

**SPECIAL EDUCATION RESEARCH AND DEVELOPMENT CENTERS****CFDA NUMBER: 84.324C****RELEASE DATE: May 15, 2007****REQUEST FOR APPLICATIONS NUMBER: IES-NCSE-2008-03****INSTITUTE OF EDUCATION SCIENCES**<http://ies.ed.gov>**LETTER OF INTENT RECEIPT DATE: September 6, 2007****APPLICATION DEADLINE DATE: November 1, 2007****THIS REQUEST FOR APPLICATIONS CONTAINS THE FOLLOWING INFORMATION:**

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## **PART I. GENERAL OVERVIEW**

### **1. REQUEST FOR APPLICATIONS**

The Institute of Education Sciences (Institute) invites applications that will contribute to its Special Education Research and Development Center program. For this competition, the Institute will consider only applications that meet the requirements outlined below under [Part II: Special Education Research and Development Center Grant Topics](#) and [Part III: Requirements of the Proposed Research](#).

### **2. OVERVIEW OF THE INSTITUTE'S RESEARCH GRANTS PROGRAMS**

The Institute's over-arching priority is research that contributes to improved academic achievement for all students, and particularly for those whose education prospects are hindered by inadequate education services and conditions associated with poverty, race/ethnicity, limited English proficiency, disability, and family circumstance.

With academic achievement as the major priority, the Institute focuses on outcomes that differ by periods of education. In the infancy and preschool period, the outcomes of interest are those that enhance readiness for schooling, for example, language skills, and for infants and toddlers with disabilities, developmental outcomes. In kindergarten through 12th grade, the core academic outcomes of reading and writing (including reading and writing in the disciplines), mathematics, and science are emphasized, as well as the behaviors and social skills that support learning in school and successful transitions to employment, independent living, and post-secondary education. At the post-secondary level, the focus is on enrollment in and completion of programs that prepare students for successful careers and lives. The same outcomes are emphasized for students with disabilities across each of these periods, and include the functional outcomes that improve educational and transitional results. The acquisition of basic skills by adults with low levels of education is also a priority.

In conducting research on academic outcomes, the Institute concentrates on conditions within the control of the education system, with the aim of identifying, developing, and validating effective education programs, practices, policies, and approaches as well as understanding the factors that influence variation in their effectiveness, such as implementation. Conditions that are of highest priority to the Institute are in the areas of curriculum, instruction, assessment (including the identification of students with disabilities), the quality of the education workforce, and the systems and policies that affect these conditions and their interrelationships (for example, accountability systems, delivery mechanisms including technology, and policies that support the ability of parents to improve educational results for their children through such means as choice of education services and provision of school-related learning opportunities in the home).

In this section, the Institute describes the overall framework for its research grant programs. Specific information on the center topics described in this announcement may be found in the sections pertaining to each Center topic:

- [Serious Behavior Disorders at the Secondary Level](#)
- [Response to Intervention in Early Childhood Special Education](#)

The Institute addresses the educational needs of typically developing students through its Education Research Grants Programs and the needs of students with disabilities through its Special Education Research Grants Programs. Both the Education Research and the Special Education Research Grants Programs are organized by outcomes (e.g., reading, mathematics), type of education condition (e.g., curriculum and instruction; teacher quality; administration, systems, and policy), grade level, and research goals.

### **A. Outcomes**

The Institute's research grants programs focus on improvement of the following education outcomes: (a) readiness for schooling (pre-reading, pre-writing, early mathematics and science knowledge and skills, and social development); (b) academic outcomes in reading, writing, mathematics, and science; (c) student behavior and social interactions within schools that affect the learning of academic content; (d) academic and functional outcomes, as well as skills that support independent living for students with significant disabilities; and (e) educational attainment (high school graduation, enrollment in and completion of post-secondary education).

### **B. Conditions**

In general, each of the Institute's research grants programs focuses on a particular type of condition (e.g., curriculum and instruction) that may affect one or more of the outcomes listed previously (e.g., reading). The Institute's research programs are listed below according to the primary condition that is the focus of the program.

**a. *Curriculum and instruction.*** Several of the Institute's programs focus on the development and evaluation of curricula and instructional approaches. These programs include: (a) Early Intervention, Early Childhood Special Education, and Assessment for Young Children with Disabilities Research, (b) Mathematics and Science Special Education Research, (c) Reading, Writing, and Language Development Special Education Research, (d) Serious Behavior Disorders Special Education Research, (e) Secondary and Transition Services Research, (f) Autism Spectrum Disorders Research, (g) Response to Intervention Research, and (h) Related Services Special Education Research.

**b. *Quality of the education workforce.*** A second condition that affects student learning and achievement is the quality of teachers and education leaders (e.g., principals, superintendents). The Institute funds research that includes approaches, practices, and programs for pre-service or in-service training of teachers or other service providers to deliver instruction or services.

**c. *Administration, systems, and policy.*** A third approach to improving student outcomes is to identify systemic changes in the ways in which schools and districts are led, organized, managed, and operated that may be directly or indirectly linked to student outcomes. The Institute takes this approach in programs including (a) Early Intervention, Early Childhood Special Education and Assessment for Young Children with Disabilities Research, (b) Individualized Education Programs and Individualized Family Service Plans Research, (c) Response to Intervention Research, and (d) Related Services Special Education Research.

Applicants should be aware that some of the Institute's programs cover multiple conditions. Of the programs listed above, these include (a) Early Intervention, Early Childhood Special Education, and Assessment for Young Children with Disabilities Research, (b) Individualized Education Programs and Individualized Family Service Plans Research, (c) Secondary and Transition Services Research, (d) Related Services Special Education Research, (e) Autism Spectrum Disorders Research, and (f) Response to Intervention Research.

### **C. Grade Levels**

The Institute's research programs also specify the ages or grade levels covered in the research program. The specific grades vary across research programs and within each research program, and grades may vary across the research goals. In general, the Institute supports research for (a) pre-kindergarten and kindergarten, (b) elementary school, (c) middle school, (d) high school, (e) post-secondary education, (f) vocational education, and (g) adult education. In addition, the Institute supports research on infants with disabilities.

### **D. Research Goals**

The Institute has established five research goals for its research programs. Within each research program one or more of the goals may apply: (a) Goal One – identify existing programs, practices, and policies that may have an impact on student outcomes, and the factors that may mediate or moderate the effects of these programs, practices, and policies; (b) Goal Two – develop programs, practices, and policies that are theoretically and empirically based; (c) Goal Three - establish the efficacy of fully developed programs, practices, and policies; (d) Goal Four – provide evidence on the effectiveness of programs, practices, and policies implemented at scale; and (e) Goal Five – develop or validate data and measurement systems and tools.

For a list of the Institute's FY 2008 research grant topics—including research grant competitions through the Institute's National Center for Special Education Research and National Center for Education Research, please see [Table 1](#) below. Funding announcements for these competitions may be downloaded from the Institute's website at <http://ies.ed.gov>.

**Table 1: FY 2008 Research Grant Topics:****National Center for Special Education Research**

1. Research Grant Topics
  - Early Intervention, Early Childhood Special Education, and Assessment for Young Children with Disabilities Research
  - Mathematics and Science Special Education Research
  - Reading, Writing, and Language Development Special Education Research
  - Serious Behavior Disorders Special Education Research
  - Individualized Education Programs and Individualized Family Service Plans Research
  - Secondary and Transition Services Research
  - Autism Spectrum Disorders Research
  - Response to Intervention Research
  - Related Services Special Education Research
2. Research Training Grant Topics
  - Postdoctoral Special Education Research Training
3. National Research and Development Center Topics
  - [Center on Serious Behavior Disorders at the Secondary Level](#)
  - [Center on Response to Intervention in Early Childhood Special Education](#)

**National Center for Education Research**

1. Research Grant Topics
  - Reading and Writing
  - Mathematics and Science Education
  - Cognition and Student Learning
  - Teacher Quality – Reading and Writing
  - Teacher Quality – Mathematics and Science Education
  - Social and Behavioral Context for Academic Learning
  - Education Leadership
  - Education Policy, Finance, and Systems
  - Early Childhood Programs and Practices
  - High School Reform
  - Interventions for Struggling Adolescent and Adult Readers and Writers
  - Postsecondary Education
  - Education Technology
2. Research Training Grant Topics
  - Postdoctoral Research Training Program
  - Predoctoral Research Training Program
3. National Research and Development Center Topics
  - Cognition and Science Instruction
  - Instructional Technology

### **3. PURPOSE AND BACKGROUND OF THE RESEARCH AND DEVELOPMENT CENTER PROGRAM**

#### **A. Purpose of the Special Education Research and Development Center Program**

Special Education Research Centers are expected to contribute significantly to the solution of special education and early intervention problems in the United States by engaging in research, development, evaluation, and dissemination activities aimed at improving child achievement and outcomes through enhancements in the special education and early intervention systems. Each Center will conduct a focused program of research in a specific topic area. In addition, each Center will conduct supplemental research within its topic area, and work cooperatively with the Institute to disseminate rigorous evidence and information to educators, service providers, and policy-makers, and provide national leadership in advancing evidence-based practice and policy within its topic area. For information on existing Institute Centers funded through the National Center for Education Research, please see <http://ies.ed.gov/ncer/projects/randdcenters/index.asp>.

For the 2008 Special Education Research and Development Centers competition, the Institute's National Center for Special Education Research (NCSER) invites applications under two topic areas: (1) *Center on Serious Behavior Disorders at the Secondary Level* and (2) *Center on Response to Intervention in Early Childhood Special Education*.

The Institute anticipates funding only one center under each topic. However, because the Institute is committed to funding only high quality work, the Institute will make an award for a particular center only if at least one application for that center is deemed meritorious under peer review and meets the requirements of the Request for Applications.

In addition, applicants should note that the Institute will use a *cooperative agreement* mechanism for the Special Education Research and Development Centers. The cooperative agreement mechanism allows substantial Institute involvement in the activities undertaken with Federal financial support. The Institute intends to work cooperatively with grantees on the supplementary research projects, dissemination activities, and leadership activities as described below. The specific responsibilities of the Federal staff and project staff will be identified and agreed upon prior to the award.

#### **B. Background for the Special Education Research and Development Center Program**

The mission of NCSER includes sponsoring a comprehensive program of special education and early intervention research designed to expand the knowledge and understanding of the needs of infants, toddlers, children and youth with disabilities to improve the developmental, educational, and transitional results of such individuals, and to improve services provided under, and support the implementation of the Individuals with Disabilities Act (IDEA). One of the ways in which NCSER will fulfill its mission is through its Special Education Research and Development Centers.

NCSER's Special Education Research and Development Centers program is different from NCSER's topical grant programs in the following ways: (1) Topical research grants, such as those in Early Intervention, Early Childhood Special Education, and Assessment or Serious

Behavior Disorders (for information on these and other programs, see <http://ies.ed.gov/ncser/projects/>) are to carry out a *single program of research*; whereas the Centers carry out a comprehensive program of research which will include a major research program and a variety of smaller scale or supplemental projects that address unmet research needs within the Center's topic area; (2) Topical research grants do not involve significant responsibility for disseminating findings to practitioners, or for providing national leadership in the research field; in contrast, these tasks are central to the Centers; (3) Topical research grants typically have shorter durations, involve lower levels of funding, and do not address issues with strategies and approaches that have as much scale and breadth as is the case for the Centers.

For its 2008 Special Education Research and Development Centers competition, NCSE is interested in applications that offer the greatest promise in: (1) contributing significantly to the solution of a specific special education or early intervention problem within the Center topics described below; (2) providing relatively rapid research and scholarship on supplemental questions that emerge within the Center's topic area and that are not being addressed adequately elsewhere; (3) providing outreach and dissemination of findings of the Center, of the What Works Clearinghouse, and of other rigorous research studies and research syntheses on the Center's topic to practitioners, policy makers, and technical assistance providers; and (4) providing national leadership within the Center's topic by developing position papers, hosting meetings, and engaging in dialogue with researchers and practitioners in order to identify promising areas of research, development, and dissemination for the field and to advance evidence-based policy and practice.

## **PART II. SPECIAL EDUCATION RESEARCH AND DEVELOPMENT CENTER GRANT TOPICS**

For FY 2008, the Institute's National Center for Special Education Research is accepting applications for Research and Development Center grants under two topics. The application deadline for each of these two topics is November 1, 2007. In this section, the Institute describes the two Special Education Research and Development Center grant topics.

### **4. Topic One - Center on Serious Behavior Disorders at the Secondary Level**

Under this topic area, NCSER invites applications that propose a coordinated program of research that will contribute to the solution of significant problems in serious behavior disorders (SBD) at the secondary level (i.e., grades 9-12), which can include, for purposes of this invitation, the transition from middle school (e.g., beginning in grade 8) to high school. This program of research is designed to address the significant lack of research on effective interventions, strategies and programs for improving the performance of students with SBD in secondary settings.

High schools play a critical role in preparing students for postsecondary education and meaningful employment. For example, high school graduates have higher rates of employment and higher earning levels than their peers who drop out of high school (Gouskova & Stafford, 2005). Furthermore, students who graduate from high school are less likely to rely upon public assistance or be incarcerated (Greene, 2002; U.S. Department of Education, National Center for Education Statistics, 2004). High schools are not currently serving students with serious behavior disorders well. Students with SBD drop out of school at a rate 5 times that of their peers without disabilities, and have the highest drop-out rate of all disability categories (U.S. Department of Education, National Center for Education Statistics, 2003). Moreover, students with SBD are disproportionately represented in the juvenile justice system, rarely participate in post-secondary education, fail to find meaningful employment as adults, and do not feel connected to their communities (Jay & Padilla, 1987; Wagner, Newman, Cameto, and Levine, 2005). Thus, there is a critical and long-standing need for a systematic and coherent program of rigorous research to identify effective interventions, programs and strategies that address the significant behavioral and academic needs of students with SBD at the secondary levels and in school settings.

Addressing the needs of students with SBD at the secondary level is a complex challenge for school practitioners and administrators. SBD is typically characterized by an array of emotional and behavioral problems that lead to a chronic display of socially inappropriate behaviors (e.g., aggressive verbal and physical behaviors with teachers and peers). Students with SBD typically exhibit such problem behaviors as defiance and aggression that can impede the delivery of instruction in the classroom and students' acquisition of academic material (Walker et al., 1996). Students with SBD frequently exhibit significant academic difficulties across content domains, and thus, fail to develop the skills necessary for academic, social and occupational success. Furthermore, risk factors that maintain and sustain serious problem behaviors appear to operate in different contexts that include the family (e.g., inappropriate parent discipline and supervision), peers (e.g., number of delinquent or antisocial friends), and neighborhoods (e.g.,

increased level of deviant behavior in the neighborhood) (e.g., Leventhal & Brooks-Gunn, 2000; Patterson, Reid, & Dishion, 1992). This presents an obvious and substantive challenge to a school's efforts to reduce serious problem behaviors and improve academic achievement for students with SBD. Current research, although varied in theoretical orientation and methodological quality, provides school practitioners with a reasonable set of basic tenets to guide the selection and application of school-based interventions and supports for students with SBD. For example, there is compelling evidence that punishment and exclusion are ineffective in reducing aggressive and disruptive behavior when used singularly and in the absence of a proactive positive behavioral support system (e.g., Nelson, Martella, & Marchand-Martella, 2002; Sugai & Horner, 2002). Similarly, reactive and punitive discipline systems have not achieved positive results and thus, educators are calling for systemic, proactive approaches to managing problem behaviors that will produce the prosocial behaviors necessary for safe school environments (Council for Exceptional Children, 1999; Eber, Sugai, Smith, & Scott, 2002). Furthermore, there is an emerging convergence of empirical support for the proposition that problem behaviors may be reduced with high quality implementation of explicit and systematic instruction (e.g., Kellam, Mayer, Rebok, & Hawkins, 1998).

Although there are school-based programs and practices developed to improve students' behavior and academic performance that are based on these general tenets, the existing research has not satisfactorily addressed the needs of secondary students with SBD for several reasons: (1) much of the intervention research has focused primarily on students with or at-risk of SBD in elementary schools (e.g., PATHS or Promoting Alternative THinking Strategies; Kusché & Greenberg, 1994; LIFT or Linking the Interests of Families and Teachers; Eddy, Reidm & Fetrow, 2000), with few research studies that target students' academic and behavioral needs in high school settings, (2) although programs that address adolescents' serious antisocial behavior exist, they have not explicitly targeted students with SBD in high school settings (e.g., ATP or Adolescent Transitions Program; Dishion, Andrews, Kavanagh, Soberman, 1996; MST or Multisystemic Therapy; Henggeler & Borduin, 1990; Henggeler et al., 1986), and (3) while many secondary school programs focus explicitly on dropout prevention or character education (see What Works Clearinghouse reviews), few explicitly and systematically target students with SBD.

It is in this context that NCSER seeks applications for a *Center in Serious Behavior Disorders* that conducts a focused and systematic program of research on interventions for students with SBD involving the development of new interventions, or the adaptation of existing interventions to meet the behavior and academic needs of students with SBD in high school settings. The research must target students with disabilities as defined by IDEA who exhibit serious behavior disorders (regardless of primary disability category). Students with serious behavior disorders who are not currently served under IDEA may also be included as an ancillary population of interest. NCSER is particularly interested in a program of focused research along with dissemination, supplemental studies, and national activities that represent a comprehensive effort to develop and evaluate interventions and to move them from theory and research to deployment of widespread effective practices. Proposals must describe how they will address the pressing concerns in a systematic, integrated and programmatic manner within the program of research and supplemental studies. Applications that propose to develop only singular interventions that do not represent a comprehensive research effort, or interventions without a plan for

supplemental studies and dissemination **will not be accepted under this Request for Applications**; instead, applicants should refer to the Serious Behavior Disorders Grants Topic.

Interventions to be developed and studied by the center must address the pressing concerns associated with SBD at the secondary level, as described previously. First, the interventions must take into account the expanded array of contexts (e.g. school, community, family) and risk factors (e.g. peer influences, inappropriate parenting, poor neighborhood role models, etc.) that sustain SBD at the secondary level. Second, the interventions must address the chronic academic deficits typical of secondary SBD by including explicit and systematic academic instruction. Third, the interventions must effectively remediate the complex and severe behaviors displayed by secondary students with SBD. These interventions may be delivered to entire classrooms, students in small groups, or individual students, and incorporate a coordinated array of services and approaches, combining, for example, in-school treatments, family involvement, and other services and approaches.

Applicants may develop new interventions or modify existing effective programs. For example, an applicant may modify an already existing comprehensive program (e.g., LIFT, ATP) for use with high school students with SBD and their families. Interventions may, for example, include (1) changing environmental stimuli (e.g., unclear and nonstandard rules for appropriate behavior that contribute to disruptive behavior); (2) using appropriate positive reinforcement and cost-response programs or incentives to encourage appropriate behavior; (3) developing project materials (e.g. teacher or counselor-delivered lessons) that aim to increase appropriate social skills for adolescents such as cooperation, self-control, and responsibility, and peer-group skills such as resisting peer pressure; (4) developing academic interventions to be implemented in the classroom or outside of the classroom (e.g., daily tutoring) that address students' deficits in content-specific (e.g., social studies, mathematics) areas or skills; and (5) designing student-level interventions that are augmented with group-based parent education sessions to teach and support the use of consistent, proactive, and non-aversive discipline and supervision practices. The intervention program could be implemented in a variety of school settings (e.g., general education, special education, alternative settings) by a range of school personnel (e.g., general education teacher, special education teacher, school psychologist). In addition, depending on the needs of the students targeted (e.g., students with SBD who have not responded to prior prevention or intervention programs or strategies and/or have significant mental health disorders), applicants may choose to augment school-based programs with linkages or supports from other agencies or professionals such as community mental health agencies (e.g., clinical psychologists, psychiatrists). A goal of such linkages may be to improve communication between school and community-based providers to allow for a more coordinated and collaborative approach to service provision for students with SBD. It should be noted, however, that research designed to examine the efficacy of programs or practices based in settings outside of high schools, must be in addition to, not in place of, a comprehensive school-based intervention program designed to address both behavior and academic outcomes. Moreover, the applicant should make explicit how the linkages and collaboration between the school-based programs and the non school-based programs will serve to enhance the overall performance of students with SBD.

By the end of the five-year program of research, the Center is expected to have developed and validated intervention strategies or programs designed to improve behavioral and social functioning as well as academic achievement and school adjustment of secondary students with SBD. Applicants are encouraged to consider an expanded array of dependent variables that include, for example, academic performance in content area classes (e.g., social studies, English, history) reduced dropout rates, improved attendance, reduced discipline referrals, improved social adjustment, and future job placement and job performance. The intervention strategies or programs should be amenable to implementation in a variety of school settings that include but are not limited to general education, special education, or alternative high school settings. The program of research *must* include supplementary studies. Examples of supplementary studies for programs in this topic area include an examination of school contextual variables (e.g., organizational practices, individual teacher characteristics and beliefs on teacher efficacy) that may influence the willingness of secondary environments to adopt a new program or change existing practices. Applicants may also choose to conduct research on the contributions of different program components to overall efficacy. For example, an applicant may decide to examine the efficacy of a program with and without a parent education program delivered in the school, or a parent education program delivered in the school versus a home or community-based setting. In addition, applicants may choose to investigate the relationship between academic performance and social/emotional behavior and vary intervention implementation to allow for causal testing of the association between academic skills and disruptive behaviors. Applicants may also propose a supplementary study addressing the cost-benefit and cost-effectiveness of intervention programs. In addition, applicants may wish to explore the utility of various universal screening strategies to identify students who experience significant behavioral problems and may benefit from an intervention, but who have not yet been identified as being in need of special education services for SBD. This can include the development and implementation of universal screening and progress monitoring measures in key skill areas to identify students who are in need of more intensive interventions. Finally, NCSEER expects the Center to provide (a) outreach and dissemination of findings of the Center, of the What Works Clearinghouse, and of other relevant rigorous research studies and research syntheses to practitioners, policy makers, and technical assistance providers (e.g., comprehensive centers) and (b) national leadership within the Center's topic by developing position papers, hosting meetings, and engaging in dialogue with researchers and practitioners in order to identify promising areas of research, development, and dissemination for the field and to advance evidence-based policy and practice.

### **5. Topic Two –Center on Response to Intervention in Early Childhood Special Education.**

In elementary school settings, Response to Intervention (RtI) holds promise as a multi-tiered system (e.g., three tiers—primary, secondary and tertiary prevention or intervention) of increasingly intense instruction and intervention that links general and special education services. RtI is conceptualized as an early intervening system in which (a) universal screening of all students for important social, academic, and cognitive skills is provided on a routine basis, (b) high quality, research-based instruction and interventions in general education classroom settings are provided to all students, and (c) student performance is assessed through continuous progress monitoring to determine whether current instruction or intervention is appropriate or whether more intensified interventions or instructional modifications tailored to the student's performance level are needed (e.g., secondary and tertiary prevention or intervention). RtI is

intended to reduce the number of new cases (incidence) of students with specific learning disabilities and the prevalence of and complications associated with existing cases (Simeonsson, 1994). Recent research on the use of RtI for improving reading outcomes indicates that providing high quality primary and intensified intervention to at risk kindergarten students over a period of four years may reduce not only student reading difficulties, but also the rate of special education placement (O'Connor, Harty, & Fulmer, 2005; O'Connor, Fulmer, Harty, & Bell, 2005).

In recent years, legislation has prompted an increased focus on school readiness skills (e.g., language, early literacy, early mathematics) (Coleman, Buysse, & Neitzel, 2006). More and more, early childhood education settings for three and four year-olds are viewed as pre-academic settings in which children learn essential prerequisite and basic skills that promote later academic success in elementary school. According to a recent survey, 41 States and the District of Columbia have developed learning standards for early childhood education settings that align with elementary grade academic standards (Education Week, 2007). In addition, there is some evidence that participating in early childhood education prior to kindergarten can reduce rates of special education placement (e.g., Reynolds, Temple, & Ou, 2003). Finally, the primary service setting for approximately 89% of three and four year-olds with disabilities is a preschool within an elementary school, early childhood or preschool center, or nursery school (Westat, 2005). RtI models used in these and other early childhood settings have the potential to strengthen the link between early childhood education and elementary school, reduce incidence of children who require special education in later grades, and address the individual cognitive, academic, school readiness, developmental, and functional needs of children with disabilities and at risk for disabilities. Further research related to these models represents an important and pressing need.

The conceptual and theoretical basis for the multi-tiered system approach that has been applied in elementary school settings can be extended to early childhood special education settings (e.g., state-funded and private preschools, Head Start Classrooms, child care centers). In fact, recent efforts in early childhood education have resulted in the development of a model called "Recognition & Response" for use with three to five year-olds. This system, like RtI, includes universal screening, progress monitoring of child performance, research-based curriculum and instruction, and an intervention hierarchy. Tier I of the "Recognition & Response" model is characterized as the "primary level" of prevention or instruction which includes (a) research-based curriculum and instructional strategies that are provided to all children and aligned with early learning content standards and performance benchmarks, and (b) universal screening and frequent progress monitoring in key skill areas to determine the quality of Tier I instruction as reflected by the performance of all children in the classroom and to identify children who need more intensive interventions. At Tier II, which is characterized as a "secondary level" of prevention or intervention, instructional practice is designed to address the needs of children who are not making adequate progress in Tier I, and it involves supplemental or additional instructional support and frequent assessment of children's progress. At Tier III, children who did not make adequate progress in Tier II receive more intensive intervention tailored to meet their unique instructional needs. Throughout all tiers of the "Recognition & Response" model, teachers, specialists, and parents collaborate to make decisions about which instructional practices are appropriate for individual children (Coleman et al., 2006).

The research base on effective Tier I general curricula and instructional strategies commonly used to develop language, early literacy, early mathematics, and other cognitive skills in early childhood education settings may be at a threshold of development that warrants a systematic program of research on interventions that can be used at Tiers II and III with children with disabilities and those at risk for disabilities. For example, through its Early Intervention, Early Childhood Special Education, and Assessment Research Grants Program and the Preschool Curriculum Evaluation Research Program (PCER), the Institute is currently funding research designed to evaluate rigorously the efficacy of curricula used in early childhood education settings. This work provides a foundation for the implementation of curricula that can be delivered as Tier I instruction in early childhood settings. Although these comprehensive studies are underway, a systematic, focused program of research is needed to develop and evaluate intensive interventions that can be used as Tiers II and III and focus on providing supplemental support or intensive intervention for children with disabilities and those at risk for disabilities who are not responsive to Tier I instruction in early childhood settings.

In addition, research on assessment tools that can be used for screening and monitoring the progress of young children's communication, cognitive problem solving, and early literacy skills (Greenwood, Walker, Carta, & Higgins, 2006; McConnell, Priest, Davis, & McEvoy, 2002) and early mathematics skills (Floyd, Hojniski, & Key, 2006; Reid, Morgan, DiPerna, & Lei, 2006; VanDerHeyden, Broussard, Fabre, Stanley, Legendre, & Creppel, 2004) in early childhood settings is emerging. However, rigorous research is needed to evaluate further the technical adequacy of these existing screening and progress monitoring measures. Similarly, research is needed to develop and evaluate the technical adequacy of additional measures that: (a) link directly to interventions used in a multi-tiered system; (b) have the potential to be widely deployed for assessing children's growth and development; (c) provide teachers with specific instructional information to determine whether instructional modifications are needed; (d) predict school readiness and academic outcomes; and (e) can be used for accountability purposes.

It is in this context that NCSER seeks applications for a *Center on Response to Intervention in Early Childhood Special Education* that conducts focused, high-quality research to develop and rigorously evaluate interventions and assessments that can be used at Tiers II and III in multi-tiered systems in early childhood settings to identify children at risk for disabilities and to improve individual development and school readiness skills, specifically in the areas of language, early literacy, or early mathematics, for children with disabilities and at risk for disabilities. NCSER is particularly interested in a program of focused research along with dissemination, supplemental studies, and national activities that represent a comprehensive effort to develop and evaluate interventions and assessments and to move them from theory and research to the deployment of effective practices. **Applicants are expected to develop and evaluate at least two interventions: an intervention that can be used at Tier II and an intervention that can be used at Tier III.** In addition, NCSER expects that the Center will concurrently develop and evaluate interventions and develop and/or validate measures that link to these interventions. Applications that propose to develop only interventions or only assessment measures or systems **will not be accepted under this Request for Applications;** instead, applicants should refer to the Early Intervention, Early Childhood Special Education, and Assessment Research Grants Topic.

Interventions that are developed and evaluated through this program of research must complement or extend what can be characterized as Tier I instruction, provide children with the skills that they need to succeed in Tier I, and improve school readiness outcomes. Tier I instruction and curricula are typically designed and developed to provide high-quality, developmentally appropriate instruction for all children. As such, these programs often provide broad and general coverage of a range of skills and content in which exposure to many topics and examples is of primary importance. For children with disabilities or at risk for disabilities, exposure to this core instruction is frequently insufficient because the architecture of Tier I programs and its organization and delivery fail to address the academic and developmental needs of these children. Research is needed to develop interventions designed to support Tier I instruction and curricula and provide children with disabilities or at risk for disabilities with adequate opportunities to acquire, practice, and rehearse skills and concepts important for improving developmental and academic outcomes and school readiness skills.

For example, an application to this program of research could develop Tier II and Tier III interventions or strategies that are designed to align with the scope and sequence of an established Tier I program, but adequately extend its instructional specificity and procedural scaffolding. Specifically, an applicant may wish to develop a Tier II intervention that supplements a language and early literacy curriculum used as Tier I. This Tier II intervention could be designed to provide supplemental support to the Tier I program by providing children with additional teaching and practice examples which would be delivered as supplementary follow up to lessons in the Tier I program. Thus, the examples and lessons of the Tier II program could build on the original scope and sequence of the Tier I program, but serve to ensure that children with or at risk for disabilities receive adequate instruction on critical developmental language or early literacy concepts. Such a Tier II program would be used as a supplement to the Tier I program by providing the preschool classroom teacher with a range of instructional options or levels of instructional enhancements, including for example: (a) pre-teaching prerequisite skills or vocabulary to a high criterion level of performance on a target Tier I lesson for the day; (b) teaching “review lessons” (aligned with the Tier I daily lesson) for 10-20 minutes per day; (c) providing teacher-guided practice lessons on a target Tier I lesson for the day; (d) providing an accelerated or decelerated pacing plan that permits teachers to re-teach a lesson or skip a lesson depending on children’s performance; (e) re-teaching a critical lesson of a Tier I program but with more explicit teacher guidance and scaffolding; (f) utilizing a schedule of cumulative skill review and periodic rehearsal that is appropriate for children with or at risk for disabilities; and (g) organizing and conducting instruction in small groups of three to five children to ensure more opportunities to respond to children’s needs. In general, these example Tier II instructional adaptations or enhancements could provide more teaching examples, teacher-guided practice examples, independent practice examples, and teacher feedback or correction procedures for targeted skills (e.g. oral language and early literacy skills) found in the Tier I program.

The same application should propose to develop a Tier III intervention that complements, to the extent feasible, the scope and sequence of the Tiers I and II programs, but represents a more systematic and intensive program of instruction than that provided in the Tier II intervention. For example, the Tier III intervention could include: (a) increased opportunities for a child to respond to specific task requests and prompts (e.g., carefully sequenced choice responses

followed by production responses, highly teacher-scaffolded support followed by teacher-guided support); (b) teacher coaching and other ongoing instructional supports; (c) additional individual tutoring for 10-15 minutes on the daily Tier I program lesson; (d) cumulative and systematic review of previously taught critical concepts and skills; (e) juxtaposition of familiar and new tasks that permit high criterion levels of child performance within and between lessons; and (f) progress monitoring of child performance on critical component skills embedded within the program. This example Tier III program would permit a teacher to focus on a child's unique skills and needs (e.g., teaching select phonemic awareness skills or build a child's receptive or expressive vocabulary). As such, it could be provided to individual children by a teacher or highly trained staff member in a setting outside of the classroom and occur twice a day for 20 minutes per day.

In addition to developing a Tier II intervention and a Tier III intervention, applicants must also identify and justify their use of existing assessments for measuring both child progress within the interventions being developed and child outcomes, including outcomes that are aligned with state content standards when appropriate.

NCSER expects that while the Center is developing and evaluating the Tier II and Tier III interventions, it will also be engaged in a systematic program of research to develop and/or validate screening measures that can be used to identify children in need of Tier II or Tier III intervention, progress monitoring measures that link to these interventions, or measures that can also serve as a general outcome measures in a multi-tiered system. Applicants may wish to collect data on the technical adequacy of previously developed measures (i.e., screening, progress monitoring and outcome). Applicants may also wish to develop and collect data on new progress monitoring measures that can be used to measure children's growth in early literacy, language, and early mathematics. Applicants must include explanation of how the measures being researched are aligned with the proposed Tier II and III interventions or multi-tiered models and collect data on how well the measures predict performance on outcome assessments that are predictive of school readiness skills and reflect progress and outcomes for children with disabilities and at risk for disabilities.

By the end of the five year program of research, the Center is expected to have developed and validated at least two interventions: An intervention that that can be used at Tier II, and an intervention that can be used at Tier III of a multi-tiered system to improve children's language, early literacy, early mathematics or other cognitive skills, and at least one screening, progress monitoring, or outcome assessment that links to the developed interventions or can be used as a general outcome measures in a multi-tiered system in an early childhood special education setting. In addition, the Center will conduct supplementary studies on issues relating to Tier II and Tier III interventions and assessments. For example, a supplemental study could examine how related services received in the home and parent participation complement the interventions and measures being developed. Finally, NCSER expects the Center to provide (a) outreach and dissemination of findings of the Center, of the What Works Clearinghouse, and of other rigorous research studies and research syntheses on the center's topic to practitioners, policy makers, and technical assistance providers (e.g., comprehensive centers) and (b) national leadership on the Center's topic by developing position papers, hosting meetings, and engaging in dialogue with

researchers and practitioners in order to identify emerging areas of research, development, and dissemination for the field and to advance evidence-based policy and practice.

## PART III. REQUIREMENTS OF THE PROPOSED RESEARCH

### 6. GENERAL REQUIREMENTS OF THE PROPOSED RESEARCH

#### **A. Basic Requirements**

**a. *Applying to multiple topics.*** Applicants may submit proposals to more than one of the Institute's FY 2008 competitions or topics. In addition, within a particular competition or topic, applicants may submit multiple proposals. However, applicants may submit a given proposal only once (i.e., applicants may not submit the same proposal or very similar proposals to multiple topics or to multiple goals in the same topic or to multiple competitions). If the Institute determines prior to panel review that an applicant has submitted the same proposal or very similar proposals to multiple topics within or across competitions and the proposal is judged to be compliant and responsive to the submission rules and requirements described in the Request for Applications, the Institute will select one version of the application to be reviewed by the appropriate scientific review panel. If the Institute determines after panel review that an applicant has submitted the same proposal or very similar proposals to multiple topics within or across competitions and if the proposal is determined to be worthy of funding, the Institute will select the topic under which the proposal will be funded.

**b. *Applying to a particular topic.*** To submit an application to the Institute's Special Education Research & Development Center grant program, applicants must choose the specific topic under which they are applying. Each topic has specific requirements. The Institute strongly encourages potential applicants to contact the relevant program officer listed in Section 20 if they have any questions regarding the appropriateness of a particular project for submission under a specific Center topic.

For the 2008 Special Education Research Center competition, applicants must submit an application *either* under Topic One (National Research and Development Center on Serious Behavior Disorders at the Secondary Level) *or* Topic Two (National Research and Development Center on Response to Intervention in Early Childhood Special Education).

#### **B. Requirements for Focused Program of Research**

The Institute intends for the work of the Centers to include a focused program of research that ideally will result in solutions or answers to specific education problems at the end of 5 years. The Institute expects the *focused program of research* to comprise about 50 to 75 percent of a Center's activities depending on the cost and effort required to carry out the focused program of research. For the FY 2008 Center competition, the Institute expects applicants to propose a focused program of research that consists of a set of tightly linked studies that build on each other and together result in the development and evaluation of education interventions as specified under the Specific Requirements sections for each Center topic. The Institute strongly discourages applications that propose a model in which multiple investigators each conduct separate studies that are only loosely coordinated around a given topic.

Although the Centers have much broader functions than conducting a focused program of research, the research program is the only portion of the activities of a Center that can be well-specified in advance, and thus can provide a fair basis for comparing and evaluating applications

for funding. Consequently as indicated by the requirements described in this section, the majority of the application should be a detailed description of the focused program of research.

a. *Significance of the focused program of research.* Applicants must first specify the topic to which they are applying and the specific focus of the center.

Second, applicants must provide a substantive and compelling rationale for the specific focus of the Center and why it has selected the particular instructional or pedagogical problem. The rationale for the significance of the focused program of research must address specifics detailed in [Part II, Section 4](#) for Center on Serious Behavior Disorders at the Secondary Level or in [Part II, Section 5](#) for Center on Response to Intervention in Early Childhood Special Education. Applicants should also articulate both the theoretical and *practical* importance of the work to be conducted by the Center. The critical issues are (a) the theoretical and empirical foundation of the problem and its relative impact on advancing effective interventions and assessments in special education or early intervention, (b) the relative significance of the issue or issues to be addressed in the context of competing problems for which practitioners and decision makers need education researchers to provide solutions and (c) the extent to which the work to be undertaken by the Center will have an impact at a national level on the issue or issues to be addressed.

Third, applicants to both Centers are strongly encouraged to conceptualize and organize the proposed Center according to an interdisciplinary framework. For the *Center on Serious Behavior Disorders at the Secondary Level*, applications should include, as appropriate, investigators from multiple disciplines related to this topic area (e.g., general education, special education, prevention, psychology, mental health, developmental psychopathology, psychiatry, public health, child welfare, juvenile justice, economics, statistics, epidemiology, organizational behavior). For the *Center on Response to Intervention in Early Childhood Special Education* applications should include, as appropriate, investigators from multiple disciplines related to this topic area (e.g., human development, early intervention, early childhood special education, child care, child welfare, measurement, policy, and economics).

b. *Methodological requirements for the focused program of research.* The most important consideration in the competitive review of proposals will be the applicant's articulation of the focused program of research and development. Applications must include well-specified objectives, a detailed research methods and data analysis plan, a plan for coordinating the work of the cooperating scientists, a timetable for accomplishing the research, and the specific outcomes of the program of research. For the 2008 Special Education Research Center competition, the Institute requests proposals in which the focused program of research is designed to develop interventions or assessments as specified in sections [Part II, Section 4](#) for Center on Serious Behavior Disorders at the Secondary Level or in [Part II, Section 5](#) for Center on Response to Intervention in Early Childhood Special Education, and provide rigorous evidence of the effect of the interventions. As such, the Institute expects the focused program of research to include a development phase and an evaluation phase.

(i) *Requirements for development of the interventions.* For the development phase of the focused program of research, applicants must clearly address the proposed methods for developing the intervention and testing the feasibility of implementation of the prototype

in an authentic education delivery setting. Applicants should describe the systematic process they will use to collect empirical data that will provide feedback for refining the intervention. A major objective of the development phase is to refine and improve the initial version of the intervention by implementing it, or components of it, observing its functioning, and making necessary adjustments in the design of the intervention so that it functions more as intended.

Strong applications include clear descriptions of the development activities so that reviewers will understand (a) what will be developed, (b) how it will be developed, and (c) when the development will take place. Applicants should describe what they would measure or observe to determine whether the intervention is working as intended when they are testing the feasibility of successive versions of the intervention. A useful by-product of such testing is a set of fidelity of intervention measures that could be used during the evaluation phase of the focused program of research.

A timeline that delineates the iterative process of drafting and revising the intervention (e.g., features or components of the intervention, procedures, training activities, and materials) is often a simple way of showing reviewers how research activities will feed into subsequent development (refinement) activities, so that information can be used to make decisions and improvements. A variety of methodological strategies may be employed during this phase. *For the development phase, reviewers need to understand the iterative development process to be used in the design and refinement of the proposed intervention.*

The Institute anticipates that multiple scientists may work on the development of the proposed product and that their work needs to be well-coordinated. Strong applications will clearly describe the coordination, for example, of individual studies that together produce the final product. In addition, by the end of the development phase, the Institute expects investigators to have a fully developed product and demonstrated that the product can be implemented in an authentic education delivery setting.

- (a) *Sample.* The applicant should define, as completely as possible, the samples and settings that will be used to assess the feasibility and usability of the intervention.
- (b) *Research plan.* The applicant must provide a detailed research plan in which they detail the proposed procedures for developing the intervention. Strong applications will include clear descriptions of: (a) what needs to be developed; (b) the procedures for developing the product; and (c) the procedures (including sample, measures, and procedures for analyzing data) for determining if the product is functioning as intended (e.g., Does the software program crash when students use it?). *Applicants should describe the iterative development process to be used in the design and refinement of the proposed product, and plans for acquiring evidence about the operation of the product according to the logic model that they describe.*
- (c) *Measures.* In the development phase, the Institute anticipates that researchers will typically rely on the collection of process data that can help the researchers refine the

product and provide insight into the feasibility and usability of the proposed product in authentic education delivery settings. Applicants should clearly describe (a) what needs to be observed in order to determine if the product is operating as intended and (b) how those observations will be collected. Observational, survey, or qualitative methodologies are encouraged to identify conditions that hinder implementation of the product.

- (ii) *Requirements for evaluation of the interventions.* For the evaluation of the interventions, applicants should propose rigorously designed efficacy trials to determine whether or not the fully-developed product is effective under specified conditions (e.g., urban schools with a high turnover rate among teachers), and with specific types of students (e.g., English language learners). Results from efficacy projects have less generalizability than results from effectiveness (scale-up) evaluations. The limited generalizability can arise both from the lack of a full range of types of settings and participants in the study, as well as through the intensive involvement of the developers and researchers in the implementation of the intervention. A well-designed efficacy trial provides evidence on whether an intervention **can** work, but not whether it would work if deployed widely. **By the end of the project period, applicants are expected to have completed one or more tests of the efficacy of the intervention they have developed. In addition, by the end of the project period, applicants are expected to have completed at least one systematic replication of an intervention in at least two other geographic areas.** Each geographic area will represent the regions defined by the Regional Education Labs (<http://ies.ed.gov/ncee/edlabs/>).

The Institute anticipates that lead scientists who oversee the evaluation of the proposed product (or products) are likely to be different from the scientists who develop the proposed product. Strong applications will clearly describe the roles, responsibilities, and coordination work across scientists responsible for the development of products and scientists responsible for the evaluation.

- (a) *Research questions.* Applicants should pose clear, concise hypotheses or research questions.
- (b) *Sample.* The applicant should define, as completely as possible, the sample to be selected and sampling procedures to be employed for the proposed study, including justification for exclusion and inclusion criteria. Additionally, the applicant should describe strategies to increase the likelihood that participants will remain in the study over the course of the evaluation (i.e., reduce attrition).
- (c) *Research design.* The applicant must provide a detailed research design. Applicants should describe how potential threats to internal and external validity would be addressed. Studies using randomized assignment to treatment and comparison conditions are strongly preferred. When a randomized trial is used, the applicant should clearly state the unit of randomization (e.g., students, classroom, teacher, or school); choice of randomizing unit or units should be grounded in a theoretical

framework. Applicants should explain the procedures for assignment of groups (e.g., schools) or participants to treatment and comparison conditions.<sup>1</sup>

*Only in circumstances in which a randomized trial is not possible* may alternatives that substantially minimize selection bias or allow it to be modeled be employed. Applicants proposing to use a design other than a randomized design must make a compelling case that randomization is not possible. Acceptable alternatives include appropriately structured regression-discontinuity designs or other well-designed quasi-experimental designs that come close to true experiments in minimizing the effects of selection bias on estimates of effect size. A well-designed quasi-experiment is one that reduces substantially the potential influence of selection bias on membership in the intervention or comparison group. This involves demonstrating equivalence between the intervention and comparison groups at program entry on the variables that are to be measured as program outcomes (e.g., student achievement scores), or obtaining such equivalence through statistical procedures such as propensity score balancing or regression. It also involves demonstrating equivalence or removing statistically the effects of other variables on which the groups may differ and that may affect intended outcomes of the program being evaluated (e.g., demographic variables, experience and level of training of teachers, motivation of students). Finally, it involves a design for the initial selection of the intervention and comparison groups that minimizes selection bias or allows it to be modeled. For example, a very weak quasi-experimental design that would *not* be acceptable as evidence of program efficacy would populate the intervention condition with teachers who volunteered for the program to be evaluated, and would select comparison teachers who had the opportunity to volunteer but did not. In contrast, an acceptable design would select teachers in one particular geographical area of a city to be in the intervention, whereas teachers in another geographical area, known to be demographically similar, would be selected to be in the comparison condition. In the former case, self-selection into the intervention is very likely to reflect motivation and other factors that will affect outcomes of interest and that will be impossible to equate across the two groups. In the latter case, the geographical differences between the participants in the two groups would ideally be unrelated to outcomes of interest, and in any case, could be measured and controlled for statistically.

- (d) *Power.* Applicants should clearly address the power of the evaluation design to detect a reasonably expected and minimally important effect. When applicants justify what constitutes a reasonably expected effect, applicants should indicate clearly (e.g., including the statistical formula) how the effect size was calculated.

Many evaluations of education interventions are designed so that clusters or groups of students, rather than individual students, are randomly assigned to treatment and comparison conditions. In such cases, the power of the design depends in part on the

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<sup>1</sup> For additional information on describing procedures for randomization, see the What Works Clearinghouse document, *Evidence Standards for Reviewing Studies* (p. 6), available at [http://www.whatworks.ed.gov/reviewprocess/study\\_standards\\_final.pdf](http://www.whatworks.ed.gov/reviewprocess/study_standards_final.pdf).

degree to which the observations of individuals within groups are correlated with each other on the outcomes of interest. For determining the sample size, applicants need to consider the number of clusters, the number of individuals within clusters, the potential adjustment from covariates, the desired effect, the intraclass correlation (i.e., the variance between clusters relative to the total variance between and within clusters), and the desired power of the design (note, other factors may also affect the determination of sample size, such as using one-tailed vs. two-tailed tests, repeated observations, attrition of participants, etc.).<sup>2</sup> Strong applications will include empirical justification for the intraclass correlation and anticipated effect size used in the power analysis.

- (e) *Measures.* Measures of student outcomes should include relevant standardized measures of student achievement in addition to other measures of student learning and achievement that are more closely aligned with the proposed intervention (e.g., researcher-developed measures). The applicant should provide information on the reliability, validity, and appropriateness of proposed measures. In strong applications, investigators will make clear that the skills or content the intervention is designed to address are captured in the various measures that are proposed.
- (f) *Fidelity of implementation of the intervention.* The applicant should specify how the implementation of the intervention would be documented and measured. In strong applications, investigators will make clear how the fidelity measures capture the critical features of the intervention. Investigators should propose research designs that permit the identification and assessment of factors impacting the fidelity of implementation.
- (g) *Comparison group, where applicable.* Comparisons of interventions against other conditions are only meaningful to the extent that one can tell what comparison group receives or experiences. Applicants should compare intervention and comparison groups on the implementation of critical features of the intervention so that, for example, if there is no observed difference between intervention and comparison student outcomes, they can determine if key elements of the intervention were also provided in the comparison condition (i.e., a lack of distinction between the intervention treatment and the comparison treatment).

In evaluations of education interventions, individuals in the comparison group typically receive some kind of treatment; rarely is the comparison group a "no-treatment" control. For some evaluations, the primary question is whether the treatment is more effective than a particular alternative treatment. In such instances, the comparison group receives a well-defined treatment that is usually an important comparison to the target intervention for theoretical or pragmatic reasons. In other

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<sup>2</sup> For more information, see Donner, A., & Klar, N. (2000). *Design and Analysis of Cluster Randomization Trials in Health Research*. New York: Oxford University Press; Murray, D. M. (1998). *Design and Analysis of Group-Randomized Trials*. New York: Oxford University Press; W.T. Grant Foundation & University of Michigan, [http://sitemaker.umich.edu/group-based/optimal\\_design\\_software](http://sitemaker.umich.edu/group-based/optimal_design_software).

cases, the primary question is whether the treatment is more effective than what is generally available and utilized in schools. In such cases, the comparison group might receive what is sometimes called "business-as-usual." That is, the comparison group receives whatever the school or district is currently using or doing in a particular area. Business-as-usual generally refers to situations in which the standard or frequent practice across the nation is a relatively undefined education treatment. However, business-as-usual may also refer to situations in which a branded intervention (e.g., a published curriculum or program) is implemented with no more support from the developers of the program than would be available under normal conditions. In either case, *using a business-as-usual comparison group is acceptable*. When business-as-usual is one or another branded intervention, applicants should specify the treatment or treatments received in the comparison group. In all cases, applicants should account for the ways in which what happens in the comparison group are important to understanding the net impact of the experimental treatment. As noted in the preceding paragraph, in strong applications, investigators propose strategies and measures for comparing the intervention and comparison groups on key features of the intervention.

The purpose here is to obtain information useful for *post hoc* explanations of why the experimental treatment does or does not improve student learning relative to the counterfactual.

Finally, the applicant should describe strategies they intend to use to avoid contamination between treatment and comparison groups. Applicants do not necessarily need to randomize at the school level to avoid contamination between groups. Applicants should explain and justify their strategies for reducing contamination.

- (h) *Mediating and moderating variables*. Observational, survey, or qualitative methodologies are encouraged as a complement to experimental methodologies to assist in the identification of factors that may explain the effectiveness or ineffectiveness of the intervention. Mediating and moderating variables that are measured in the intervention condition that are also likely to affect outcomes in the comparison condition should be measured in the comparison condition (e.g., student time-on-task, teacher experience/time in position).

The evaluation should be designed to account for sources of variation in outcomes across settings (i.e., to account for what might otherwise be part of the error variance). Applicants should provide a theoretical rationale to justify the inclusion (or exclusion) of factors/variables in the design of the evaluation that have been found to affect the success of education programs (e.g., teacher experience, fidelity of implementation, characteristics of the student population). The research should demonstrate the conditions and critical variables that affect the success of a given intervention. The most scalable interventions are those that can produce the desired effects across a range of education contexts.

- (i) *Data analysis.* All proposals must include detailed descriptions of data analysis procedures. For quantitative data, specific statistical procedures should be described. The relation between hypotheses, measures, independent and dependent variables should be clear. For qualitative data, the specific methods used to index, summarize, and interpret data should be delineated.

Most evaluations of education interventions involve clustering of students in classes and schools and require the effects of such clustering to be accounted for in the analyses, even when individuals are randomly assigned to condition. Such circumstances generally require specialized multilevel statistical analyses using computer programs designed for such purposes. Strong applications will provide sufficient detail for reviewers to judge the appropriateness of the data analysis strategy. For random assignment studies, applicants need to be aware that typically the primary unit of analysis is the unit of random assignment.

- (iii) *Assessment Development.* When assessment development is included in the focused program of research (as is required for the Center on Response to Intervention in Early Childhood Special Education), applicants must provide a compelling rationale to support the development of a proposed assessment. Reviewers will consider the strength of theoretical foundation for the proposed assessment, the existing empirical evidence supporting the proposed assessment, and whether the proposed assessment duplicates existing assessments. In developing these assessments, researchers should keep in mind the pragmatic constraints (e.g., number of students, limited class time, time required to train teachers to use the assessments, costs) that teachers, service providers, and administrators will consider to determine whether the instrument is a viable option for use in classrooms and other education delivery settings. Applications should provide sufficient description of the proposed assessment and how it could be utilized within education delivery settings for reviewers to judge the practicality of the proposed assessment for instructional purposes.

In addition, there are two aspects of the research methodology that applicants must clearly address: (a) the proposed methods for developing the assessment, and (b) the proposed research methods for obtaining evidence of the *validity and reliability* of the instrument.

- (a) Assessment development. Applicants must detail the proposed procedures for developing the assessment. Strong applications will include descriptions of: (a) the procedures for determining the constructs that will be "tapped" by the instrument; (b) the procedures for selecting items to be used in the assessment, including assessing difficulty of selected items, and obtaining representative responses to items; and (c) the process for determining the administrative procedures for conducting the assessment (e.g., mode of administration, inclusion/exclusion of individual test takers, and whether make-ups or alternative administrative conditions will be allowed). Applicants should describe the process they will use to collect empirical data that will provide feedback for refining specific components of the assessment. *Applicants*

*should describe the iterative development process to be used in the design and refinement of the proposed measurement tool.*

- (b) **Assessment evaluation.** Applicants must clearly describe the research plans for determining the validity and reliability of the instrument. Applicants should describe the characteristics, size, and analytic adequacy of samples to be used in each study, including justification for exclusion and inclusion criteria. Applicants should describe detailed planned analytic methods (e.g., statistical and/or psychometric models), plans for treatment of missing responses, and criteria for interpreting results.
- c. ***Timeline.*** Along with the description of the focused program of research, applicants should include a clear timeline for the activities in their focused program of research.
- d. ***Research team.*** Competitive applicants will have leadership and staff that collectively demonstrate expertise in the education practice being examined, implementation and analysis of results from the research design that will be employed, working with education delivery settings, and experience that is relevant to dissemination and national leadership activities. Centers are strongly encouraged to conceptualize and organize the proposed Center according to an interdisciplinary framework and should include, as appropriate, investigators from multiple disciplines related to the topic area (see [Section III.6.B.a](#)).
- e. ***Collaborations with schools and other education or service delivery settings.*** When conducting research activities in schools or other education or service delivery settings, applicants should document that they have the capacity and experience to obtain such cooperation and to describe the steps they have taken or will take to obtain it. Strong applications will include documentation of the availability and cooperation of the schools or other delivery settings that will be required to carry out that work via a letter of support from the education organization(s).

### **C. Requirements for Supplemental Research Projects**

As part of the center activities, applicants are expected to conduct smaller research projects that speak to other issues that are important within the context of the broad topic of the center. The Institute intends to work cooperatively with center grantees to select and design supplementary studies as needed to respond to pressing policy and practice needs within the topic covered by the center. In that context, the Institute does not expect applicants to provide highly detailed research plans for these studies in the application. The applicant should, however, document capacity to conduct such studies (e.g., knowledge of the field and research experience of key personnel) and provide two examples of supplementary studies the applicant believes might be useful to undertake, including a short rationale explaining the need for the proposed study and a short description of the type of research approach that would be used. Although this section of the application does not need to be long, applicants should bear in mind that capacity for conducting quick response research projects will carry weight in the scoring of the application.

### **D. Requirements for Outreach and Dissemination Activities**

As part of the Center activities, applicants are expected to: (a) develop dissemination products that translate their research findings for multiple audiences, including policy makers, teachers

and parents; (b) publish in peer reviewed journals; (c) publish or otherwise disseminate products such as measures and interventions developed during the course of the research; (d) host a web page and use other electronic media to provide continuously updated information about the Center's activities; and (e) engage in dissemination and outreach activities at professional conferences and other appropriate venues. Through the cooperative agreement, the Institute intends to work with center grantees to develop and plan these activities. In the application, the Institute does expect applicants to provide evidence that they are capable of engaging in all types of dissemination activities (e.g., knowledge of and connections with practitioner and policy communities) and to provide two examples of the types of activities they believe might be useful to undertake, including a short rationale justifying the need for the proposed activity and a description of their capacity for conducting such projects (e.g., experience translating research findings for multiple audiences). Although this section of the application does not need to be long, applicants should bear in mind that capacity for dissemination activities will carry weight in the scoring of the application.

#### **E. Requirements for National Leadership Activities**

As part of the center activities, applicants are expected to provide national leadership within the Center's topic area by developing position papers, hosting meetings, and engaging in dialogue with researchers and practitioners in order to identify promising areas of research, development, and dissemination for the field. The Institute intends to work cooperatively with center grantees in the development and planning of such activities. In that context, the Institute does not expect applicants to provide highly detailed plans for the leadership activities. It is sufficient to provide information on why the proposed Center staff are qualified to fulfill this leadership role if awarded a Center, as well as two examples of the types of activities the applicant believes might be useful to undertake, including a short rationale justifying the need for the proposed activity and a description of the applicant's capacity for conducting such projects. Although this section of the application does not need to be long, applicants should bear in mind that capacity for carrying out leadership and national activities will carry weight in the scoring of the application.

#### **F. Requirements for Management of Center Activities**

The Institute anticipates that the development and evaluation of the proposed education product or products, as well as the supplementary studies, outreach and dissemination activities, and national leadership activities will require the coordination of multiple scientists. Applicants should describe plans and procedures for the overall management of the center. These plans should include details of procedures for coordinating with schools and districts or other education delivery settings involved in the projects of the center.

## **PART IV GENERAL SUBMISSION AND REVIEW INFORMATION**

### **7. APPLICATIONS AVAILABLE**

Application forms and instructions for the electronic submission of applications will be available for the programs of research listed in this RFA from the following web site no later than July 31, 2007:

<http://www.Grants.gov/>

The application form approved for use in the competitions specified in this RFA is the government-wide SF424 Research and Related (R&R) Form (OMB Number 4040-0001).

### **8. MECHANISM OF SUPPORT**

The Institute intends to award Center grants in the form of cooperative agreements for periods up to 5 years pursuant to this request for applications.

### **9. FUNDING AVAILABLE**

Typical awards will be in the range of \$1,000,000 to \$2,000,000 (total cost = direct + indirect) per year for 5 years. The size of the award depends on the scope of the activities.

The Institute expects the *focused program of research* to comprise about 50 to 75 percent of a Center's activities depending on the cost and effort required to carry out the focused program of research, with the remainder of the budget devoted to supplementary studies, dissemination activities, leadership activities, and any administrative activities not included in the focused program of research.

Although the plans of the Institute include the Special Education Research and Development Center program, awards pursuant to this request for applications are contingent upon the availability of funds and the receipt of a sufficient number of meritorious applications. The Institute anticipates funding only one center under each goal. However, because the Institute is committed to funding only high quality work, the Institute will make an award for a particular center only if at least one application for that center is deemed meritorious under peer review.

### **10. ELIGIBLE APPLICANTS**

Applicants that have the ability and capacity to conduct scientifically valid research are eligible to apply. Eligible applicants include, but are not limited to, non-profit and for-profit organizations and public and private agencies and institutions, such as colleges and universities.

### **11. SPECIAL REQUIREMENTS**

Activities supported through this program must be relevant to U.S. schools.

Recipients of awards are expected to publish or otherwise make publicly available the results of the work supported through this program. The Institute asks IES-funded investigators to submit voluntarily to the Educational Resources Information Center (ERIC) an electronic version of the author's final manuscript, upon acceptance for publication in a peer-reviewed journal, resulting from research supported in whole or in part, from IES. The author's final manuscript is defined

as the final version accepted for journal publication, and includes all modifications from the peer review process.

The PI and co-PIs should budget for two trips to Washington, DC per year. The first trip is to meet with the program officer in Washington, DC to discuss plans, timelines, findings, and dissemination efforts.

Prior to the annual meeting, grantees will submit a report describing accomplishments and activities, and explaining any deviations from the proposed plans and timeline for the relevant year. Through the terms of the cooperative agreement, grantees will work with the Institute to plan activities related to (a) supplementary research; (b) dissemination and outreach (including development of specific products, such as manuals, booklets, and guides); and (c) leadership in the field (see description in [Section III.6: General Requirements of the Proposed Research](#)).

The second trip is to attend the annual meeting with other grantees and Institute staff for a duration of up to 3 days of meetings. At least one project representative should attend the three-day meeting.

The Institute anticipates that a substantial portion of the research funded under this announcement will be conducted in field settings. Hence, the applicant is reminded to apply its negotiated off-campus indirect cost rate, as directed by the terms of the applicant's negotiated agreement.

Research applicants may collaborate with, or be, for-profit entities that develop, distribute, or otherwise market products or services that can be used as interventions or components of interventions in the proposed research activities. Involvement of the developer or distributor must not jeopardize the objectivity of the evaluation. Applications from, or collaborations including, such organizations should justify the need for Federal assistance to undertake the evaluation of programs that are marketed to consumers and consider sharing the cost of the evaluation, as well as sharing all or a substantial portion of the cost of the implementation of the product being evaluated (e.g., sharing the cost of textbooks for students).

The Institute strongly advises applicants to establish a written agreement among all key collaborators and their institutions (e.g., principal and co-principal investigators) regarding roles, responsibilities, access to data, publication rights, and decision-making procedures within 3 months of receipt of an award.

Through the terms of the cooperative agreement, grantees will work with the Institute to plan activities related to (a) supplementary research; (b) dissemination and outreach (including development of specific products, such as manuals, booklets, and guides); and (c) leadership in the field.

## **12. LETTER OF INTENT**

A letter indicating an applicant's intent to submit an application is optional, but encouraged, for each application. The letter of intent form must be submitted electronically by the date listed at

the beginning of this document, using the instructions provided at:  
<https://ies.constellagroup.com>.

The letter of intent should include:

- Descriptive title;
- Topic that the applicant will address;
- Brief description of the proposed project;
- Name, institutional affiliation, address, telephone number and e-mail address of the principal investigator(s);
- Name and institutional affiliation of any key collaborators and contractors;
- Duration of the proposed project;
- Estimated budget request for each year; and
- Total budget request.

The project description should be single-spaced and should not exceed one page (about 3,500 characters). Although the letter of intent is optional, is not binding, and does not enter into the review of a subsequent application, the information that it contains allows Institute staff to estimate the potential workload to plan the review.

### **13. SUBMITTING AN APPLICATION**

Applications must be submitted **electronically by 4:30 p.m., Washington, DC time** by the application deadline date, using the standard forms and the instructions provided at the following web site:

<http://www.Grants.gov>

Potential applicants should check this site for information about the electronic submission procedures that must be followed and the software that will be required.

### **14. CONTENTS OF APPLICATION**

All applications and proposals for Institute funding must be contained within specified page limits. Internet Web site addresses (URLs) may not be used to provide information necessary to the review because reviewers are under no obligation to view the Internet sites.

All of the instructions and requirements regarding (a) submission of the application, (b) application page limits, (c) acceptable format, and (d) necessary attachments (.PDF files) will be provided in the **Application Instructions** document for this competition to be found under the “For Applicants -- Apply for Grants” link of Grants.gov. Also, all of the required forms will be provided in the **Application Package** that accompanies the Application Instructions.

Applicants must search for the downloadable Application Instructions and Application Package for each competition by the CFDA number. The alpha suffix should not be included in the search (e.g., search for 84.305, not 84.305C). For this competition, applicants need to download the “Special Education Research & Development Center” Application Instructions and Application Package.

In this section, the Institute provides instructions regarding the content of the (a) center summary/abstract, (b) center program narrative, (c) bibliography and references cited, (d) biographical sketches of senior/key personnel, (e) narrative budget justification (f) subaward budget, (g) Appendix A, (h) Appendix B, (i) human subjects narrative, and (j) additional forms. The instructions below will be reiterated in the Application Instructions document for this competition, which will be available, as noted above, under the “For Applicants -- Apply for Grants” link of [Grants.gov](http://Grants.gov).

#### **A. Center Summary/Abstract**

The center summary/abstract will be submitted as a .PDF attachment, is limited to 1 single-spaced page and must adhere to the margin, format, and font size requirements described in the center narrative section.

The center summary/abstract should include (1) the title of the center; (2) the RFA topic under which the applicant is applying; (3) a brief description of the focused program of research; and (4) a list of the key personnel.

#### **B. Center Program Narrative**

The center program narrative will be submitted as a .PDF attachment. Incorporating the requirements detailed in [Part III General Requirements of the Proposed Research](#) and the requirements listed under the relevant center topic ([Section II.4](#) for the Center on Serious Behavior Disorders at the Secondary Level; [Section II.5](#) for the Center on Response to Intervention in Early Childhood Special Education), the *center program narrative* provides the majority of the information on which reviewers will evaluate the proposal.

The center program narrative must include the seven sections described below (a. "Significance of the Focused Program of Research" through g. "Personnel") in the order listed and must conform to the format requirements described on the application submission website.

The center program narrative is limited to **35 single-spaced pages** for all applicants. This 35-page limit does not include any of the SF 424 forms, the one-page summary/abstract, the appendices, research on human subjects information, bibliography and references cited, biographical sketches of senior/key personnel, narrative budget justification, subaward budget information or certifications and assurances. **Reviewers are able to conduct the highest quality review when applications are concise and easy to read, with pages numbered consecutively.**

For the purposes of applications submitted under this RFA, a “page” is 8.5 in. x 11 in., on one side only, with 1 inch margins at the top, bottom, and both sides. Text must be single spaced in the narrative. To ensure that the text is easy for reviewers to read and that all applicants have the same amount of available space in which to describe their projects, applicants must adhere to the type size and format specifications for the entire narrative including footnotes. **It is very important that applicants review carefully the “Application Format Requirements” outlined in *Fiscal Year 2008 Application Package Highlights*, which will be part of the application instructions, available on <http://www.Grants.gov> no later than July 31, 2007.**

**a. *Significance of the Focused Program of Research.*** To address the significance of the focused program of research, applicants should refer to the issues posed in sections detailing the specific requirements for each center topic ([Section II.4](#) for the Center on Serious Behavior Disorders at the Secondary Level; [Section II.5](#) for the Center on Response to Intervention in Early Childhood Special Education), and the Requirements for the Program of Focused Research ([Section III.6.B.a](#)).

Applicants may use Appendix B to include up to 10 pages of examples of materials to be developed or evaluated (e.g., computer screens depicting how information is presented to students, examples of test items for a proposed assessment). Applicants should be aware that all narrative text describing the theoretical background, empirical support, components of the assessment or intervention, or any other aspect of the proposal must be included within the 35-page center program narrative. The only materials that are allowed in Appendix B are examples of the materials that are used by or presented to participants in the intervention or assessment.

**b. *Research Plan for the Focused Program of Research.*** Applicants should address all of the requirements detailed in [Part III, Section 6.B.b Methodological requirements for the focused program of research](#).

**c. *Supplemental Studies.*** Applicants should address all of the requirements detailed in [Part III, Section 6C Requirements for Supplemental Research Projects](#).

**d. *Outreach and Dissemination Activities.*** Applicants should address all of the requirements detailed in [Part III, Section 6D Requirements for Outreach and Dissemination Activities](#).

**e. *Leadership Activities.*** Applicants should address all of the requirements detailed in [Part III, Section 6E Requirements for National Leadership Activities](#).

**f. *Management and Institutional Resources.*** Applicants should address all of the requirements detailed in [Part III, Section 6F Management of Center Activities](#). In addition, applicants should provide a description of the resources available to support the center at the applicant's institution and in the field settings in which the research will be conducted.

**g. *Personnel.*** Applicants must include brief descriptions of the qualifications of key personnel (information on personnel should also be provided in their curriculum vitae) in the research narrative to be compliant with the requirements of the Request for Applications. For each of the key personnel, please describe the roles, responsibilities, and percent of time devoted to the project.

### **C. Bibliography and References Cited**

This section will be submitted as a .PDF attachment. Please include complete citations, including titles and all authors, for literature cited in the research narrative.

### **D. Biographical Sketches of Senior/Key Personnel**

This section will be submitted as a .PDF attachment. Abbreviated curriculum vitae should be provided for the principal investigator(s) and other key personnel. *Each vita is limited to 4 pages*

*and should include information sufficient to demonstrate that personnel possess training and expertise commensurate with their duties (e.g., publications, grants, relevant research experience), and have adequate time devoted to the project to carry out their duties. The fifth page of the attachment should list current and pending grants with the proportion of the individual's time allocated to each project. The curriculum vita must adhere to the margin, format, and font size requirements described in the project narrative section.*

#### **E. Narrative Budget Justification**

This section will be submitted as a .PDF attachment and should provide sufficient detail to allow reviewers to judge whether reasonable costs have been attributed to the project. The budget justification should correspond to the itemized breakdown of project costs that is provided in the Research & Related Budget (SF 424) Sections A & B; C, D, & E; and F-K. It should include the time commitments and brief descriptions of the responsibilities of key personnel. For consultants, the narrative should include the number of days of anticipated consultation, the expected rate of compensation, travel, per diem, and other related costs. A justification for equipment purchase, supplies, travel and other related project costs should also be provided in the budget narrative for each project year outlined in the Research & Related Budget (SF 424).

*For those applications that include a subaward(s) for work conducted at collaborating institutions, the narrative should also provide the details about the subaward(s). Include the actual subaward budgets as a separate attachment. (See below [“Subaward Budget”](#).)*

Applicants should use their institution's federal indirect cost rate and use the off-campus indirect cost rate where appropriate (see instructions under Section 11 Special Requirements).

#### **F. Subaward Budget**

This section will be submitted as a .PDF attachment. For applications that include a subaward(s) for work conducted at collaborating institutions, applicants must submit an itemized budget spreadsheet for each subaward for each project year. As noted above, the details of the subaward costs should be included in the Narrative Budget Justification. An Excel spreadsheet will be provided in the electronic application package to allow applicants to enter the subaward budget information in accordance with the prescribed format. Applicants will complete the spreadsheet in Excel format, convert it to a .PDF file, and then upload it as an attachment.

#### **G. Appendix A**

Appendix A should be included at the end of the Center Program Narrative, and will be submitted as part of the same .PDF attachment.

The purpose of *Appendix A* is to allow the applicant to include any figures, charts, or tables that supplement the research text, examples of measures to be used in the project, and letters of agreement from partners (e.g., schools) and consultants. These are the only materials that may be included in Appendix A; all other materials will be removed prior to review of the application. Narrative text related to any aspect of the project (e.g., descriptions of the proposed sample, the design of the study, or previous research conducted by the applicant) must be included in the research narrative. Letters of agreement should include enough information to make it clear that the author of the letter understands the nature of the commitment of time,

space, and resources to the research project that will be required if the application is funded. The appendix is limited to 15 pages. The Institute recognizes that some applicants may have more letters of agreement than will be accommodated by the 15-page limit. In such instances, applicants should include the most important letters of agreement and may list the letters of agreement that are not included in the application due to page limitations.

#### **H. Appendix B (optional)**

If applicable, Appendix B should be included at the end of the Center Program Narrative, following [Appendix A](#), and will be submitted as part of the same .PDF attachment.

The purpose of Appendix B is to allow applicants who are proposing an intervention or assessment to include examples of curriculum material, computer screens, test items, or other materials used in the intervention or assessment. These are the only materials that may be included in Appendix B; all other materials will be removed prior to review of the application. Appendix B is limited to 10 pages. Narrative text related to the intervention (e.g., descriptions of research that supports the use of the intervention/assessment, the theoretical rationale for the intervention/assessment, or details regarding the implementation or use of the intervention/assessment) must be included in the 35-page Center Program Narrative.

#### **I. Research on Human Subjects**

This section will be submitted as a .PDF attachment. If an applicant proposes research activities involving human subjects at any time during the proposed project period, either at the applicant organization or at any other performance site or collaborating institution, then the applicant must provide either a human subjects "exempt research narrative" or a "nonexempt research narrative" and upload this narrative as instructed in the *Fiscal Year 2008 Application Package Highlights*. See the U.S. Department of Education's web page for detailed information about the protection of human subjects in research:

<http://www.ed.gov/policy/fund/guid/humansub/overview.html>

#### **J. Additional Forms**

Please note that applicants selected for funding will be required to submit the following certifications and assurances before a grant is issued:

- (1) SF 424B-Assurances-Non-Construction Programs
- (2) Grants.gov Lobbying Form
- (3) ED 80-0014 (if applicable)-Lower Tier Certification
- (4) SF-LLL (if applicable) - Disclosure of Lobbying Activities
- (5) Protection of Human Research Subjects assurance and/or Institutional Review Board certification, as appropriate

### **15. APPLICATION PROCESSING**

Applications must be received by **4:30 p.m. Washington, DC time** on the application deadline date listed in the heading of this request for applications. Upon receipt, each application will be reviewed for completeness and for responsiveness to this request for applications. Applications that do not address specific requirements of this request will be returned to the applicants without further consideration.

## **16. PEER REVIEW PROCESS**

Applications that are compliant and responsive to this request will be evaluated for scientific and technical merit. Reviews will be conducted in accordance with the review criteria stated below by a panel of scientists who have substantive and methodological expertise appropriate to the research training program and request for applications.

Each application will be assigned to one of the Institute's scientific review panels. At least two primary reviewers will complete written evaluations of the application, identifying strengths and weaknesses related to each of the review criteria. Primary reviewers will independently assign a score for each criterion, as well as an overall score, for each application they review. Based on the overall scores assigned by primary reviewers, an average overall score for each application will be calculated and a preliminary rank order of applications prepared before the full review panel convenes to complete the review of applications.

The full panel will consider and score only those applications deemed to be the most competitive and to have the highest merit, as reflected by the preliminary rank order. A panel member may nominate for consideration by the full panel any proposal that he or she believes merits full panel review but would not have been included in the full panel meeting based on its preliminary rank order.

## **17. REVIEW CRITERIA FOR SCIENTIFIC MERIT**

The purpose of Institute-supported research is to contribute to the solution of education problems and to provide reliable information about the education practices that support learning and improve academic achievement and access to education for all students. Reviewers for all applications will be expected to assess the following aspects of an application in order to judge the likelihood that the proposed research will have a substantial impact on the pursuit of that goal. Information pertinent to each of these criteria is also described above in the section on [Requirements of the Proposed Research](#), in the Specific Requirements section of the relevant research grant topic, and in the description of the [Center Program Narrative](#), which appears in the section on Contents of Application.

### **A. Significance of the Focused Program of Research**

For significance of the focused program of research, applicants need to provide the theoretical, empirical, and practical rationale underlying the proposed focused program of research as detailed in the section detailing the specific requirements for the relevant center topic.

### **B. Research Plan for the Focused Program of Research**

Does the applicant adequately address the methodological requirements described in the [Section 6.B.b Methodological requirements for the focused program of research?](#)

### **C. Plans for Other Center Activities**

Does the content of the examples of proposed supplementary studies, dissemination activities, and leadership activities and the description of the applicant's capacity to conduct such projects demonstrate that the applicant has the ideas, experience, and capability to successfully carry-out such projects in cooperation with the Institute?

**D. Management and Institutional Resources**

Do the plans and procedures for the overall management of the center indicate that the applicant has the capacity to efficiently and successfully complete the proposed research, dissemination, and leadership activities? Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed activities? Do the commitments of each partner show support for the implementation and success of the proposed center activities?

**E. Personnel**

Does the description of the personnel make it apparent that the principal investigator, project director, and other key personnel possess the training and experience and will commit sufficient time to competently implement the proposed research?

**18. RECEIPT AND START DATE SCHEDULE**

Letter of Intent Receipt Date: September 6, 2007

**Application Deadline Date: November 1, 2007, 4:30 p.m. Washington, DC time**

Earliest Anticipated Start Date: July 2008

**19. AWARD DECISIONS**

The following will be considered in making award decisions:

Scientific merit as determined by peer review

Responsiveness to the requirements of this request

Performance and use of funds under a previous Federal award

Contribution to the overall program of research described in this request

Availability of funds

**20. INQUIRIES MAY BE SENT TO:**

*For Topic One: Center on Serious Behavior Disorders at the Secondary Level*

Dr. Jacquelyn Buckley  
Institute of Education Sciences  
555 New Jersey Avenue, NW  
Washington, DC 20208

Email: [Jacquelyn.Buckley](mailto:Jacquelyn.Buckley)

Telephone: (202) 219-2130

*For Topic Two: Center on Response to Intervention in Early Childhood Special Education*

Dr. Kristen Lauer  
Institute of Education Sciences  
555 New Jersey Avenue, NW  
Washington, DC 20208

Email: [Kristen.Lauer@ed.gov](mailto:Kristen.Lauer@ed.gov)

Telephone: (202) 219-0377

## **21. PROGRAM AUTHORITY**

20 U.S.C. 9501 *et seq.*, the “Education Sciences Reform Act of 2002,” Title I of Public Law 107-279, November 5, 2002 as amended by Title II of the Individuals with Disabilities Education Improvement Act of 2004, Public Law 108-446, December 3, 2004. This program is not subject to the intergovernmental review requirements of Executive Order 12372.

## **22. APPLICABLE REGULATIONS**

The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 77, 80, 81, 82, 84, 85, 86 (part 86 applies only to institutions of higher education), 97, 98, and 99. In addition 34 CFR part 75 is applicable, except for the provisions in 34 CFR 75.100, 75.101(b), 75.102, 75.103, 75.105, 75.109(a), 75.200, 75.201, 75.209, 75.210, 75.211, 75.217, 75.219, 75.220, 75.221, 75.222, and 75.230.

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