



## **Implications for Policy, Practice, and Future Research**

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The many findings of the set of interrelated projects conducted over 13 years by the Acquiring Literacy in English (ALE) and Vocabulary Instruction and Assessment for Spanish Speakers (VIAS) research teams have appeared and will continue to appear in forms limited by the constraints of journal editors – 20-25 page articles, not more than 5-8 tables or figures per article, each article organized around a central, tightly defined research question or two.

Such forms of dissemination are crucial as evidence that the taxpayer's dollar has been wisely invested in the research program, and they are the key marker of success for researchers and their institutions. But such forms of dissemination, however valuable, should not be held up as the gold standard for educational research, in particular educational research focused on a large and growing group of students placed at very high risk in U.S. schools. Rather, we need products that will improve the design and delivery of educational experiences to such children (and their English-only classmates in struggling schools). What has this body of research delivered that would change educational practice?

### ***Better Tools for Broader Assessment***

A first contribution is a wide array of tools to help us understand exactly what Spanish-English bilingual students (and their teachers) know in the domains of vocabulary and in conscious manipulation of and reflection on various aspects of language and literacy. These tools take into account both the advantages and the challenges associated with being a Spanish speaker. The tools themselves are valuable products of the research that deserve to be widely disseminated and used. Research-developed resources are available on the [VIAS website](#).

### ***Refocusing on Reading for Meaning***

Though much of the work of the VIAS project was carried out during a period when many believed that accurate and fluent word reading was the major challenge in literacy development, nonetheless researchers in this program project remained focused on reading for meaning, to which word reading is a prerequisite but not typically the major obstacle. The persistent attention in this research program on reading comprehension, even among the youngest participants, and on vocabulary development as a contributor to reading for meaning, ensures the value of its contributions.

On the other hand, the focus of the work in VIAS on vocabulary as a primary predictor runs the risk of misleading consumers of the research. In dissemination of the findings about the interventions and the vocabulary-focused assessments, researchers will work to make it crystal clear that vocabulary functions as an index of world knowledge, which in turn is the real contributor to reading comprehension.

If superficial readings of the findings from these projects lead early childhood teachers toward direct teaching of longer and longer lists of words, that would be an unhappy outcome. Instead, the message that vocabulary is best taught and best learned in the context of content-rich book reading, discussion, and teaching needs to be emphasized. Direct teaching of words needed for the content learning is, of course, advised, but incidental learning of words encountered in such settings is also an important contribution to total vocabulary, and rich conceptual structures and deep content knowledge are the real goal.

### ***The Complexity of Transfer***

Transfer is traditionally conceptualized within research on second language learning as interference, i.e., a process to be overcome. Within the VIAS projects, transfer has been found mostly (though not exclusively) to be positive, with accomplishments in the native language serving as resources for the acquisition of English. At the same time, a careful study of the findings from these various research undertakings makes clear that transfer itself is a complex and malleable process, with its form and its likelihood influenced by characteristics of the student (level of first language skill, degree of metalinguistic awareness), the task (phonology vs. phonological awareness, noncognate vs. cognate vocabulary), and the learning situation (access to bilingual teachers, separation or mutual use of the two languages).

More systematic exploitation of the findings reported here might help define the optimal conditions for promoting positive and reducing negative transfer, and help chart the research agenda that would directly address the remaining questions.

### ***Work Yet to Be Done: More Research, More Use of the Research***

Much more has been accomplished as a result of this lengthy, comprehensive, and coherent research effort than can be reflected here. Nonetheless, of course, much remains to be done. The work reported here is limited to Spanish-speaking learners of English, and we need to explore to what degree it is relevant to the learning challenges facing the Somali, Sudanese, Iraqi, and Afghani immigrant children now arriving in U.S. schools, as well as the many speakers of Asian, Indian, Creole, and other languages already here. The Latino participants in the studies reported here represent a relatively limited demographic compared to the full range of immigrant children. Most of them were first exposed to English in preschool or kindergarten; what are the implications for later arrivals, in particular those with limited or interrupted schooling? Most of the participants in these studies experienced challenges related to economic resources, parental legal status and employability, and familial stress, in addition to the educational and social challenge of second language learning; to what degree are the language learning processes and educational outcomes similar or different for immigrants with different resources and either greater or less severe challenges?

In addition to the predictable domains into which research like this should be expanded, the design challenge of making these findings usable to improve education is huge. Various pieces are strongly supported already: teach new vocabulary using a combination of direct instruction and discussion; text-embedded methods; recruit parents to teach the same concepts in the home language; raise metalinguistic awareness to support cognate learning; and provide background knowledge (with the relevant vocabulary) to support comprehension.

The challenge is to put these different bits and pieces together into a coherent program that teachers can use, with implementation supported by relevant assessments used formatively, and with associated professional development. Ideally, such a comprehensive program would be part of what pre-service teachers learn to use – since almost all of them will encounter English language learners in their classrooms!

Ideally, the principles and practices embedded in such a program would be part of what prospective teachers are tested on, since failure to understand them suggests limitations in one's ability to serve all one's students. Moving from a list of research findings to an educational program requires integrative thinking and boldness to fill in the holes; moving from a well-designed program to a well-implemented and successful program requires thinking broadly and systemically. Researchers may not be equipped to do this all by themselves, but if they can forge partnerships with practitioners in school districts and in teacher education programs, they have much to contribute.