Infant Child Research Programs Ongoing Research and Research Training Opportunities



Research and training activities through the Infant Child Research Programs are centered on several applied research themes including development of innovative approaches to early intervention for vulnerable infants, toddlers, and preschoolers, efficacy research under controlled experimental conditions, and effectiveness research in actual practice settings. Ongoing research projects and access to archival datasets collectively provide numerous opportunities for predoctoral and postdoctoral researchers to develop and enhance basic, applied, and clinical research skills with a focus on young children who have or are at risk for developmental problems.

One area of ongoing work includes a series of intervention studies focusing on very young children with developmental language delays. Two primary issues have served as the focus of this work: (a) the effects of primary caregiver responsivity training on young children's acquisition of early nonverbal communication skills and early words, (b) comparisons of early language intervention procedures that were center-based, home-based, or a combination of home and center. Initial analyses across these datasets indicate that conditions that include caregiver responsivity training result in significantly greater word learning by young children with developmental language delay. We are continuing to evaluate this finding in order to more precisely define parameters of caregiver responsivity that facilitate language learning in young children.

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A second area of investigation is designed to evaluate, experimentally, the efficacy of a "relationship-based" approach to the provision of early intervention services to infants and toddlers with disabilities within a home-based model. Three issues are at the core of this work. First, the focus on the intervention has been expanded from communication and language to include multiple developmental domains (cognitive and social-emotional). Second, the "relationship-based" approach includes a focus on caregiver responsivity as well as the quality of the relationship between the early interventionist (EI) and the primary caregiver. Third, the EIs rather than the primary caregivers are the focus on the intervention efforts. Essentially, the investigation has been designed to evaluate the extent to which training of the EIs in implementation of a particular protocol can ultimately result in (a) changes in the quality of the home visits, (b) mother-child interaction (EIs), and (c) the children's development one year later.

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A third area of investigation focuses on the quality of the language and emergent literacy learning environment in Head Start preschools, child care preschools, and preschools operated by local school districts. We have developed a tool for evaluating teachers' use of evidence-based teaching practices in these varying programs and are in the process of determining the reliability and validity of the instrument.

ICRP Research (continued)



The development and initial evaluation of emergent literacy curricula and explicit oral language teaching for preschoolers with disabilities comprises our fourth area of investigation. Recent models of early literacy development conceptualize growth as occurring simultaneously in several related areas. These include (a) conceptual knowledge about the functions of print, procedural knowledge about the mechanics of how people read and write (e.g. letter-sound knowledge), (b) oral language including vocabulary, and (c) metalinguistic skills (e.g. phonological and syntactic awareness). There is evidence that the relationship between these areas changes over time and that oral language plays a critical but differential role during different stages of literacy acquisition. The purpose of investigations in this area are to (a) determine the efficacy of a language and early literacy curriculum adapted for use with preschool children with developmental disabilities, and (b) to evaluate the extent to which the addition of an explicit oral language teaching protocol further enhances children's gains in oral language, pre-reading, and pre-writing skills. Secondary purposes are to examine factors that influence children's response to the interventions, professional development and intervention fidelity, and the perceived value and feasibility of the interventions from the perspective of the preschool classroom personnel. Through this work we have developed a new preschool curriculum entitled: "Teaching Emergent Literacy and Language across the Curriculum," referred to as TELL+. This new curriculum includes integrations for math, science, and social emotional skills. At present we are conducting initial tests of the curriculum and expect to move to efficacy trials in the near future.

Our fifth area of investigation focuses on adaptations, including assistive technology to promote learning opportunities for young children. We began work in this area in 2001 and established, in collaboration with colleagues at Thomas Jefferson University in Philadelphia, the Tots-n-Tech Research Institute (http://tnt.asu.edu). In addition to ongoing professional development in the area, we are beginning a new research and development project that will focus on the Individual Family Service Plan, which serves as the document detailing early intervention services and needs for families and their infants and toddlers eligible for Part C services through IDEA. In particular, we are developing and testing the effects of an adaptation-based IFSP form (template) and process. The process includes use of (a) an routines/activities based family interview to identify what is going well and what is not, (b) translation of the interview data and other assessments to identify IFSP outcomes that reflect family routines/activities with opportunities for practice and learning of new skills, (c) an adaptation hierarchy, including AT as appropriate to enhance children's participation in family routines/activities, thereby expanding learning opportunities, (d) the IFSP as a plan for facilitating outcomes and providing the learning opportunities, and (e) progress monitoring in achieving the IFSP outcomes. As a component of developing the form/ process we will design, launch, and test a web-based performance support system that help providers apply these processes in IFSP development and implementation.

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For more information about research protocols, products, findings, and predoctoral/postdoctoral training opportunities in any of these areas please contact the ICRP director, Jeanne Wilcox: mjwilcox@asu.edu