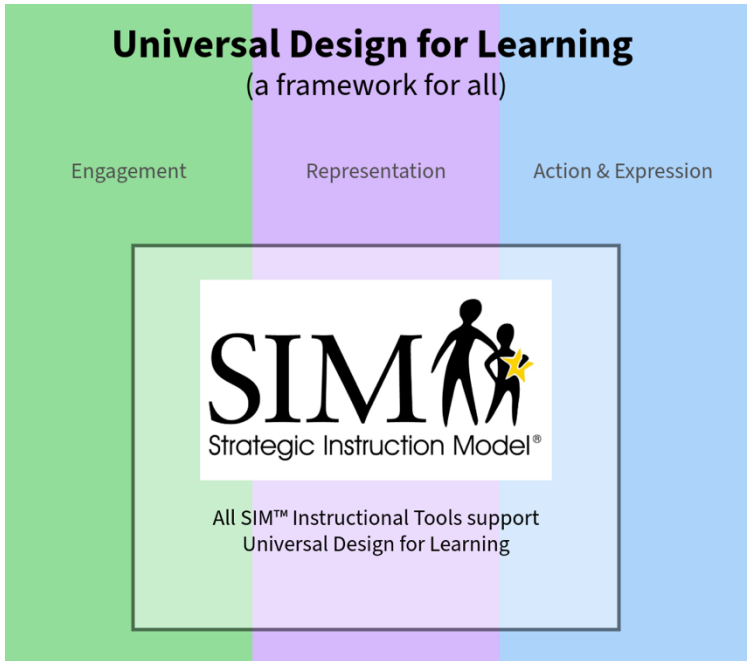
A Crosswalk: Universal Design for Learning and SIM™ Instructional Tools and Interventions

This crosswalk was developed to assist educators in understanding the relationship between the principles, processes, and elements from Universal Design for Learning (UDL) and specific Strategic Instruction Model (SIM) Learning Strategies (LS) and Content Enhancement Routines (CER). UDL and SIM are both instructional resources educators can use to support the learning needs of their students.

Universal Design for Learning (UDL)

UDL is a framework to improve and optimize teaching and learning based on what we know about the human brain. Each brain is made of billions of interconnected neurons that form unique pathways. Like fingerprints, no two brains are alike. The CAST UDL Guidelines (2024) help educators address the diversity in learning in three main categories:

- **Engagement** (the why of learning): recruiting interest, sustaining effort and persistence, and self-regulation
- **Representation** (the what of learning): perception, language and symbols, and comprehension
- **Action & Expression** (the how of learning): physical action, expression and communication, and executive function



Strategic Instruction Model (SIM)

The Strategic Instruction Model is a comprehensive approach to adolescent literacy, including an evidence-based set of instructional tools and interventions that empower teachers and enable students to better succeed in school and beyond. Strategic schools and teachers select instructional tools and interventions to meet their student needs, and strategic students have options for matching an approach to a task. Since 1978, researchers from KUCRL have partnered with classroom teachers to design SIM instructional tools, materials, and interventions. The research-based components of these tools have been tested and approved by teachers to become evidence-based practices shown to be effective in varied school and classroom contexts. SIM includes two arms that work

Maggie Hefner, SIM Professional Developer (North Carolina) and Jocelyn Washburn, KU CRL Director of Professional Development, 2025

together to improve literacy: Learning Strategies (LS) and Content Enhancement Routines (CER). LS use explicit and systematic instructional procedures. CERs are dynamic instructional tools that use powerful teaching devices and procedures to teach critical content in an understandable and easy-to-learn manner. Schools and teachers may implement a combination of LS and/or CER. The nested figure illustrates that all SIM instructional tools support UDL, but not all UDL includes the use of SIM. The table below outlines specific ways that UDL and SIM are similar and includes several examples from SIM instructional tools that demonstrate UDL principles, processes, or elements.

Comparison of Universal Design for Learning (UDL) and the Strategic Instruction Model (SIM)			
	UDL	SIM	Examples from SIM Instructional Tools
What (Definition)	UDL is a framework for designing flexible learning environments that accommodate learner variability. It's not a curriculum or a specific program—it's a set of principles and guidelines for making instruction accessible and engaging for all students.	SIM LS are explicit, research-based methods that teach students ***how to learn*** by breaking complex academic tasks into manageable steps. SIM CER help teachers present content in an organized, accessible way for all learners.	SIM instructional tools follow the principles and guidelines for making instruction accessible and engaging for all students by offering a range of LS and CER: LS: The Inference Strategy The Word Identification Strategy Listening & Notetaking Strategy CER: Unit Organizer Routine Framing Routine Question Exploration Routine
Why (Purpose)	Learning is not one-size-fits-all. Every student has unique strengths, needs, and ways of engaging with content. UDL was developed to create flexible learning environments that remove barriers and give all learners equitable opportunities to succeed.	SIM LS and CER were developed to help students become independent, strategic learners who can succeed in both academic and real-world settings and develop cognitive and metacognitive skills for tasks such as reading comprehension, writing, and problem-solving.	When students become strategic learners, they have access to a set of learning tools to meet their course expectations, which removes barriers and empowers them to succeed.

<table>
<tr><th colspan="4">Comparison of Universal Design for Learning (UDL) and the Strategic Instruction Model (SIM)</th></tr>
<tr><td rowspan="2">How (Methods)</td><td rowspan="2">UDL is built on the practical framework and principles educators use to design learning experiences that meet diverse learning needs through these core principles:
1. Multiple Means of Representation
2. Multiple Means of Action and Expression
3. Multiple Means of Engagement</td><td>SIM LS utilizes a direct instruction model that incorporates the 8 stages of learning:
1. Pretest & Commitments
2. Describe
3. Model
4. Verbal Practice
5. Controlled Practice
6. Advanced Practice
7. Posttest & Commitments
8. Generalization</td><td>During the Describe & Model Stages of Instruction, teachers provide multiple means of representation of the LS. During the Verbal Practice stage, students participate in multiple means of action & expression to commit the mnemonic devices (strategy steps) to memory through a variety of activities. Students express their learning verbally or in writing. Throughout LS Stage of Instruction, learners encounter multiple means of engagement by using practicing the strategy with multiple sources, such as scaffolded learning sheets passage books as well as tasks from the general curriculum.</td></tr>
<tr><td>SIM includes an instructional planning cycle that promotes effective teaching and learning of critical content called SMARTER:
S- Shape Critical Questions
M- Map Critical Content
A- Analyze Learning Demands
R- Reach Enhancement Decisions
T- Teach for Strategic Learning
E- Evaluate Learning
R- Revisit Learning Outcomes</td><td>The SMARTER instructional cycle steps support teachers to analyze the learning demands present in their standards-based curriculum and their students' learning needs to make instructional decisions. The SMARTER steps prompt teachers to visually display critical content for students, plan for learner variability, and monitor learning progress as they facilitate multiple means of learning experiences.</td></tr>
</table>

Comparison of Universal Design for Learning (UDL) and the Strategic Instruction Model (SIM)			
		All SIM CER incorporate a modified explicit, direct instruction model with the Cue, Do, Review instructional sequence, cognitive strategy steps, and visual organizers.	With all CER, teachers co-construct visual organizers to represent critical content. The co-construction process calls upon multiple means of representation, action and expression, and engagement (e.g., verbal, pictorial, graphic, writing).
Where (Settings)	UDL Guidelines can be utilized in any instructional setting with diverse learners, and is a framework, not a program.	SIM strategies and routines can be utilized in any instructional setting with students who need explicit instruction to become strategic, independent learners.	SIM can be taught in general education, special education, inclusive classrooms, and intervention programs. SIM routines are primarily intended for general education, inclusive & co-taught classes.
How do they work together?	UDL Guidelines describe giving learners multiple means to represent, express, and engage in learning. SIM strategies and routines can be options for all learners. The specific strategies and routines are taught to learners to utilize to access their intended curriculum, and once mastered, provide learners with independent metacognitive skills to become responsible for their own learning.		

References

CAST (2024). Universal Design for Learning Guidelines version 3.0. Retrieved from https://udlguidelines.cast.org