High-Leverage Practices for Supporting ALL Learners

Part 4: Instruction

2020 | Division of Teaching and Learning
High-leverage Practice Series Overview
Overview of High-leverage Practices

• The High-leverage Practices for Inclusive Classrooms are 22 critical practices every K–12 teacher should master and be able to demonstrate. The selected practices are used frequently in classrooms and have been shown to improve student outcomes if successfully implemented.

• The HLPs are organized around four aspects of practice:
  • Collaboration
  • Assessment
  • Social/emotional/behavioral
  • Instruction
Objectives for the Series

This training series will provide LEAs with support to develop capacity among all educators serving students with disabilities (SWD) to implement evidence-based, high-leverage practices that correlate with improved academic and social-emotional outcomes for all learners, regardless of disability status.
Today’s Agenda

Participants will:

• Practice using data to identify appropriate learning goals
• Identify the key elements of systematically designed instruction
• Identify key elements of instructional strategies that support metacognition
• Work collaboratively to develop a shared library of resources that will support implementation of these high-leverage instructional practices
Using Data to Identify Appropriate Learning Goals
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Get Your Toolkit Ready

You’ll need:
• student data
• grade-level content
• relevant research-based resources

Set Instructional Priorities

Identify critical content that will help the student grow across academic domains

Use Your Toolkit to Identify Goals

Describe what the student will need to reach these standards
## Sample Math Goal Toolkit

### Student Data Sources
- PARCC results
- MAP
- ANET
- i-Ready
- IXL
- Criterion-referenced tests
- Curriculum-based assessments
- Structured intervention assessments
- Student work samples from across content areas
- Parent, student, and teacher/RSP input

### Content Standards
- **Common Core Standards for Mathematical Practice**
- **Common Core Standards for Mathematical Content**

### Research-based Resources
- Teaching Math to Young Children
- Strategies for Improving Algebra Knowledge in Middle and High School Students
Sample Reading Goal Toolkit

**Student Data Sources**
- PARCC results
- TRC
- OWLS
- GORT
- GRADE
- Reading Inventory
- DIBELS
- Criterion-referenced tests
- Curriculum-based measures
- Structured intervention assessments
- Student work samples from across content areas
- Parent, student, and teacher/RSP input

**Content Standards**
- Common Core Anchor Standards for Reading

**Research-based Resources**
- The National Reading Panel's "Big Five"
- The Institutes of Educational Sciences Practice Guide: Improving Reading Comprehension in Kindergarten Through 3rd Grade
# Sample Writing Goal Toolkit

## Student Data Sources
- PARCC results
- ANET
- OWLS
- TOWE
- Criterion-referenced tests
- Curriculum-based assessments
- Structured intervention assessments
- Student work samples from across content areas
- Parent, student, and teacher/RSP input

## Content Standards
- Common Core Anchor Standards for Writing

## Research-based Resources
- Teaching Elementary School Students to Be Effective Writers
- Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools
Sample Science Goal Toolkit

### Student Data Sources
- State science assessment results
- Criterion-referenced tests
- Curriculum-based measures
- Student work samples from across content areas
- Parent, student, and teacher/RSP input
- Reading and math assessment data

### Content Standards
- [Next Generation Science Standards](#)
- [Common Core Literacy Standards for Science and Technical Subjects](#)

### Research-based Resources
- [Next Generation Science Standards Curriculum Planning Resources](#)
Sample Social Studies Goal Toolkit

**Student Data Sources**
- Criterion-referenced tests
- Curriculum-based measures
- Student work samples from across content areas
- Parent, student, and teacher/RSP input
- Reading and math assessment data

**Content Standards**
- [National Council for the Social Studies (NCSS) Standards](#)
- [Common Core Literacy Standards for History and Social Studies](#)

**Research-based Resources**
- [Critical Thinking Resources](#)
Task 1: Customize YOUR Toolkit

Student Data Sources
Content Standards
Research-based Resources
The Task: Identify Appropriate Learning Goals

Get Your Toolkit Ready

• Gather your data
• Identify holes
• Make a plan to fill the knowledge gaps

Set Instructional Priorities

• Find the critical content and skills in the content standards
• Focus on building knowledge and skills that are useful across content areas

Use Your Toolkit to Identify Goals

• Use student data to determine what supports will be needed for the student to reach the standard
• Translate the standard to an appropriate, individualized goal
Sample Goal

By June 2, 2020, given a writing prompt on a preferred topic, a graphic organizer, and a word bank containing relevant vocabulary, Jennifer will write an explanatory paragraph including a topic sentence, two sentences containing facts to support the topic sentence, and a concluding sentence for 2 of 3 opportunities.

(CCSS.ELA-Literacy.W.2.2)
Sample Goal Template

Given
_____________________________________________________________________________________

(Condition)

______________________________  will ____________________________________________________________________

(Student)  (Behavior)

_____________________________________________________________________________________

(Criterion)

by _________________________________.

(Timeframe)
Share Your Goals …

Get Your Toolkit Ready

What tools did you use?
- Student data?
- Content standards?
- Research-based resources?

Set Instructional Priorities

- What standard did you prioritize?
- Why did you select this standard?

Use Your Toolkit to Identify Goals

- What will the student need to reach this standard?
- How did you translate the standard into an individualized goal?
BREAK

See you in 10 minutes.
The Key Elements of Systematically Designed Instruction
The Key Elements of Systematically Designed Instruction

- Supports attainment of clear learning goals
- Delivered in a logical sequence
- Helps students to make connections between concepts
Systematically designed instruction supports attainment of clear learning goals. Are your goals clear?

- Antecedent condition
- Conspicuous behavior
- Clear criteria
- Observable
- Measurable
- Positive
- Linked to the general education curriculum
- Individualized
- Socially valid
- High-reaching
Systematically designed instruction is delivered in a logical sequence.

- Big ideas before Details
- Frequently encountered content before Seldom encountered content
- Less complex tasks before More complex tasks
- Unambiguous information before Ambiguous information
- Separate skills and concepts before Discriminating between concepts
The Task: Conduct a Task Analysis of the Sample Goal

By June 2, 2020, given explicit instruction, a problem-solving checklist, and a modeled example, Angela will solve multi-step equations containing positive and negative whole numbers with 80% accuracy on 4 of 5 teacher-created probes.

CCSS.MATH.CONTENT.7.EE.B.3
The Task: Conduct a Task Analysis of YOUR Goal

- What are the discrete tasks that your student needs to be able to do and demonstrate mastery of YOUR goal?
- In what order would you teach your student to execute each of these tasks?
Systematically designed instruction helps students to make connections.

Education researchers have identified six principles of instruction that help students make connections between previously learned content and skills and new learning.

- Start and End with Big Ideas
- Use Conspicuous Strategies
- Strategic Integration of New Concepts
- Strategic Review of Content
- Prime Background Knowledge
- Model
- Lead
- Assess
The Task: Apply at least THREE of the Six Principles to the Sample Goal

By June 2, 2020, given explicit instruction, a problem-solving checklist, and a modeled example, Angela will solve multi-step equations containing positive and negative whole numbers with 80% accuracy on 4 of 5 teacher-created probes.

CCSS.MATH.CONTENT.7.EE.B.3
The Task: Apply at Least Three of the Six Principles to YOUR Goal

Revisit the tasks that your student needs to be able to do demonstrate mastery of YOUR goal. Address THREE of the following questions:

1. How will you use a “Big Idea” to frame and structure the learning?
2. What conspicuous strategies will you empower students to use as they work to master each task and the overall goal?
3. How will you use the “Model – Lead - Assess” model to release responsibility for learning from teacher to student?
4. How will you prime background knowledge? How will you connect it to “Big Ideas,” daily objectives, and the overall learning goal?
5. Design instruction to strategically and logically integrate new concepts with previously learned concepts and skills?
6. How will you structure review to:
   ▪ Contextualize new content with the “Big Idea” framework?
   ▪ Strengthen connections between previously learned material and new content?
   ▪ Ensure learning is maintained?
Share Your Ideas

Start and End with Big Ideas

Use Conspicuous Strategies

Model
Lead
Assess

Strategic Integration of New Concepts

Strategic Review of Content

Prime Background Knowledge
LUNCH TIME!

See you in an hour.
Instructional Strategies that Support Cognition and Metacognition
Cognitive vs. Metacognitive Instructional Strategies

- Cognitive strategies are simply different ways of learning and achieving goals.

Metacognitive strategies support independent application of cognitive strategies.

- Determining a learning goal
- Selecting an appropriate strategy for a given goal
- Self-monitoring application of the strategy
- Evaluating the effectiveness of the strategy
- Revising the approach as needed to achieve success
Cognitive and Metacognitive Strategy Instruction: The Teacher-Student Dynamic

- **Student** demonstrates a need for further academic or functional support
- **Teacher** uses data to select and explicitly teach cognitive strategies to address this need and metacognitive strategies to support self-regulation

**Teacher and student share responsibility for the learning process**

- **Teacher** provides multiple opportunities to practice the strategies, as well as scaffolds and supports
- **Student** practices selecting and using both cognitive and metacognitive strategies

**Teacher bears primary responsibility for learning process**

- **Student** recognizes that a tool is needed to complete a task
- **Student** uses METACOGNITIVE strategy to select a COGNITIVE strategy, work through its steps, and monitor progress, and make needed adjustments
- **Teacher** monitors student performance until mastery is demonstrated

**Student bears primary responsibility for learning process**
Choosing a Framework of Strategy Instruction

• Structured frameworks of strategy instruction are used to help students think, plan, and execute tasks.

• These models can be used as frameworks for teaching a wide variety of both cognitive AND metacognitive strategies.

• Consistent use of a structured framework for strategy instruction supports metacognition, fosters students’ self-efficacy, and makes your classroom generally a more predictable place … an essential element of positive, trauma responsive classroom environment
Sample Framework: The Self-regulated Strategy Development Model (SRDM)

- Identify and assess mastery of prerequisite skills
- Discuss the strategy with students
- Model the strategy
- Memorize the strategy
- Support the strategy
- Establish independent practice

Want to learn more about the Self-regulated Strategy Development Model? Visit the IRIS Center’s (free) professional development module!
The Task: Selecting Strategies to Support Student Achievement

<table>
<thead>
<tr>
<th>Resource</th>
<th>Tips and Tricks</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRIS Center Resource Locator</td>
<td>Scroll down to the Learning Strategies tab for 19 different learning modules to support your strategy instruction.</td>
</tr>
<tr>
<td><strong>Evidence Based</strong> Intervention Network</td>
<td>Under Evidence-based Interventions, click on the Interventions button to find a variety of evidence-based strategies for reading, math, and behavior</td>
</tr>
<tr>
<td>Intervention Central</td>
<td>Scroll down to find strategies in academic and executive function domains.</td>
</tr>
<tr>
<td>The University of Nebraska’s Cognitive Strategy Instruction page</td>
<td>Use the links in the Cognitive Strategy Instruction table on the right to learn more about teaching strategies and their application to reading, writing, math, and executive function domains.</td>
</tr>
<tr>
<td>National Center on Intensive Intervention – Literacy Strategies</td>
<td>Scroll down to find resources for your content area. The resources are organized by skill.</td>
</tr>
<tr>
<td>National Center on Intensive Intervention – Math Strategies</td>
<td></td>
</tr>
<tr>
<td>What Works Clearinghouse</td>
<td>Each practice guide contains resources to support implementation of evidence-based strategies.</td>
</tr>
</tbody>
</table>
Final Task: Make a Resource to Support Implementation of Your Plan for Strategy Instruction

**Understand**
- Read the problem

**Plan**
- Choose a strategy:
  - Make a table
  - Work backward
  - Draw a diagram
  - Guess and check

**Solve**
- Apply your strategy

**Check**
- Check my work
- Try a different strategy

**Think:**
- What is it asking?
- What is the key information?
- Work carefully!
- Does my answer make sense?
Thank you!
Your Feedback is Needed!

(Please) Take the Survey:
Professional Development Opportunities

The OSSE Teaching and Learning team offers a wide variety of professional development opportunities.

Ways to stay informed:

1. Subscribe to the TAL Bulletin: [http://eepurl.com/gBFkKw](http://eepurl.com/gBFkKw)
2. OSSE Events Calendar [osse.dc.gov/events](http://osse.dc.gov/events)
Additional Resources