automatic and errorless performance requires a great deal of drill and practice...” Brophy, 1986

“Use it or lose it.” Unknown
Practise

Purpose and Benefits of Practice

• Reinforces the basic skills needed to learn more advanced skills (proficiency, fluency, automaticity)

• Protects against forgetting (retention, maintenance)

• Improves transfer (generalization)
Practice

Types of Practice

• Initial Practice

• Distributed Practice

• Cumulative Practice/Review
Practice

Initial Practice

• Occurs under watchful eye of the teacher

• Provide numerous practice opportunities within the teacher-directed lesson to build accuracy. Provide immediate feedback after each item.
Distributed or Spaced Practice

• Studying or practicing a skill in short sessions overtime.

• Distributing practice overtime (versus massing practice in one session) aids retention in a variety of academic areas.
“Retrieval practice – recalling facts or concepts or events from memory – is more effective learning strategy than review by rereading.”

Distributed or spaced practice – “Periodic practice arrests forgetting, strengths retrieval routes, and is essential for hanging onto the knowledge you want to gain.” Brown, Roediger III, &McDaniel, 2014
Cumulative Review

• Provide **intentional review** of previously taught skills/strategies/concepts/vocabulary/knowledge.

• Goal is to increase long-term retention.
Practice

Range of practice activities
- Paper and pencil tasks
- Practice embedded in lesson
- Practice games
- Practice with partners
- Practice on computer/tablet
“... When basic skills are automated, mental space becomes available for deeper levels of thinking and understanding”
Hattie & Yates, 2014

- Reading words
- Reading passages
- Writing manuscript/cursive
- Typing/Keyboarding
- Spelling
- Saying numerals and value
- Math facts
- Graphing
- Solving equations
- Locating information in reference source
- Others
It is not:  
Drill and Kill

It is:  
Drill and Skill

Perhaps:  
Drill and Thrill
Video Lesson

Record any good practices.
Desired Level of Performance

Current Level of Performance

Curriculum Instruction
Feedback
Scaffolding
Practice
Reflection

• What aspects of instruction need additional focus by your agency?
Let us remember:

How well we teach = How well they learn

Teach with Passion
Manage with Compassion
## Recommended Books

<table>
<thead>
<tr>
<th>Book</th>
<th>Authors</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explicit Instruction</td>
<td>Archer and Hughes</td>
<td>2011</td>
</tr>
<tr>
<td>Make it Stick</td>
<td>Brown, Roediger III, McDaniel</td>
<td>2014</td>
</tr>
<tr>
<td>Visible Learning</td>
<td>Hattie</td>
<td>2009</td>
</tr>
<tr>
<td>Visible Learning and the Science of How we Learn</td>
<td>Hattie and Yates</td>
<td>2014</td>
</tr>
<tr>
<td>Embedded Formative Assessment</td>
<td>Wiliam</td>
<td>2011</td>
</tr>
<tr>
<td>Why Don’t Students Like School?</td>
<td>Willingham</td>
<td>2009</td>
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