



REQUEST FOR APPLICATIONS

**SPECIAL EDUCATION RESEARCH AND
DEVELOPMENT CENTER PROGRAM**

CFDA Number: 84.324C

<u>COMPETITION ROUND</u>	Letter of Intent Due Date	Application Package Available	Application Due Date
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PART I GENERAL OVERVIEW

1. REQUEST FOR APPLICATIONS

In this announcement, the Institute of Education Sciences (Institute) invites applications for research projects that will contribute to its Special Education Research and Development Center program. For the FY 2012 competition, the Institute will consider only applications that meet the requirements outlined below under *Part II Special Education Research and Development Center Program* and *Part III Requirements of the Proposed Research*.

Separate announcements are available on the Institute's web site that pertain to the other research and research training grant programs funded through the Institute's National Center for Special Education Research and to the discretionary grant competitions funded through the Institute's National Center for Education Research (<http://ies.ed.gov/funding>).

PART II SPECIAL EDUCATION RESEARCH AND DEVELOPMENT CENTER PROGRAM

2. PURPOSE

Under the Education Sciences Reform Act of 2002, the Institute supports special education research and development centers (R&D Centers) that are intended to contribute significantly to the solution of special education problems in the United States by engaging in research, development, evaluation, and national leadership activities aimed at improving the education system, and, ultimately, student achievement. Each of the R&D Centers conducts a focused program of research in its topic area. In addition, each Center conducts supplemental research within its broad topic area and provides national leadership in advancing evidence-based practice and policy within its topic area. For information on existing Institute special education R&D Centers, please see <http://ies.ed.gov/ncser/RandD/>.

The work of the Institute is grounded in the principle that effective education research must address the interests and needs of education practitioners and policymakers, as well as students, parents and community members (see <http://ies.ed.gov/director/board/priorities.asp> for the Institute's priorities). To this end, the Institute encourages researchers to develop partnerships with stakeholder groups to advance the relevance of their work, the accessibility of their publications, and the usability of their findings for the day-to-day work of education practitioners and policymakers.

For the FY 2012 Special Education Research and Development Center competition, the Institute invites applications for four Special Education Research and Development Centers: (1) **Special Education Research and Development Center on School-Based Interventions for Secondary Students with Autism Spectrum Disorders**, (2) **Special Education Research and Development Center on Reading Instruction for Deaf and Hard of Hearing Students**, (3) **Special Education Research and Development Center on Interventions for Families of Students with Autism Spectrum Disorders**, and (4) **Special Education Research and Development Center on Interventions for Families of Students with Emotional and Behavioral Disorders**.

3. BACKGROUND

The Institute's R&D Centers grapple with key education issues that face our nation. Through the Institute's R&D Center program, researchers have greater resources to tackle more complex education problems, create innovative education solutions, and contribute to knowledge and theory in special education. The Institute currently funds 3 special education R&D centers through the National Center for Special Education Research and 16 national R&D centers through the National Center for Education Research. Here are examples of the types of issues that they are addressing.

- Young children who have not had sufficient language and early literacy experiences prior to kindergarten face significant challenges learning to read. These children often continue to experience poor reading skills throughout school. The *Center for Response*

to Intervention in Early Childhood is creating a Response to Intervention model including innovative approaches to promote the development of language and early literacy skills and an assessment system for tracking children's progress.

- For the past several decades, students with emotional and behavioral disorders have had the poorest educational, behavioral, and social post-school outcomes of any disability group, yet very little research exists to inform practice with this population of high school age students. The *Center on Serious Behavior Disorders at the Secondary Level* is developing and evaluating a comprehensive package of interventions to improve outcomes for students through enhancing school and teacher capacity, building youth competence, and increasing family and community supports.
- Poor understanding of fractions is a critical aspect of inadequate mathematics knowledge. This issue is especially problematic because understanding fractions is essential for algebra and other more advanced areas of mathematics. The goal of the *Center for Improving Learning of Fractions* is to apply theories, methods, and empirical findings from cognitive science research on the acquisition of mathematical knowledge to better understand the problems that children with mathematics difficulties have with learning fractions and to develop effective interventions to remedy those problems.
- School districts are experimenting with the use of incentives for teachers, administrators, and schools to improve the quality of education in their schools. How should performance incentive programs be structured to achieve desired goals and minimize unintended negative consequences? The *National Center for Teacher Performance Incentives* has conducted a number of studies to test the effects of different parameters for incentive programs on student outcomes.
- The recent development of state longitudinal data systems offers the opportunity to answer a multitude of education policy-relevant questions, but requires sophisticated methodological expertise to handle complicated datasets and complex analyses. *The Center for the Analysis of Longitudinal Data in Education Research* (CALDER) brings together a group of economists with such expertise to take advantage of comprehensive education databases in Florida, Missouri, New York, North Carolina, Texas and Washington state to examine the relations between teacher workforce and governance policies (e.g., certification, compensation, accountability, and choice) and key education outcomes (e.g., student achievement, graduation rates, teacher retention).

For its FY 2012 R&D Center competition, the Institute is interested in applications that offer the greatest promise for (1) contributing to the solution of a specific special education problem within the R&D Center topic described below and to the generation of new knowledge and theories relevant to the focus of the R&D Center; (2) providing relatively rapid research and scholarship on supplemental questions that emerge within the R&D Center's topic area and that are not being addressed adequately elsewhere; and (3) providing national leadership within the R&D Center's topic by developing position papers, hosting meetings, and engaging in dialogue with researchers, practitioners, and policymakers in order to identify promising areas of research, development, and dissemination for the field and to advance evidence-based policy and practice.

PART III REQUIREMENTS OF THE PROPOSED RESEARCH

4. TOPIC ONE: REQUIREMENTS FOR SPECIAL EDUCATION RESEARCH AND DEVELOPMENT CENTER ON SCHOOL-BASED INTERVENTIONS FOR SECONDARY STUDENTS WITH AUTISM SPECTRUM DISORDERS

According to the Centers for Disease Control and Prevention (2009), one in 110 children have an autism spectrum disorder (ASD). Autism is a pervasive disorder affecting multiple developmental outcomes (e.g., behavior, communication, cognitive skills). The heterogeneity of abilities pose a significant challenge for schools in determining how best to meet the needs of each child within the least restrictive environment.

In general, there is a lack of research on secondary students with ASD (McGovern & Sigman, 2005; Seltzer, Shattuck, Abbeduto, & Greenberg, 2004). The research to date suggests that despite some mitigation in the severity of some symptoms (e.g., communication deficits) associated with ASD as children grow older (Howlin, Goode, Hutton, & Rutter, 2004; Murphy, Beadle-Brown, Wing, Gould, Shah & Holmes, 2005, Seltzer et al., 2004), significant limitations persist that can affect a range of educational, social, and transition outcomes. For example, reading and math skills for secondary students with ASD are, on average, 4 and 5 years below grade level, respectively (Wagner et al., 2003). Social skill impairments, one of the core limitations in children with ASD, persist in adolescence and adulthood (Selzer et al., 2004; Wagner et al., 2003); social skill deficits are associated with poor development of adaptive skills (McGovern & Sigman, 2005). Behavioral problems, such as challenging behavior and resistance to change, are often long-term issues (Murphy et al., 2005) and may limit successful transition outcomes such as employment (Howlin et al., 2004).

Little attention has been given to the development and evaluation of interventions and strategies for secondary students with ASD (Graetz, 2004; Hendricks & Wehman, 2009; Machalicek, O'Reilly, Beretvas, Sagafoos & Lancioni, 2007). Through the research grant program on Autism Spectrum Disorders, the Institute has funded projects that target preschool and early elementary school children with ASD. Although the Institute's ASD research portfolio is growing, the Institute recognizes that a largely neglected area is interventions for middle and high school students with ASD. To address this need, the Institute is establishing a Special Education National Research and Development Center on School-Based Interventions for Secondary Students with Autism Spectrum Disorders (Autism Research Center). The purpose of this Center is to conduct a program of research to develop and evaluate a comprehensive, school-based intervention program for secondary students with ASD (middle or high school) that is intended to improve cognitive, communicative, academic, social, behavioral, functional, or transition outcomes. By comprehensive intervention, the Institute means an intervention that is designed to address two or more of these outcomes (e.g., academic and behavioral). Applications that propose to develop and evaluate only a singular intervention (e.g., a social skills intervention only) will not be accepted under this Request for Applications. By school-based, the Institute means that the intervention is designed to be implemented in schools alone or schools with a home or community component that may involve non-school staff.

For its focused program of research, the Special Education Autism Research Center is required (a) to develop, or modify an existing, school-based intervention to address multiple student outcomes (e.g., academic, behavioral, cognitive, communicative, social, transition) for students with ASD in middle or high school, and (b) to conduct an efficacy study of the impact of the intervention on student outcomes. Applicants might, for example, consider integrating existing social, behavioral, and literacy interventions in a way that would allow teachers to support middle school students with ASD in general education classrooms. The Institute encourages applicants to develop instructional approaches or strategies appropriate for students in middle and high school with ASD that will improve skills across academic or vocational instruction.

In addition to its focused program of research on the development and evaluation of a comprehensive school-based intervention for students with ASD, the Autism Research Center will conduct supplementary studies and engage in national leadership activities relevant to school-based interventions for secondary students with ASD.

A. Significance of the Focused Program of Research

Under significance of the project, applicants provide a compelling rationale justifying why the proposed research is important to conduct. Specifically, applicants should address the following three questions. (1) What is the target population of ASD students (e.g., high school students with ASD) and the specific outcomes (e.g., transition, communicative, reading) that the proposed intervention will address and why should the Autism Research Center focus its efforts on these outcomes for these students? (2) What intervention will be developed, including the theoretical and empirical rationale for and practical importance of the intervention? (3) Why is the proposed research important to conduct? By addressing these three questions, applicants are addressing aspects of the significance of their proposal.

a. Target population and outcomes

The Institute recognizes that ASD covers a wide spectrum of abilities and that interventions appropriate for some students with ASD would not be appropriate for others. Applicants should clearly describe who the target population will be and how it will be identified. Applicants should specify the outcomes that will be addressed by the proposed intervention (e.g., transition outcomes, communication skills).

b. Intervention to be developed

Applicants must propose to develop a comprehensive, school-based intervention for middle or high school students with ASD. By comprehensive intervention, the Institute means an intervention that is designed to address two or more of the following types of outcomes: cognitive, communicative, academic, social, behavioral, functional, or transition outcomes. Applications that propose to develop and evaluate only a singular intervention (e.g., a social skills intervention only) will not be accepted under this Request for Applications. By school-based, the Institute means that the intervention is designed to be implemented in schools alone or schools with a home or community component that may involve non-school staff. The applicant should include a description of the intervention (components and how it will be used) and the theory of change for the intervention. Applicants should provide a strong theoretical and empirical rationale for the intervention. Applicants should explain why the proposed intervention is likely to produce substantially better outcomes for secondary students with ASD relative to current practice. A clear comparison of the proposed intervention with typical practice helps reviewers determine if the proposed intervention has the potential to produce substantially better student outcomes because it is sufficiently different from current practices and has "active ingredients" that appear on the basis of theoretical or empirical reasons to be powerful agents for improving the outcomes of interest. In the rationale to support the proposed intervention, applicants should address the *practical* importance of the proposed intervention. For example, would the proposed intervention be both affordable for and easily implemented by schools?

c. Importance of the proposed research

As described in *Sections 4.A.a* and *4.A.b*, the applicant should describe and justify the selection of the target population and outcomes to be addressed and describe the proposed intervention. All of this information lends support to the applicant's justification for the importance of the proposed focused program of research. In addition, applicants should clearly summarize for reviewers their argument for why the proposed focused program of research is important to fund.

B. Research Plan for the Focused Program of Research

a. Methodological requirements for developing a comprehensive intervention for secondary students with ASD

For the Autism Research Center, applicants must propose to develop a comprehensive, school-based intervention for secondary students with ASD. Applicants must provide a detailed description of the

methods for developing the proposed intervention. Applicants should articulate the proposed methods for testing the feasibility of implementation of the prototype in an authentic education delivery setting (e.g., schools or classrooms). Applicants should describe the systematic process they will use to collect empirical data that will provide feedback for refining the intervention. Applicants should provide sufficient detail to allow reviewers to judge the applicant's capacity to develop, refine, and improve the intervention so that the intervention operates as intended when implemented by the target user. In strong applications, reviewers will be able to understand (a) what will be developed, (b) how it will be developed, and (c) when the development will take place (e.g., timeline for the research activities). 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 implementation measures that can be used in the efficacy trial of the intervention.

b. Methodological requirements for evaluating the efficacy of the comprehensive intervention

In efficacy trials, the intervention may be implemented under what is sometimes called "ideal" conditions that include more support than what would be expected under routine practice. The goal of efficacy trials is to determine if an intervention *can work* to improve student outcomes with a limited and specified sample as opposed to if an intervention *will work* when implemented under conditions of routine practice. The Institute also encourages researchers to examine which organizational supports, tools, and procedures may be needed for sufficient implementation of the core components of the intervention under routine practice. For example, observational studies may describe which supports seem to be linked to the successful adoption of the intervention by all or specific subgroups of those implementing it.

Applicants must provide a detailed description of the research design, methods, and data analysis plan for evaluating the efficacy of the intervention. Applicants should include well-specified objectives that link to their design and analysis plans. Applicants should describe how potential threats to internal and external validity would be addressed.

Studies using random assignment to intervention and comparison conditions have the strongest internal validity for causal conclusions and, thus, are preferred whenever they are feasible. When a randomized trial is used, the applicant should clearly state and present a convincing rationale for the unit of randomization (e.g., students, classroom, teacher, or school). Applicants should explain the procedures for assignment of groups (e.g., schools) or participants to intervention and comparison conditions and how the integrity of the assignment process will be ensured.¹

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. 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.

Applicants should clearly address the statistical power of the evaluation design to detect a reasonably expected and minimally important effect. When justifying what constitutes a reasonably expected effect, applicants should indicate clearly (e.g., by including the statistical formula) how the effect size was calculated. If a primary research question focuses on subgroups (e.g., severity of disability), applicants should show that the proposed sample has sufficient power to address the proposed question about specific subgroups.

Applicants should describe the proposed measures, provide technical information on the reliability and validity of the measures, and detail procedures for collecting and coding data. In strong applications,

¹ What a randomized control trial must do to meet the WWC's evidence standards is described in the WWC Procedures and Standards Handbook (2008) available at <http://ies.ed.gov/ncee/wwc/references/library/>.

applicants use the proposed theory of change as a framework and make clear how the proposed measures link to the proximal and distal outcomes that the intervention is intended to change. In strong applications, applicants would detail procedures for measuring the fidelity of the implementation of the intervention. Applicants must include a detailed description of their data analysis plan.

From the Institute's standpoint, the evaluation of the efficacy of the comprehensive intervention would be *methodologically successful* if, at the end of the grant period, the investigators had rigorously evaluated the impact of a clearly specified intervention on relevant student outcomes and under clearly described conditions using a research design that meets (without reservation) the Institute's What Works Clearinghouse standards (<http://whatworks.ed.gov>), whether or not the intervention is found to improve student outcomes relative to the comparison condition. The Institute would consider methodologically successful projects to be *pragmatically successful* if the rigorous evaluation determined that the intervention has a net positive impact on student outcomes in relation to the policy, program, or practice to which it is being compared. The Institute expects all methodologically successful projects to contribute to our theoretical understanding of education processes and procedures and to the advancement of the education sciences.

c. Timeline

Applicants should include a timeline that makes clear when research activities will be conducted. For example, researchers should make clear when development studies will be conducted and when evaluation activities (e.g., recruiting sample, developing measures, implementing intervention) will be conducted.

5. TOPIC TWO: REQUIREMENTS FOR SPECIAL EDUCATION RESEARCH AND DEVELOPMENT CENTER ON READING INSTRUCTION FOR DEAF AND HARD OF HEARING STUDENTS

Poor literacy skills have been characteristic of the deaf population for decades. National data suggest that median literacy rates of deaf high school graduates have remained consistently around the fourth grade level since the beginning of the twentieth century (Allen, 1994). About one in five deaf students who graduate from high school have reading skills at or below the second grade level; about one in three deaf students who graduate from high school have reading skills between the second and fourth grade level (Dew, 1999). Compared to deaf students, hard of hearing students (i.e., those with mild to moderate hearing loss) fare better overall, but even mild hearing losses can create significant challenges for developing reading skills (Marschark et al., 2009).

In general, deaf children of deaf parents tend to read better than do deaf children of hearing parents. However, the majority of children who are deaf or hard of hearing are born to hearing parents who are not likely to be fluent or proficient in sign language and are in the process of learning the language themselves (e.g., Goldin-Meadow & Mayberry, 2001). This may limit opportunities for linguistic input to young deaf children with hearing parents.

Recently, researchers have begun to focus on whether the findings in the Report of the National Reading Panel (National Institute of Child Health and Human Development, 2000) apply to young students who are deaf or hard of hearing (e.g., Schirmer & McGough, 2005) and whether hearing children and children who are deaf or hard of hearing share the same significant predictors of literacy attainment (Kyle & Harris, 2006). For example, one predictor receiving considerable attention among researchers is phonological awareness. For young children with normal hearing sensitivity, research on the importance of phonological awareness and explicit phonics instruction indicates that children who do not learn the alphabetic principle (i.e., letters represent sounds that blend together to make meaningful words) experience significant difficulties obtaining proficient reading skills (National Institute of Child Health and Human Development, 2000). However, the role and importance of phonological awareness in the development of reading for deaf children is still not clear (e.g., Allen et al., 2009; Wang, Trezek, Luckner, & Paul, 2008). Similar questions exist related to the importance of other factors, such as language

processing skills, vocabulary, syntactic proficiency in the primary language, and speechreading for overall literacy attainment (Chamberlain & Mayberry, 2008; Kyle & Harris, 2006; Marschark et al., 2009).

The Institute recognizes that proficiency in reading is critical for furthering one's education and achieving success in the workplace and that improving reading outcomes for students who are deaf or hard of hearing requires substantial additional research, particularly research to identify, develop, and test instructional approaches, curricula, and other innovative education interventions designed to enhance the reading skills of students who are deaf or hard of hearing.

To complement its existing research programs in literacy education, the Institute is establishing a Special Education Research and Development Center on Reading Instruction for Deaf and Hard of Hearing Students (Reading/DHH Center). This Center will conduct a focused program of research to further explore underlying factors related to literacy for young students who are deaf or hard of hearing (kindergarten through Grade 2) and to develop innovative approaches to improving reading instruction for these students. The innovative approaches for improving instruction supported by this Center may include instructional strategies to be implemented by teachers or other school specialists as well as innovative instructional approaches delivered through other means such as adaptive computerized tutoring, or instruction delivered through other innovative approaches but must be designed to be implemented in authentic education delivery settings (e.g., schools). The Center will focus on improving literacy skills for students in early elementary school (i.e., kindergarten through Grade 2) to maximize the potential long term impact of early literacy skills intervention on literacy development and overall school performance.

In addition to its focused program of research on improving reading instruction for students who are deaf or hard of hearing, the Reading/DHH Center will conduct supplementary studies and engage in national leadership activities relevant to improving reading outcomes for students who are deaf or hard of hearing.

A. Significance of the Focused Program of Research

For its focused program of research, the Reading/DHH Center is required (a) to explore underlying factors that impede reading and language skills of young students (kindergarten through Grade 2) who are deaf or hard of hearing for the purpose of identifying possible targets for intervention and (b) to develop and test innovative instructional approaches or other interventions for students who are deaf or hard of hearing that utilize research on these underlying factors. By (1) clearly identifying the students who will be the target of the new instructional approaches or interventions, (2) providing a compelling rationale for the underlying factors explored and their potential contribution to reading difficulties, and (3) clearly describing the instructional approaches or interventions to be developed and tested, applicants are addressing the *significance of the focused program of research*.

a. Identification of students

The focused program of research (i.e., exploration of underlying factors and development of innovative instructional approaches) must target students from kindergarten through Grade 2 who are deaf or hard of hearing. Applicants should clearly describe who the target population will be and how it will be identified.

b. Rationale for factors to be explored

Applicants must propose to conduct studies intended to extend our knowledge of the underlying factors that inhibit or constrain reading and language performance in students who are deaf or hard of hearing. Applicants should clearly describe the theoretical and empirical rationale for studies designed to explore underlying factors of learning difficulties in reading and language and identify possible targets for intervention. The rationale should include a discussion of how this new knowledge of the underlying factors could inform the development of innovative instructional approaches or interventions.

c. Rationale for innovative instructional approaches that will be developed

Applicants to the Reading/DHH Center must propose research to develop innovative instructional approaches or other education interventions for teaching reading to students who are deaf or hard of hearing. The Institute expects the Reading/DHH Center to develop reading interventions that are based on *current* knowledge about the factors underlying reading and language performance of deaf and hard of hearing students, in addition to developing interventions based on the exploratory research that the Center conducts. The instructional approaches or intervention to be developed must be designed to be implemented in authentic education delivery settings (e.g., classrooms). The instructional approaches or intervention may be implemented by classroom teachers, delivered by school specialists, incorporate adaptive computerized tutoring, or use other school-based delivery mechanisms.

Although results of the exploratory work will influence the development of instructional approaches or interventions, in order for reviewers to assess applicants' capacity to carry out the research to develop new interventions, applicants should provide an example of how they would conduct such research based on existing knowledge about factors that underlie reading and language performance for students who are deaf or hard of hearing. As part of the Significance section, applicants should describe the instructional approach or intervention to be developed. Applicants should provide a strong theoretical and empirical justification for the design of the intervention.

B. Research Plan for the Focused Program of Research

a. Methodological requirements for exploring the underlying factors that impede language and literacy performance

For the Reading/DHH Center, applicants should clearly describe a set of studies designed to explore the factors underlying the language and literacy performance of students who are deaf or hard of hearing. Such studies might include, for example, short-term longitudinal studies in which the objective is to identify the component processes and skills that are (a) highly correlated with reading proficiency, and (b) can be improved, accelerated, or advanced through instruction. The researcher should make explicit the hypothesized link between the underlying factors and improving reading. Another approach to these exploratory questions is to begin by identifying a constellation of observed behaviors indicating reading difficulties, and then propose a research plan to explore systematically possible causal explanations for that problem.

b. Methodological requirements for developing innovative instructional approaches

For the Reading/DHH Center, applicants must propose to conduct a series of studies to develop innovative instructional approaches or interventions for improving reading instruction for students who are deaf or hard of hearing. The Institute recognizes that detailing all of the studies in the series may not be possible, particularly when later experiments depend on the results of earlier experiments in the series. However, applicants must provide sufficient detail for reviewers to judge the quality of the proposed program of research. Applicants may, for example, describe the overall approach of the focused program of research and provide specific details for two or three exemplar studies.

Strong applications will include clear descriptions of: (1) the characteristics of students who will participate in the studies; (2) the procedures for developing the instructional approaches or interventions; and (3) the research design and procedures (including measures and procedures for collecting and analyzing data) for determining if the instructional approaches or intervention function as intended. It is helpful if applicants explain: (a) how they define "operating as intended" for the proposed instructional approaches or intervention; (b) what data they will collect to determine how the instructional approaches or intervention are operating; (c) how they will use the data they collect to make further revisions to the instructional approaches or intervention; and (d) what criteria they will use to determine if the instructional approaches or intervention operate as intended.

Applicants should propose studies that address the feasibility of implementing the instructional approaches or interventions in authentic education delivery settings

and the promise of the intervention for achieving the intended outcomes. Feasibility should be demonstrated on a sample of users (e.g., teachers, students) who are like those for whom the intervention is intended and should show that they can utilize or implement the intervention in the way that the researchers intend the intervention to be implemented. The promise of the intervention for achieving the intended outcomes can be demonstrated through small experimental or quasi-experimental studies.

c. Timeline

Applicants should include a timeline that makes clear when research activities will be conducted. For example, researchers should make clear when specific development activities will occur so that data collected during the implementation of initial versions of interventions can be used to revise subsequent versions.

6. TOPIC THREE: REQUIREMENTS FOR SPECIAL EDUCATION RESEARCH AND DEVELOPMENT CENTER ON INTERVENTIONS FOR FAMILIES OF STUDENTS WITH AUTISM SPECTRUM DISORDERS

Families play an important role in the development of children with Autism Spectrum Disorders (ASD). For example, parents are generally the first to recognize their young child's developmental delays and other problems, and actively seek out diagnosis and intervention (Iovannone, Dunlap, Huber, & Kincaid, 2003). Similarly, there is a growing literature which indicates that family involvement is a crucial component of interventions for children with ASD (see Marcus, Kuncze, & Schopler, 2005). For example, relationship-focused programs (e.g., parent responsiveness) have been associated with developmental gains in young children at-risk for or with developmental disabilities including autism (Dunst, Trivette, Raab, & Masiello, 2008; Mahoney et al., 1998; Mahoney & Perales, 2005; Siller & Sigman, 2002). Research by Siller and Sigman (2002, 2008) found that parents who had higher levels of responsiveness had children whose language age gain was nearly twice the rate of children whose parents had lower levels of responsiveness.

Family involvement in interventions for children with ASD may involve a variety of strategies. For example, parents may participate in school-based activities and interventions (e.g., communication with teachers, volunteering in the school). There are also home-based activities to work with children on new skills that will help them adjust to school and learn, or support the skills they are acquiring in school or other intervention settings. For example, parents may learn to teach their child cognitive skills, language, and other academic competencies, or family members may be taught to help increase appropriate and decrease inappropriate behaviors to support school adjustment and learning. Family involvement and support interventions also frequently help build a working relationship between parents and teachers or other professionals. Parents can be valuable members of an educational team because they know the specific pattern of behaviors and cognitive strengths and limitations of their own child.

Families of children with autism also experience high levels of stress. For example, researchers have noted that across age ranges, parents of children with autism experienced more stress than parents of children with other developmental disabilities (e.g., Sanders & Morgan, 1997; Davis & Carter, 2008). These high stress levels may attenuate the gains and developmental progress of these children (Robbins, Dunlap, & Plienis, 1991). Family-focused interventions may help reduce the many stresses of parenting a child with ASD to enable them to focus more on productive, learning-oriented interactions with their child.

Additional research is needed in many areas of family involvement in the education of children with ASD, particularly in family involvement with older children and adolescents. To address this need, and complement and enhance the NCSER's growing portfolio of research programs in Autism Spectrum Disorders, the Institute is establishing a Special Education National Research and Development Center on Families of Students with Autism Spectrum Disorders (Families and ASD Research Center). The purpose of the Center is to conduct a program of research on families of students with ASD from kindergarten through Grade 12. Such research must involve families in a way that is directly tied to the education system.

For its focused program of research, the Families and ASD Research Center is required to (a) to develop or modify an existing intervention to address the needs of families in supporting the educational or transitional outcomes of students with ASD, and (b) conduct an efficacy study of the impact of the intervention on student outcomes. For example, an intervention may focus on effective ways to incorporate family components into more comprehensive school-based interventions; strategies to enable parents to work effectively with schools so that school- and home-based interventions are more coordinated and mutually supportive in treating the student; or improving the ability of teachers to work with families with a student with ASD.

In addition to its focused program of research on the development and evaluation of interventions for families of students with ASD, the Families and ASD Research Center will conduct supplementary studies and engage in national leadership activities relevant educational outcomes of families of students with ASD.

A. Significance of the Focused Program of Research

For its focused program of research, the Families and ASD Center is required to (1) develop interventions or modify existing interventions for families of students with ASD, and (2) rigorously test the efficacy of the intervention developed. By (1) clearly identifying the students who will be the target of new intervention or approach, (2) providing a compelling rationale for the intervention to be developed, including the theoretical and empirical rationale for and practical importance of the intervention, and (3) clearly describing the approaches or interventions to be developed and tested, applicants are addressing aspects of the significance of their proposal.

a. Identification of students

The Institute recognizes that ASD covers a wide spectrum of abilities and that interventions appropriate for some students with ASD would not be appropriate for others. Applicants should clearly describe who the target population will be and how it will be identified. The population must focus on a grade range within the bounds of kindergarten through Grade 12.

b. Intervention to be developed

Applicants must propose to develop or modify an existing intervention for families of students with ASD. Interventions for families must be in conjunction with a school or district. The intervention may be school-based, or it may be home- or community-based as long as it is directly coordinated with the school and aimed at improving education outcomes. The applicant should include a description of the intervention and the theory of change for the intervention. Applicants should provide a strong theoretical and empirical rationale for the intervention. Applicants should explain why the proposed family intervention is likely to produce substantially better outcomes for students with ASD relative to current practice. A clear comparison of the proposed intervention with typical practice helps reviewers determine if the proposed intervention has the potential to produce substantially better student outcomes because it is sufficiently different from current practices and has "active ingredients" that appear on the basis of theoretical or empirical reasons to be powerful agents for improving the outcomes of interest. In the rationale to support the proposed intervention, applicants should address the *practical* importance of the proposed intervention. For example, would the proposed intervention be both affordable for and easily implemented by or in collaboration with schools?

c. Importance of the proposed research

As described in *Sections 6.A.a* and *6.A.b*, the applicant should describe and justify the selection of the target population and describe the proposed intervention. All of this information lends support to the applicant's justification for the importance of the proposed focused program of research. In addition, applicants should clearly summarize for reviewers their argument for why the proposed focused program of research is important to fund.

B. Research Plan for the Focused Program of Research

a. Methodological requirements for developing an intervention for families of students with ASD

For the Families and ASD Research Center, applicants must propose to develop or adapt an existing intervention for families of students with ASD. Applicants must provide a detailed description of the methods for developing the proposed intervention. Applicants should articulate the proposed methods for testing the feasibility of implementation of the prototype in an authentic education delivery setting or other authentic setting directly connected to an education delivery setting. Applicants should describe the systematic process they will use to collect empirical data that will provide feedback for refining the intervention. Applicants should provide sufficient detail to allow reviewers to judge their capacity to develop, refine, and improve the intervention so that the intervention operates as intended when implemented by the target user. In strong applications, reviewers will be able to understand (a) what will be developed, (b) how it will be developed, and (c) when the development will take place (e.g., timeline for the research activities). 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 implementation measures that can be used in the efficacy trial of the intervention.

b. Methodological requirements for evaluating the efficacy of the family intervention

In efficacy trials, the intervention may be implemented under what is sometimes called "ideal" conditions that include more support than what would be expected under routine practice. The goal of efficacy trials is to determine if an intervention *can work* to improve student outcomes with a limited and specified sample as opposed to if an intervention *will work* when implemented under conditions of routine practice. The Institute also encourages researchers to examine which organizational supports, tools, and procedures may be needed for sufficient implementation of the core components of the intervention under routine practice. For example, observational studies may describe which supports seem to be linked to the successful adoption of the intervention by all or specific subgroups of those implementing it.

Applicants must provide a detailed description of the research design, methods, and data analysis plan for evaluating the efficacy of the intervention. Applicants should include well-specified objectives that link to their design and analysis plans. Applicants should describe how potential threats to internal and external validity would be addressed.

Studies using random assignment to intervention and comparison conditions have the strongest internal validity for causal conclusions and, thus, are preferred whenever they are feasible. When a randomized trial is used, the applicant should clearly state and present a convincing rationale for the unit of randomization (e.g., students, classroom, teacher, or school). Applicants should explain the procedures for assignment of groups (e.g., schools) or participants to intervention and comparison conditions and how the integrity of the assignment process will be ensured.²

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. 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.

Applicants should clearly address the statistical power of the evaluation design to detect a reasonably expected and minimally important effect. When justifying what constitutes a reasonably expected effect, applicants should indicate clearly (e.g., by including the statistical formula) how the effect size was calculated. If a primary research question focuses on subgroups (e.g., severity of disability), applicants

² What a randomized control trial must do to meet the WWC's evidence standards is described in the WWC Procedures and Standards Handbook (2008) available at <http://ies.ed.gov/ncee/wwc/references/library/>.

should show that the proposed sample has sufficient power to address the proposed question about specific subgroups.

Applicants should describe the proposed measures, provide technical information on the reliability and validity of the measures, and detail procedures for collecting and coding data. In strong applications, applicants use the proposed theory of change as a framework and make clear how the proposed measures link to the proximal and distal outcomes that the intervention is intended to change. In strong applications, applicants would detail procedures for measuring the fidelity of the implementation of the intervention. Applicants must include a detailed description of their data analysis plan.

From the Institute's standpoint, the evaluation of the efficacy of the family intervention would be *methodologically successful* if, at the end of the grant period, the investigators had rigorously evaluated the impact of a clearly specified intervention on relevant student outcomes and under clearly described conditions using a research design that meets (without reservation) the Institute's What Works Clearinghouse standards (<http://whatworks.ed.gov>), whether or not the intervention is found to improve student outcomes relative to the comparison condition. The Institute would consider methodologically successful projects to be *pragmatically successful* if the rigorous evaluation determined that the intervention has a net positive impact on student outcomes in relation to the policy, program, or practice to which it is being compared. The Institute expects all methodologically successful projects to contribute to our theoretical understanding of education processes and procedures and to the advancement of the education sciences.

c. Timeline

Applicants should include a timeline that makes clear when research activities will be conducted. For example, researchers should make clear when development studies will be conducted and when evaluation activities (e.g., recruiting sample, developing measures, implementing intervention) will be conducted.

7. TOPIC FOUR: REQUIREMENTS FOR SPECIAL EDUCATION RESEARCH AND DEVELOPMENT CENTER ON INTERVENTIONS FOR FAMILIES OF STUDENTS WITH EMOTIONAL AND BEHAVIORAL DISORDERS (EBD)

For more than 20 years, there has been little improvement in in-school and post-school outcomes for children with emotional and behavioral disorders (EBD) (Bradley, Doolittle, & Bartolotta, 2008). Students with EBD have persistently had the worst educational, behavioral, and social post-school outcomes of any of the disability groups (Epstein, Nelson, Trout, & Mooney, 2005; Wagner, Newman, Cameto, and Levine, 2005).

It is widely recognized that the family plays a powerful role the cognitive, emotional, and behavioral development of children, and that parenting practices are critical to preventing or mitigating child behavior problems (e.g., Chamberlain & Patterson, 1995; Loeber & Hay, 1997; Welsh & Farrington, 2007). Decades of research have indicated that harsh and inconsistent parenting practices contribute to aggressive behavior (e.g., Patterson, 1976, 1982). Aggressive behavior that emerges during childhood is a key risk factor for the development of more severe problem behavior, as well as educational problems such as poor school achievement and poor school attendance (Campbell, 1995; Dodge, 1993; 1998; Patterson, Capaldi, & Bank, 1989; Webster-Stratton, 2000).

Recognizing this, one intervention approach intended to improve outcomes for students with EBD has been parent education and training programs designed to increase the use of effective parenting skills. Extensive evidence supports interventions that help children with disruptive behavior disorders primarily through teaching parents effective behavior management strategies and parenting skills (e.g., Fabiano et al., 2009; Pelham & Fabiano, 2008). This approach has evidence for improving behaviors of students across the developmental spectrum. For example, this approach has been shown to reduce negative social behaviors among behaviorally high-risk elementary school children (e.g., Gardner, Burton, &

Klimes, 2006), and reduce conduct problems and improve academic engagement for adolescents (e.g., Spoth, Randall, and Shin, 2008).

Despite the growing evidence for these types of parenting interventions, other approaches to family interventions are less well researched, particularly for their promise for improving student education outcomes. For example, family interventions for students with EBD could also consider a range of family support needs. Programs could help families develop formal and informal support systems such as parent support groups. Interventions may also help build a working relationship between parents and teachers or other service providers, and focus on increasing family knowledge of, access to, and use of school and community services for their child. In addition to improving parenting skills related to behavior management, programs may also teach parents ways to support their child academically and increase parent involvement in their child's education. Improving family involvement is particularly important for students with EBD, who are least likely to have families involved in their education (Wagner et al, 2006).

In addition, much less is known about the best training models for educating parents (e.g., web-based, videos, face-to-face, individual or group sessions), or how best to develop an family intervention that targets both the child and family to improve education outcomes for students. Many school-based behavior programs have a parent component associated with the core behavioral intervention but the parent component is typically the least researched or developed component of the intervention. Overall, even for the parenting interventions that are considered well-established approaches for improving child outcomes, parents are not accessing these services, particularly at school. Parent interventions are not well integrated into interventions schools use to address the needs of students with EBD, despite parent training being included as a related service under the Individuals with Disabilities Education Improvement Act (IDEA). When parent programs are implemented, the programs are typically plagued by low parent participation rates and high attrition rates (e.g., Kazdin, 1997; Spoth, Clair, Greenberg, Redmond, & Shin, 2007).

Thus, there is a critical and long-standing need for a systematic and coherent program of rigorous research to develop and identify effective family interventions, programs, and strategies that address the behavioral and academic needs of students with EBD. To address this need, and complement and enhance the NCSER's growing portfolio of research programs in Social and Behavioral Outcomes to Support Learning, the Institute is establishing a Special Education National Research and Development Center on Interventions for Families of Students with Emotional and Behavioral Disorders (EBD) (Families and EBD Research Center). The purpose of the Center is to conduct a program of research on the development and evaluation of interventions for families of children with or at risk of EBD from kindergarten through Grade 12. Such research must involve families in a way that is directly tied to the education system.

In addition to its focused program of research on the development and evaluation of interventions for families of children with EBD, the Families and EBD Research Center will conduct supplementary studies and engage in national leadership activities relevant to improving family outcomes in a way that ultimately improves outcomes for students with EBD.

A. Significance of the Focused Program of Research

For its focused program of research, the Families and EBD Center is required to (1) develop innovative interventions, programs, or practices, or modify existing interventions, programs, or practices, for families of students with EBD, and (2) rigorously test the efficacy of the intervention developed. By (1) clearly identifying the students who will be the target of new intervention or approach, (2) providing a compelling rationale for the intervention to be developed, including the theoretical and empirical rationale for and practical importance of the intervention, and (3) clearly describing the approaches or interventions to be developed and tested, applicants are addressing aspects of the significance of their proposal.

a. Identification of students

Applicants should clearly describe who the target population will be and how it will be identified. The research must focus on a grade range within the bounds of kindergarten through Grade 12. Target students may be students with or at risk for EBD.

Applicants proposing to study children at risk for developing EBD should present research-based evidence of an association between risk factors in their proposed sample and the potential identification of EBD. The determination of at-risk for disabilities status must be made on an *individual child basis* and may include, for example, factors used for moving children to higher tiers in a Response to Intervention model. *The method to be used for determining if a child is at risk for developing EBD should be made explicit in applications and should be completed as part of the sample selection process.* Evidence consisting only of general population characteristics (e.g., labeling children as "at risk for EBD" because they are from low income families) is *not* sufficient for this purpose.

b. Intervention to be developed

Applicants must propose to develop or modify an existing intervention for families of students with or at risk for developing EBD. Interventions for families must be in conjunction with a school or district. The intervention may be school-based, or it may be home- or community-based as long as it is directly coordinated with the school and aimed at ultimately improving education outcomes. The applicant should include a description of the intervention and the theory of change for the intervention. Applicants should provide a strong theoretical and empirical rationale for the intervention. Applicants should explain why the proposed family intervention is likely to produce substantially better outcomes for students with EBD relative to current practice. A clear comparison of the proposed intervention with typical practice helps reviewers determine if the proposed intervention has the potential to produce substantially better student outcomes because it is sufficiently different from current practices and has "active ingredients" that appear on the basis of theoretical or empirical reasons to be powerful agents for improving the outcomes of interest. In the rationale to support the proposed intervention, applicants should address the *practical* importance of the proposed intervention. For example, would the proposed intervention be both affordable for and easily implemented by or in collaboration with schools?

c. Importance of the proposed research

As described in *Sections 7.A.a* and *7A.b*, the applicant should describe and justify the selection of the target population and describe the proposed intervention. All of this information lends support to the applicant's justification for the importance of the proposed focused program of research. In addition, applicants should clearly summarize for reviewers their argument for why the proposed focused program of research is important to fund.

B. Research Plan for the Focused Program of Research

a. Methodological requirements for developing an intervention for families of students with EBD

For the Families and EBD Research Center, applicants must propose to develop or modify an existing intervention for families of students with EBD. Applicants must provide a detailed description of the methods for developing or adapting the proposed intervention. Applicants should articulate the proposed methods for testing the feasibility of implementation of the prototype in an authentic education delivery setting or other authentic setting directly connected to an education delivery setting. Applicants should describe the systematic process they will use to collect empirical data that will provide feedback for refining the intervention. Applicants should provide sufficient detail to allow reviewers to judge their capacity to develop, refine, and improve the intervention so that the intervention operates as intended when implemented by the target user. In strong applications, reviewers will be able to understand (a) what will be developed, (b) how it will be developed, and (c) when the development will take place (e.g., timeline for the research activities). 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 implementation measures that can be used in the efficacy trial of the intervention.

b. Methodological requirements for evaluating the efficacy of the family intervention

In efficacy trials, the intervention may be implemented under what is sometimes called "ideal" conditions that include more support than what would be expected under routine practice. The goal of efficacy trials is to determine if an intervention *can work* to improve student outcomes with a limited and specified sample as opposed to if an intervention *will work* when implemented under conditions of routine practice. The Institute also encourages researchers to examine which organizational supports, tools, and procedures may be needed for sufficient implementation of the core components of the intervention under routine practice. For example, observational studies may describe which supports seem to be linked to the successful adoption of the intervention by all or specific subgroups of those implementing it.

Applicants must provide a detailed description of the research design, methods, and data analysis plan for evaluating the efficacy of the intervention. Applicants should include well-specified objectives that link to their design and analysis plans. Applicants should describe how potential threats to internal and external validity would be addressed.

Studies using random assignment to intervention and comparison conditions have the strongest internal validity for causal conclusions and, thus, are preferred whenever they are feasible. When a randomized trial is used, the applicant should clearly state and present a convincing rationale for the unit of randomization (e.g., students, classroom, teacher, or school). Applicants should explain the procedures for assignment of groups (e.g., schools) or participants to intervention and comparison conditions and how the integrity of the assignment process will be ensured.³

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. 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.

Applicants should clearly address the statistical power of the evaluation design to detect a reasonably expected and minimally important effect. When justifying what constitutes a reasonably expected effect, applicants should indicate clearly (e.g., by including the statistical formula) how the effect size was calculated. If a primary research question focuses on subgroups (e.g., severity of disability), applicants should show that the proposed sample has sufficient power to address the proposed question about specific subgroups.

Applicants should describe the proposed measures, provide technical information on the reliability and validity of the measures, and detail procedures for collecting and coding data. In strong applications, applicants use the proposed theory of change as a framework and make clear how the proposed measures link to the proximal and distal outcomes that the intervention is intended to change. In strong applications, applicants would detail procedures for measuring the fidelity of the implementation of the intervention. Applicants must include a detailed description of their data analysis plan.

From the Institute's standpoint, the evaluation of the efficacy of the family intervention would be *methodologically successful* if, at the end of the grant period, the investigators had rigorously evaluated the impact of a clearly specified intervention on relevant student outcomes and under clearly described conditions using a research design that meets (without reservation) the Institute's What Works Clearinghouse standards (<http://whatworks.ed.gov>), whether or not the intervention is found to improve student outcomes relative to the comparison condition. The Institute would consider methodologically

³ What a randomized control trial must do to meet the WWC's evidence standards is described in the WWC Procedures and Standards Handbook (2008) available at <http://ies.ed.gov/ncee/wwc/references/library/>.

successful projects to be *pragmatically successful* if the rigorous evaluation determined that the intervention has a net positive impact on student outcomes in relation to the policy, program, or practice to which it is being compared. The Institute expects all methodologically successful projects to contribute to our theoretical understanding of education processes and procedures and to the advancement of the education sciences.

c. Timeline

Applicants should include a timeline that makes clear when research activities will be conducted. For example, researchers should make clear when development studies will be conducted and when evaluation activities (e.g., recruiting sample, developing measures, implementing intervention) will be conducted.

8. GENERAL REQUIREMENTS OF THE PROPOSED RESEARCH

A. Basic Requirements

a. Resubmissions

Applicants who intend to revise and resubmit a proposal that was submitted to one of the Institute's previous competitions but that was not funded must indicate on the application form that their FY 2012 proposal is a revised proposal. Their prior reviews will be sent to this year's reviewers along with their proposal. Applicants should indicate the revisions that were made to the proposal on the basis of the prior reviews using no more than 3 pages of Appendix A.

Applicants who have submitted a somewhat similar proposal in the past but are submitting the current proposal as a new proposal must indicate on the application form that their FY 2012 proposal is a new proposal. Applicants should provide a rationale explaining why the current proposal should be considered to be a "new" proposal rather than a "revised" proposal at the beginning of Appendix A using no more than 3 pages. Without such an explanation, if the Institute determines that the current proposal is very similar to a previously unfunded proposal, the Institute may send the reviews of the prior unfunded proposal to this year's reviewers along with the current proposal.

b. Applying to multiple competitions or topics

Applicants may submit proposals to more than one of the Institute's competitions in FY 2012. In addition, within a particular competition, applicants may submit multiple proposals. However, applicants may submit a given proposal only once (i.e., applicants may not submit the same proposal or similar proposals to multiple competitions). If the Institute determines prior to panel review that an applicant has submitted the same proposal or similar proposals 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 similar proposals within or across competitions and if the proposal is determined to be worthy of funding, the Institute will select the competition under which the proposal will be funded.

B. Requirements for the Focused Program of Research

The Institute intends for the work of the R&D Centers to include a focused program of research that ideally will result in solutions or answers to specific special 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 2012 R&D 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 accomplish the goals specified under Section 4 *Requirements for Special Education Research and Development Center on School-based Interventions for Secondary Students with Autism Spectrum Disorders* or Section 5 *Requirements for Special Education Research and Development Center on Reading Instruction for Deaf and Hard of Hearing Students* or Section 6 *Requirements for Special Education*

Research and Development Center on Family Interventions for Students with Autism Spectrum Disorders or *Section 7 Requirements for Special Education Research and Development Center on Family Interventions for Students with Emotional and Behavioral Disorders*. The Institute strongly discourages applications that propose a model in which multiple investigators each conduct separate studies that are only loosely coordinated around the 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, the majority of the application should be a detailed description of the focused program of research.

a. Significance of the focused program of research

Because review panels typically read applications across a number of research programs, it is most helpful if in the first sentence of the project narrative, the applicant identifies the research program to which the application has been submitted (e.g., "This is an application for a Special Education R&D Center on Secondary Students with Autism Spectrum Disorders").

The rationale for the significance of the focused program of research must address specific requirements detailed in *Section 4.A* or *Section 5.A* or *Section 6.A* or *Section 7.A Significance of the Focused Program of Research*.

b. Research plan 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. Applications should 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.

The methodological requirements for the focused program of research are specified in *Section 4.B* or *Section 5.B* or *Section 6.B* or *Section 7.B Research Plan for the Focused Program of Research*.

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. (The timeline may be included in Appendix A.)

C. Requirements for Other Center Activities

a. Requirements for supplemental research projects

As part of the Center activities, applicants are expected to conduct smaller, supplemental research projects that speak to other issues that are important within the context of the broad topic of the Center. These projects are typically ones that can be completed within 9 to 12 months. Because these studies are expected to be completed in a relatively short period, typical supplemental studies involve secondary analyses of longitudinal data sets.

Because the Center will work cooperatively with the Institute to select and design supplemental studies to respond to pressing policy and practice needs within the topic covered by the Center, the Institute does not expect applicants to provide highly detailed research plans for these studies in the application. **The Institute expects applicants to devote no more than two or three paragraphs to the description of each supplemental study.** 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 supplemental 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. Applicants should bear in mind that, although this section of the proposal

does not need to be long, capacity for conducting supplemental research projects will carry weight in the scoring of the application.

b. 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, policymakers, and practitioners to identify promising areas of research, development, and dissemination for the field.

Because the Center will work cooperatively with the Institute in the development and planning of such activities, the Institute does not expect applicants to provide highly detailed plans for the leadership activities. Applicants should explain why the proposed Center staff is qualified to fulfill this leadership role if awarded a Center and describe at least 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. In addition, applicants should identify appropriate organizations and agencies with which they might collaborate in carrying out leadership activities. 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.

D. Management and Institutional Resources

The Institute anticipates that the focused program of research, as well as the supplemental studies, and national leadership activities will require the coordination of multiple scientists and other partners. 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.

Competitive applicants will have access to institutional resources that adequately support research activities and access to schools or other education delivery settings in which to conduct the research.

When the proposed focused program of research includes conducting research activities in schools, 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. If the plans for the **first year** of grant activities include substantial work to be conducted in schools or other education delivery settings, strong applications will include documentation of the availability and cooperation of the schools or other education delivery settings that will be required to carry out that work via a letter of support from the education organization(s).

An applicant may involve curriculum or assessment developers or distributors (*including for-profit entities*) in the project, from having the developers as full partners in its proposal to using off-the-shelf curriculum or assessment materials without involvement of the developer or publisher. However, involvement of the developer or distributor should not jeopardize the objectivity of the research. Strong applications will carefully describe the role, if any, of the developer/distributor in the project. Applicants should describe how objectivity in the research would be maintained.

E. Personnel

Competitive applicants will have leadership and staff that collectively demonstrate (a) expertise in the content areas relevant to the Center topic (e.g., literacy and instruction of students who are deaf or hard of hearing); (b) the methodological expertise to carry out the proposed projects, (c) sufficient experience working with education delivery settings to carry out the proposed projects, and (d) experience that is relevant to national leadership activities. In the project narrative, applicants should briefly describe the qualifications, roles, responsibilities, and percent of time to be devoted to the project for key personnel.

PART IV GENERAL SUBMISSION AND REVIEW INFORMATION

9. MECHANISM OF SUPPORT

The Institute intends to award cooperative agreements pursuant to this request for applications. The maximum length of the award period is five years.

10. 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 project. The maximum duration of the award is 5 years and the maximum award for a 5-year project is \$10,000,000 (total cost).

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 supplemental studies, 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 described in this announcement, 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 at least 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 Center only if at least one application is deemed meritorious under peer review.

11. 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.

12. SPECIAL REQUIREMENTS

Recipients of awards are expected to publish, or otherwise make publicly available, the results of the work supported through this program. Institute-funded investigators must submit final, peer-reviewed manuscripts resulting from research supported in whole or in part by the Institute to the Educational Resources Information Center (ERIC, <http://eric.ed.gov>) upon acceptance for publication. An author's final manuscript is defined as the final version accepted for journal publication and includes all graphics and supplemental materials that are associated with the article. The Institute will make the manuscript available to the public through ERIC no later than 12 months after the official date of publication. Institutions and investigators are responsible for ensuring that any publishing or copyright agreements concerning submitted articles fully comply with this requirement.

Applicants must budget for one meeting each year (for up to 3 days) in Washington, D.C. with other grantees and Institute staff. At least one project representative must attend the meeting.

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.

Applicants may propose studies that piggyback onto an existing study (i.e., requires access to subjects and data from another study). In such cases, the Principal Investigator of the existing study must be one of the members of the research team applying for the grant to conduct the new project.

If an application is being considered for funding based on the technical merit scores from the scientific peer review panel and the research relies on access to secondary data sets, the applicant will need to

provide documentation that the applicant has access to the necessary data sets in order to receive a grant. This means that if an applicant does not have permission to use the proposed data sets at the time of application, the applicant will need to provide documentation to the Institute from the entity controlling the data set(s) indicating that the applicant has permission to use the data for the proposed research for the time period discussed in the proposal before the grant will be awarded. Similarly, applicants who had permission to use a proposed data set prior to the application may be asked to provide documentation that they continue to have permission to use the data set to conduct the proposed research during the project period.

If an application is being considered for funding based on the technical merit scores from the scientific peer review panel and the research relies on access to education delivery settings (e.g., districts and schools), the applicant will need to provide documentation that the applicant has access to the necessary districts and schools in order to receive the grant. This means that if an applicant does not have permission to conduct the proposed project in the necessary number of districts and schools at the time of application, the applicant will need to provide documentation to the Institute indicating that the applicant has successfully recruited the necessary number of districts and schools for the proposed research before the full first-year costs will be awarded. Similarly, applicants who recruited sufficient numbers of districts and schools prior to the application may be asked to provide documentation that the districts and schools originally recruited for the application continue to be willing partners in the research. 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 three months of receipt of an award.

Through the terms of the cooperative agreement, grantees will work with the Institute to plan activities related to supplemental research and leadership activities.

13. DESIGNATION OF PRINCIPAL INVESTIGATOR

The applicant institution is responsible for identifying the Principal Investigator. The Principal Investigator is the individual who has the authority and responsibility for the proper conduct of the research, including the appropriate use of federal funds and the submission of required scientific progress reports. An applicant institution may elect to designate more than one Principal Investigator. In so doing, the applicant institution identifies them as individuals who share the authority and responsibility for leading and directing the research Center intellectually and logistically. All Principal Investigators will be listed on any grant award notification. However, institutions applying for funding must designate a single point of contact for the Center. The role of this person is primarily for communication purposes on the scientific and related budgetary aspects of the Center and should be listed as the Principal Investigator. All other Principal Investigators should be listed as Co-Principal Investigators.

14. LETTER OF INTENT

The Institute asks all applicants to submit a letter of intent by 4:30 p.m. Washington D.C. time on the relevant due date for the competition to which they plan to submit. The information in the Letters of Intent enables Institute staff to identify the expertise needed for the scientific peer review panels and secure sufficient reviewers to handle the anticipated number of applications. The Institute encourages all interested applicants to submit a letter of intent, even if they think that they might later decide not to submit an application. The letter of intent is not binding and does not enter into the review of a subsequent application. The letter of intent must be submitted electronically using the instructions provided at <https://iesreview.ed.gov>. Receipt of the letter of intent will be acknowledged via email.

A. Content

The letter of intent should include:

- a. Descriptive title
- b. Center topic to which the applicant intends to submit a proposal
- c. Brief description of the proposed focused program of research

- d. Name, institutional affiliation, address, telephone number and e-mail address of the Principal Investigator and any co-Principal Investigators
- e. Name and institutional affiliation of any key collaborators and contractors
- f. Duration of the proposed project
- g. Estimated total budget request (the estimate need only be a rough approximation).

B. Format and Page Limitation

Fields are provided in the letter of intent for each of the content areas described above. The project description should be single-spaced and should not exceed one page (about 3,500 characters).

15. MANDATORY SUBMISSION OF ELECTRONIC APPLICATIONS

Grant applications must be submitted electronically through the Internet using the software provided on the Grants.gov Web site: <http://www.grants.gov/>. Applicants must follow the application procedures and submission requirements described in the Institute's Grants.gov Application Submission Guide and the instructions in the User Guides provided by Grants.gov.

Applications submitted in paper format will be rejected unless the applicant (a) qualifies for one of the allowable exceptions to the electronic submission requirement described in the Federal Register notice announcing the Special Education Research and Development Center Program (CFDA Number 84.324C) competition described in this Request for Applications and (b) submits, no later than two weeks before the application deadline date, a written statement to the Institute that documents that the applicant qualifies for one of these exceptions.

For more information on using Grants.gov, applicants should visit the Grants.gov web site.

16. APPLICATION INSTRUCTIONS AND APPLICATION PACKAGE

A. Documents Needed to Prepare Applications

To complete and submit an application, applicants need to review and use three documents: the Request for Applications, the IES Grants.gov Application Submission Guide, and the Application Package.

- The *Request for Applications* for the Special Education Research and Development Center Program (CFDA 84.324C) describes the substantive requirements for a research application.

✓ Request for Applications <http://ies.ed.gov/funding/>

- The *IES Grants.gov Application Submission Guide* provides the instructions for completing and submitting the forms.

✓ IES Grants.gov Application Submission Guide <http://ies.ed.gov/funding/>

Additional help navigating Grants.gov is available in the Grants.gov User Guides:

✓ Grants.gov User Guides <http://www.grants.gov/applicants/resources.jsp>

- The *Application Package* provides all of the forms that need to be completed and submitted. The application form approved for use in the competitions specified in this RFA is the government-wide SF 424 Research and Related (R&R) Form (OMB Number 4040-0001). The applicant must follow the directions in *Section C* below to download the Application Package from Grants.gov.

B. Date Application Package is Available on Grants.gov

The Application Package will be available on <http://www.Grants.gov/> by the following date:

Application Package Available by

July 21, 2011

C. Download Correct Application Package

a. CFDA number

Applicants must first search by the CFDA number for each IES Request for Applications *without* the alpha suffix to obtain the correct downloadable Application Package. For the Special Education Research Request for Applications, applicants must search on: **CFDA 84.324**.

b. Special Education Research and Development Center Application Package

The Grants.gov search on CFDA 84.324 will yield more than one Application Package. For the Special Education Research and Development Center Request for Applications, applicants must download the package for the appropriate deadline marked:

Application Package:	Special Education Research and Development Center Program CFDA 84.324C
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In order for the application to be submitted to the correct grant competition, applicants must download the Application Package that is designated for the grant competition and competition deadline. Using a different Application Package, even if that package is for an Institute competition, will result in the application being submitted to the wrong competition. Applications submitted to the wrong competition may not be reviewed for the Special Education Research and Development Center Program competition.

17. SUBMISSION PROCESS AND DEADLINE

Applications must be submitted **electronically and received by 4:30:00 p.m., Washington, D.C. time** on the application deadline date, using the standard forms in the Application Package and the instructions provided on the Grants.gov web site.

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

18. APPLICATION CONTENT AND FORMATTING REQUIREMENTS

In this section, the Institute provides instructions regarding the content of the (a) project summary/abstract, (b) project narrative, (c) Appendix A, (d) Appendix B, (e) Appendix C, and (f) bibliography and references cited. Instructions for all other documents to be included in the application (i.e., the SF-424 forms, biographical sketches, narrative budget justification, and human subjects narrative) are provided in the IES Grants.gov Application Submission Guide.

B. General Format Requirements

Margin, format, and font size requirements for the Center project summary/abstract, Center project narrative, Appendix A, Appendix B, Appendix C, and bibliography and references cited are described in this section. 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.

a. Page and margin specifications

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.

b. Spacing

Text must be single spaced in the narrative.

c. Type size (font size)

Type must conform to the following three requirements:

- The height of the letters must not be smaller than a type size of 12 point.
- Type density, including characters and spaces must be no more than 15 characters per inch (cpi)
For proportional spacing, the average for any representative section of text must not exceed 15 cpi.
- Type size must yield no more than 6 lines of type within a vertical inch.

Applicants should check the type size using a standard device for measuring type size, rather than relying on the font selected for a particular word processing/printer combination. The type size used must conform to all three requirements. Small type size makes it difficult for reviewers to read the application; consequently, the use of small type will be grounds for the Institute to return the application without peer review.

Adherence to type size and line spacing requirements is necessary so that no applicant will have an unfair advantage by using small type or by providing more text in their applications. *Note, these requirements apply to the PDF file as submitted.* As a practical matter, applicants who use a 12-point Times New Roman font without compressing, kerning, condensing or other alterations typically meet these requirements.

Figures, charts, tables, and figure legends may be in a smaller type size but must be readily legible.

d. Graphs, diagrams, tables

Applicants are encouraged to use black and white in graphs, diagrams, tables, and charts. If color is used, the applicant must ensure that the material reproduces well when photocopied in black and white.

C. Project Summary/Abstract

a. Submission

The Center project summary/abstract will be submitted as a separate .PDF attachment.

b. Page limitations and format requirements

The project summary/abstract is limited to one single-spaced page and must adhere to the margin, format, and font size requirements above.

c. Content

The Center project summary/abstract should include:

- (1) Title of the proposed Center
- (2) The topic under which the applicant is applying (i.e., Special Education National Research and Development Center on School-Based Interventions for Secondary Students with Autism Spectrum Disorders)
- (3) Brief description of the focused program of research
- (4) A list of the key Center personnel

D. Project Narrative

a. Submission

The Center project narrative will be submitted as a .PDF attachment.

b. Page limitations and format requirements

The Center project narrative is limited to **35 single-spaced pages** for all applicants. The 35-page limit for the project narrative 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. If the narrative for the Center project is determined to exceed the 35 single-spaced page limit, the Institute will remove any pages after the thirty-fifth page of the narrative.

Reviewers are able to conduct the highest quality review when applications are concise and easy to read, with pages numbered consecutively using the top or bottom right-hand corner.

c. Format for citing references in text

To ensure that all applicants have the same amount of available space in which to describe their Center in the project narrative, applicants should use the author-date style of citation (e.g., James, 2004), such as that described in the *Publication Manual of the American Psychological Association, 6th Ed.* (American Psychological Association, 2009).

d. Content

To be compliant with the requirements of the Request for Applications, the Center project narrative must include five sections: (a) Significance of the Focused Program of Research, (b) Research Plan for the Focused Program of Research, (c) Other Center Activities, (d) Management and Institutional Resources, and (e) Personnel. Information to be included in each of these sections is detailed in *Part III Requirements of the Proposed Research*. Incorporating the requirements outlined in this section provides the majority of the information on which reviewers will evaluate the proposal.

E. Appendix A (Optional)

a. Submission

Appendix A should be included at the end of the Project Narrative and submitted as part of the same .PDF attachment.

b. Page limitations and format requirements

Appendix A is limited to 15 pages. It must adhere to the margin, format, and font size requirements described in *Section 18.B. General Format Requirements*.

c. Content

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. In addition, in the case of a resubmission, the applicant may use up to 3 pages of the appendix to describe the ways in which the revised proposal is responsive to prior reviewer feedback. Similarly, applicants who have submitted a somewhat similar proposal in the past but are submitting the current proposal as a new proposal may use up to 3 pages in Appendix A to provide a rationale explaining why the current proposal should be considered to be a "new" proposal rather than a "revised" proposal. 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 35-page research narrative.

F. Appendix B (Optional)

a. Submission

Appendix B should be included at the end of the Project Narrative, following Appendix A, and submitted as part of the same .PDF attachment.

b. Page limitations and format requirements

Appendix B is limited to 10 pages. It must adhere to the margin, format, and font size requirements described in *Section 18.B. General Format Requirements*.

c. Content

The purpose of Appendix B is to allow applicants to include examples of curriculum materials, assessment items, computer screens, or other materials used in an intervention or assessment that is pertinent to the proposed project. These are the only materials that may be included in Appendix B; all other materials will be removed prior to review of the application. Narrative text related to the intervention or assessment (e.g., descriptions of research that supports the use of the revised curriculum components, the theoretical rationale for specific types of assessment items, or details regarding the implementation or use of the intervention) must be included in the 35-page Center project narrative.

G. Appendix C (Optional)

a. Submission

Appendix C should be included at the end of the Center Project Narrative, following Appendix B (or following Appendix A if no Appendix B is included), and submitted as part of the same .PDF attachment.

b. Page limitations and format requirements

Appendix C does not have a page limit. Appendix C contains letters of agreement from research partners (e.g. schools, districts, consultants, sources of data). Applicants must ensure that the letters reproduce well so that reviewers can easily read them. Applicants should not reduce the size of the letters.

c. Content

The purpose of Appendix C is to allow the applicant to include letters of agreement from partners (e.g., schools and districts), organizations holding data to be used in the project, and consultants.

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, resources, and/or data to the research project that will be required if the application is funded. The most common reason for projects to fail is loss of participating schools and districts.

H. Bibliography and References Cited

a. Submission

The section will be submitted as a .PDF attachment.

b. Page limitations and format requirements

There are no limitations to the number of pages in the bibliography. The bibliography must adhere to the margin, format, and font size requirements described in *Section 18.B. General Format Requirements*.

c. Content

Applicants should include complete citations, including the names of all authors (in the same sequence in which they appear in the publication), titles (e.g., article and journal, chapter and book, book), page numbers, and year of publication for literature cited in the research narrative.

19. APPLICATION PROCESSING

Applications must be submitted electronically and received by **4:30:00 p.m., Washington, D.C. time** on the application deadline date listed in the heading of this request for applications. Following 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.

20. 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 program of research and request for applications.

Each application will be assigned to one of the Institute's scientific review panels. At least three 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 will be prepared before the full peer 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.

21. 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 in *Part III Requirements of the Proposed Research*.

A. Significance of the Focused Program of Research

Does the applicant provide a compelling rationale for the significance of the project as defined in the sections on the significance of the focused program of research?

B. Research Plan for the Focused Program of Research

Does the applicant meet the requirements described in the sections detailing the methodological requirements for the focused program of research?

C. Plans for Other Center Activities

Do the content of the examples of proposed supplemental studies 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 appropriate training and experience and will commit sufficient time to competently implement the proposed research?

22. RECEIPT AND START DATE SCHEDULE

A. Letter of Intent Receipt Date

July 21, 2011

B. Application Deadline Date

September 22, 2011

C. Earliest Anticipated Start Date

July 1, 2012

D. Latest Possible Start Date

September 1, 2012

23. 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

24. INQUIRIES MAY BE SENT TO

A. Special Education Research and Development Center on School-Based Interventions for Secondary Students with Autism Spectrum Disorders

Dr. Amy Sussman
Institute of Education Sciences
555 New Jersey Avenue, NW
Washington, D.C. 20208

Email: Amy.Sussman@ed.gov
Telephone: (202) 219-2126

B. Special Education Research and Development Center on Reading Instruction for Deaf and Hard of Hearing Students

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

Email: Kristen.Lauer@ed.gov
Telephone: (202) 219-0377

C. Special Education Research and Development Center on Interventions for Families of Students with Autism Spectrum Disorders

Dr. Amy Sussman
Institute of Education Sciences
555 New Jersey Avenue, NW
Washington, D.C. 20208

Email: Amy.Sussman@ed.gov
Telephone: (202) 219-2126

D. Special Education Research and Development Center on Interventions for Families of Students with Emotional and Behavioral Disorders

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

Email: Jacquelyn.Buckley@ed.gov
Telephone: (202) 219-2130

25. 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. This program is not subject to the intergovernmental review requirements of Executive Order 12372.

26. 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(a)-(c), 75.219, 75.220, 75.221, 75.222, and 75.230.

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