

Spider Learning, Inc. Background and Program Overview June 2020

Spider Learning's Online Resource Bundles (ORBs) comprise a comprehensive Middle School curriculum, but are designed to be delivered as flexible, differentiated resources in the blended learning classroom. ORBs are built to empower classroom teachers with diagnostic and formative data and provide flexible instructional resources to personalize learning. Our goal is to empower the art of teaching, by applying the science of learning.

Each ORB contains the same components that teachers can use to differentiate within their classrooms:

- Pre- and Post-Tests
- Interactive Instructional Media
- Leveled Direct Instruction (paired with exit tickets)
- Lesson Assessments
- OER/Teacher Resources (for reteaching and/or enrichment)



Features of the curriculum include:

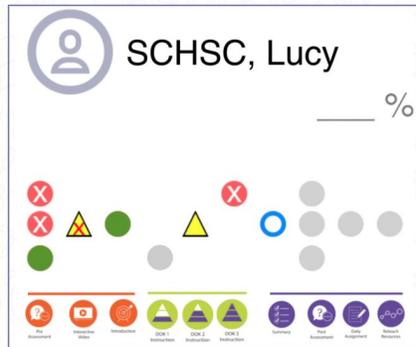
- Lesson-specific diagnostic data is collected and displayed in real time to teachers while students complete three technology-enhanced items in the Pre-Test. The use of Technology Enhanced Items (TEIs) ensures accurate data by eliminating the possibility of a student guessing a correct answer. These three assessment items measure student understanding based on Webb's Depth of Knowledge levels, beginning in DOK1 up to DOK3. Teachers visually access this data and use it to plan specific tasks for their students on a class, group or individual basis. Lesson-specific Post-Tests are also available for teachers to measure student learning.
- Each lesson in the core courses includes interactive instructional media, which combines video content (8 short videos) with adaptive questions to make connections to prior learning and provides remedial instruction as necessary. By focusing on access and connections to prerequisite knowledge, and making connections to new objectives, we ensure that students are poised to learn the new material. Each piece of interactive media within Spider Learning's ORBs encourages a personalized path, based upon each student's individual responses.
- Each lesson contains an explicitly-stated objective, an introduction to the topic and a metacognitive prompt that provides students with an opportunity to strategize their approach to the learning each lesson. The metacognitive prompt, nested within each lesson introduction, ensures student ownership and agency as they plan their learning approach. By communicating this strategy to their teacher, they begin taking ownership of the manner in which they will work to master the lesson content.
- The three leveled resources that serve as the direct instruction components of the lesson parallel the lesson Pre-Test. By meeting each student at their appropriate level of entry into the new material, student engagement and time on task during class is maximized. Differentiating instruction has never before been this manageable. The combination of intra-lesson scaffolding and the use of the meta-cognitive prompt help students develop crucial problem solving skills, build stronger connections and foster a deeper understanding of the content that is presented. Text and image-based instruction and examples are now complemented with engaging lesson activities that focus on Webb's Depth of Knowledge (DOK) Levels 1-3. By utilizing embed technology-enhanced items, we can simulate guided practice while providing the teacher with invaluable exit ticket data.
- In addition to the Technology Enhanced Question exit ticket, students can also be assigned the Post-Test to determine how effective the instruction was for each student. Even if a blended teacher personally provides direct instruction to the class, they can use the Pre-test, Post-Test combination to measure the effectiveness of their instruction. Each lesson or ORB also provides a Daily Assignment resource. This summative assessment is generated from a deep pool of objective and technology-enhanced questions, ensuring that each student receives a unique assignment. The assignment is also regenerated from the pool on any student re-attempts of the assessment; this is done in order to provide authentic data to the teacher.

- Each ORB also contains a folder style resource that is pre-populated with web based materials serving as additional classroom resources for the teacher. Most of these resources are Open Educational Resources that are freely available on the Internet; teachers may also add any OER that they already use to this folder for convenient access. Teachers who have created their own classroom resources may also upload them to this folder so that they are available through the Classroom Command Center. These OER/Teacher Resources can be used to reinforce concepts within the lesson, provide additional instruction, remediation and/or enrichment opportunities within the classroom setting.

Our Classroom Command Center tool makes teaching in a blended classroom manageable for all teachers. The Classroom Command Center is a powerful tool for teachers managing a blended learning classroom, as it provides the teacher with easy to interpret visual representations of real-time formative data within an intuitive classroom management and distribution tool.



Each student is assigned a custom playlist with resources at their level based upon a diagnostic Pre-Test in every lesson. Visual, color coded representations of real-time data enable, on the fly, formative decisions from even the most data-shy teachers.



With our innovative “Drag and Drop” ORBit distribution and comprehensive standards aligned Online Resource Bundles (ORB), Blended and Personalized Learning has never been as manageable. The combination of the curricular resources and classroom management tools provide teachers with a flexible and effective online program for Middle School and Algebra students.