Annotated Resources: MTSS/RTI in Early Childhood

Compiled by Tracy E. McElhattan, Ph.D., Judith J. Carta, Ph.D., Robin Miller Young, Ph.D., October 2015

Frameworks for MTSS/RTI in Early Childhood


This article first presents the origins of Recognition & Response, then identifies the major components of R&R and describes steps to help practitioners apply the principles in early childhood settings.


The first authoritative volume on RTI in early childhood, this book presents the best thinking and current research-based knowledge on how to apply RTI principles with young children. Leading scholars cover a wide range of topics, including: the foundations of RTI; assessment within an RTI framework; discussion of major tiered approaches to instruction and intervention in early childhood; curriculum and instruction; program-level supports; Implementation Science as a process for scaling-up the initiative, and future challenges and directions. Readers will learn how the application of RTI to early childhood settings meets the pressing need to customize teaching and learning for an increasingly diverse population of young children.


This article presents a comprehensive view of an RTI framework in early childhood, including a description of the potential benefits, system context in early childhood, development and implementation of the framework, emerging models and resources, research and development of RTI practices, and an example of a state-based early childhood program implementing RTI. Additionally, there is a discussion of myths about RTI in early childhood and implications for research, development, evaluation, and practice.
This article describes results of a process-product study of preschool instruction and children’s growth and outcomes in 4 types of programs (i.e., Pre-K, Title I, Head Start, and Tuition-Based) using a response to intervention perspective.

This chapter reports progress in development and use of progress-monitoring measurement for infants and toddlers. The authors frame their work in light of three goals pursued by those working with infants and toddlers: (a) to identify children not responding to early intervention and who may need a change in intervention to make progress, (b) to monitor growth and developmental progress of the individual child over time, and (c) to evaluate the effectiveness of early intervention programs and services provided to children.

The three-volume set provides a comprehensive look at critical issues in early childhood from various experts in the field, combining the latest research with professional experience, wisdom and family perspectives. Topics range from the historical context of early childhood education and special education to contemporary issues such as serving culturally and linguistically diverse children in early childhood settings.

This is a letter from the acting director of the Office of Special Education programs in response to an email query regarding the applicability of RTI methods to children age 3-5 enrolled in Head Start programs.


This chapter emphasizes the critical nature of implementing a curriculum framework in early childhood classrooms to ensure high quality education for all children. Specifically, the role of the school psychologist in supporting the adoption, implementation, and evaluation of curriculum frameworks in early childhood classrooms is discussed.


One in a series of monographs published by the Council for Exceptional Children (CEC), Council of Administrators of Special Education (CASE) division. This monograph on RtI includes an article on the emerging movement to develop RtI models with EC/Preschool/Prekindergarten settings.

Center for Response to Intervention in Early Childhood (CRTIEC)

CRTIEC is a research and development center sponsored by the U.S. Department of Education’s Institute of Education Sciences (IES) to develop and validate Tier 2 and Tier 3 interventions to support the early literacy and language development of children in pre-kindergarten and to develop a measurement system for identifying children needing higher tiers of support in early literacy and to monitor their progress in this area. Their website includes resources on interventions and assessment and links to presentations made at the annual RTI in Early Childhood Summit.
Recognition & Response (R&R)/RTI for Pre-K

Recognition and Response (R&R) is a U.S. Department of Education Institute of Education Sciences (IES) funded project at the FPG Child Development Institute at the University of North Carolina, designed to study the effectiveness of a tiered instructional model for pre-k children. The website includes: general information about R&R, research, classroom examples, teacher reflections, presentations, videos, discussions, and more.

Web Address: http://randr.fpg.unc.edu/index

National Association for the Education of Young Children: Frameworks for RtI in ECE.

This website provides the joint statement on RTI in Early Childhood from NAEYC, Council for Exceptional Children Division for Early Childhood (DEC), and the National Head Start Association (NHSA).

Web Address: http://www.naeyc.org/content/frameworks-for-rti-in-ece


Lynette Chandler, Professor and Program Coordinator for Special Education in the Department of Special and Early Education at Northern Illinois University, shares a preservice perspective of early childhood RTI professional development in the state of Illinois. Robin Miller Young, Director of Early Childhood Education, Rockford University, shares from the inservice perspective. At this website, readers can join in the discussion with other professionals by answering specific questions posted on the discussion page.

Web Address: http://npdci.fpg.unc.edu


This special issue of the Journal of Early Intervention describes how the Center on Response to Intervention in Early Childhood (CRTIEC) federal grantees (Greenwood, Carta, Goldstein, McConnell, and Kaminski) and their collaborators developed and field-tested an MTSS model for teaching language and literacy skills to preschoolers.


This special series of the School Psychology Review focuses on accelerating growth and learning for all young children and the implications of using an RTI model in early childhood. Selected articles specific to early childhood included in this special edition:


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**Assessment and Decision Making in MTSS/RTI Frameworks**


This article describes the development and initial validation of preschool IGDIs in Oral Language.

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**Bricker, D., Squires, J., & Clifford, J. (2010). Developmental screening measures: Stretching the use of the ASQ for other assessment purposes. Infants & Young Children, 23(1), 14-22.**

In this article, authors provide a rationale for use of the Ages and Stages Questionnaire (ASQ) for assessment within an RtI instructional model.

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This paper describes the development and preliminary technical adequacy evidence for the Preschool Numeracy Indicators (PNIs), and emerging tool to assess early math and numeracy skills.

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Authors provide a description of the use of curriculum-based progress-monitoring procedures within a multi-tiered instructional framework in preschool classrooms for children from low-income families. Researchers provided ongoing coaching to teachers in order to assist teachers in planning for differentiating instruction. The EMERGE intervention was used to strengthen the use of evidence-based early literacy practices into classroom routines and activities.

This is the third in a three-part series of articles (see Hojnoski, Gischlar, & Missal, 2009a, 2009b) describing the steps in using data-based decision making to inform intervention and improve child outcomes. The focus of this work is to describe basic considerations when interpreting graphed data through visual analysis in order to understand child performance data. Authors present a basic graphic framework for organizing performance data, then review elements of visual analysis, and then discuss how graphs can be used to inform instruction and intervention. Vignettes are used to illustrate and enhance concepts presented.


A discussion of current innovation in measurement conceptualization, development, and application for young children is provided. Specifically, the authors provide an overview and description of Individual Growth and Development Indicators (IGDIs), and evidence of the effectiveness in large-scale application of the measures. Challenges, concerns, and future research are discussed.


The first in a series of three, (see Hojnoski, Gischlar, & Missal, 2009b; Gischlar, Hojnoski, & Missall, 2009), the purpose of this article is to describe basic elements of performance data collection in early childhood settings to promote systematic progress monitoring and improve child outcomes. The authors present basic knowledge to enhance the reader's ability to collect meaningful data through the identification of valued behaviors to target through instruction or intervention.


The second in a series of three, (see Hojnoski, Gischlar, & Missal, 2009a; Gischlar, Hojnoski, & Missall, 2009), purpose of this article is to describe basic elements of graphing child performance data in order to improve child outcomes in early childhood settings. The
authors provide directions for creating graphs by using a computer or paper and pencil, and discuss how the graphs can be used to communicate with stakeholders such as parents, administrators, or service providers. Vignettes are used throughout the article to illustrate use of graphical information and enhance understanding.


The authors guide readers through data collection in a preschool classroom and provide suggestions on how to use the data to drive classroom instruction. General outcome measures (GOMs), a procedure for monitoring growth and development in young children, is described followed by a description of currently available strategies for the use of preschool early literacy GOMs.


This chapter provides a general overview of general outcome measurement and how it has been applied to infants and toddlers and preschool-aged children. The focus is on the role of assessment in early childhood response to intervention.


This chapter is an expansion and update of an earlier edition of *Best Practices*. The current chapter updates previous information about Individual Growth and Development Indicators (IGDIs) for preschool children, provides a description of how these measures are used in both research and practice, and presents information on how IGDIs can be used in RTI approaches in early childhood settings.


The authors describe the development of five Individual Growth and Development Indicators (IGDIs) for language and early literacy progress monitoring. Examples are included describing how to use the assessments for children's progress monitoring and program evaluation in early intervention. Technical information regarding the measures is also included.


Authors of this article provide a review of selected assessment tools in early childhood that demonstrate instructional validity. Future direction for strengthening validity for the use in an early childhood RTI framework is discussed.


This article describes a study that examines the usefulness of using curriculum-based early literacy measures as screening tools for assessing growth in early literacy skills following brief interventions. Results showed enhanced decision accuracy while using the curriculum-based measures with children at risk for learning difficulties, especially in combination with brief, class-wide interventions. Additionally, implications for expanding an RTI framework in early childhood settings are discussed.

Individual Growth and Development Indicators for Infants and Toddlers

This website includes general information about IGDIs, (progress monitoring measures for infants and toddlers). It includes publications and presentations, information about training, certification, and materials, and also includes the IGDI Child Data System.

Web Address: http://www.igdi.ku.edu

Individual Growth and Development Indicators for Preschoolers

The myIGDIs website includes tools for how to measure and monitor the progress of preschool-aged children in early literacy, language, and numeracy. The website includes information about the measures and how to order them; online reports for individuals, classrooms and programs; and professional development modules. Calendar of upcoming conference presentations and webinars are available.
mCLASS CIRCLE: Observational and assessment tools for progress monitoring on handheld devices—Susan Landry

This website provides software for carrying out assessments in English and Spanish as well as features for aggregate-level reporting and analysis, self-service enrollment and rostering, and secure data hosting and management.


Tier 1 Instruction in Early Literacy/Language

What Works Clearinghouse: Early Childhood Education


Center for Early Literacy and Language: OSEP-funded TA Center


Preschool Curriculum Evaluation Study: IES funded study of 14 curricula to promote school readiness


National Early Literacy Panel: NELP Report


Tier 2 Instruction in Early Literacy/Language


In this study, universal screening in emergent literacy was paired with differentiated instruction for 220 at-risk prekindergarteners in 38 child care and preschool settings. The at-risk preschoolers made significant gains in emergent literacy skills (e.g., rhyme, alliteration) as a result of the 9-week small-group intervention. Results provide evidence of an effective Tier 2 intervention in an RTI context.

This study assessed the effectiveness of a Tier 2 phonemic awareness intervention on 34 preschoolers enrolled in Early Reading First classrooms. The intervention was provided twice weekly in small groups over 6 weeks and resulted in medium to large effect sizes for 71% of the children. The potential of Tier 2 interventions to positively impact the future reading skills of at-risk children is discussed.


The authors evaluated the efficacy of a Tier 2 Phonological Awareness intervention, used within an RTI model for preschool children. Children participated in a small group intervention 3–4 days per week for approximately 10 minutes, for a total of 28-36 lessons. Each lesson focused on PA and alphabet knowledge. Children demonstrated consistent gains on both weekly progress monitoring measures and other measures of PA and alphabet knowledge. Results indicated support for use in preschool classrooms for children needing instructional support beyond what is offered as part of the Tier 1 curriculum.


Evidence-based recommendations to guide practitioners in explicit vocabulary teaching through embedded storybooks are provided. In addition, a review of evidence-based principles for vocabulary instruction for children with and without disabilities is discussed.

Describes the results of a study examining the effects of a Tier 2 automated listening station approach for teaching vocabulary.

**Read It Again-PreK! by Laura Justice and Anita McGinty**

This website provides information about a practitioner-friendly, scientifically based, and relevant curricular supplement designed to develop and strengthen young children’s early foundations in language and literacy. The website provides everything one needs to access the Read It Again-PreK! supplemental curriculum materials including (a) introductory content, (b) lesson plans, (c) implementation notes, and (d) downloadable materials.


**Developing Talkers by Susan Landry, Children’s Learning Institute, University of Texas Health Science Center at Houston**

This website provides information about Developing Talkers Developing Talkers: Pre-K and Hablemos Juntos: Pre-K, curriculum supplements to promote oral language that follow a Pre-Kindergarten Response to Intervention (P-RTI) instructional framework. The supplements are designed to meet the needs of many aspects of Tier 1 and Tier 2 pre-K oral language instruction. Specifically, listening comprehension and vocabulary skills are targeted in the book reading context by providing lessons, materials, and an instructional template to develop and strengthen children’s oral language skills.

Web address: [http://www.childrenslearninginstitute.org/our-programs/program-overview/TX-school-ready/developing-talkers/](http://www.childrenslearninginstitute.org/our-programs/program-overview/TX-school-ready/developing-talkers/)

**Say, Tell, Do, Play by Karen Burnstein, Kathleen Roskos and James Christie.**

This website provides information about Say-Tell-Do-Play interactive site that supports an intervention for children with language delays through modules that include evaluation, instruction, practice, reading, substantial conversations, play, activities and assessments.

Web address: [http://prod.ereadohio.org/swi/](http://prod.ereadohio.org/swi/).

**Tier 3 Instruction in Early Literacy/Language**

This article describes the results of a Tier 3 intervention targeting phonological awareness skills in prekindergarten-aged children.

**Social/Emotional MTSS/RTI in Early Childhood**


This article describes the relationship between RtI and the “Pyramid Model” for promoting social emotional competence and positive behavior development in young children, including a discussion of the parallels and compatibility of the two models. Challenges are also addressed as well as the potential offered by implementation of the emerging frameworks.


The Teaching Pyramid framework is the focus of this article, with a description of the four levels of practice to address the needs of all children, including those with persistent challenging behavior. A systemic approach is emphasized, with the key implication being that most solutions to challenging behaviors are found by examining general classroom practice and adult behaviors, rather than focusing on intensive interventions for individual children.


This article describes a preschool’s use of PBIS (Positive Behavioral Interventions and Supports) and PATHS (Promoting Alternative Thinking Skills) to develop socially competent and emotionally resilient young children.


Special Issue: Positive behavior supports and interventions in early childhood education. *NHSA Dialog, 12*(2).
This special issue journal addresses Program-Wide Positive Behavior Support as an effective practice to accomplish the goal of infusing mental health and social emotional programming into all aspects of program planning in early childhood settings. Specific articles and discussions in this special issue:


Website: [http://www.tandfonline.com/toc/hnhd20/12/2](http://www.tandfonline.com/toc/hnhd20/12/2)

**Center on the Social and Emotional Foundations for Early Learning (CSEFEL)**

CSEFEL is funded by the Office of Head Start and Child Care Bureau to disseminate evidence-based practices and research to early childhood programs. This website provides extensive training materials, videos, and print resources for the Pyramid Model for Supporting Social Emotional Competence in Infants and Young Children, a tiered model of evidence-based practices for addressing challenging behavior and promoting social emotional competence in young children. Specific materials found on the website include research syntheses, training kits and modules, videos, *What Works* briefs, practical strategies, and resources for states, trainers, families, and teachers.
Technical Assistance Center on Social Emotional Intervention for Young Children (TACSEI)

TACSEI is funded by the U.S. Department of Education, OSEP and provides resources and intensive technical assistance and training to selected states to build needed infrastructure and systems for implementing the Pyramid Model. In addition, TACSEI synthesizes and disseminates research findings, and provides links to presentations, distance learning, and a consultant bank to provide training and consultations for programs, trainers, and states to implement the Pyramid Model.

Web Address: http://www.challengingbehavior.org/

Implementation of MTSS/RTI in Early Childhood


Helpful guidelines and resources for early childhood RTI implementation are presented for those who provide training to current and future early childhood special educators. Resources include (a) a research-based summary of the learner characteristics of children likely to need additional instruction, (b) information on assessment tools, (c) websites that have reviewed research on commercially available interventions, (d) instructional strategies for use by teacher educators, and (e) a discussion of implications of RTI for early childhood educators.


Current knowledge of RTI in preschool settings is summarized, emphasizing an evaluation of the strengths and weaknesses of the research base. Specific challenges of high-risk preschool settings are presented.

This article conceptualizes an RTI model to be utilized in those preschool settings that include children with disabilities or those identified as “at risk.” Challenges, limitations, criticism, advantages, and opportunities for RTI consultation and support are presented and discussed.


The use of RTI in preschool settings is examined in this paper and suggests that RTI could assist in alleviating social emotional risk factors and challenging behavior during preschool years. A case study is presented and recommendations for practice in use of Positive Behavior Support is preschool is provided.


This free online training provided by the Frank Porter Graham Child Development Institute will equip participants to (a) describe effective tiered instruction within both social-emotional and academic contexts for young children and (b) use a data-driven decision making process to determine if tiered instruction could be used to promote positive behaviors and academic outcomes in early childhood settings.

Web Address: http://community.fpg.unc.edu/connect-modules/learners/module-7


A free webinar, conducted by Dr. Lynette Chandler of Northern Illinois University (NIU), for the Early Childhood Professional Development division of the Illinois Resource Center (IRC). Webinar can be viewed in four parts: 1) Overview; 2) First Steps; 3) Developing the Tiers; and 4) Problem Solving; entire webinar takes about one hour to view.

Web address: http://ec.thecenterweb.org/site/resources/response-intervention-prekindergarten

This article introduces Project ELI (Early Literacy Initiative), a tiered model for promoting early literacy in an inclusive settings and describes the process that Tier 1 (universal strategies) were implemented and how they were adapted for English Language Learners and children with special needs.

Website: http://life.comm.fsu.edu/LIFEArticles/Literacy/YEC_Promoting.pdf.


A section of this book chapter illustrates how the instructional needs of a class of children, a small group of children and an individual child can be met within an RtI tiered model.


This article describes the design and implementation of the Exemplary Model of Early Reading Growth and Excellence (EMERGE), a program that incorporates an RTI framework to promote early literacy and language skill development among low-income minority children. The authors present preliminary findings and discuss challenges of applying an RTI model in early childhood settings.


The purpose of this article is to describe RTI and provide a description of an ecobehavioral approach to providing school staff the information they need to implement RTI. This article focuses on implementation of RTI from an ecobehavioral approach in multiple settings, including preschools.

Jackson, S., Pretti-Frontczak, K., Harjusola-Webb, S., Grisham-Brown, J.,

In this article, literature related to RtI was reviewed to identify common principles of RtI in practice. The identified principles are then aligned to DEC recommended practices and a rationale and support for a curriculum framework in early childhood is identified. The role of related service providers, specifically SLP’s, in an RtI model is addressed.


An overview of how RtI in preschool settings could be used effectively is provided. Issues addressed include (a) how to design and implement a high-quality Tier 1 environment that systematically improves language and literacy outcomes, (b) how to implement a supplemental Tier 2 intervention that improves language and literacy outcomes of children unresponsive to Tier 1, and (c) how to design and implement an effective assessment program that identifies children who are unsuccessful in Tiers 1 and 2 environments. Specific application of Justice and McGinty’s *Read It Again-Pre-K* (2008) in an RtI model is discussed.


This article presents adaptations for dual language learners (DLLs) within an existing model of tiered instruction. The authors provide a brief overview of the Recognition & Response for Dual Language Learners (R&R-DLL) model, focusing on the instructional adaptations for DLLs. After describing the adaptations to instruction for DLLs, the authors present illustrations of these strategies in two different teaching and learning contexts within a tiered instructional approach.


This chapter explains concisely the basic Active Frameworks and how they may be used to scale up an early childhood initiative, such as MTSS/RtI.


This article and related newsletter article provides practical tips for implementing practices related to RTI, specifically in an early childhood or early learning setting. Geared towards administrators and teacher teams, questions to guide planning for assessment and instructional needs are provided.

Website: [http://community.benchmarkemail.com/users/milcstaff/newsletter/November-2011-Newsletter](http://community.benchmarkemail.com/users/milcstaff/newsletter/November-2011-Newsletter)


This article describes Project ELI (Early Literacy Initiative); a three-tiered model that the authors have implemented to support early literacy and language in preschool classes. The model incorporates a 10 step process that involves collaborations across principals and administrative teams in preschool and kindergarten settings.

**RTI Blog**

This blog is part of the RTI Action Network, featuring a weekly editorial from experienced implementers and/or researchers. Authors post commentary about issues regarding RTI and readers can post reactions and thoughts.

Web Address: [http://www.rtinetwork.org/rti-blog](http://www.rtinetwork.org/rti-blog)


The message from the editors states that they are proposing the idea of “blending” as the logical evolution of “inclusion” practices. Moreover, the articles included in this issue address some or all of the MTSS/RTI in EC practices described elsewhere in this annotated bibliography.


Special Issue: Approaches to individualizing supports for high-risk preschoolers. *NHSA Dialog, 12*(3).

This issue focuses on meeting the learning needs of preschool children at risk of later reading difficulties and academic failure. Response to Intervention models and differentiated instruction are discussed as a context for the specific interventions described in the articles of this special issue journal. Specific articles and discussions included in the special issue:


Website: [http://www.tandfonline.com/toc/hnhd20/12/3](http://www.tandfonline.com/toc/hnhd20/12/3)

National Early Childhood Technical Assistance Center (NECTAC)-Response to Intervention (RTI) in Early Childhood

NECTAC is supported by the U.S. Department of Education’s Office of Special Education Programs (OSEP) to improve outcomes for children and families served under Part C-Infant and Toddlers with Disabilities Programs and Part B-Section 619 Preschool Programs for Children with Disabilities. The NECTAC website provides free searchable resources from an array of providers, including presentations from national conferences, OSEP policy, and IES funded research.
National Implementation Research Network (NIRN)

The mission of the National Implementation Research Network (NIRN) is to contribute to the best practices and science of implementation, organization change, and system reinvention to improve outcomes across the spectrum of human services. A major goal of the National Implementation Research Network is to help establish an evidence base for the implementation processes and practices of evidence-based programs. Resources are available on the website that may be helpful in scaling up a variety of early childhood evidence-based practices (home visiting, etc.), including MTSS/RTI.

Web Address: http://nirn.fpg.unc.edu/

RTI Action Network-Pre-K Resources

The RTI Action Network is funded by the Cisco Foundation and is part of the National Center for Learning Disabilities. The website includes links to download articles examining RTI in Pre-Kindergarten, links to other websites on the subject of RTI in early childhood, and information on screening, assessment, and progress monitoring in Pre-K. Also included is information on parent-school partnerships in early childhood.

Web Address: http://www.rtinetwork.org/pre-k

Implementing Response to Intervention in Early Childhood Settings: National, State, and Program Perspectives

This 80-min. webcast featured four nationally-recognized experts in RTI who describe an overview of RTI, new instructional strategies, policy considerations, and approaches to measurement and needed supports for successful implementation of RTI.


This presentation described both policy and practice when addressing the essential components, benefits, and challenges to implementing RTI in early childhood settings. The presentation also provided a description of the Recognition & Response and the Center for Response to Intervention in Early Childhood websites.
Roadmap to Pre-K RTI: Applying Response to Intervention in Preschool Settings Webinar Handouts (May 20, 2009).

The webinar provided an overview of the publication from the National Center for Learning Disabilities, *Roadmap to Pre-K RTI: Applying RTI to Preschool Settings*. Audience for this webinar includes early childhood experts, policy makers, advocates, and any others who seek to gain an understanding of RTI components in order to develop their own RTI implementation plan.

Web Address: http://www.rtinetwork.org/images/content/downloads/professional%20development/Early_Childhood_Innovation_2010_RTI_in_Early_Childhood.pdf

‘Virtual Visit”: A Preschool Example of RtI in Action:

The RtI Action Network has developed a video that features Prairie Children Preschool in Aurora, Illinois, which has been successfully implementing RTI in an early childhood setting for several years. Listen to Principal LuAnn Shields and her staff as they discuss the reasons they have designed their program the way they have, how they use data to make decisions and how they involve parents in throughout the process of RTI implementation.

Web Address: http://rtinetwork.org/professional/videos/virtualvisits or on Youtube at www.youtube.com/user/RTIActionNetwork.

**Recognition & Response: Pathways to School Success for Young Children**

This website is funded by grants from the Emily Hall Tremaine Foundation and Cisco Systems Foundation and is managed by the National Center for Learning Disabilities, with program partners from other national and state organizations. The website provides information about R&R; strategies, tools, and resources to facilitate effective implementation; technical assistance in support of R&R implementation; and access to additional information and resources.

Web Address: http://www.recognitionandresponse.org/
This paper is an annotated list of resources related to implementing RTI in early education settings. The list includes links to websites, webinars, policy papers and blogs available on the Internet. It also provides a listing of books and chapters, and journal articles that have been published on topics related to multi-tiered systems of support such as measures used for identification and progress monitoring, and interventions for providing young children with additional support in early literacy, language and social-emotional development. This resource list originated from the Center for Response to Intervention in Early Childhood (CRTIEC) in 2012, Grant R324C080011 to the University of Kansas (Charles R. Greenwood and Judith J. Carta, principal investigators) from the National Center for Special Education Research, Institute of Education Sciences, U.S. Department of Education.