

**Interdisciplinary Institute for the Study of Language and Literacy  
(IISLL)**

**Submitted by**

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We are proposing the establishment of an Interdisciplinary Institute for the Study of Language and Literacy (IISLL). The IISLL will support research directed at a broad range of issues concerning language and literacy throughout the lifespan. It reflects a general theme of research that cuts across several colleges, departments, and student services and as such, has the promise of leading to interdisciplinary research, teaching, and community outreach and service endeavors. Language and literacy research naturally includes both basic and applied scholarship and, therefore, IISLL will map onto several strategic plan initiatives (Initiatives 1, 2, and 3) and will bring these together into one Institute. Therefore, the proposed goals and objectives below focus on engaging in high quality scientific research in language, literacy and methodology, promoting best practices in educational programming, and providing evidence-based outreach to the community.

#### **A. *Goals and Objectives***

1. To promote and conduct scholarship and teaching related to literacy and language development across the lifespan, including research on oral language development; beginning reading development; adolescent literacy; post-secondary literacy; adult literacy; second language literacy; reading difficulties; oral language and reading interventions and treatments; writing development; and assessment, research, and statistical methods for studying language development.
  - Objective 1-1. Conduct basic research on language and literacy development and across the lifespan from the combined expertise of researchers in the institute.
  - Objective 1-2. Conduct basic research on assessment, intervention design, research design, and statistical methodology for investigating literacy and language development and teaching across the lifespan from the combined expertise of methodologists and researchers in the Institute.
  - Objective 1-3. Seek external funding for interdisciplinary work in Objectives 1-1 and 1-2.
  
2. To conduct and disseminate research on evidence-based literacy and language practices as applied in local education agencies, higher education agencies, and community-based organizations.
  - Objective 2-1. Implement research studies of evidence-based literacy and language practices in schools, colleges/universities, NIU Literacy and Speech-Language-Hearing Clinics, and other community and health settings.
  - Objective 2-2. Disseminate information regarding evidence-based literacy and language practices via workshops, conferences, written publications, and electronic media.
  - Objective 2-3. Seek external funding for applied research and dissemination in Objectives 2-1 and 2-2.
  
3. To promote opportunities for interdisciplinary research, scholarship, and teaching among students and faculty affiliated with the Institute.
  - Objective 3-1. Create faculty collaborative networks that cross programmatic and departmental lines and combine research in multiple disciplines and across different developmental (i.e., age and stage) periods.
  - Objective 3-2. Create a Certificate of Graduate Studies in Literacy and Language.
  - Objective 3-3. Provide assistantships for graduate students in any of the participating partner programs to conduct research in the collaborative networks.
  - Objective 3-4. Seek external funding to support the formation of collaborative networks and the scholarship of graduate students in these networks outlined in Objectives 3-1 and 3-3.

4. To provide language and literacy outreach services to: (a) local education agencies, higher education agencies, and community-based organizations related to evidence-based practices and (b) clients through NIU Clinics and community programs.
  - Objective 4-1. Conduct workshops and conferences and provide school- and community-based literacy, language, and assessment/analysis coaches for disseminating evidence-based literacy and language practices to applied settings.
  - Objective 4-2. Train clinicians to implement evidence-based practices in NIU Literacy and Speech and Hearing Clinics and in other clinical settings in the community.
  - Objective 4-3. Seek external funding for outreach and training activities in Objectives 4-1 and 4-2.
  
5. To develop a Technical Assistance Center to train educators from PK-20 educational settings and community-based organizations in the use of methods and models to conduct sophisticated research and evaluation in the areas of beginning reading development, adolescent literacy, post-secondary literacy, adult literacy, second language literacy, assessment, reading difficulties, reading interventions and treatments, writing development, and oral language development.
  - Objective 5-1. Train PK-20 and community-based educators to implement evidence-based literacy and language practices in classroom and educational settings either directly or through in-school literacy and language coaches.
  - Objective 5-2. Train PK-20 and community-based educators to implement evidence-based assessment and analysis methods to correctly interpret student behaviors and skills directly and through in-school assessment coaches.
  - Objective 5-3. Seek external funding opportunities for school- and community-based training activities in Objectives 5-1 and 5-2.

***B. Need for and unique contribution of IISLL to the NIU Community***

IISLL emphasizes a particular strength of Northern Illinois University. There are multiple colleges and departments within the university containing faculty members whose scholarship, teaching, and service focus on language, literacy, or literacy education. As discussed below, there are several research, teaching, and service laboratories, clinics, and collaborations that are thematically aligned with the proposed cluster. The laboratories cut across the disciplines of psychology, anthropology, educational psychology, literacy education, linguistics, communication disorders, and assessment, research and statistical methods and these reflect an interdisciplinary approach to the study of language across contexts and the lifespan. As such, the study of language development (i.e., written and spoken) represents a potential unifying theme of research and service that can bridge colleges, departments, and programs within the NIU community. As evidence of the strength of the community, there have been several initiatives and grant proposals whose foundation was rooted in the potential for interdisciplinary research on language and literacy. For example, the primary focus of the Cognitive Studies Initiative spearheaded by Dean Fred Kitterle was on language and involved faculty in psychology, linguistics, computer science, and anthropology. Additionally, two grant proposals for the development of an interdisciplinary pre-doctoral program in educational sciences were submitted to the Institute for Educational Sciences, U.S. Department of Education. The focus of both proposals was on language and literacy education because it reflected a natural strength of the NIU community and is recognized as a problem of national concern (National Reading Panel, 2000; Snow, 2002).

Specific examples of interdisciplinary language and literacy research programs at NIU include the following. Early language development has been the focus of research by a team that includes Pamela

Hadley (University of Illinois, external partner), Matthew Rispoli (University of Illinois, external partner) and Janet Holt (NIU). Rispoli has had four NIH and NSF grants funded to study sentence and language production for a total of \$305,000; Hadley has been funded by NIH for the study of grammatical development in children with specific language impairments for \$214,000. Additionally, the team has an NSF proposal pending. Further, at least four current externally-funded grants for teacher professional development, including an NSF grant (Kitts, Perry et al., 2007) and three ISBE math and science partnership grants (Khoury, Shafer et al., 2007; Miller et al., 2007; Vorha et al., 2007) include a strong emphasis on literacy learning strategies, and involve faculty members with expertise in this area. Another interdisciplinary endeavor has been undertaken in the critical area of English as a Second Language through the Quill program and Project Success. These initiatives involved the collaborative efforts of NIU faculty and local education agencies to increase the number and improve the quality of teachers who serve English Language Learners. Quill was funded by a five-year national professional development grant originally funded in 2002 under Title 3 of the No Child Left Behind Act (\$289,370 per year for 5 years). Project Success is also a five-year national professional development grant funded by the Department of Education (\$300,000 per year renewable for five years).

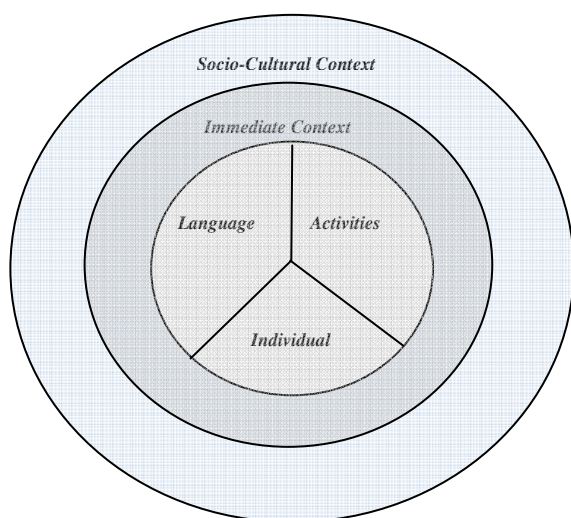
IISLL reflects a growing sentiment that the complex nature of language is such that it requires an interdisciplinary approach (Snow, 2002). First, an understanding of language must be rooted in a developmental perspective that focuses on the variety of language activities that span across individuals' lives. Our experience with language typically starts immediately after birth in initial interactions with primary caregivers. These continued early linguistic experiences have profound impacts on the development of early literacy practices (Harste, Woodward, & Burke, 1984). As we enter formal education, the linguistic activities become more complex, moving beyond informal oral discourse to formal modes of communication in the context of reading and writing. It is well understood that a student's academic success is contingent on the development of these formal skills. Indeed, one can argue that the development of these skills is critical for success beyond formal education and extend throughout one's lifetime.

In order to further illustrate the need for an interdisciplinary approach to the study of language, consider the model of language presented in Figure 1, which was adapted from a model of literacy (Snow, 2002). There are three elements to linguistic activities. The first is the individual, which consists of the cognitive and neurological systems that support the use of language. Moreover, this model attends to the characteristics of individuals that lead to individual differences in language processing proficiencies throughout the lifespan. The second element involves the linguistic systems themselves, which comprise the lexical, syntactic, semantic, and pragmatic constraints imposed by language. The third element involves the activities and the various situations where we use language, such as in the context of oral conversation, reading, and writing. Each of these elements exists in a larger context. One may think of the context as consisting of a particular time and place and, moreover, a specific learning situation. For example, language use in a classroom engenders different goals and objectives than in the context of an Internet chatroom. Additionally, the larger socio-economic contexts interact with these "micro" contexts to influence language development. That is, language use is influenced by cultural activities that provide a basis for understanding how a particular community views and understands the world. Moreover, these cultural systems feed back into the knowledge of the individual, dynamically changing features of language, and the activities that are deemed acceptable and appropriate in a particular time and place.

There are several NIU research laboratories and service facilities that cut across colleges, departments, and programs and which focus on or more of these elements of language. For example, researchers in the *Discourse Technology Laboratory*, within the Department of Psychology, conduct basic research on reading comprehension in young adult populations and develop computer based interventions and assessment tools help and identifying struggling students. Their approaches to these problems are rooted in theories of language processing from the field of cognitive sciences. As another example, research in the *Secondary Analysis of National Survey Data Lab*, in the College of Education, focuses on examining and analyzing existing data from several large-scale data sets that contain information on children, adolescents' and adults' literacy skills and practices. This research has been conducted by Drs.

M Cecil Smith, Janet Holt, and Thomas Smith. In the Literacy Clinic and the School-University Partnership Program, researchers in the College of Education (including Drs. Elish-Piper, Falk-Ross, L'Allier, Richgels, and Stahl) conduct applied research on curricular approaches and programs in PreK-20 settings and in literacy teacher education to gain greater insight into research-based best practices. Collaborations between Dr. Holt from the Educational Research and Evaluation faculty and Speech and Hearing Science faculty at the University of Illinois have been established in the study of early language development. As a final example, the *Linguistic and Cognitive Anthropology Laboratory* is headed by Dr. Bennardo in the Anthropology Department. The lab focuses on how a cultural model can be found in the way that a population cognitively and linguistically represents spatial relationships, social relationships (social networks), and political action.

Figure 1. *A model of language and literacy.*



As is evident in the qualifications section of this proposal, NIU has a number of faculty members who are making substantial scholarly and applied contributions and have been successful in acquiring external funding. However, despite our prior efforts (e.g., The Cognitive Studies Initiative), the current structure of the NIU community has failed to take maximum advantage of the potential synergies across existing collaborations and laboratories that study the various aspects of language shown in Figure 1.

IISLL has the potential to bring these and other laboratories, facilities, and faculty members together to provide a Language & Literacy Research Center that offers a comprehensive study of language across the lifespan. There are several advantages to the NIU community. First, it will establish NIU in the forefront of the interdisciplinary studies of language and literacy. Existing centers similar to IISLL exist in only a few universities (e.g., The Beckman Institute at the University of Illinois; The Center for the Study of Reading at the University of Illinois; The Learning Research and Development Center at the University of Pittsburgh; The New Literacies Research Center at the University of Connecticut). Second, it will increase the potential to develop projects that merit external funding. As an example, Drs. Magliano and Millis in the Department of Psychology are currently finishing a grant funded by the U.S. Department of Education to establish the proof of concept for a new approach for assessing reading processes and strategies. The next step of the project involves developing research designed to assess and validate its uses in educational settings. However, Drs. Magliano and Millis are trained as cognitive psychologists and do not have sufficient knowledge of literacy education, teachers, and educational contexts to fully develop these studies. IISLL will provide a basis for developing collaborations with the appropriate faculty members that have this knowledge; therefore, IISLL will provide a mechanism for translating basic research into practice in the NIU community, service region,

and beyond through the Technical Assistance Center. In another example, Dr. Holt from Educational Research and Evaluation at NIU has collaborated with Drs. Hadley and Rispoli from Speech and Hearing Science at the University of Illinois on several research projects and on grant proposals, as well as consulted on P. Hadley's NIH grant. However, more extensive opportunities exist for grant collaboration between NIU faculty with the University of Illinois group, for example, to track samples of children in northern Illinois that have been extensively studied by Hadley, Rispoli, and Holt to connect early language development with school-aged reading and writing skills to form comprehensive models of language development. Yet another benefit of IISLL is that it could provide a basis for disseminating knowledge and educational products that have value beyond the NIU community. For example, the reading comprehension assessment tools and interventions that are being developed in the Discourse Technologies Laboratory could contribute significantly to the services provided to clients of the NIU Literacy Clinic and to students participating in the CHANCE program. Once these tools and methods are proven in NIU settings, IISLL could facilitate their incorporation into NIU courses that prepare language and literacy professionals as well as in school-university partnership settings affiliated with NIU. Furthermore, through the outreach functions of IISLL, these research-based tools and approaches can be shared with other educational institutions across northern Illinois and beyond. The Institute's Technical Assistance Center will be responsible for these functions.

### ***C. Proposed Structure and Unique Contribution of IISLL***

Three inter-related centers will be established under the Institute's operating framework (see Figure 2). IISLL will take advantage of the synergies that already exist to create an Institute that provides a comprehensive, interdisciplinary approach to the study of language and literacy and assessment, and which brings together researchers, scholars, and educators who focus on a variety of ways to analyze language and literacy (See Figure 3). Cognitive science is an interdisciplinary field by its nature and with respect to IISLL will involve researchers in cognitive psychology, linguistics, and anthropology. Educational sciences will involve researchers in educational psychology and literacy education. Developmental sciences will involve developmental and educational psychologists who study language development and learning from a developmental perspective. Finally, researchers across disciplines who are experts in scientific methodology and quantitative analyses will provide expertise in the different approaches for studying language and literacy.

Given the current emphasis on sound scientific approaches for educational sciences in funding agencies such as the Institute for Educational Sciences, establishing the **Language and Literacy Research Center** within the IISLL is critical for the pursuit of extramural funding. The goal is to foster the interaction between research disciplines and university services that address the components of language specified in Figure 1. Cognitive, developmental, and educational psychologists provide a basis for building relevant models of the individual language user. Linguists provide an understanding as to the nature and structure of language. Psychology, educational psychology, literacy education, linguistics, and anthropology are disciplines that study language in the context of a variety of activities. As such, each discipline provides unique contributions regarding the understanding of language and literacy.

A **Research and Statistical Methods and Assessment (ReSA) Center** -- in which the development of new methods and applications of cutting-edge methodologies to the study of language and literacy are advanced -- is a critical component of the Institute. The development and application of new assessment methods to investigate reading and writing progress in school-age children, the study of measures of language development; the development of growth models to study language and literacy development will be advanced within the ReSA Center.

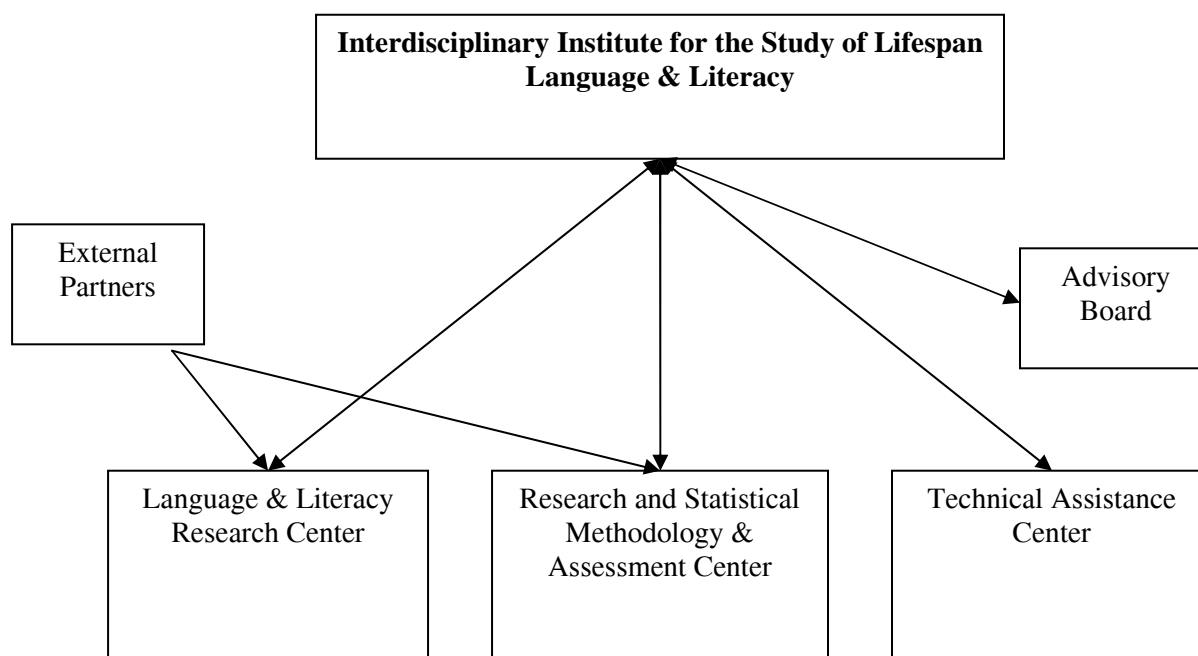
The **Technical Assistance Center** will work with local education agencies, higher education agencies, and community-based organizations to implement and disseminate research-based programs, curriculum, and assessments developed by IISLL. The need for such research-based best practices is well documented (e.g., Gambrell, Morrow, & Pressley, 2007; U.S. Department of Education, 2002); however, the articulation of research into practice is often difficult due to the separation of research programs from

educational programs. IISLL's Technical Assistance Center will serve as the conduit from research to practice so that educators will have access to and support to implement research-based best practices.

External partners, such as those named previously, will contribute substantially to the research and scholarship within IISLL, collaborating with NIU faculty members and research teams on grant proposals and related work.

An advisory board will be comprised of non-NIU personnel who are leaders in several fields relevant to language and literacy research, scholarship, and education. These individuals will have a strong history of conducting interdisciplinary research and/or have developed interdisciplinary institutes or programs.

Figure 2. *Proposed structure for the Interdisciplinary Institute for the Study of Lifespan Language & Literacy.*



### **C.1. Existing research programs, and student services that will contribute to IISLL.**

Given the goals stated above, IISLL will promote both basic and applied endeavors with the goal of bridging the two. This goal is critical to ensure that applied endeavors directed at promoting proficiencies in language processing are based on sound theories of cognition (Magliano, Millis, Ozurur, & McNamara, 2007; Pellegrino, & Chudowsky, 2003; Snow, 2002). Indeed, in recognition of the importance of basic interventions and curricula on cognitive theories, most calls for proposals from federal agencies (i.e., Institute for Educational Sciences, NSF) require that interventions, assessment tools, and new curricula be based on relevant theories of cognition.

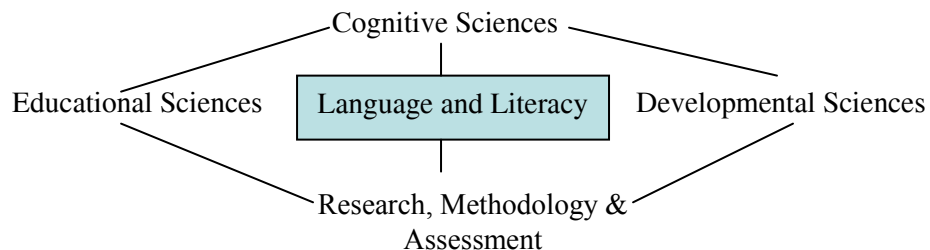
There are several research programs and student service centers within the NIU community that are poised to take part in IISLL. Brief descriptions of the research programs and student services that will be included in the inaugural IISLL are provided below.

#### **C.1.1. Research on Language and Literacy Development.**

**C.1.1a. Research programs in early language development.** Dr. Elise Frank Masur directs the Research Laboratory on Interaction and Early Language in the Psychology Department at Northern

Illinois University. Research in this laboratory focuses on the experiences infants and young children engage in with their parents that contribute to developing their language and communicative skills, and help prepare them to be successful when they reach school age. Studies have investigated relations between children's vocabulary acquisition and a) responsive and directive characteristics of maternal speech; b) imitative interchanges between mothers and children; and c) mothers' and children's responses to their partners' imitation. Recent studies have also included analyses of the typical independent and dyadic play behaviors of infants and the presence of the television and of relations between preschool children's language abilities and book-reading experiences and their phonemic awareness and letter-name knowledge, two pre-literacy measures predictive of reading skill in the early elementary grades.

Figure 3: *A model of the interdisciplinary research approach of IISLL.*



Dr. Holt from Educational Research and Evaluation at Northern Illinois University is collaborating with Drs. Hadley and Rispoli from the Applied Psycholinguistics Lab at the University of Illinois in the development of assessment systems for measuring grammatical development in young children and models of early language development for normally developing children as well as children with specific language impairments. It is important to note that the 40+ children studied by this collaborative team all resided in DeKalb county and represent the beginning of a long term study of language development and literacy outcomes that would be of great scientific value. To date, the team has produced numerous publications, including a 2006 publication that earned the Editor's Award for the Language section of the *Journal of Speech, Language, and Hearing Research* (Hadley & Holt). Drs. Hadley and Rispoli have been funded for their research via NIH and NSF and a current application for NSF funding is pending for the team.

**C.1.1b. Research program in early literacy development.** Dr. Don Richgels, Department of Literacy Education, studies children's early literacy development (preschool – grade 1), emphasizing its relation to spoken language development. Dr. Richgels has identified a number of *written language learning routines* and he has argued that the construct of *written language-learning routine* has more power to shape effective literacy instruction than many competing pedagogical constructs. Dr. Richgels was awarded the NIU Presidential Research Professor Award in 2005.

**C.1.1c. Research programs in the NIU Literacy Clinic to study K-12 literacy and reading Development.** The NIU Literacy Clinic provides research-based assessment and instructional services to students in grades K-12 across NIU's service region. Research projects affiliated with the Literacy Clinic include analyses of common reading problems, examinations of instructional interventions, assessment of parent-teacher collaborations to support children's literacy development, and studies of literacy teacher education. Teams of NIU faculty and graduate students have conducted such research in recent years, including Drs. Elish-Piper, Falk-Ross, and L'Allier. The Literacy Clinic is partially-funded by service fees, contracts, and grants (e.g., The International Reading Association, The Woodcock-Munoz Foundation, and Altrusa International).

**C.1.1d. Research programs in K-12 English-as-a-second language education.** Project QUILL (Drs. Carrier, Orem, Stahl, and Wholeben) and Project SUCCESS (Drs. Orem and Stahl) examine research-based best practices for teaching English Language Learners (ELLs) in K-12 settings. QUILL

was funded under Title 3 of the No Child Left Behind Act, and SUCCESS is funded under Title 3 of the U.S. Department of Education. The major foci of these projects are (1) to assist provisionally certified bilingual teachers to earn Illinois teaching certification; (2) to prepare rural school districts to serve ELLs through the use of research-based practices; and (3) to help NIU professors, instructors, clinical supervisors, and cooperating teachers implement effective practices for teaching ELLs into NIU's teacher education programs. These programs have received over six million dollars of funding in grants and contracts.

***C.1.1e. Research programs in the NIU Speech-Language-Hearing Clinic.*** The NIU Speech-Language-Hearing Clinic provides evidence-based practice in the delivery of quality, state-of-the-art services in audiology, speech-language pathology, and rehabilitation counseling to the citizens of northern Illinois and the surrounding areas. The Clinic focuses on speech, language, and hearing issues across the lifespan, beginning at birth with screenings of newborns for hearing and continuing across childhood, adolescence, and adulthood. The Clinic provides services to over 8,000 clients per year. Research programs in the NIU Speech-Language-Hearing Clinic involve many faculty members (e.g., Professors Davidson, Morris, Olson, and Tattersall) and include strands in speech, language, and hearing problems and related best-practices and interventions. The Speech-Language-Hearing Clinic is funded through external fees and contracts.

***C.1.1f. Research program in adolescent and adult text comprehension.*** This research program involves Drs. Britt, Magliano, and Millis in the Department of Psychology. Their research programs share the common focus of discourse comprehension within the context of evolving computer technologies. They conduct basic research designed to test cognitive models of reading comprehension and argument evaluation. Researchers in this program have received approximately \$5,000,000 in external support from the U.S. Department of Education and National Science Foundation to develop computer based assessment tools of comprehension proficiency and to develop intelligent tutor systems that teach literacy comprehension and argument evaluation skills.

***C.1.1g. Research program in adolescent and adult literacy development.*** Professor M Cecil Smith has conducted analyses of adults' literacy practices (e.g., reading books, periodicals, and documents) and the associations of different literacy practices to literacy proficiencies, based on standardized assessments. Primarily, this work has been conducted through either secondary analyses of large-scale data sets or through the use of a daily diary in which adult participants record their reading activities. He has also been involved as a research associate for the Longitudinal Study of Adult Learning (LSAL) at Portland State University. The LSAL followed a group of adults school dropouts over several years to assess their literacy abilities. Currently, he is conducting secondary analyses of the National Assessment of Adult Literacy, a project of the National Center for Education Statistics (U.S. Department of Education), examining relationships among literacy practices, literacy skills, and employment status. Generally, his work has focused on the role of literacy practices and their associations with measured literacy abilities. He has received funding from the American Educational Research Association, the National Center for the Study of Adult Learning and Literacy, the Educational Testing Service (ETS), and the U.S. Department of Education for this work.

***C.1.1h. Research program on early bilingualism and language processing.*** Dr. Li-jen Kuo (Educational Psychology) has conducted research on various aspects of language acquisition and literacy development among bilingual children, including studies of the emergence of phonological awareness and morphological awareness to the development of reading comprehension and critical thinking. Her work takes primarily a cognitive science approach and examines language acquisition and literacy development from a broad cross-language perspective.

### **C.1.2. Research on the Influence of Cultural Systems on Language.**

***C.1.2a. Research Program in Cultural Linguistics.*** Dr. Bennardo works in the Department of Anthropology and studies how cultural models can be found in the way that a population cognitively and linguistically represents spatial relationships, social relationships, and political action. Cultural models are

a way in which knowledge is organized mentally and linguistically. Dr. Bennardo has received funding from the National Science Foundation to support his research.

### **C.1.3. Research on Statistical Methods and Assessment.**

**C.1.3a. Research program in growth modeling.** Dr. Holt from Educational Research and Evaluation has conducted, presented, and published research on new applications of random coefficients growth modeling for studying developmental issues across the lifespan in education and psychology. In addition, Dr. Collins of Educational Research and Evaluation uses measures of growth in assessing reading improvements in young, school-aged children in school settings, and Holt and Collins have collaborated on research on growth modeling. Applications of growth modeling to the study of language and development have been presented and published with Drs. Hadley and Rispoli (external partners). Dr. Holt has received funding from the American Educational Research Association to study novel uses of growth modeling for educational research.

**C.1.3b. Research program in assessment.** Dr. Collins from Educational Research and Evaluation is concluding a four-year early reading project funded by Project REAL at Northern Illinois University in which she partners with a Rockford elementary school, conducting universal screening and progress monitoring assessments throughout the year to facilitate intervention decisions for K-2<sup>nd</sup> grade students and classrooms. Drs. Collins and Holt are also advancing the study of growth models to assess dual discrepancy and improve decision-making within the *Response to Intervention* model of service delivery. Additionally, Dr. Collins is completing a program of research aimed at identifying essential assessment content for both general and special education teachers.

**C.1.3c. Research in intervention design.** Drs. Holt from the Educational Research and Evaluation faculty and Dr. Hadley from Speech and Hearing Science at the University of Illinois are collaborating on a line of research that focuses on using features of growth curve methodology to optimize the design of interventions when there is an underlying developmental pattern.

**C.1.3d. Research in statistical methodology.** Three members of the team have extensive experience in statistical methodologies, Drs. Holt, Smith, and Walker of the Educational Research and Evaluation faculty. Dr. Holt's research has covered multivariate test statistics, statistical methods for genetics research, and growth modeling. Dr. Smith's expertise is on methods of classification analyses and their application to defining occupational structure. Dr. Walker's research has primarily focused on cross-validation and reliability indices, prediction accuracy and measures of effect size.

This is a list of selected research programs related to IISLL; however, it is not an exhaustive list. A critical area of need that is not represented will be sought to be filled by seeking an additional faculty member with expertise in neuroscience, specifically a scholar with expertise to capitalize on the NIU's proton therapy center to conduct neurological imaging of the brain to study the neuroscience of language and literacy.

## **C. 2. Proposed activities and accomplishments of IISLL**

Members of IISLL will engage in several activities that are designed to achieve the overall goals of the institute and that will lead to a self-sustaining institute. In general, these activities are directed at promoting interdisciplinary research within the NIU community regarding language, literacy, education, and ReSA to facilitate the exchange of ideas within the university community and the larger national and international communities, and to provide services to the NIU community and to school districts and agencies that have partnerships with NIU.

### **C.2.1. Research and Dissemination**

**C.2.1a. Collaborative, scientific research.** The primary activity of the institute will be to conduct basic and applied scientific research on language, literacy and research, statistical, and assessment

methods as they apply to language and literacy. The emphasis will be on high quality and high value scientific research that can both advance the theory of language and literacy development across the lifespan and have widespread application to educational, clinical, and community settings. Interdisciplinary collaborative networks will be developed from the varied disciplines represented in the institute to engage in research that will have a developmental and lifespan focus.

**C.2.1b. Seminar and colloquia series.** The success of IISLL is contingent on creating a sustainable interaction among faculty members, graduate students, and undergraduate students who are participants in the institute. One vehicle for creating this interaction involves weekly seminars where members present their own research or discuss major trends and advances in the field. Unfortunately, efforts to create interdisciplinary seminars often fail after only a few semesters. One way to help ensure that these seminars continue is to offer course credit for the seminar. As such, IISLL will propose the development of a new course called Seminar in Interdisciplinary Research on Language and Literacy. It will be available for both graduate and undergraduate credit.

Additionally, we propose a yearly colloquia series. Specifically, IISLL would provide funds to bring in nationally and internationally recognized researchers across a variety of disciplines. Ideally, these researchers would be associated with a theme or topic that is covered by the weekly seminar. A yearbook will also be published from the proceedings at the colloquia series to provide another avenue for dissemination.

**C.2.1c. Conferences.** A conference will be conducted yearly to bring top scholars in the disciplines of Language, Literacy, and related fields to the NIU campus to share the latest scholarly findings in these fields. By attracting scholars in varied fields of language and literacy we will further promote the multidisciplinary mission of the institute. A yearbook will also be published from the proceedings at the annual conference.

**C.2.1d. Website, blog, and technology dissemination.** The Institute will develop a website, hosted on NIU's domain (e.g., [www.iisll.niu.edu](http://www.iisll.niu.edu)) that will provide current information about Institute research, affiliated faculty, and will provide a means for dissemination of information (e.g., technical and research reports, newsletters, and information on language development for parents and practitioners). A weblog ("blog") will be created to provide a forum for researchers and graduate students to describe and discuss their work in an on-going discussion forum which invites public comment. These activities will be coordinated by the Technical Assistance Center of the Institute. Do we need to highlight the technical papers – often an important way to get a center or institute “on the map” in the professional literature?

## **C.2.2 Educational Programming**

**C.2.2a. Certificate of advanced graduate study.** The IISLL team will develop a Certificate of Advanced Graduate Study: Interdisciplinary Studies of Language and Literacy. The Certificate will be comprised of 18 credits that represent the major strands of IISLL and will contain existing courses as well as new courses. The Certificate will be of interest to advanced graduate students in the colleges, departments, and programs represented in IISLL. The certificate will be structured around these areas: literacy and the individual (3 credits), study of language (3 credits), language activities (3 credits), language and literacy contexts (3 credits), research and assessment methodology in language and literacy (3 credits), and seminar in interdisciplinary research on language and literacy (3 credits). The certificate will be housed across the College of Education and the College of Liberal Arts and Sciences.

## **C.2.3. Outreach to Schools, Health Agencies and the Northern Illinois Region**

**C.2.3a. Workshops and training camps.** A series of summer workshops are proposed for training literacy and language researchers in the use of newly developed and cutting-edge research and statistical methodologies for faculty and graduate students. These summer workshops will be offered for NIU graduate credit. Additionally, a series of applied workshops are proposed to train teachers in the use of research-based classroom language, literacy, and assessment methods which have been developed and

tested through IISLL. The teacher training camps will be correlated with NIU graduate courses such as LTRE 591, “Reading Institute” and LTCY 587, “Teaching Practicum.” These workshops will be offered in collaboration with professional organizations such as the Illinois Reading Council, Illinois Association for Multilingual Multicultural Education, and Illinois Teachers of English to Speakers to Other Languages – Bilingual Education.

#### ***F. Existing Clusters***

Clusters exist at several other universities, including The National Center for the Study of Writing and Literacy at University of California Berkley; Center for the Study of Reading at the University of Illinois at Urbana-Champaign; The Beckman Institute of Cognitive Science at the University of Illinois at Urbana-Champaign; The Research Institute for the Study of Language in an Urban Society at the City University of New York Graduate Center; The Literacy Achievement Research Center at Michigan State University; The Center for the Study of Urban Literacies at the University of California Los Angeles; The New Literacies Research Center at the University of Connecticut; and The Learning Research and Development Center at the University of Pittsburgh. Each of these clusters has secured external funding and produced scholarship that has positively impacted the universities and the fields of study. A major difference, however, exists between these existing clusters and IISLL in that the proposed institute will bring three unique strengths that go beyond each of the clusters named above. Namely, IISLL will examine language and literacy (1) across the lifespan; (2) by conducting basic research which will be the foundation for applied research which will lead to outreach and service programs; and (3) by developing and implementing new research, statistical, and assessment methods to study language and literacy issues through the ReSA Center.

### **Required Resources and Estimated Cost of the Institute**

#### ***Faculty Release Time***

Funds are requested to support release time (i.e., 1 course) for the three faculty members who will serve as directors of the Institute’s centers. Funds are also requested to support release time (i.e., 1 course) for up to 4 center-affiliated faculty members per year for the first 3 years of the Institute. The purpose of the release time is for these faculty members to prepare grant proposals for external funding to conduct research pertinent to language and literacy. Costs are estimated at \$150,000.<sup>00</sup> per year (1 course release per faculty member, plus additional compensation for the Executive Director of IISLL).

#### ***Undergraduate and Graduate Student Fellowships***

Funds are requested to support three full-time graduate fellows for the first 3 years of the Institute. Each Graduate Fellow will be employed in one of the Institute centers and will be responsible for assisting with research, grant-writing, statistical consulting, dissemination of information, and other general duties. Funds are also requested to support three undergraduate fellow for the first 3 years of the Institute. Each undergraduate Fellow will be assigned to a Center and will be responsible for assisting with research, and general duties (to be determined). Costs are estimated at \$80,000.<sup>00</sup> per year.

#### ***Travel Support***

Funds are requested to provide travel support (i.e., conferences) for three Center directors and up to six faculty members per year for the first 3 years of the Institute. Costs are estimated at approximately \$13,500 per year (\$1,500 per faculty member).

#### ***Administrative Support***

***Secretarial support*** (1/2 time). Funds are requested to support a half-time secretary for the first 3 years of the Institute. The secretary will work for the executive director of the Institute board. Thereafter, funding to support salary and benefits for secretarial staff will be based on a percentage from external grants awarded to the Institute (TBD).

**Web site.** Funding is requested for the development and maintenance of an Institute web site. Costs for secretary and website are estimated at \$20,000.

### ***Equipment Support***

Funding is requested for 6 desktop computers with software, 4 laptop computers with software, 2 inkjet laser printers, and miscellaneous materials and supplies. Costs are estimated at \$25,000.<sup>00</sup> for Year 1 and \$5,000.00 for Years 2 and 3.

### ***Seminars and Colloquia***

Funding is requested to support up a seminar and a colloquium series for the first 3 years of the Institute. The seminar is “internal,” where exemplary research and teaching of center-affiliated faculty are featured. The purpose of the seminars is to provoke discussion, foster new collaborative efforts towards grant proposals that fund new research initiatives, and provide updates of ongoing work relevant to the respective center. The colloquia are “external” activities that focus on the research of prominent scholars in language and literacy studies, and research methodology, statistics, and assessment. The purpose of the colloquium series is to invite leading language and literacy researchers and methodologists to NIU’s campus to share their work and thereby learn about new work in the field and build potential collaborations. Funds will provide travel money and honoraria for two invited colloquium speakers per year. Costs are estimated at \$8,000.<sup>00</sup> each year.

### ***Advisory Board***

Funding is requested to pay for the services of the members of the advisory board (as many as 4 persons) and for travel, meals, and accommodation expenses during on-campus meetings among Center directors, faculty, and advisory board members. Costs are estimated at \$6,000.<sup>00</sup> annually.

### ***Internal Evaluator***

An evaluator will be hired to assess the success of the IISLL in achieving its objectives during the first three years of operation and at the end of the fifth year of operation. Costs are estimated at \$10,000.<sup>00</sup> annually.

### ***Faculty and Student Recruitment and Publicity***

Funding is requested for activities related to the recruitment and retention of both faculty and students (undergraduate and graduate). Costs are estimated at \$5,000.<sup>00</sup> annually.

Total Operational Resources Needed, Annual	= \$298,000 - 318,000 per year
Total Institutional Support	= \$950,000 over 3 years (assuming 5% increase in costs for Years 2 & 3)
Total Estimated Support from Extramural Funding	= avg. \$3 million per year

### ***Members of IISLL***

The interdisciplinary team for this proposal spans three colleges at NIU: Education, Liberal Arts and Sciences, and Health and Human Science. This partnership also includes external research partners at the University of Illinois, Champaign-Urbana and the University of Illinois, Chicago. The combined areas of expertise of the members include the disciplines of cognitive science, literacy education, second-language learning, linguistics, adult literacy, speech and hearing science, anthropology, research and statistical methods, and assessment. Community-based external partners are also an important part of the IISLL team. IISLL will capitalize on strong relationships with NIU’s School-University Partnership districts including Rockford School District 205, DeKalb Community Unit School District 428, Glen

Ellyn School District 41, Rochelle School District 231, and School District U-46, among others. In addition, NIU partners such as Rock Valley Community College, Kishwaukee Community College, and community-based organizations will also serve as external partners.

### ***Development Team***

**Laurie Elish-Piper** (Professor of Literacy Education and Director of NIU Literacy Clinic). Dr. Elish-Piper's expertise and experience are in the areas of literacy education, literacy assessment, family literacy, and literacy coaching.

**Janet Holt** (Associate Professor of Educational Research and Evaluation). Dr. Holt's expertise and experience is in the area of growth modeling, research design, and applications of growth modeling to early language development and educational research.

**Joseph Magliano** (Professor of Psychology). Dr. Magliano's basic research focuses on the comprehension of media, such as texts, film, and picture stories. He has expertise in theories of language comprehension in the field of Cognitive Sciences, experimental research design, and discourse analysis. Additionally, he and his colleagues in the psychology department have been developing educational products that assess or promote comprehension skills.

**M Cecil Smith** (Professor of Educational Psychology). Dr. Smith's research focuses on adults' literacy practices in regards to reading, the relationship of these practices to one's proficiency as a reader, and the ways in which reading contributes to personal, intellectual, and social development.

### ***NIU Faculty Associates***

<b>Name</b>	<b>Department</b>	<b>Rank</b>	<b>Expertise</b>
Sonya Armstrong	Literacy Education	Assistant Professor	Post-Secondary Literacy
M. Anne Britt	Psychology	Associate Professor	Comprehension; Cognition
Susan Callahan	English	Associate Professor	English Education
Chris Carger	Literacy Education	Associate Professor	Bilingualism and Reading
Vicki Collins	Educational Technology, Research, & Assessment	Associate Professor	Growth Patterns in Reading; Reading Interventions
Giovanni Bennardo	Anthropology	Associate Professor	Linguistic and Cognitive Anthropology
Mayra Daniel	Literacy Education	Assistant Professor	Bilingual / ESL Education
Anne Davidson	Communic Disorders	Director, Speech-Language-Hearing Clinic	Speech-Language Pathology
Francine Falk-Ross	Literacy Education	Associate Professor	Middle School Literacy
Laura Hedin	Teaching and Learning	Assistant Professor	Reading in Special Education
Dan House	Institutional Research	Director	Research Methods; Cross-national Research
Larry Johannessen	English	Professor	English Education
Laura Ruth Johnson	Educational Technology, Research, & Assessment	Assistant Professor	Qualitative Research Methods; Family Literacy
John Knapp	English	Professor	English Education
Li-Jen Kuo	Educational Psychology	Assistant Professor	Linguistics; Language Develop
Susan L'Allier	Literacy Education	Associate Professor	Literacy Teacher Education
Doris Macdonald	English	Associate Professor	Language and Linguistics
Christine Malecki	Psychology	Associate Professor	Literacy Interventions; Curriculum-Based Measures
Elise Masur	Psychology	Professor	Language and Cognitive Development in Young

			Children
Keith Millis	Psychology	Professor	Discourse; Comprehension
Sherrill Morris	Communic Disorders	Assistant Professor	Speech-Language Pathology
Janet Olson	Communic Disorders	Clinical Faculty	Speech-Language Pathology
Richard Orem	Literacy Education	Professor	Adult ESL Education
Bradley Peters	English	Associate Professor	Writing
Corey Ray-Subramanian	Psychology	Assistant Professor	Assessment and Instruction for English Language Learners
Donald Richgels	Literacy Education	Professor	Language Development
Thomas J. Smith	Ed Tech, Res, & Assess	Associate Professor	Research Methods
Norman Stahl	Literacy Education	Professor	Post-Secondary Literacy; Comparative Reading
Patricia Tattersall	Communic Disorders	Clinical Faculty	Speech-Language Pathology
Stephen Tonks	Educational Psychology	Assistant Professor	Reading Motivation
David Walker	Educational Technology, Research, & Assessment	Associate Professor; Assessment Coordinator	Research Methods
Donna Werderich	Literacy Education	Assistant Professor	Middle School Language Arts Education

### ***External Partners***

IISLL will establish collaborative relationships with researchers at other universities who have nationally and internationally recognized programs of research with a strong record of receiving external funding. At the time of submitting this proposal, we have secured agreements with three external partners:

**Pamela Hadley** (Associate Professor of Speech and Hearing Science, University of Illinois, Champaign Urbana). Dr. Hadley's research focuses upon early grammatical development in children developing typically and those at-risk for specific language impairment.

**Matthew Rispoli** (Visiting Assistant Professor of Speech and Hearing Science, University of Illinois, Champaign-Urbana). Matt Rispoli is a developmental psycholinguist specializing early grammatical development and the early development of sentence production.

**Susan R. Goldman** (Professor of Psychology and Educational Psychology at the University of Illinois, Chicago). Dr. Goldman's current research activities focus on the psychological processes involved in how people understand and learn from text, discourse, multimedia, and conversation (face to face and online). A second important focus of Dr. Goldman's research is on new assessment models that can inform decision-making during learning and instruction processes. In her current position at the University of Illinois at Chicago, she is co-directing the Center for the Study of Learning, Instruction, and Teacher Development. The Center provides a context for continuing work on teacher professional development and student learning and initiating work on teacher preparation. A key question in these activities is the role of electronic technologies in supporting teaching, learning, and assessment.

Upon funding, the Institute will seek additional partners.

### **Structure and Sustainability of Cluster**

IISLL will be led by a 3-member board comprised of the director of the Language and Literacy Research Center (Magliano), the director of the Research, Statistical Methods, and Assessment Center (Holt), and the director of the Technical Advisory Center (Elish-Piper). On a rotating, 2-year basis, one board member will serve as Executive Director of the Institute. The board will interact with three groups of participants in IISLL. The first is the Advisory Board, comprised of leaders in several fields associated with IISLL. The second consists of IISLL team member and students from Northern Illinois University.

The third group is comprised of the external research partners. These latter two groups, in collaboration with the Institute board, will be responsible for carrying out the proposed activities of IISLL.

For IISLL to be sustainable, each center must also be sustainable. Affiliated faculty members must, therefore, seek out and obtain external funding. Therefore, a primary mission of IISLL will be to obtain external funding for research, training, and development projects associated with language, literacy, literacy education, research design, statistical methods, and assessment of language and literacy problems. There are federal, state, and private agencies that have existing calls for proposals that are appropriate for the IISLL mission. For example, The Institute for Educational Sciences has two calls for proposal within their Education Research program. One topic focuses on Reading and Writing that primarily funds the development and testing of interventions, training programs, and assessment tools. The Basic Processes topic within the same call funds research on the cognitive processes associated with reading (and other academic skills). Several private foundations also have research grant programs that correlate to the applied research strand of IISLL including The Spencer Foundation (Teaching, Learning, and Instructional Resources grant program), The Annenberg Foundation (Education and Youth Development grant program), The Bill and Melinda Gates Foundation (Education grant program) and The W.K. Kellogg Foundation (Youth and Education grant program). In addition, funding from the Illinois State Board of Education (Preschool for All; Prevention Initiative; English Language Learning) is available in key areas addressed by IISLL.

Members of IISLL will prepare and submit grants for research and training projects. The first will involve basic and applied research related to language and literacy. The second will involve seeking funding for applied projects that develop and test interventions and assessment tools, that deliver teacher training programs, and that provide professional development for educators.

An effective approach to increasing IISLL visibility involves training students who will work in a variety of settings. As such, IISLL will seek funding for pre- and post-doctoral training grants. As noted earlier, NIU has sought funding from the U.S. Department of Education to develop a pre-doctoral in educational sciences (there have been three calls for proposals: two in 2004 and one in 2007). Institutions that received funding from this program already had long-standing, interdisciplinary programs. IISLL will provide the infrastructure that will make NIU more competitive for future grants.

The graduate certificate, seminars, conferences, and workshops are also critical for IISLL sustainability. These endeavors will bring together internal and external partners, students, and members of the community with the common goals of learning about language and literacy and using that knowledge to facilitate student learning and the effectiveness of teachers. These activities will facilitate collaborations among the participants of IISLL.

### **Evaluation Plan**

The Institute will be internally evaluated at 1 year, 3 years, 5 years, and 10 years and at five-year intervals thereafter. This activity will be initially conducted by the Directors and later by an internal evaluator. If necessary, changes will be made to the institute to accelerate activities to achieve the stated objectives. Additionally, external evaluations and recommendations will be made by an external advisory board. This board will meet with the Directors at the end of the first year of funding and then at regular intervals, no less than every other year.

***Indicators of performance.*** Assessment of success with regard to the goals and objectives of the project will be determined by comparing the Institute's accomplishments to performance benchmarks (see Appendix A).

***Meetings with an advisory board.*** The IISLL director, board members, and faculty associates will meet with the advisory board during the fall of the first year of funding to seek advice during the development phase and then at the end of the third year of funding to seek an objective assessment of the progress of the Institute. Advisory board members and letters of support are provided in Appendix B.

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- Harste, J.C. , Burke, C.L., & Woodward, V.A. (1984). *Language stories and literacy lessons*. Portsmouth, NH: Heinemann.
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- National Reading Panel (2000). *Teaching children to read. An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington DC: National Institute of Child Health and Human Development.
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