

November 2008

My professional experiences thus far have focused on diverse children, especially those whose first language is not English. I currently teach a course on bilingual assessment, and I am actively writing grants specifically addressing this interest. For example, I am collecting data as part of a grant-supported, mixed-methods study. The study, which investigates factors contributing to the success or failure of bilingual children, is possible due to a collaborative relationship with a local charter school. In addition, I have published test reviews, a book chapter, and a peer-reviewed article specifically addressing diversity-related issues.

Many of my other research and teaching interests involve working with students from special populations such as those with disabilities. Specifically, I work toward investigating the best methods for determining appropriate assessments, interventions, and placements. Many of my research articles and presentations have evaluated current assessment instruments and intervention training programs. Specifically, my collaborators and I examined across several studies the impact of anxiety, personality, and neuropsychological factors on cognitive assessment results.

Supplementing my interest in assessment, I also have a strong interest in the use of technology in education. As a graduate student, I helped develop two pieces of educational software. As a professor, I have one paper published and another in print on Web accessibility, or the usability of educational Web pages to individuals with disabilities through the use of assistive technology devices. In addition, I co-authored a paper addressing the validity of the ANAM, a computer-based neuropsychological assessment tool.

My long-term goal is to combine these three interests – bilingual students, assessment, and technology – to develop a multi-lingual, computerized reading assessment measure for mono-lingual assessment personnel to use while making diagnostic decisions for bilingual children. As most assessment specialists are monolingual, a multi-lingual computerized achievement assessment would enable all educators to obtain information about children's reading capability in both English and their native language, as is mandated by federal law. The proposed multi-site project that I have included with this packet addresses this in greater detail.

S. Kathleen Krach, Ph.D.

Brief Abstract: Proposal of a collaborative multi-site research program

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#### Abstract

Given the need for reading assessment tools in languages other than English and the paucity of multi-lingual school psychologists, I propose to develop and research a tool to help with both of these issues. Specifically, I would like to develop a reading instrument measuring basic reading, reading comprehension, and reading fluency in English and at least one other language (Spanish). As the test would be computerized, then mono-lingual school psychologists would be able to administer it without the need of a translator. This project would be extremely difficult to complete without assistance from senior scholars more familiar with test publication techniques as well as multi-site research opportunities for normative data collection. In addition, assistance from funding sources as well as test publishers would be invaluable. At this point in my career, I do not have ready access to any of these resources. Through the help of the SPRCC, I hope to be able to start to develop the relationships needed to forward this research agenda.

S. Kathleen Krach, Ph.D.

Proposal of a collaborative multi-site research program

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National legislation (IDEA, 2004) requires that assessments performed on students for diagnostic purposes be administered in the child's native language. However, school psychologists frequently are not always using the most appropriate tests for this purpose (Ochoa, Galarza, & Gonzalez, 1996). Part of the reason may be that there are not enough trained school psychologists who are aware of the practicalities of the requirements for native language testing. Another might be that there are not enough multi-lingual assessment personnel or multi-lingual instruments available for school psychologists to follow these legal requirements. Therefore, I propose to develop and research a reading assessment tool that can be used by mono-lingual school psychologists to measure multi-lingual students in both English and the child's native language. This would allow the school psychologist to follow not only the letter of the law (IDEA, 2004) but also best practice (Rhodes, Ochoa, Ortiz, 2005).

Purpose of the research.

To develop a computer-based psycho-educational assessment tool to assess reading skills for multi-lingual children to be administered by mono-lingual school psychologists.

Steps to complete the project as identified by Robertson (2003).

- 1) Conduct a comprehensive review of the literature in the areas of reading assessment, curriculum-based assessment, and computerized assessment.
- 2) Identify computer-based, reading tasks that address diagnostic categories defined by IDEA (2004).
- 3) Identify reading expectations for children in the United States and in other countries. As the first version of this instrument will be only in English and Spanish, this will most

likely involve only the United States and Mexico. Further countries and languages will be added later.

- 4) Meet with publishers to develop a plan.
- 5) Work collaboratively with other content experts to develop and analyze specific items and item-sets needed to establish and track reading skills in both languages.
- 6) Run paper and pencil trials in a pilot study of the instrument prior to moving it to a computerized format.
- 7) Work collaboratively with technology experts to develop the instrument itself.
- 8) Run computer-based trials in a pilot study of the instrument.
- 9) Make changes as needed based on item analysis and psychometric data gathered from the pilot studies.
- 10) Gather normative and psychometric data for the instrument across multiple locations for children in each of the two languages.
- 11) Work with a test publisher to make the instrument available to school psychologists in the field.

Given that I am inexperienced with the creation of a test instrument from start to finish, it will be difficult for me to estimate the number of participants needed for each step. I would assume the need for approximately 100 subjects for each of the two pilot tests as well as about 2000-3000 subjects for norming the instrument. Hopefully, a senior scholar can help guide me through the process of selecting the appropriate pilot and normative sample for an instrument such as this one. As for a budget, again, I would hope to be able to work with both a senior scholar and a test development representative for the purposes of budget development. I can

only guess that it would cost between \$130,000.00 to \$150,000.00 based on estimates described by Robertson (2003).

This project would be extremely difficult to complete without assistance from senior scholars more familiar with test publication techniques as well as multi-site research opportunities for normative data collection. In addition, assistance from funding sources as well as test publishers would be invaluable. At this point in my career, I do not have ready access to any of these resources. Through the help of the SPRCC, I hope to be able to start to develop the relationships needed to forward this research agenda.

#### References

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