

Using ICEL Components for Solution Alignment

Key:

- Areas
 - Possible barriers
 - Possible intervention characteristics needed

Instruction (Delivery) Factors:

- Level of Instruction
 - Is instructional-level curriculum presented to the student?
 - Instructional level curriculum should be presented
 - Is the student missing foundational skills in the area that instruction is presented?
 - Targeted instruction in foundational skills should be provided
- Rate of Instruction
 - Is the curriculum presented at a rate that exceeds the student's capacity for retention?
 - Break up instructional presentation into smaller chunks presented more frequently (distributed and sustained practice).
 - Does the student need more practice and repetition of material prior to delivery of higher-level material?
 - Provide student with time to review and practice skills from earlier instruction prior to presentation of new material
 - Is the student receiving frequent enough corrective feedback?
 - Provide more frequent checks of student learning and feedback either corrective or reinforcing about student learning.
- Presentation of Instruction
 - Are learning sessions too long in duration for the student to remain actively engaged?
 - Provide instruction in smaller but more frequent chunks of time.
 - Is learning made meaningful for the student?
 - Highlight relevant characteristics of content to real-world experiences and how these skills link to higher level needs (e.g., blending and segmenting words builds skills for spelling or sounding out unfamiliar.
 - Are directions clarified so that the student can complete activities?
 - Clarify and ask student to paraphrase the steps for completing an assignment.
 - Are intrinsic reinforcements embedded in instructional presentation?
 - Self-monitoring and rewards built in to gains in skills or accuracy
 - Are high levels of active responding to instruction present?
 - Include hands-on activities and physical activity embedded in instruction
 - Is scaffolding and prompting provided at levels that align with stages of acquisition of skills?
 - Adjust scaffolding and instruction to focus on where the student is in the learning hierarchy (acquisition, fluency, generalization, adaptation)

Environmental Factors:

- **Expectations, Beliefs/Attitudes About Schools**
 - Do parents value academics and learning?
 - Linkages between academics and future goals and needs should be reinforced
 - Is the parent relationship with the school favorable?
 - Work with parents to identify their needs and find additional time in the school day to provide student with supports not available outside the school
 - Do peers support academic success?
 - Work with student to identify goal(s) for his or her own self that can motivate academic success; find linkages between academic success and future goals or community needs.
- **Medical Factors**
 - Are diagnosed illnesses, syndromes, irritants, allergies, medication side effects, impacting the student's exposure to instruction (need to leave classroom for medical issues, upper respiratory issues keeping the student from hearing or attending to instruction, etc.)?
 - Provide additional support during the school day to catch student up on missed content; provide suggestions for outside assistance via tutoring or homework that can increase opportunities to practice

- Are nutrition, hunger-thirst sleep issues limiting the student's ability to focus on instruction?
 - Provide opportunities to address health distractions and additional remediation time during non-academic portions of the day
- Is the student overly fatigued?
 - Provide instruction in smaller chunks and offer alternate times for rest
- **Transience**
 - Has the student missed instruction due to absences?
 - Provide time during non-academic content to provide exposure to missed content
 - Has the student experienced mis-alignment of curriculum due to changing schools and being exposed to different elements of instruction?
 - Provide instruction in content that supports current instruction as well as in areas that serve as a foundation for the current or future learning
 - Has the student not attended a school long enough for teachers to be able to identify how the child learns best?
 - Allow time to gather data to evaluate the student's level of skill and any gaps or errors in skills
- **Attendance/Tardiness**
 - Has the student missed critical elements or instruction and pre-requisite skills due to absences or tardiness?
 - Provide time during non-academic content to provide exposure to missed content
- **Class Size**
 - Does the number of students in the classroom limit the student in the delivery of praise, corrective feedback, etc?
 - Provide direct and frequent feedback to guide student in either correcting for understanding his or her approach to a task was accurate
 - Does the number of students in the classroom limit the student from being exposed to effective role models in performance in basic skills?
 - Provide role models and thinking out loud of problem solving steps needed to complete an instruction task. (e.g., allow student to frequently see and hear examples of fluent reading or steps in solving a math problem)

Curriculum (Content) Factors:

- **Curriculum Content**
 - Are central necessary skills receiving high levels of attention during instruction?
 - Provide review segments of skills that need to be primed prior to introducing new content
 - Is a review of previous and precursor skills included in the instructional session?
 - Provide additional instruction in precursor skills
- **Instructional Materials**
 - Are materials used able to maintain student's focus and academic engagement?
 - Provide materials that offer various presentation dimensions (e.g., colorful, hands-on, oral responses, written responses)
 - Are materials presented at an instructional level for the student?
 - Provide additional instruction using instructional level materials and pre-teaching vocabulary and content of materials presented in classroom environment

Learner Factors:

- **History of Instruction,**
 - Are gaps in skills or education identified and aligned with curriculum?
 - Provide additional instruction in precursor skills
- **Performance vs. Skill Deficits**
 - Are issues about performance (won't do) vs. skill (can't do) deficits identified?
 - Establish a self-monitoring, graphing, and reinforcement system
- **Internally/Externally Motivated**
 - Are both internal and external forms of reinforcement tied to acquisition of skills?
 - Establish a reinforcement system to reward effort, accuracy, and/or performance on academic tasks
 - Are reinforcers meaningful to the student?

- Identify rewards the student would like to receive
- **Abilities and Impairments**
 - Are there any physical, perceptual, sensory, impairments impeding the student's learning (e.g., failed vision or hearing, verbal difficulties responding to verbally-based tasks)?
 - Work with student to identify alternate avenues along which to deliver and provide practice on academic tasks to the student
- **Organization/Study Skills**
 - Does the student lack organizational skills?
 - Provide student with materials to help organize work (diagrams, study maps).
 - Does the student lack study skills?
 - Provide instruction and guidance in study skills