

Working With Adult English Language Learners With Limited Literacy: Research, Practice, and Professional Development

Miriam Burt, Joy Kreeft Peyton, and Kirsten Schaezel, Center for Applied Linguistics

Background on Adult Learners

Adult education programs serve both native English speakers and learners whose first, or native, language is not English. Native English speakers attend adult basic education (ABE) classes to learn basic skills needed to improve their literacy levels; they attend adult secondary education (ASE) classes to earn high school equivalency certificates. Both ABE and ASE instruction help learners achieve other goals related to job, family, or further education. English language learners attend English as a second language (ESL), ABE, or workforce preparation classes to improve their oral and literacy skills in English and to achieve goals similar to those of native English speakers.

Audience for This Brief

This brief is written for teachers, program administrators, education researchers, and policy makers to ensure that those who work with adult English language learners with limited literacy have the knowledge and skills to address their literacy needs.

Introduction

Adult English language learners with limited literacy often have little or no formal schooling in their native language. As a result, they need focused instruction to help them increase their reading, writing, and oral proficiency in English (Ellis, 2005). This brief describes the ethnic, linguistic, and educational backgrounds of these learners; looks at what they need to know and be able to do to acquire literacy in English; discusses how teachers can facilitate the development of literacy skills in the classroom; and suggests models for training teachers to work with this population.

Characteristics of the Population

The number of English language learners in adult education programs in the United States is significant. Nearly half (46%) of the learners enrolled in adult education programs in Program Year 2006-2007 were learning English as a second language. Nearly half of this population (48%) tested at the three lowest ESL levels of the National Reporting System (NRS): ESL Beginning Literacy, ESL Beginning Low, and ESL Beginning High (U.S. Department of Education, 2008). The skills of learners at these levels range from no or minimal reading or writing skills in any language, with little or no

comprehension of how print corresponds to spoken language, to the ability to read most sight words and familiar phrases and simple sentences, with limited understanding of connected prose (U.S. Department of Education, 2007).

The population of learners at these levels of English literacy is diverse. Classes may include men and women with wide differences in age, native language, length of time in the United States, access to and experience with formal education, level of oral and written proficiency in English and their native language, and goals for learning. In Program Year 2006-2007, over 74% of the learners in literacy and beginning-level ESL classes were Hispanic or Latino, 12% were Asian, 6% were Black or African American, and 7% were White. The rest were Native American or Pacific Islander (U.S. Department of Education, 2008).

Although the above data do not provide information on the countries of origin of these learners, it is logical to conclude that the languages they speak have a variety of written alphabetic systems. Table 1, adapted from Burt, Peyton, and Adams (2003), illustrates possible native language literacy backgrounds of learners who might attend adult ESL classes.

Table 1: Types of Native Language Literacy of English Language Learners

Native Language Literacy	Explanation
Preliterate	Native language has no written form or is in the process of developing a written form (e.g., many American indigenous, African, Australian, and Pacific languages).
Nonliterate	Learners have no access to literacy instruction.
Semiliterate	Learners have limited access to literacy instruction.
Nonalphabet literate	Learners are literate in a language written in a nonalphabetic script (e.g., Mandarin Chinese).
Non-Roman alphabet literate	Learners are literate in a language written in a non-Roman alphabet (e.g., Arabic, Greek, Korean, Russian, Thai).
Roman alphabet literate	Learners are literate in a language written in a Roman alphabet script (e.g., French, German, Spanish). They read from left to right and recognize letter shapes and fonts.

Adapted from Burt, Peyton, & Adams (2003)

Factors that may have an impact on the learning of English literacy include the level of oral and written proficiency in the native language and in English (Bigelow & Tarone, 2004; Tarone, Bigelow, & Hansen, 2007); exposure to and experience with literacy in and outside of formal education settings—for example, the number of years of formal schooling in the home country (Bigelow & Tarone, 2004; Grabe & Stoller, 2002); and learner motivation (Dornyei, 2002; Masgoret & Gardner, 2003).

This brief focuses primarily on the needs of preliterate, nonliterate, and semiliterate learners. However, some learners whose native languages are written in nonalphabetic, non-Roman alphabetic, and Roman alphabetic scripts may not be literate in those languages and may be enrolled in literacy-level English classes.

Knowledge and Skill Needs of Learners

The research literature on the development of literacy skills in adult learners focuses primarily on reading. Researchers (e.g., Birch, 2002; Folse, 2004; Kruidenier, 2002; Nation, 2005) have identified four components of reading that are key to the development of literacy:

- Alphabets – the knowledge of the sounds of the spoken language and the ability to connect these sounds with written letters
- Fluency – the speed and ease of reading and the ability to decode quickly and accurately and to read with appropriate rhythm, intonation, and expression
- Vocabulary – the individual words that a person knows and understands
- Reading comprehension – the ability to construct meaning from a written text; involves all of the elements of the reading process and includes syntactical processing, the ability to understand grammar and usage conventions, and structural and organizational features of English texts

(See Burt, Peyton, & Van Duzer, 2005, for discussion of how each of these components of reading development can be taught to adults learning English.)

Adults with limited literacy need to learn all of the skills listed above. Before these skills can be developed, however, even more basic skills may need to be in place. For example, learners need to understand that written texts have a beginning, middle, and end; that English is read from left to right and from the top of a page to the bottom; and that written words can represent a story or a message just as spoken words and pictures can (August & Shanahan, 2006).

Literacy learners also need to be able to sit at a desk, hold a writing implement, listen to the teacher, and interact with other adults as fellow learners. Most of their previous educational experience may have involved watching and learning from others rather than reading a text or writing on a page

(Hardman, 1999). Finally, literacy learners should be able to associate written symbols with meaning and to see patterns in the symbols. They may find letters and any graphical representations—maps, graphs, charts, even pictures—difficult to interpret (Dowse, 2004; Hvitfeldt, 1985).

Instructional Strategies

There has been limited research on effective instructional strategies for adult English language learners—especially learners with limited literacy (Cronen, Silver-Pecuilla, & Condelli, 2005; Mathews-Aydinli, 2008; Tarone, Bigelow, & Hansen, 2007). However, literature on learning in general, on second language acquisition, and on literacy development for English language learners describes the following instructional strategies for promoting literacy development. These strategies address the four key components of reading listed earlier.

Build on and Develop Learner Motivation

Teachers who facilitate learner motivation find out what learners want and need to know and take this into account in designing instruction (Dornyei, 2002; Masorget & Gardner, 2003). With learners whose oral and literacy skills are limited, teachers can find out what they are interested in learning through nonverbal needs assessments. For example, they can show pictures depicting different literacy contexts and ask learners to mark the contexts in which they want to be able to read and write. Examples of needs assessment instruments and suggestions for using or adapting them for literacy-level classrooms can be found in “Assessing Learner Needs in the Adult ESL Classroom” (2007) and “Needs Assessment and Learner Self-Evaluation” (2008).

Build on Learners’ Knowledge and Experiences

A body of literature on reading discusses the role of schema activation (background knowledge) in facilitating reading development in second language learners. (See, e.g., Singhal, 2005, and Urquhart & Weir, 1998, for discussions of schema activation.) The reader’s factual knowledge, cultural values, understanding of the organization and purpose of a written text, and ability to recognize words and their relationships to each other in a sentence all affect the ability to comprehend a written text (Singhal, 2005). To build schema with literacy-level learners, teachers often select texts on familiar subjects and then share stories and use pictures and graphics to bring learners into the text through their own experiences (Coatney, 2006; Droop & Verhoeven, 1998).

Provide a Real-World Context for Literacy Activities in Class

Learners need to make connections between the words and structures they are reading and their own realities in the world (Coatney, 2006). One strategy that has been proven effective is bringing into class information and artifacts from places that learners live and work. A study of this strat-

egy found that students learned more, as measured by scores on standardized tests, in classes where the teacher made connections between life outside the classroom and what was learned in the classroom (Condelli, Wrigley, & Yoon, in press).

Teach Specific Strategies for Approaching and Understanding a Passage

Learners at all literacy levels use, and need to know how to use, a variety of strategies for approaching and understanding written texts. (See Pritchard & O'Hara, 2008, for a list of research focused on this process.) After receiving an oral introduction to a text, learners with limited literacy might begin by looking at the structure of the text (e.g., finding the beginning and the end); picking out words they recognize; and seeing if pictures, graphs, or maps in the text are helpful (Florez & Terrill, 2003).

Teach Word Recognition Skills and Alphabetic Literacy

Word recognition is the identification of written words encountered in print. (See Kurvers, 2007, for a discussion of the research on word recognition; see Tarone, Bigelow, & Hansen, 2007, for a discussion of the importance of developing alphabetic literacy.) Teachers may begin with preliteracy exercises that provide practice with directionality and recognition of shapes and sizes. (For activities to develop preliteracy skills, see "Activities to Promote Reading Development," 2008, pp. II-60–II-61.) Next they can introduce beginning literacy skills by teaching the alphabet, consonants and then vowels, then sight words, and then move on to longer utterances, perhaps using flashcards and dialogue strips.

Build Vocabulary

Vocabulary knowledge in the language being read has been shown to have a strong effect on reading comprehension (Coady, 1997; Grabe & Stoller, 2002). Although some research suggests that vocabulary can be developed through extensive and frequent reading in addition to specific focus on words and word categories (e.g., Coady, 1997; Joe, 1998), extensive independent reading may not be a viable option with literacy-level learners. Instead, more "explicit instruction" (Kruidenier, 2002, p. 67) may be advisable, providing learners with the words they need and their definitions. Teachers may use this instructional approach to bridge the gap between oral and written language using oral dialogues, pictures, and flashcards on topics familiar to the learners (Florez & Terrill, 2003).

Create Opportunities for Peer-to-Peer Communication About Written Texts

Some studies of adult learners have found that peer collaborative learning supports the development of literacy in a community of practice (Albers, Hellermann, & Harris, 2007;

Taylor, Abasi, Pinsent-Johnson, & Evans, 2007; Watanabe & Swain, 2007). Learners with limited literacy can first watch a skill modeled by the teacher or a more capable peer, then ask for information and clarification, then begin to participate with support and feedback from the teacher and each other (Hellermann, 2007; Reigel, 2008). For example, when learning new vocabulary words, a less capable learner can watch and listen as a more knowledgeable peer sounds out the new words and receives feedback from the teacher. This shows learners not only how to sound out new words, but also that attempts at sounding out a word are not always correct the first time. It may encourage a less capable learner to take risks in learning new words.

Consider Direct Feedback, Rather Than Teacher Recasts, To Help Learners Acquire Correct Grammatical Forms

Research conducted with Somali adult learners with limited literacy revealed that literate, educated learners were able to recall recasts (repetitions of the correct form of an utterance) significantly more often and more correctly than were learners with lower literacy skills (Bigelow, Delmas, Hansen, & Tarone, 2006). This suggests that teachers might consider offering learners with limited literacy direct feedback on their performance, rather than merely providing a correct restatement of the learners' utterances. The feedback of course needs to be at a level learners can process and needs to be focused on the grammatical and linguistic forms that are being targeted in the classroom at that time.

Involve Learners' Family Members in Literacy Activities

Families can share reading, community discovery, and other literacy activities. The teacher might develop a packet of activities to be done with the family at home. In a study of literacy development in an adult education program, Terry (2007) found that the involvement of family members significantly influenced learners' participation in the program.

Professional Development for Teachers of Learners With Limited Literacy

Educators working with adult English language learners with limited literacy need knowledge about the learners they are working with, about the content they are teaching, and about teaching methodologies and instructional strategies that are appropriate and effective with this population (Lucas, Loo, & McDonald, 2005). Knowledge about learners encompasses their backgrounds, experiences, and needs and includes their countries of origin, native languages, years of formal schooling in their home country, experiences with print, levels of literacy in their native language and in English, and their personal goals for developing literacy. Much of this information can be gained during the program intake process. Registration forms can request this informa-

tion—in learners’ native languages, if possible. Programs can combine orientations for new students with registration activities. A registration assistant can help learners complete the form, explaining or translating as needed, and filling in the blanks for learners who have no literacy skills. (For an example of a this type of registration form, see Virginia Adult Learning Resource Center, 2002.)

Content knowledge and knowledge of instructional strategies and techniques can be developed through professional development activities. The American Institutes for Research (Sherman et al., 2006) and the Center for Applied Linguistics (2008) have identified key components of high-quality professional development, some of which are listed below. They have been adapted to address the specific needs of teachers working with adult English language learners with limited literacy.

Quality professional development

- helps teachers connect content and materials to real-world situations that adults with limited literacy will confront;
- occurs over time and is not a one-shot activity;
- reflects the research on how adults with limited literacy learn;
- uses materials that address the needs of learners with different backgrounds and specifically those with limited literacy;
- takes into account factors that affect learner motivation, such as study skills, time management, and anxiety; and
- uses appropriate technology to prepare and support participants before, during, and after all professional development activities.

(For a complete list of the components of high-quality professional development, see Center for Applied Linguistics, 2008.)

Systematic, ongoing, research-based professional development uses a variety of formats, including workshops, institutes, and courses; study circles; and coaching and mentoring.

Workshops, Institutes, or Courses

Face-to-face or online workshops, institutes, or courses for teachers can focus on identifying and working with diverse learner backgrounds, understanding key components of reading development, and developing lessons for learners with limited literacy. See the *CAELA Guide for Adult ESL Trainers* (Center for Adult English Language Acquisition, 2007) and the *Practitioner Toolkit* (National Center for Family Literacy & Center for Applied Linguistics, 2008) for workshop topics and formats for teachers working with this population. In addition to offering workshops and other

trainings, programs and states need to provide ongoing support to practitioners through online discussions, classroom visits, and follow-up trainings.

For teachers with limited experience, a more basic approach may be needed. An online course used by the state of Virginia, ESL Basics Online (www.aelweb.vcu.edu/verizon/eslbasics.html), offers professional development for new teachers working with adult English language learners. This 8-week course includes instruction in teaching reading, speaking, listening, and writing. It also provides instruction in characteristics of adult ESL learners, methods and issues in language teaching, and lesson planning.

Study Circles

A study circle involves a group of practitioners reading and discussing research and considering its implications for classroom and program practice. In conjunction with or as a follow-up to workshops, study circles offer the opportunity for practitioners to focus and reflect more deeply, with a community of peers, on the content and methodologies they are learning in workshops and implementing in their classes. Led by a facilitator, the group might meet multiple times on a regular schedule. Between sessions, participants might read research they will discuss at the next session and practice techniques or use tools they were given at the previous session. In subsequent sessions they might report back on their experiences. Examples of study circle materials that have been used with teachers working with adult English language learners with limited literacy include *Teaching Adult ESL Literacy: A Study Circle Facilitator’s Guide* (Arciszewska-Russo, 2004) and “Study Circle on Teaching Beginning Levels” (2007).

Coaching and Mentoring

Teachers can observe one another, or a more experienced coach can observe and work with a teacher, to provide opportunities to think and learn together, solve problems, and offer suggestions. Coaching and mentoring sessions need to focus on how well students are learning as well as on how well the teacher is performing. Coaching and mentoring for teachers working with learners with limited literacy might focus on instructional strategies to assess learners’ needs or on activities to teach specific skills, such as reading sight words. For information on coaching and mentoring activities, see “Information for Trainers” (2007, pp. II-52–II-62.)

Any of the professional development formats described above can focus on the development and delivery of effective lesson plans. Some of the issues involved in planning lessons for adult learners with limited literacy include knowing when to introduce reading and writing; how to group learners for effective peer learning; and how to build vocabulary, word recognition skills, and understanding of text structure. For professional development activities on

lesson planning, see “Effective Lesson Planning for Adult English Language Learners” (2007) and “Lesson Planning” (2008).

Conclusion

There are many adult English learners with limited literacy in federally funded adult education programs in the United States. Practitioners working with this population need research-based, ongoing, systematic professional development that provides them with content knowledge and effective instructional strategies. Research is needed to better understand how adult English language learners with limited literacy skills in their native language and little formal education acquire literacy skills in English. A number of efforts are underway and should serve to guide the field. For example, a study funded by the U.S. Department of Education, Office of Vocational and Adult Education, on the implementation of a specific curriculum for adults with limited literacy is in process, and reports will be forthcoming. A background paper on preparing instructors to teach reading and writing to adult English language learners has been commissioned by the National Institute for Literacy. Research focusing on specific areas of literacy development (e.g., the use of recasts vs. direct instruction, the impact of literacy on the development of oral skills in the second language) will continue to be published. Finally, research is also needed on the knowledge and skills essential for practitioners working with this population and on effective means of providing them with appropriate professional development.

References

- Activities to promote reading development. (2008). In National Center for Family Literacy and Center for Applied Linguistics, *Practitioner toolkit: Working with adult English language learners* (pp. II-57–II-76). Louisville, KY, and Washington, DC: Authors.
- Albers, S., Hellermann, J., & Harris, K. A. (2007). *Students with little prior formal education: Success and interactional practices in the language classroom*. Poster session presented at the annual conference on Research, Practice, and Policy for Low-Educated Second Language and Literacy Acquisition for Adults, Newcastle upon Tyne, England, September 13–15, 2007.
- Arciszewska-Russo, B. (2004). *Teaching adult ESL literacy: A study circle facilitator's guide*. Harrisburg, PA: Bureau of Adult Basic and Literacy Education. Retrieved September 18, 2008, from http://www.iu13.org/aded_sepdc_ESLsctD.pdf
- Assessing learner needs in the adult ESL classroom. (2007). In Center for Adult English Language Acquisition, *The CAELA guide for adult ESL trainers* (pp. III-A-1–III-A-105). Washington, DC: Center for Applied Linguistics.
- August, D., & Shanahan, T. (Eds.). (2006). *Developing literacy in second-language learners: Report of the National Literacy Panel on Language-Minority Children and Youth*. Mahwah, NJ: Erlbaum. Available from <http://www.routledge.com>
- Bigelow, M., Delmas, R., Hansen, K., & Tarone, E. (2006). Literacy and the processing of oral recasts in SLA. *TESOL Quarterly*, 40(4), 665–689.
- Bigelow, M., & Tarone, E. (2004). The role of literacy level in second language acquisition: Doesn't who we study determine what we know? *TESOL Quarterly*, 38(4), 689–700.
- Birch, B. M. (2002). *English L2 reading: Getting to the bottom*. Mahwah, NJ: Erlbaum.
- Burt, M., Peyton, J. K., & Adams, R. (2003). *Reading and adult English language learners: A review of the research*. Washington, DC: Center for Applied Linguistics. Retrieved June 19, 2008, from <http://www.cal.org/caela/research/RAELL.pdf>
- Burt, M., Peyton, J. K., & Van Duzer, C. (2005). *How should adult ESL reading instruction differ from ABE reading instruction?* Washington, DC: Center for Adult English Language Acquisition. Retrieved June 19, 2008, from http://www.cal.org/caela/esl_resources/briefs/readingdif.html
- Center for Adult English Language Acquisition. (2007). *CAELA guide for adult ESL trainers*. Washington, DC: Center for Applied Linguistics. Retrieved June 17, 2008, from <http://www.cal.org/caela/scb/guide.html>
- Center for Applied Linguistics. (2008). *Framework for quality professional development for practitioners working with adult English language learners*. Washington, DC: Author. Retrieved June 17, 2008, from http://www.cal.org/caelanetwork/pd_resources/framework.html
- Coady, J. (1997). L2 vocabulary acquisition through extensive reading. In J. Coady & T. Huckins (Eds.), *Second language vocabulary acquisition* (pp. 217–228). Norwood, NJ: Ablex.
- Coatney, S. (2006). The importance of background knowledge. *Teacher Librarian*, 34(1), 60.
- Condelli, L., Wrigley, H., & Yoon, K. S. (in press). What works for adult literacy students of English as a second language. In S. Reder & J. Bynner (Eds.), *Tracking adult literacy and numeracy: Longitudinal studies of adult education*. New York: Routledge.
- Cronen, S., Silver-Pecuilla, H., & Condelli, L. (2005). *Conducting large-scale research in adult ESL: Challenges and approaches for the Explicit Literacy Impact Study*. Retrieved June 20, 2008, from <http://www.air.org/news/documents/AERA2005%20ESL.pdf>
- Dornyei, Z. (2002). The motivational basis of language learning tasks. In P. Robinson (Ed.), *Individual differences and instructed language learning* (pp. 137–158). Amsterdam: John Benjamins.
- Dowse, R. (2004). Using visuals to communicate medicine information to patients with low literacy. *Adult Learning*, 15(1-2), 22–25.
- Droop, M., & Verhoeven, L. (1998). Background knowledge, linguistic complexity, and second-language reading comprehension. *Journal of Literacy Research*, 30(2), 253–271. Retrieved June 16, 2008, from http://findarticles.com/p/articles/mi_qa3785/is_199806/ai_n8794370
- Effective lesson planning for adult English language learners. (2007). In Center for Adult English Language Acquisition, *The CAELA guide for adult ESL trainers* (pp. III-C-1–III-C-146). Washington, DC: Center for Applied Linguistics.

- Ellis, R. (2005). Principles of instructed language learning. *Asian EFL Journal*, 7(3). Retrieved June 10, 2008, from http://www.asian-efl-journal.com/September_05_re.php#3a
- Florez, M. C., & Terrill, L. (2003). *Working with literacy-level adult English language learners*. Washington, DC: Center for Applied Linguistics. Retrieved June 19, 2008, from http://www.cal.org/caela/esl_resources/digests/litQA.html
- Folse, K. S. (2004). *Vocabulary myths: Applying second language research to classroom teaching*. Ann Arbor: University of Michigan.
- Grabe, W., & Stoller, F. L. (2002). *Teaching and researching reading*. Harlow, England: Pearson Education.
- Hardman, J. C. (1999). A community of learners: Cambodians in an adult ESL classroom. *Language Teaching Research*, 3, 145-166.
- Hellermann, J. (2007). The development of practices for action in classroom dyadic interaction: Focus on task openings. *The Modern Language Journal*, 91(1), 83-96.
- Hvitfeldt, C. (1985, Winter/Spring). Picture perception and interpretation among pre-literate adults. *Passage: A Journal of Refugee Education*, 1(1), 27-30.
- Information for trainers. (2007). In Center for Adult English Language Acquisition, *The CAELA guide for adult ESL trainers* (pp. II-1-II-67). Washington, DC: Center for Applied Linguistics.
- Joe, A. (1998). What effects do text-based tasks promoting generation have on incidental vocabulary acquisition? *Applied Linguistics*, 19(3), 357-377.
- Kruidenier, J. (2002). *Research-based principles for adult basic education reading instruction*. Washington, DC: National Institute for Literacy. Retrieved June 19, 2008, from http://www.nifl.gov/partnershipforreading/publications/html/adult_ed/index.html
- Kurvers, J. (2007). Development of word recognition skills of adult L2 beginning readers. In N. Faux (Ed.), *Low-educated second language and literacy acquisition: Research, policy, and practice* (pp. 23-44). Richmond: The Literacy Institute at Virginia Commonwealth University.
- Lesson planning. (2008). In National Center for Family Literacy and Center for Applied Linguistics, *Practitioner toolkit: Working with adult English language learners* (pp. II-29-II-40.). Louisville, KY, and Washington, DC: Authors.
- Lucas, N., Loo, S., & McDonald, J. (2005). Combining "subject knowledge" with "how to teach": An exploratory study of new initial teacher education for teachers of adult literacy, numeracy and English for speakers of other languages. *International Journal of Lifelong Education*, 24(4), 337-350.
- Masgoret, A. M., & Gardner, R. C. (2003). Attitudes, motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language Learning*, 53(Suppl. 1), 167-210.
- Mathews-Aydinli, J. (2008). Overlooked and understudied? A survey of current trends in research on adult English language learners. *Adult Education Quarterly*, 58(3), 198-213.
- Nation, I. M. P. (2005). Teaching and learning vocabulary. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 581-595). Mahwah, NJ: Erlbaum.
- National Center for Family Literacy and Center for Applied Linguistics. (2008). *Practitioner toolkit: Working with adult English language learners*. Louisville, KY, and Washington, DC: Authors. Retrieved July 7, 2008, from http://www.cal.org/caela/tools/program_development/prac_toolkit.html
- Needs assessment and learner self-evaluation. (2008). In National Center for Family Literacy and Center for Applied Linguistics, *Practitioner toolkit: Working with adult English language learners* (pp. II-5-II-28). Louisville, KY, and Washington, DC: Authors.
- Pritchard, R., & O'Hara, S. (2008). Reading in Spanish and English: A comparative study of processing strategies. *Journal of Adolescent & Adult Literacy*, 51, 630-638.
- Reigel, M. (2008). Positive feedback in pairwork and its association with ESL course level promotion. *TESOL Quarterly*, 42(1), 79-98.
- Sherman, R., Safford-Ramus, K., Hector-Mason, A., Condelli, L., Olinger, A., & Jani, N. (2006). *An environmental scan of adult numeracy professional development initiatives and practices*. Washington, DC: American Institutes for Research.
- Singhal, M. (2005). *Teaching reading to adult second language learners. Theoretical foundations, pedagogical applications, and current issues*. Lowell, MA: The Reading Matrix.
- Study circle on teaching beginning levels. (2007). In Center for Adult English Language Acquisition, *The CAELA guide for adult ESL trainers* (pp. IV-C-1-IV-C-47). Washington, DC: Center for Applied Linguistics.
- Tarone, E., Bigelow, M., & Hansen, K. (2007). The impact of alphabetic print literacy level on oral second language acquisition. In N. Faux (Ed.), *Low-educated second language and literacy acquisition: Research, policy, and practice* (pp. 99-122). Richmond: The Literacy Institute at Virginia Commonwealth University.
- Taylor, M., Abasi, A., Pinsent-Johnson, C., & Evans, K. (2007). Collaborative learning in communities of literacy practice. *Adult Basic Education & Literacy Journal*, 1(1), 4-11.
- Terry, M. (2007). The supportive roles that learners' families play in adult literacy programs. *Educational Research Quarterly*, 31(1), 27-44.
- Urquhart, A. J., & Weir, C. (1998). *Reading in a second language: Process, product, and process*. New York: Longman.
- U.S. Department of Education, Office of Vocational and Adult Education. (2007). *Implementation guidelines: Measures and methods for the National Reporting System for Adult Education*. Washington, DC: Author. Retrieved, June 19, 2008, from <http://www.nrsweb.org/docs/ImplementationGuidelines.pdf>
- U.S. Department of Education, Office of Vocational and Adult Education. (2008). National Reporting System. Retrieved June 12, 2008, from <http://wdcrobcolp01.ed.gov/CFAPPS/OVAE/NRS/tables/?CFID=6141148&CFTOKEN>
- Virginia Adult Learning Resource Center. (2002). *ESOL starter kit*. Richmond: Author. Retrieved September 17, 2008, from http://www.aelweb.vcu.edu/publications/ESLKit/ESLKit_2002.pdf
- Watanabe, Y., & Swain, M. (2007). Effects of proficiency differences and patterns of pair interaction on second language learning: Collaborative dialogue between adult ESL learners. *Language Teaching Research*, 11(2), 121-142.