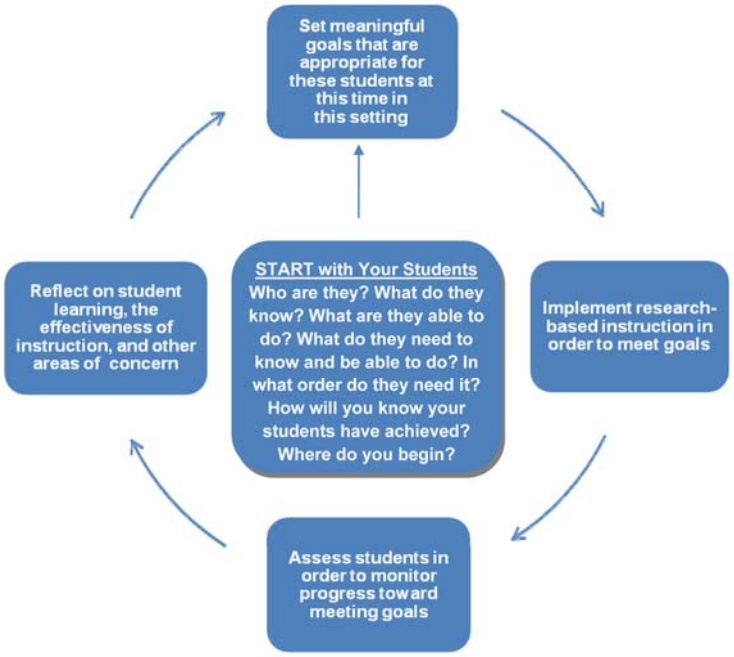
AZ Response to Intervention (RTI)

Curriculum & Instruction

Curriculum is a carefully orchestrated educational plan that requires the learner to construct knowledge, attitudes, values, and skills. A curriculum is more than a set of activities. It must be coherent, focused on important ideas, and well articulated across the grade levels. Academic content standards provide the linchpin for curriculum, instruction, and assessment. Designing a standards-based classroom involves recursive decision-making and the implementation of learning opportunities for students that carefully link identified concepts and learning expectations, the strengths and weaknesses of learners, learning and teaching activities, and assessments "of" and "for" learning.

Within the teaching and learning model, it is important that students are guaranteed a viable, rigorous, and relevant curriculum. The relevance and rigor enables students to fully integrate knowledge so that they are able to think in complex ways and solve pertinent problems and create new and unique ideas and solutions for use in real-world situations. The congruence model below illustrates the curriculum and instructional cycle in a standards-based classroom.



The curriculum that each school and/or district chooses should be scientific, evidence based and shown to be effective for the students for whom it is targeted (Vaughn, Wanzek, Woodruff, and Linan-Thompson (2007). The basis of Response to Intervention is that we eliminate inappropriate instruction as a reason for inadequate progress. This reflects the position of the 2001 President's Commission on Excellence in Special Education that many problems affecting students identified as having learning disabilities (LD) are not related to deficits in the student, but instead are related to inappropriate and/or ineffective instruction (Yell & Drasgow, 2007).

The U.S. Department of Education supports a Web site and funds three technical assistance centers to help states, districts, and schools implement the SBR reading requirements.

What Works Clearinghouse

The What Works Clearinghouse features evidence-based studies of the effects of curriculum on students' achievement outcomes (Foorman, 2007). The aim of the clearinghouse is to promote informed educational decision making through a set of easily accessible databases and user-friendly reports.

Technical Assistance Centers

The U.S. Department of Education funded technical assistance centers in Oregon, Texas, and Florida to help states, districts, and schools implement Reading First requirements. At least two practical and wide range tools were developed at these centers. Simmons and Kame'enui (2003) created A Consumer's Guide to Evaluating a Core Reading Program Grades K–3: A Critical Elements Analysis at the Oregon Center, and researchers at the Florida center created a scoring rubric for evaluating potential core reading programs.

Selecting Core Programs in Other Subjects

Although there is considerable literature describing selection of core curricula in reading, there is much less focusing on core curricula in writing, mathematics, science, and social studies. At present, there is only one elementary math curriculum with discernable positive effects listed on the What Works Clearinghouse. No particular curriculum or information is provided for beginning writing, science, or social studies.

However, some of the findings by Al Otaiba et al. (2005) about reading programs appear to translate across disciplines. That is, effective core curricula should a) have a clearly articulated scientific research base, b) involve explicit instructional strategies, and c) provide consistent organizational and instructional routines. Without explicit guidance or the aid of technical assistance centers in these subjects, it becomes imperative that classroom teachers take the lead in determining an effective core curriculum in these subjects. Teachers can accomplish this by asking whether the content of a curriculum's teacher guide is research based and clearly organized, and whether the text in the pupil edition allows students sufficient practice to master the instructional strategies covered in the lessons (Foorman, 2007)

Research supports the assertion that skills and strategies must be explicitly and systematically taught. Explicit instruction, often called direct instruction, refers to an instructional practice that carefully constructs interactions between students and their teacher. Teachers clearly state a teaching objective and follow a defined instructional sequence. They assess how much students already know on the subject and tailor subsequent instruction, based upon that initial evaluation of student skills. Students move through the curriculum, both individually and in groups, repeatedly practicing skills at a pace determined by the teacher's understanding of student needs and progress (Swanson, 2001). Explicit instruction has been found to be especially successful when a child has problems with a specific or isolated skill (Kroesbergen & Van Luit, 2003).

In addition, the use of multisensory instruction has been found to be very effective for all students and specifically for students who might find reading, writing or mathematics to be a difficult skill to learn. First, it helps get the information across. Second, it helps the students process the information. And, third, it helps students retrieve information already learned. The principles of multisensory instruction include visual, auditory, and kinesthetic/tactile input; that it be systematic, cumulative, and direct; and that the teaching be related to the student's level of understanding. (Birsh 2005)

Differentiated instruction should be provided for all students as part of the instruction. The classroom teacher should adjust the degree of complexity of the **content**, **process** and **product** (Tomlinson 2001) to meet the needs of students' expected achievement.

Content

- *Align tasks and objectives to learning goals.* Designers of differentiated instruction determine as essential the alignment of tasks with instructional goals and objectives. Goals are most frequently assessed by many high-stakes tests at the state level and frequently administered standardized measures. Objectives are frequently written in incremental steps resulting in a continuum of skills-building tasks. An objectives-driven menu makes it easier to find the next instructional step for learners entering at varying levels.
- *Instruction is concept-focused and principle-driven.* The teachers must focus on the concepts, principles and skills that students should learn. The content of instruction should address the same concepts with all students but be adjusted by degree of complexity for the diversity of learners in the classroom.

Process

- *Flexible grouping is consistently used.* Strategies for flexible grouping are essential. Learners are expected to interact and work together as they develop knowledge of new content. Teachers may conduct whole-class introductory discussions of content big ideas followed by small group or pair work. Student groups may be coached from within or by the teacher to complete assigned

tasks. Grouping of students is not fixed. Based on the content, project, and on-going evaluations, grouping and regrouping must be a dynamic process as one of the foundations of differentiated instruction.

- *Classroom management benefits students and teachers*. Teachers must consider organization and instructional delivery strategies to effectively operate a classroom using differentiated instruction. Carol Tomlinson (2001) identifies 17 key strategies for teachers to successfully meet the challenge of designing and managing differentiated instruction in her text How to Differentiate Instruction in Mixed-Ability Classrooms, Chapter 7.

Products

- *Initial and on-going assessment of student readiness and growth are essential.* Assessments may be formal or informal, including interviews, surveys, performance assessments, and more formal evaluation procedures. Incorporating pre and on-going assessment informs teachers to better provide a menu of approaches, choices, and scaffolds for the varying needs, interests and abilities that exist in classrooms of diverse students.
- *Students are active and responsible explorers.* Teachers understand that each task put before the learner will be interesting, engaging, and accessible to essential understanding and skills. Each child should be engaged during the lesson.
- *Vary expectations and requirements for student responses.* Items to which students respond may be differentiated for students to demonstrate or express their knowledge and understanding. A well-designed student product allows varied means of expression, alternative procedures, and provides varying degrees of difficulty, types of evaluation, and scoring.

In an RTI model, fidelity is important at both the school level (e.g., implementation of the process) and the teacher level (e.g., implementation of instruction and progress monitoring). Fidelity of implementation is the delivery of instruction in the way in which it was designed to be delivered (Gresham, MacMillan, Boebe-Frankenberger, & Bocian, 2000). Several key components lead to high fidelity, and several key indicators are evidence of implementation with fidelity.

Key components: The key components that lead to RTI fidelity in general education include the following:

• Systematic curriculum
• Effective instruction
• Direct instruction
• Specified instructional materials
• Checklist of key instructional components
• CBM assessments
• Videos and/or observations of classroom instruction

• Results graphed against goals
• Data (results) graphed against goals
• Student progress monitored monthly
• Decisions regarding curriculum and instruction based on data

Key indicators: Key indicators of RTI fidelity in general education include:

• 80 percent to 85 percent of students pass tests
• Improved results over time
• High percentage of students on trajectory
(Reschly & Gresham, 2006)

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