

HLP 12: SYSTEMATICALLY DESIGN INSTRUCTION TOWARDS A LEARNING GOAL VIDEO TRANSCRIPT

Welcome to our video for HLP #12 Systematically design instruction towards a learning goal.

There are 22 High-Leverage Practices for special education spread across four domains. Systematically design instruction falls under the Instruction domain.

This video is broken into two parts. In part 1 we provide a definition and rationale for systematically designing instruction towards specific learning goals. In part 2, we highlight and demonstrate three key components of this HLP.

Part 1: What is systematically designed instruction?

Systematic instruction is a well-researched instructional approach available to general and special education teachers working with students with disabilities, but, what is it?

Many students with disabilities struggle to learn content, especially when the new information holds little, if any relevance to their life. As a result, students may not learn important content when it is first presented, and teachers typically move quickly from topic to topic in order to keep up with curriculum pacing guides and prepare students for various assessments. Because content in most subjects is additive, deficits in prior knowledge can snowball into significant gaps that result in student frustration and failure. Teachers who systematically design instruction towards specific learning goals are cognizant of this issue, and take important steps towards a positive solution.

The hallmark of systematic instruction is teachers establish clear learning goals for students, they sequence each lesson to explicitly connect to previously learned material... All while using explicit scaffolds to help support acquisition of new knowledge.

It takes careful planning to systematically design instruction. Teachers must identify precise learning goals, determine what students need to know and able to do in order to reach the goal, and allocate instructional time to meet student needs.

It is important to note that systematic instruction is not applied in isolation. Rather, it is one component of well-designed lessons and units. For example, Systematic Instruction is very closely tied to the principles of Explicit Instruction.

Explicit Instruction is another high-leverage practice for special education, which you can read about in the HLP book published by CEC and the CEEDAR center, and learn about in video 16 from this series.

Systematically designed instruction is effective for many students, not only those with disabilities. And can be used across grade levels, and content areas.

It is important to note that while any teacher can and should systematically design instruction towards learning goals, the intensity with which teachers use this practice increases with the specific needs of students with disabilities. For example, special education teachers and other specialists should use data to make informed decisions about student goals, identify intense interventions to pursue and address those goals, and determine the needed supports that bridge the gap between the demands of the curriculum and needs of the students.

Part 2: Three components of systematically designed instruction.

There are three key components of systematic instruction towards learning goals. 1. Set clear, specific, challenging and measurable goals for students. 2. Organize and sequence lessons logically so they target broader goals. And 3. Support students in organizing new knowledge by providing scaffolds and structures for learning.

Component 1: Set clear, specific, challenging, and measurable learning goals for students.

It is important for teachers to set instructional goals for individual students, instructional groups, and for the entire class. All goals should be set based on available data, and in consultation with instructional experts. For students with disabilities, goals should be contained within the IEP, and regularly measured using progress monitoring tools. Teachers should explicitly communicate goals, so students know what is expected. It is important to connect daily goals to longer-term outcomes.

In addition, teachers should be clear about what constitutes success, and what steps students will need to complete in order to achieve the goal successfully. Activities during lessons should be structured so students succeed to the extent possible.

In the following clip showing a small group mathematics lesson, Ms. Sarah Melvin connects a prior learning goal to the goal of today's lesson. Note how she is providing multiple opportunities to respond, and providing feedback to her students.

Component 2: Organize and sequence lessons logically.

We mentioned previously that teachers should explicitly state how the current lesson or activity “fits” in the sequence of what else students have been doing and learning. In addition, activities should support students’ progress toward learning goals. By logically sequencing skills, teachers can scaffold instruction to support performance and progress.

For example, in a systematically designed lesson or unit, less complex knowledge and skills are taught before more complex concepts, frequently used content is taught before less frequently

used content, and teachers explicitly teach students skills and procedures needed for independent use. Teachers are explicit about confirming students' critical background knowledge, and reteach, as needed. In a more intensive educational setting, goals might be broken down into smaller increments, but it should still be clear to students how the goal or its increments connects to prior and future learning.

Video clip - In this small group reading example, Dr. Carol Canady Payne scaffolds a phonics lesson so students first orally identify the number of phonemes in words, which represents less complex knowledge, and then later, she provides the opportunity for students to demonstrate the basic knowledge by completing a more complex task. In sum, she demonstrates a logically organized and sequenced lesson.

Component 3: Support students in organizing new knowledge by providing scaffolds and structures for learning.

By making explicit connections among content and skills either with graphic organizers or other organization tools, teachers can help students see relationships among facts and concepts, maximize retention of new information, deepen understanding of the material, and help students apply new knowledge or skills independently.

A key to providing high quality systematic instruction is to show students a variety of ways to interact with or demonstrate the skill or concept being taught. Using manipulatives, graphic organizers and other visual aids and tools, students are supported in their organization of new information.

It is important to note, however, that the teacher must explicitly teach students how these aids should be used to boost their learning. Providing a model to students of how they should use these tools to organize their knowledge, and opportunities for them to practice using the tools and receive feedback on their practice are vital steps in systematically designing instruction.

Supports for students with disabilities should be individualized per their IEP. In a more intensive learning environment, the teacher should carefully select a scaffold or tool (such as a graphic organizer) that provides individualized support. In this setting, students also need teachers to model when and how the support should be used, and also need multiple opportunities to practice and receive feedback on using the support.

In this final clip showing an intensive mathematics lesson, Mrs Sadai Khan scaffolds her student's success for solving word problems by explicitly modeling use of a strategy, and using manipulatives.

In the previous clip, Mrs. Khan provided the modeling and solved the problem. Afterwards, she continued with a high level of scaffolding to support Molly's attempts to use the strategy and become independent.



High-Leverage Practices in Special Education

Conclusion

In summary, systematic instruction begins at the planning phase, when teachers carefully consider student's performance in light of curricular demands. Then, systematic instruction continues throughout the instructional process to match the intensity of instruction with students' individualized needs. The principles of systematic instruction intersect with several other HLPs, including #16 use explicit instruction, and HLP #20, intensify instruction.

More information about systematically designed instruction and its role in supporting the needs of students with and without disabilities can be found at highleveragepractices.org, and the national center for intensive instruction website.

Thanks for watching, and please continue using resources from this series on high-leverage practices for special education.