



Response to Intervention (RtI) in Early Childhood

CENTER FOR RESPONSE TO INTERVENTION IN EARLY CHILDHOOD (CRtIEC)



RtI in Early Childhood: Questions and Implications

- What is RtI?
- Why employ RtI in Early Childhood?
- How does RtI differ from traditional models of service delivery in schools?
- What does the RtI model look like in practice?
- How CRtIEC can help?



What is Response to Intervention (RtI)?

RtI is a systematic problem-solving process designed to:

- Allow for earlier identification of students' difficulties
- Provide students with a level of instructional intensity matched to their demonstrated response to intervention
- Provide a data-based method for evaluating the effectiveness of instructional approaches and changing/improving them



What is Response to Intervention (RtI)? *Continued*

- RtI is intended to reduce the need for special education by improving and providing services early
- RtI services are individualized and based on evidence-based strategies
- RtI is currently utilized for school-aged children, but there is no standard model in early childhood



RtI: Accountability and Support in Early Childhood

- RtI is preventative, targets all children (not just those in ECSE), & has the potential to reduce referrals in schools
- RtI emphasizes the need for High Quality Care and Education through promotion of research-based curricula and instruction
- RtI is supported through Early Childhood movements, including *Early Reading First*, *Good Start*, and *Grow Smart*, as well as universal preschool initiatives



RtI as a Response to Tradition

- Prior to RtI, children were identified with learning disabilities after experiencing school failure
- This traditional model, known as the discrepancy model (a.k.a. wait-to-fail), relies on referral and requires a severe discrepancy between a child's aptitude and achievement scores in order to potentially receive services
- RtI emphasizes that all children are screened and then continuously monitored to identify the need for targeted or intensive interventions



Response to Intervention in Practice

RtI relies on a multi-tier prevention system to identify students with Learning Disabilities:

Tier 1: Primary prevention level, Universal Instruction

Tier 2: Secondary prevention level, Targeted Instruction

Tier 3: Tertiary prevention level, Intensive Instruction

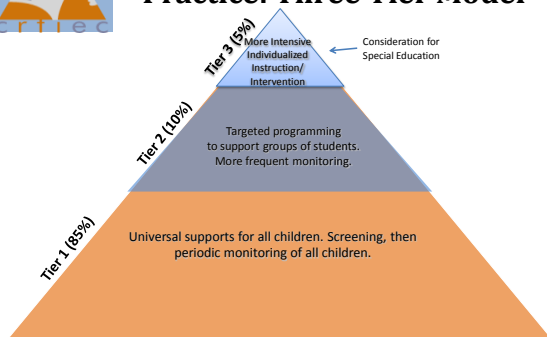


Typical RtI Procedure and Practice

- Screen all students to identify suspected at-risk students.
- Progress monitor students suspected to be at risk to (dis)confirm risk.
- Provide second preventative tutoring to at-risk students, while progress is monitored to assess response.
- Move students who prove unresponsive to secondary preventative tutoring to tertiary prevention. They receive comprehensive evaluation to answer questions and to determine disability.
- Monitor progress in tertiary prevention to set IEP goals, formulate effective programs, and determine exit decisions.



Response to Intervention in Practice: Three-Tier Model



Response to Intervention in Practice: Three-Tier Model

- The following slides give an overview of an RtI service delivery model
- Characteristics of a typical RtI model are indicated by the color blue: these include features that are **not** early childhood specific, but instead, are universal despite the target population
- Characteristics of RtI model specific to Early Childhood are indicated by the color orange

RtI Tier-1 Service Delivery: Primary Prevention and Universal Instruction

- **Children Served:** All students
- **Intervention Practices:** include evidence-based universal curriculum that meets specified criteria (e.g. early literacy and language)
- **Instruction Targets:** oral language and vocabulary; phonological and phonemic awareness, print awareness and alphabet knowledge; comprehension
- **Emphasis:** daily large and small group instruction on early literacy and language
- **Teacher involvement:** combination of teacher-directed and independent activities
- **Instruction:** low to moderate specificity of instructional design
- **Student progress monitoring:** quarterly in the four curriculum areas
- **Data-Based Decision Making:** local norms establishing expected level and rate of performance

RtI Tier-2 Service Delivery : Secondary Prevention and Targeted Instruction

- **Children Served:** students not making adequate progress in Tier 1
- **Intervention Practices:** supplemental to Tier 1; small groups with support of classroom aides and/or paraprofessionals; include increasing opportunities to respond in the 4 curricular areas delivered in center activities that are paraprofessional-supported
- **Instructional design:** Moderate to high specificity of on targeted skills from core curricula
- **Teacher involvement:** paraprofessional-supported center activities
- **Progress Monitoring:** carried out monthly and as well as weekly mastery monitoring probes designed to measure the skills being taught in specific curricular domains
- **Data-Based Decision Making:** ongoing mastery monitoring results in targeted intervention and targeted services delivered to children who score below the expected rate of progress (1 SD or more below norms)

RtI Tier-3 Service Delivery: Tertiary Prevention and Intensive Instruction

- **Children Served:** students not making adequate progress in Tier 2
- **Intervention Practices:** supplemental or alternative to T1 instruction; systematic scope and sequence of skills, scripting of lessons, explicit direct teaching, scaffolded learning, sufficient practice to learn skills to mastery, ample opportunities to practice, immediate teacher feedback
- **Intervention Details:** delivered to small groups of 1 to 3 students and can include an additional 15-30 minutes of instruction in scripted paraprofessional-led activities
- **Progress monitoring:** monthly with weekly curriculum-based assessments designed for measuring progress in acquisition of high priority skills targeted by Tier 3 intervention
- **Data-Based Decision Making:** ongoing progress monitoring results in targeted intervention; Progress in Tier 3 can lead to Tier 2 or Tier 1 services; Continued lack of progress in Tier 3 results in special education services with individualized intervention addressing unique needs



Implications of RtI in Early Childhood: Considerations

- There is an increased emphasis on helping children acquire key school readiness concepts prior to kindergarten and some children require additional supports to learn
- Early childhood currently has standardized interventions, research-based curricula, and an assessment system but prekindergarten programs have no evidence-based approaches for early identification and intervention in educational domains including those of literacy and language
- Existing models that are based on the RtI framework, including the EMERGE model (University of Wisconsin-Madison) and Recognition and Response have shown positive results



EMERGE (Gettinger & Stoiber, 2008)

- the EMERGE program is founded on the notions that:
 - children require continuous exposure to and structured interaction with print
 - frequent oral and written language interactions with adults
 - systematic, explicit instruction to develop skills.
 - literacy environments play a key role in developing children's language and early reading skills.
 - early childhood teachers require sustained, high-quality professional development to be successful in promoting children's literacy development.



Emerge Continued

"Tier 1 includes a research-supported curriculum, a literacy-rich environment, and instructional activities to support children's development of phonological awareness, oral language, alphabet knowledge, and print awareness. In Tier 1, the focus is on optimizing the quality of the overall environment and classroom practices to promote early literacy development among all children. Teachers participate in professional development, weekly coaching sessions, and collaborative planning to provide high-quality, scientifically based instruction and to create literacy-rich classrooms." (Gettinger & Stoiber, 2008)



Emerge Continued

- In effect, each EMERGE tier represents an increasingly stronger focus on, and greater assistance with, acquiring SOAP (sound awareness, oral language, alphabet knowledge, and print awareness) skills.
- Using alphabet knowledge as an example, all children receive instruction on target letters every week as part of the regular classroom activities.
- By providing children with multiple opportunities to respond during Tier-1 instruction, teachers are able to observe students' levels of alphabet knowledge. In addition, monthly progress monitoring enables teachers to determine which children require extra practice on letter identification (Gettinger & Stoiber, 2008).



Implications of RtI in Early Childhood: Effects of Early Childhood Education & the added Benefit of RtI

In school-based preschool programs that emphasize early school age intervention for low-income students, which emphasize parent involvement and early literacy skills studies have shown that program participation beginning prior to kindergarten is related to the following:

- Higher school achievement
- Higher rates of school completion through age 20
- Lower rates of school dropout
- Lower rates of juvenile arrest for violent and non-violent charges
- Less need for school remedial services



Implications of RtI in Early Childhood: Effects of Early Childhood Education with the added Benefit of RtI

In federally funded cost-benefit analysis of federally-financed, comprehensive early childhood interventions (not Early Childhood Special Education), Reynolds et al. (2001) found that economically program benefits exceeded program costs in the following categories:

1. Reductions in expenditures for the school remedial services of grade retention and special education
2. Reductions in the criminal justice system expenditures for both juvenile and adult arrest and treatment
3. Reductions in the child welfare system expenditures associated with child abuse and neglect



Implications of RtI in Early Childhood: Effects of Early Childhood Education with the added Benefit of RtI Continued

4. Averted tangible costs to crime victims
5. Increases in adult earnings and tax revenues projected for increases in educational achievement

According to study results, the present value (in 1998 dollars) to society was \$24, 772 per participant with an average cost of \$4, 068 per participant. The greatest benefits were savings in school remedial services, increased tax revenues, and averted crime victim costs.

(Reynolds et al. 2001)



Challenges with RtI in Early Childhood (Reynolds et al. 2001)

Percentage of respondents indicating area was a SIGNIFICANT CHALLENGE:

Insufficient trained personnel	63.3%
Lack of resources	56.7%
Lack of Tier-2 and Tier-3 strategies	53.3%
Lack of progress monitoring tools	53.3%
Lack of knowledge for putting RtI model together	46.7%



Where do we begin? Focus on Tier I

- We know that a research based Tier-1 model needs to reach students in programs including but not limited to ECFE, ECSE, and School Readiness.
- We know successful Tier-1 classrooms have the following features:
 - Instruction: robust instructional strategies (direct instruction, teaching specific skills)
 - Infrastructure: physical environment (classroom layout) and materials (classroom resources available to children and staff)
 - Curriculum: robust research-based curricula
 - Data-Based Decision Making: Method for assessing both formative and summative performance



Where do we begin? Focus on Tier I

- We know that without robust Tier-1 models schools rely on previously discredited concepts
- Ideally Tier-1 models should have an
 - Emphasis on Maturation (intervene early)
 - Emphasis on Enriched Environment (ensure sufficient opportunities to gain important skills)
 - Emphasis on Teacher and Parent self-report and checklists (obtain direct measures of child performance at regular intervals and in response to intervention trials)
- Once Tier-1 is established, Tier-2 and Tier 3 models will be put into place



How can CRtIEC Help?

- Currently, the University of Minnesota CRtIEC network is working to build a Minnesota Model
- CRtIEC provides support for assessment resources, progress monitoring and screening
- CRtIEC provides the latest information on standards and benchmarking as it becomes available
- Additionally, CRtIEC provides substantial support for participating schools in exchange for participation in data collection efforts



How can CRtIEC Help? Contacting Key People and Getting Involved

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- [Join the Network!](#)
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