

# BRIDGING RESEARCH AND PRACTICE: THE ROLE OF DIAGNOSTIC ASSESSMENT IN EVIDENCE-BASED READING INSTRUCTION

The U.S. Department of Education, Office of Vocational and Adult Education (OVAE), Division of Adult Education and Literacy (DAEL), is working to infuse evidence-based reading instruction into state professional development delivery systems and adult basic education (ABE) classrooms. STudent Achievement in Reading (STAR) began as a pilot project designed to improve classroom instruction through the use of a toolkit that translates reading research into practice, as well as systematic training and technical assistance. The pilot project engaged six states in designing and implementing systemic reform to deliver evidence-based reading instruction (EBRI) for intermediate-level adult learners.

The STAR pilot revealed that, for EBRI to be successfully integrated into classroom practice, it must be supported by changes in organizational practices and policies. Study circles, cyber chats, and site visits were conducted throughout the pilot to assist state and local programs in making these systemic and organizational changes. STAR instructors and program administrators used each of these activities to learn about and apply the best available research on adult reading instruction to their daily practice.

The following four topics were selected for the study circles and for this series of issue briefs because they are critical to STAR implementation: professional development, diagnostic assessment, instructional leadership, and managed enrollment.

This paper highlights key findings from the research on diagnostic assessment for adult learners and identifies some of the pilot participants' experiences and reflections on implementing STAR in their programs and classrooms.

## WHAT IS EVIDENCE-BASED READING INSTRUCTION (EBRI)?

Evidence-based reading instruction (EBRI) is based on practices that have been shown to be successful in improving reading achievement. Success can be demonstrated in different ways. One way is through research studies where data are collected according to a rigorous design. Another way is through consensus among expert practitioners who monitor outcomes as part of their practice. Regardless of how success is shown, the results on which success is established must be valid and reliable, and should come from a variety of sources.

An adult basic education report summarizes the research studies on reading (Kruidenier, 2002) along with a report that provides the consensus among experts about the implications of this research for instruction (McShane, 2006). From these reports, we can conclude that evidence-based reading instruction for adult learners includes the following practices:

- assessment of learners' strengths and needs on each component of reading;
- use of assessment results for instructional decision making, at the program level and in the classroom;
- systematic and explicit instruction, consisting of teacher explanation and modeling and student opportunities for guided practice and application;
- instruction that maximizes learners' active engagement;
- instructional activities and materials that learners recognize as relevant; and
- continuous monitoring by teachers and learners of instructional effectiveness.

## OVERVIEW

Diagnostic reading assessments are tools used to measure learners' skills in each of the four components of adult reading: alphabets, fluency, vocabulary, and text comprehension. In the STAR pilot, classroom teachers and program administrators learned to administer and use the results of diagnostic reading assessments to identify individual learners' strengths and needs, group learners for instruction, plan lessons, and monitor learners' progress in each of the four reading components.

Prior to the pilot, all STAR teachers and program administrators used standardized assessments of silent reading comprehension for placement and accountability purposes, however, STAR was their first introduction to the use of diagnostic reading assessments. The diagnostic assessments they learned to use provided valuable new knowledge about their learners' instructional needs and resulted in important programmatic changes.

## WHAT DOES THE RESEARCH SHOW?

### Adult Learners Have Diverse Reading Needs

Research indicates that skilled reading is the result of a developmental process that begins in early childhood and changes as individuals grow older and have wider experiences with reading and text (Snow & Strucker, 2000). Learners' progress along the continuum of reading development can become stalled, resulting in the lack of or only partial development of core reading skills. Adult learners can encounter difficulties anywhere along this continuum.

The Adult Reading Components Study (ARCS) (Strucker & Davidson, 2003) provides valuable information about the reading strengths and needs of adult learners. This study assessed 655 adults enrolled in ABE classes in rapid naming, phonemic awareness, word analysis, word recognition, spelling, oral reading, expressive and receptive vocabulary, and silent comprehension. These assessments provided measures of individuals' skills in each of the four reading components. The learners' scores were subject to cluster analysis, which resulted in 10 instructionally relevant clusters or profiles of adult readers ranging from beginning readers up through GED levels of reading. More than half of ABE learners in the ARCS fell into five profiles that correspond to the National Reporting System's intermediate-level of reading ability (GLE 4 - 8.9). While some

intermediate adults need to strengthen their skills in several of the components of reading, nearly all share the need to improve their fluency and vocabulary.

### Standardized Reading Assessments Are Not Sufficient

The National Reporting System (NRS) requires that learners complete valid and reliable tests when they enroll in an ABE program in order to determine educational functioning level (EFL), as well as to ascertain subsequent advancement and growth in EFL. EFLs can be measured in either math or reading using current NRS approved tests that conform to standard psychometric criteria for validity and reliability as defined by the Division of Adult Education and Literacy (DAEL), U.S. Department of Education. The NRS provides descriptors of six levels of adult learners based on basic reading skills as measured by the TABE and CASAS. These levels range from Beginning ABE Literacy, which is equivalent to a kindergarten or first grade reading level (GLE 0 - 1.9), to High Adult Secondary Education (GLE 11-12.9), which is equivalent to an eleventh or twelfth grade reading level. Adult education programs use the results of these assessments to make classroom placement decisions. Learners are later post-tested using the same assessments to measure learning gained from their participation in the ABE program (Kruidenier, 2002).

While tests like the TABE and CASAS are very important tools for accountability and placement purposes, they cannot be used as diagnostic reading assessments. Unlike diagnostic assessments, the TABE and CASAS only measure learners' skills in one of the four essential reading components – text comprehension. These tests do not provide adequate information about learners' alphabets, vocabulary, and fluency skills, which, together with text comprehension are needed to read with understanding. Teachers and program administrators need to use diagnostic assessments to pinpoint the individual needs of their learners and plan instruction that accelerates their reading acquisition

(Strucker, 1997). In addition, teachers can use the results of diagnostic assessments to talk to adults about their learning needs and the work it will take to improve their reading and move on to the next step that they need to take in their education.

#### Pilot Perspective: A New Approach to

A teacher from Rend Lake College in Ina, Illinois explained that prior to STAR she had assumed that all of the intermediate-level learners who came into her classroom had the same reading needs and would benefit from the same type of instruction. She was surprised to find that once she started administering the diagnostic assessments her learners had, in fact, a range of strengths and weaknesses in four component areas: Some needed more help in alphabets, others in vocabulary, and still others in fluency and comprehension. This teacher now uses the assessment data to create learner profiles, plan small group lessons, and to select leveled reading materials that are appropriate for her learners.

## Implementing Diagnostic Reading Assessment: Findings and Considerations

The STAR pilot revealed that there are a number of challenges involved in successfully introducing diagnostic reading assessments in ABE programs. Foremost among these challenges is finding the time to administer individual diagnostic assessments and providing trained program personnel to administer them. STAR pilot sites have taken a variety of different approaches to address these challenges. Some STAR programs have introduced a co-teaching model whereby one teacher is available to assess new learners while the other teacher delivers ongoing instruction in reading and other subject areas. Others have instituted managed enrollment policies, which enable teachers and administrators to conduct diagnostic assessments on a regular schedule that coincides with the beginning of each term. In addition, some local programs have trained community volunteers and paraprofessionals to administer the assessments.

Finally, some STAR pilot sites have created staff positions that are dedicated to conducting diagnostic assessment and to the collection and dissemination of learner data among instructional staff. There are myriad strategies for implementing diagnostic assessment, yet all require high-quality training for teachers, administrators, paraprofessional, and volunteer staff in the skilled administration of these assessments and optimal use of learner data in planning reading instruction.

### Pilot Perspective: Meaningful Assessment Results

Teachers at the Hartford Adult Education Program in Hartford, Connecticut have substantially increased their use of diagnostic assessment across the four components of adult reading and, in the process, have discovered an important partner – the learner. Unlike the results of standardized reading assessments, diagnostic assessments help learners to understand the specific reading components with which they have difficulty. Consequently, students feel that the results of diagnostic assessments give a more accurate picture of who they are as readers.

STAR teachers and learners at this site are using their increased confidence in reading assessments to help drive improved reading performance. Together, they are charting learner progress on each of the reading components. In this way, learners are able to set goals for improving their reading and, as teachers report, are more motivated to work on their reading skills.

### Paving the Way for Diagnostic Assessment and EBRI

The successful implementation of diagnostic reading assessment in ABE programs will require action and support at the state, local, and classroom levels. The STAR pilot yielded important lessons that may be valuable to policy makers and adult education providers who want to introduce the use of diagnostic assessments in their programs. The following guidelines are based on those lessons.

For State Administrators and Policymakers

- Increase access to training in the administration of diagnostic assessments, analyzing learner data, and using data to plan instruction;
- Provide resources and materials to adult basic education programs to administer diagnostic assessments; and
- Continue to enforce the use of standardized assessments to measure learner outcomes and meet NRS requirements.

#### For Program Administrators

- Provide professional development for program personnel in administering diagnostic assessments and using assessment data to plan instruction;
- Monitor program personnel's assessment skills and provide additional training when necessary;
- Provide teachers with time, materials, and appropriate space to conduct diagnostic assessments and provide feedback to their students; and
- Institute a managed enrollment policy and schedule diagnostic assessments at the inception of each term.

#### For Teachers

- Keep in mind that learners actually may be receptive to diagnostic assessment and value the individualized feedback that they provide;
- Pursue professional development in diagnostic assessment and practice administering the assessments with a colleague, supervisor, or trainer;
- Remember that the amount of time it takes to conduct assessments will decrease as you become more familiar with their content and procedures;
- Talk to students about their assessment results; and
- Use the results to create profiles of the strengths and needs of your learners and plan instruction accordingly.

#### Pilot Perspective: Teacher Training

National STAR Reading Trainer, Dr. Susan Finn Miller, has used an apprenticeship model to create opportunities for practice and time that teachers need to conduct diagnostic assessments. In this model, one teacher who is skilled in diagnostic assessment serves as the lead teacher and works with others to model and support them in their learning how to conduct the assessments. Novice teachers learn initially by observing and then practice on their own with corrective feedback and support from the lead teacher. The goal is to train two teachers for each STAR classroom so that one teacher can instruct while the other conducts diagnostic assessments on an ongoing basis.

#### Pilot Perspective: Making Time

Teachers at Parkland College in Champaign, Illinois began conducting diagnostic assessment in all four reading components. They were encouraged by what they learned from these assessments, but they were equally frustrated because the time it took to administer the assessments took away from the time for other duties and responsibilities. While these teachers realized that the time spent administering the diagnostic assessments would decrease as they gained more familiarity and experience using them, they needed immediate solutions. To save time, teachers created pre-made individual learner assessment packets. This common-sense strategy uses zip-lock storage bags to arrange assessment materials (i.e., instruments, scoring guides, reading passages, etc.) so that the test administration progresses smoothly and without interruptions due to fumbling with papers or searching for readings. As a result of this adaptation, teachers report that they have reduced the time needed to conduct diagnostic assessments with their learners.

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## ADDITIONAL RESOURCES

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