

Center on Multi-Tiered System of Supports

RIOT and ICEL Matrix

	Instruction	Curriculum	Environment	Learner(s)
General Hypothesis	Is the instruction evidence-based, explicit, and intense enough?	Does the curriculum match the students' need(s)? Do they have the prerequisite skills to access it?	Does the environment support learning in a positive, proactive way?	Does the instruction, curriculum, and environment consider learners' characteristics?
Review:	 permanent products or lesson plans for previous strategies and interventions used; instructional demands; differentiation provided; types of responses by students previous instruction for practices or interventions used 	lesson plans for skills taught in relation to students' mastery of skills; scope and sequence of skills; learning objectives relative to student skills; massed versus distributed practice; juxtaposition of examples used for concepts	 lesson plans for extent to which behavioral expectations were taught seating charts or arrangement for access to materials, board, sound in room 	 products or gradebook for comparing student(s) scores to classroom average or others in group records for health history; attendance; previous test results and patterns previous instruction for response and change in skills
Interview:	 teacher for intended versus actual use of strategies; perceptions of use of strategies peers for perception of tasks and instruction 	teacher for adherence to curriculum, pacing, lessons, etc.; alignment of core with interventions and of needs of student(s)	 teacher for teaching of expectations and routines; use of classroom management strategies students for perception of climate, structure, and routines 	perception of needs and skills; perceptions between classes or core versus intervention(s)
Observe:	 lessons for adherence and use of evidence-base practices task demands; completion of tasks by student(s); opportunities to respond and accuracy of responses; focus of instruction compared to students' mastery of skill along instructional hierarchy 	 fidelity to content/lesson plans alignment of objectives, use of curriculum, content covered between classrooms, settings, etc.; clarity of learning objectives 	 physical environment interactions among students and among student-staff/teacher feedback (error correction and praise) provided 	behavior patterns (antecedents, behaviors, responses) student engagement with content
Test:	 administer fidelity checklists or measures of instructional practices manipulate instructional practices or demands and measure effect on student(s') responses 	 determine readability of texts, assignments, etc. in relation to student reading level manipulate difficulty of material or manner in which it's presented to measure effect on student(s') responses 	 administer classroom environment scales compare student(s') performance between settings or classrooms 	 direct assessment to determine student's mastery of skills along instructional hierarchy administer/examine diagnostic data for student(s') conduct error analysis to determine error patterns direct behavior rating to quantify behaviors of concern

Harlacher, J., Potter, J., & Collins, A. (2024). Untangling data-based decision making: A problem solving model to enhance MTSS. Marzano Resources.