# Low Educated Second Language and Literacy Acquisition 

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# THE TRADITION CONTINUES: SHARING KNOWLEDGE TO SERVE LESLLA LEARNERS 

Theresa Wall, Bow Valley College, and Monica Leong

In September of 2009, Bow Valley College hosted the Fifth Annual LESLLA Conference in Banff Alberta, Canada. For five years now, researchers, teachers, administrators and policy makers have come together to share and discuss their work in order to best serve students who have become known as LESLLA learners. Since the initial conference held at Tilburg University in the Netherlands, successive conferences have been held in West Virginia in the United States, Newcastle in the UK, and Antwerp in Belgium.

The term LESLLA was coined at the inaugural meeting in 2004, standing for LowEducated Second Language and Literacy Acquisition. This term is now used to describe a group or demographic of adult learners who have had limited or no access to education in their country of origin, who have limited literacy in their first language, and who are now learning to read and write for the first time in a language they are learning to speak as well.

LESLLA research is essential to help us understand the needs of this group of learners. The conference proceedings are divided into three sections 1) practice and instruction; 2) research; and 3) a personal reflection.

In the section on practice and instruction, Patsy Vinogradov discusses a balanced approach to literacy instruction using both top-down and bottom-up processes and offers practical suggestions on how to use learner-generated texts to accomplish the balance. Alan Williams and Denise E. Murray outline their Get Wise project, a series of materials developed for young adult LESLLA learners in Australia, and highlight the value of and methods for developing materials for a content-based approach, specific to the needs of local learners. Heide Spruck Wrigley discusses the challenges faced by low literate immigrant and refugee youth. She then highlights promising programs and practices in serving this demographic. Janet Isserlis examines the impact of trauma on learning, something many LESLLA learners and teachers face in the classroom. Isserlis explores ways teachers, administrators and policy makers can understand to create an effective learning environment and considers the impact this might have on instructional practice and policy.

In the section on research, Susanna Strube, Ineke van de Craats, and Roeland van Hout discuss the complexities of reading picture stories for non-literate L2 learners and note that the 'simple' tasks taught in class are perhaps not at all simple for a LESLLA learner. This has implications for all involved in LESLLA education. Jeanne Kurvers, Willemijn Stockmann and Ineke van de Craats discuss the challenging question: how long does it take an adult learner to learn to read and write for the first time in a second language? This question is important to funders, policy makers and teachers alike. To further narrow the research, Martha Young-

Scholten and Rola Naeb study Non-Educated Second Language and Literacy Acquisition (NESLLA) learners. In their paper, they explore whether it is possible for learners with no education at all in their first language to become fully literate in a second language. In her paper, Gunna Funder Hansen uses the connectionist model to contrast processes required for reading fluency in English and Arabic, and the possible implications for teaching pre-literate adults to read in a second language.

The proceedings conclude with a personal reflection by Ruth J. Colvin, who describes her work with LESLLA learners.

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# BALANCING TOP AND BOTTOM: LEARNER-GENERATED TEXTS FOR TEACHING PHONICS 

Patsy Vinogradov, University of Minnesota

## 1 Introduction

Adult learners learn best when instruction is consistently grounded in meaningful, relevant contexts and is closely connected to learners' daily lives and needs (Auerbach, 1992; Imel, 1998; Knowles, 1973). LESLLA learners ${ }^{1}$ are no exception. At the same time, reading research places a high value on explicit phonics instruction for emergent readers: the direct teaching of "alphabetic skills" such as phonological awareness, decoding, and encoding. While these two needs may appear to pull instructors in different directions, this report offers practical options for balanced instruction that addresses both priorities. After briefly exploring the tenets of balanced literacy and the value of phonics instruction for adult emergent readers, classroom practices are illustrated that use learner-generated texts as a basis for developing alphabetic print literacy.

## 2 Balanced literacy: Weaving top and bottom

The "whole language vs. phonics great debate" among reading experts is largely a thing of the past (see Chall, 1967). Reading is viewed as an interactive, meaningmaking endeavor that includes both top-down and bottom-up processes (Birch, 2007; Campbell, 2004). While adult language classrooms vary greatly, generally instructors include both bottom-up and top-down reading instruction in their classrooms, as each approach develops different skills that strong readers need (Campbell 2004; Parrish, 2004; Vinogradov, 2008). LESLLA learners, as adult emergent readers new to alphabetic print literacy, need lessons that both focus on meaning and also bring attention to the building blocks of literacy. Effective LESLLA literacy lessons are balanced: grounded in interesting, relevant contexts that emphasize meaning, while also explicitly teaching patterns of sounds, syllables, and word families (Fish, Knell \& Buchanan, 2007; Vinogradov, 2008). As Michael Pressley writes, "balanced-literacy teachers combine the strengths of whole language and skills instruction, and in doing so, create instruction that is more than the sum of its parts" (1998, p. 1).

One method that integrates such explicit phonics instruction into meaningful, theme-based lessons is termed Whole-Part-Whole (WPW). Here teachers begin with a topic that is interesting, important, and familiar to learners. They elicit words, phrases, and stories from students, and they strengthen their vocabularies surrounding the given topic. Then, once learners are engaged in the topic, they examine particular words to present and practice alphabetics (phonics and

[^0]phonemic awareness skills). Later, they return these words to the larger context to continue reading and oral language practice (Haverson \& Haynes, 1982; TrupkeBastidas \& Poulos, 2007). Instead of presenting phonics in a decontextualized way with nonsense words and endless worksheets on word families, WPW strives to provide a balance: on one side of the coin is meaningful language, and on the other side are the building blocks that combine to create this language. When students are familiar with a given topic and have a bank of words, teachers can then spend time on sound-symbol correspondence, and learners can discover how letters and sounds are related (Brod, 1999, p.16). This creates a much needed connection between the larger topic at hand and the emergent reading activities.

## 3 Explicit phonics instruction

Adults who lack print literacy generally also lack critical pre-literacy skills such as phonemic awareness and phonics skills (Gombert, 1994; Kurvers \& van de Craats, 2007; Young-Scholten \& Strom, 2006). The LESLLA research study by YoungScholten and Strom shows that while all the study's participants "demonstrated solid knowledge of the alphabet in their ability to read letters in different fonts and out of order...many demonstrated no phonemic awareness and no decoding ability" (Young-Scholten \& Strom, 2006, p. 63). Such findings indicate that teachers should include explicit instruction of phonemic awareness and decoding in their classrooms, since such skills do not develop with alphabet knowledge alone. Anecdotally, many of my own LESLLA learners have shown similar patterns; when shown a word, they may be able to name the letters, but they are often not able to assign sounds to the letters or to combine them to sound-out the word or to derive meaning from it.

There is much more to reading than simply knowing the alphabet, a fact that decades of reading research have proven. LESLLA instructors struggle with exactly what should be taught and how. Can these literacy skills be taught to LESLLA learners? And how should precious instructional time be spent to develop such skills? While the research surrounding literacy instruction for low-literate adult second language learners is growing, it is still quite limited. The field of LESLLA can draw from the large reading research base done with children both in first and second language literacy and also from research on adult first language literacy development.

A remarkable number of studies have been done that focus on reading development in children in the early elementary years. The National Reading Panel (2000) reviewed relevant research, and their conclusions support explicit and systematic literacy instruction. While these conclusions were based on research with native speaking children, another important research review by Kruidenier (2002) focused on adult literacy development in native speaking adults, and it also supports explicit and systematic instruction. A few small practitioner research projects have demonstrated the positive impact on reading ability when specific, concentrated phonics instruction is implemented into instruction of LESLLA learners (Evans, 2008; Trupke-Bastidas \& Poulos, 2007). While further research is needed in this area, evidence points to the high value of such interventions.

What exactly is meant by explicit and systematic? Kruidenier's review states that such instruction should focus on both phonemic awareness, the ability to manipulate sounds within a spoken word, and phonics, the knowledge of soundsymbol relationships. Specifically, he suggests that teachers build phonemic awareness by (1) focusing on one or two types of phonemic awareness tasks at a time; (2) focusing on segmenting and blending, which may be most useful to learners; and (3) using letters as well as sounds for instruction (Kruidenier, 2002, p. 50). "Decoding," or mastering how sounds relate to the alphabet, requires that learners 1) recognize letters, 2) identify and produce the sounds represented by the letters, 3) blend the individual sounds in sequence, and finally 4) recognize the word (Kruidenier, 2002).

Research on the language and literacy development of children who are non-native speakers of English can also inform LESLLA practice. The American Education Research Association advocates explicit phonics as one of four critical components of reading instruction to help English language learners (ELLs) catch up to their native speaking peers (AERA, 2004, p.3). Interestingly, the other three recommendations include intensive vocabulary instruction, a focus on reading comprehension strategies, and oral language development. This package of critical components for reading constitutes a balanced literacy approach. Additionally, research studies focused on English language learning children were reviewed by the National Literacy Panel (Grant \& Wong, 2003) and indicate a strong relationship between oral proficiency and literacy skills. The LESLLA research done by Tarone, Bigelow, and Hansen (2009) further explores this connection between oracy and literacy, and they too conclude that practitioners must connect oral language and the written word, and they must do so in a balanced, engaging, multi-faceted way. LESLLA instructors need a toolbox full of effective balanced literacy activities, and the use of learner-generated texts is one of these tools.

## 4 The value of learner-generated texts

As stated at the beginning of this report, decades of adult learning research demonstrates the importance of meaningful, engaging lessons for adults (Knowles, 1973; Imel, 1998; Weinstein, 1999; Wrigley \& Guth, 1992). Learners' lives must be central to instructional approaches and materials (Auerbach \& Burgess, 1985; Lado, 1991; Williams \& Chapman, 2007). As Gail Weinstein writes, "ESL and literacy classrooms can and should be settings where adults find opportunities to develop language and literacy skills while reflecting, as individuals and in collaboration, on their changing lives" (1999, p. 6). Learning should be contextualized, relevant, and lessons should draw upon the actual experiences and concerns of learners (Auerbach, 1992). Adult learners have pressing needs and interests in their communities, and they must manage a great deal of environmental print. And yet when teachers reach for reading development texts and materials to build literacy in their LESLLA learners, they may find very little that is fitting for adults, and even less that combines learners needs and interests with level-appropriate literacy work (see CAELA, 2009). Much of the emergent reading curricula available and created by teachers is childish in nature, and tends to replicate the literacy work done in early childhood classrooms and primary grades. While reading-level appropriate,
such material is not engaging for adult learners as it is neither age-appropriate nor relevant to the daily needs of LESLLA learners.

Creating and capitalizing on learner-generated texts is one classroom practice that exemplifies balanced literacy instruction. Learner-generated texts immediately provide relevant, meaningful, level and age-appropriate reading material. In creating learner-generated texts, teachers tap into learners' often more developed listening and speaking skills to build literacy (Geva \& Zadeh, 2006). Oral processing skills and print literacy skills are interconnected and interdependent (Tarone, Bigelow \& Hansen, 2009), and as learners practice and build their oral abilities, learnergenerated texts provide a means to connect these skills and to present oral language on paper. The result is an array of rich and interesting readings for students.

The traditional method of producing learner-generated texts is the Language Experience Approach (LEA). In LEA, students first share a common experience, perhaps a field trip or an experience like making a sandwich in the classroom. Then, the teacher guides them to re-tell the experience aloud. Students recall what happened to a teacher or another scribe who writes down their words. Later, these words are then used as reading texts. From here, a number of bottom-up focused techniques can be used to focus on word analysis and particular sounds and structures. Then, students revisit the entire text they have created, and perhaps add to it (see Whole Part Whole description above). LEA is an efficient technique in working with emergent readers as it connects what they are able to communicate orally to what they are learning to do in print (Crandall \& Peyton, 1993).

- Shared experience
- Students' newsletters
- Picture stories
- Responding to a photograph or visual
- Transcribed taped conversations
- Journal entries
- Texts for wordless books
- Photo books
- Class posters
- Overheard student stories
(Liden, Poulos, \& Vinogradov, 2008)
Figure 1: Ways to Generate Learner Texts
The Language Experience Approach is one way to create learner-generated texts, but texts can be created less formally as well (see Croydan, 2005). For example, a teacher and students can look at a photograph together and write about what they see and think. Journaling, free-writing, or a teacher simply transcribing a story a student shared during break-time all create learner-generated texts. Figure 1 above lists more ways to generate learner texts. Such stories provide abundant opportunities for looking at bottom-up strategies. The advantage of using learnergenerated texts is that the text is already comprehensible, meaningful, and interesting to the learner. Since the learner created it, he/she has ownership over those words and that story. By using these texts within the Whole-Part-Whole
method, teachers can then focus on particular sounds, word families, or other reading skills within content that the student created him/herself. This creates an engaging and memorable lesson for learners.


## 5 Examples of learner generated texts and phonics activities

Once a learner-generated text has been created, teachers can draw on the text in many ways to practice bottom-up reading skills. To explore some of these activities, we turn to a sample of LESLLA learner writing. This text (Figure 2 below) was generated in an adult English as a Second Language class for low-literate adults in Minnesota, USA. This particular class consists mostly of Southeast Asian learners, refugees from Burma, Laos, and Thailand. A summer project for this LESLLA class involved creating a community garden near the school. As a shared experience that allowed students to share their farming expertise, the gardening project provided a rich resource for language and balanced literacy lessons. As they worked in the garden throughout the summer months, their instructor elicited and helped learners write a number of stories. During classroom time, she capitalized on these stories to widen their vocabularies, build their conversation skills, and develop their emerging literacy skills.

```
Hot Day
Today is summer.
Today is sunny.
Today is hot.
Today we are sweating.
Today drink water.
Today wear t-shirt.
```

Figure 2: Hot Day
Once meaning is well established ("whole" in WPW method), the teacher can focus on pieces of language ("parts" in WPW). A number of active, engaging tasks can help students build word recognition and sound-symbol correspondence skills with this text. While by no means a comprehensive list, a sample of such tasks is listed below.

## Sequencing tasks

- Order the Story (with group). Write each word or phrase of the story on cards and place one full set of cards on each table. In small groups, learners need to re-create the story on their tables and practice reading it to each other.
- Stand Up and Sequence. Hand out a card with one word or phrase from the story to each student. Have students stand up and come to the front of the room to re-order the story, saying their words aloud as they read together.
- Pocket Chart. Write the story on index cards, one word on each card. Hand out the cards and have student re-create the story in order in the pocket
chart. Mix up the words the next day, or after break, and have pairs or individuals repeat ordering the story.
- Order the Story (individually). Type up the story for the next day, and have students cut the story into sentences, words or phrases and re-order.


## Word Recognition Tasks

- Circle the Word in the Text. Have students circle all the times a certain word is repeated in the story. For example, following "Hot Day," students can circle "today" each time it appears, either on the board or on their own copy of the story. Repeat with the word "is."
- Choose the Word You Hear. Create a worksheet that lists words from the story alongside other words. Students must circle the word that is called out. For example:
Teacher: In number one, circle the word "bot."
(Learners choose from a worksheet; the options are hot/sunny/we).
Teacher: Number two, circle the word "we."
(Learners choose from the words wear/we/water.
- Flyswatter Game. Tape each card (with a word or phrase from the story) on the wall or board and have two learners sit in front of the board, each with a flyswatter. As the teacher or a fellow student calls out a word, the two learners race to hit it first.
- Nine-patch. Each student receives a piece of paper that has been marked to create 9 squares (3 X 3). Have small pieces of paper with words from the story ready for each student. As the teacher calls out a word from the story, the learner must find the slip of paper with that word and place on the grid. More advanced students can write the words on the grid.

| 1. summer | 2. sunny | 3. sweating |
| :--- | :--- | :--- |
| 4. wear | 5. we | 6. water |
| 7. today | 8. is | 9. are |

- Same or Different? This activity helps build the 'automaticity' that fluent readers use when reading. Create a pile of paper strips with a line in the center, and write two words on each paper strip that differ only by one or two letters. Students turn over a strip very quickly, just for a moment, and they must quickly determine whether the two words are the same or different. Then turn the paper over to check.

| shirt | skirt |
| :--- | :--- |

## Phonemic Awareness Tasks

- Sound Chain. Choose a word from the story and say it aloud. Students must listen for the final sound of that word and say a word that begins with that sound. Continue listening for the final sound and stating a word that uses that sound initially. For example:
Teacher: Today. What's the last sound in "today?"
Learners: /eI/.
Teacher: Right! What's a word that starts with / eI/?
Learners: Age.
Teacher: Good! And what's the last sound in 'age'?
Learners: / dz/
Teacher: Yes. What's a word that starts with / $\mathrm{d} \boldsymbol{z} /$ ?
Learners: Jump.
Etc.
- Where's the Sound? Give each student or pair of students 3 paper cups, one for the first sound, one for a middle sound, and one for the final sound. Have student label the cups appropriately 1, 2, and 3. Say a word, and then ask students where one of the sounds in the word occurs. They must drop a bean or penny into the appropriate cup. For example, if the word is "hot," and you ask, "Where is the $/ \mathrm{t} /$ ?" Students drop a bean into the final cup, or number 3. You can then ask, "Where is the /h/ sound?" and students will drop a bean into the first cup.
- Blend the Word. Say a word from the story and have students say the word back in segments, emphasizing each sound. For example:
Teacher: Summer.
Learners: / $\mathrm{s} / \mathrm{l} / \mathrm{u} / \mathrm{l} / \mathrm{m} /$, /er/
After several words, repeat the process. Teacher says a word's phonemes, and learners must blend them mentally and say the word. For example:
Teacher: / $t /$, / iy/, /sh/, /ir/, |t/
Learners: T-shirt!
- Does it Rhyme? Emphasize through examples that rhyme concerns the ends of words. Have students listen to three words (at least one from the learner-generated story) and identify the one that doesn't belong. For example: hot, pot, pat. Alternatively, students can identify rhyming words in a story or the teacher can say a word (for example, pot) and students must find a word in the story that rhymes (hot).

Phonics Tasks

- Large Cards. Put letters or letter combinations on large cards, hand to each student, and have students "spell out" words, starting with one from the story, at the front of the room.
Teacher: D-R-I-N-K, now D and R sit down, S come up. What word do we bave now? (sink.) Now I sit down, A come up. What now? (sank) Take time to point out similarities and differences among the words and to have students
physically 'blend' the cards together in front of the room to demonstrate the combining of sounds.
- Sort the Words. Sort pictures or words by the letter sound. This can be done with the word cards from the story (see sequencing tasks above). Or, give students a worksheet with empty boxes for each sound, and they sort the pictures under the sound or words under the sound.

| W <br> wear, we, water | S <br> sunny, summer |
| :--- | :--- |
| T <br> today | Sh <br> shirt |

- Fill in the Missing Letters. To review the vocabulary words for your unit, give students a list of words that have one or more letters missing (try to choose ones that they could easily hear the sound of). Have students write the missing letters (without dictation).

- Dictation. The literacy task of assigning symbols to sounds is a major undertaking, and students will need a great deal of practice. Dictation is also a good progress-checking activity. Connect oral and written language by having students try to write the sounds or words you (or fellow students) call out. Encourage new readers to write only the first sound they hear, or the final sound, and later the entire word if possible. Encourage "inventive" spelling.
- Word Families. Using a starter-word from the learner-generated text, elicit or introduce more words that fall into this word family. For example: hot (pot, rot, shot, dot, got, not), or wear (pear, bear), or drink (sink, think, blink). Students can sort words on cards or slips of paper into particular word families, or you can do a number of the other phonics activities listed above working not on specific sounds, but on this specific word family pattern.
- Letter Tiles. Put a handful of letter tiles (similar to Scrabble ${ }^{\circledR}$ tiles) on each table for use by 2-4 students. You (or a student) call out words that the learners must spell with their tiles. They can work individually, in pairs or groups. Make it into a game: Assign teams and award points to the team who can spell the word correctly first.

Clearly, once a text has been generated by LESLLA learners, teachers need only read it carefully to find a treasure chest of bottom-up tasks that can build emergent literacy skills. Some of these tasks are described above, but innovative teachers can no doubt create many, many more. The final step in the Whole-Part-Whole method is to then return to the whole text and again focus on meaning, perhaps expanding the original text in the process. By taking the time to work on the pieces of
language, including word recognition, phonemic awareness, and phonics, students then return to the whole text with deeper understanding and increased attention to how print functions.

## 6 Conclusion

LESLLA learners face a unique set of challenges: acquiring literacy as adults while learning a new language and resettling in a new culture. While tackling these incredible tasks, learners bring with them remarkable resources for learning that can be capitalized on by skilled teachers to build literacy. In this report, learnergenerated texts are presented as one route to effective, balanced literacy instruction that addresses the top-down needs of adult emergent readers while also nurturing bottom-up skills. LESLLA teachers can capitalize on students' oral language abilities to build literacy by recording their spoken stories and using their words as reading texts.

Using the Whole-Part-Whole method, teachers can focus first on meaning and comprehension, and then they can turn attention to specific readings skills such as sequencing, word recognition, phonemic awareness, and phonics. Then returning to the 'whole' text, students gain new understanding of the building blocks of language within their own stories. Such practice uses language that is familiar and engaging to learners to nurture their emergent reading skills. In this way, teachers and learners work together to create motivating, achievable lessons that gently move LESLLA learners to becoming proficient readers and writers.

## For discussion

Below is another text gathered from a LESLLA class at the Minnesota Literacy Council. What kinds of emergent literacy activities could be done with learners based on this text?

## Beautiful Garden

Mr. J tiller on the dirt.
Many students clean the stones and grass.
Dirt in the pot and plant tomatoes, chilies, cilantro, eggplants.
Put in the stakes and put in the fence.
Plant broccoli, onions, green beans, flowers in the garden.
Water the plants everyday.
We like cucumbers, carrots, broccoli, onions, radishes.
We feel happy.
Figure 3: Beautiful Garden

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## References

American Education Research Association, (2004). English language learners: Boosting academic achievement. Research Points, Winter 2004 2(1), 3.

Auerbach, E. R., \& Burgess, D. (1985). The hidden curriculum of survival ESL. TESOL Quarterly, 19(3), 475-495.

Auerbach, E. R (1992). Making meaning, making change: Participatory curriculum development for ESL literacy. Washington, DC: National Clearinghouse on Literacy Education, Center for Applied Linguistics. (ED 356 688)

Birch, B. (2007). English L2 reading: Getting to the bottom. Mahwah, NJ: Lawrence Erlbaum Associates.

Brod, S. (1999). What non-readers or beginning readers need to know: Performance-based ESL adult literacy. Denver, CO: Spring Institute for International Studies.

Campbell, P. (2004). Teaching reading to adults: A balanced approach. Edmonton, Canada: Grass Roots Press.

Center for Adult English Language Acquisition (2009). Literacy and beginning-level texts for adult English language learners. Retrieved from: http://www.cal.org/caela/esl_resources/littext.html

Chall, J.R. (1967). Learning to read: The great debate. New York: McGraw-Hill.
Croydan, A. (2005). Making it real: Teaching pre-literate adult refugee students. Tacoma, Washington: Tacoma Community House Training Project.

Crandall, J. \& Peyton, J. (Eds.). (1993). Approaches to adult ESL literacy instruction. Baltimore: Center for Applied Linguistics and Delta Systems Co., Inc.

Evans, E. (2008). Onset and rime instruction in a low level ABE ESOL reading classroom. Unpublished master's thesis, Hamline University, St. Paul, Minnesota.

Fish, B., Knell, E., \& Buchanan, H. (2007). Teaching literacy to preliterate adults: The top and the bottom. TESOL: Adult Education Interest Section Newsletter, 5, 2.

Geva, E., \& Zadeh, X. Y. (2006). Reading efficiency in native English-speaking and English-as-a-second-language children: The role of oral proficiency and underlying cognitive-linguistic processes. Scientific Studies of Reading, 10(1), 3157.

Gombert, J. E. (1994). How do illiterate adults react to metalinguistic training? Annals of Dyslexia, 44, 250-269.

Grant, R.A. \& Wong, S.D. (2003). Barriers to literacy for language-minority learners: An argument for a change in the literacy education profession. Journal of Adolescent and Adult Literacy, 46, 386-394.

Haverson, W. \& Haynes, J. (1982). ESL/Literacy for adult learners. S. Behrens, (Ed.). Language in Education: Theory and Practice, 49. Washington, DC: Center for Applied Linguistics.

Imel, S. (1998). Using adult learning principles in adult basic and literacy education practice. (ED-99-CO-0013)

Knowles, M. (1973). The adult learner: A neglected species (3rd Ed.). Houston, TX: Gulf Publishing.

Kruidenier, J. (2002). Research-based principles for adult basic education reading instruction. Washington, DC: National Institute for Literacy. Retrieved December 21, 2009, from www.nifl.gov/partnershipforreading/publications/html/adult ed/index.html.

Kurvers, J., \& van de Craats, I. (2007). Memory, second language reading, and lexicon: A comparison between successful and less successful adults and children. In N. R. Faux (Ed.), Low-Educated Adult Second Language and Literacy Acquisition: Proceedings of Symposium (pp. 65-80). Richmond, VA: Literacy Institute at Virginia Commonwealth University.

Lado, A. (1991). Ways in which Spanish-speaking illiterates differ from literates in ESL classrooms. Unpublished master's thesis, Georgetown University, Washington, DC.

Liden, A., Poulos, A., \& Vinogradov, P. (2008). Building literacy in emergent adult readers. Pre-Convention Institute presented at TESOL Convention. New York City, NY.

Minnesota Literacy Council (2009). Adventures at Arlington Hills blog. Retrieved January 5, 2010, from http://mlcarlington.blogspot.com/2009 0601 archive.html

National Reading Panel. (2000). Report of the national reading panel: Teaching children to read. Washington, DC: National Institute of Child Health and Human Development.

Parrish, B. (2004). Teaching adult ESL: A practical introduction. New York: McGrawHill.

Pressley, M. (1998). Reading instruction that works: The case for balanced teaching. New York: The Guilford Press.

Tarone, E., Bigelow, M., \& Hansen, K. (2009). Literacy and second language oracy. Oxford: Oxford University Press.

Trupke-Bastidas, J., \& Poulos, A. (2007). Improving literacy of L1-non-literate and L1-literate adult English as a second language learners. Minne/WITESOL Journal, 25. Retrieved on December 3, 2009 from http://minnetesol.org/journal/vol25 html pages/26 Reimer.htm.

Vinogradov, P. (2008). "Maestra! The letters speak." Adult ESL students learning to read for the first time. Minne/WITESOL, 25.

Weinstein, G. (1999). Learners' lives as curriculum, six journeys to immigrant literacy. Delta Systems and the Center for Applied Linguistics.

Williams, A., \& Chapman, L. (2007). Meeting diverse needs; content-based language teaching and settlement needs for low literacy adult ESL immigrants. In M. Young- Scholten, (Ed.), Low-Educated Adult Second Language and Literacy Acquisition Proceedings of the Third Annual Forum (pp 49-60). New Castle upon Tyne, England: Newcastle University.

Wrigley, H.S. \& Guth, G.J.A. (1992). Bringing literacy to life: Issues and options in adult ESL literacy. San Mateo, CA: Aguirre International. (EDRS No. ED 348 896).

Young-Scholten, M., \& Strom, N. (2006). First-time L2 readers: Is there a critical period? In I. Van de Craats, J. Kurvers \& M. Young-Scholten (Eds.), LowEducated Adult Second Language and Literacy Acquisition: Proceedings of the Inaugural Symposium (pp. 45-68). Utrecht, The Netherlands: LOT.

# Get Wise: CONTENT-BASED TEACHING FOR LESLLA REFUGEE YOUTH IN ADULT PROGRAMS 

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## 1 Introduction

Get Wise is a set of multi-media teaching materials developed within the Australian Adult Migrant ${ }^{2}$ English Program (AMEP) for low literacy refugee youth and young adult learners. The materials illustrate how a content-based approach can contribute to the learning of English language, literacy and content relevant to the lives of older adolescent and young adult LESLLA learners. While the Get Wise materials were the outcome of a large well-funded project, they demonstrate strategies that can be applied locally by teachers working to meet the needs of older adolescent and young adult LESLLA learners, regardless of the level of funding.

## 2 The Australian context

There are significant numbers of younger learners (aged between 16 and 24) in the AMEP, which is a settlement program that provides ESL instruction to new and recently arrived adult immigrants across Australia. The AMEP is funded by the federal Department of Immigration and Citizenship (DIAC) and provides up to 510 hours free ESL tuition to learners in certain categories (generally refugee and humanitarian intake immigrants ${ }^{3}$ ). Learners with special needs such as difficult preimmigration experiences may be eligible for an additional 100 hours of instruction. In 2004, this was expanded for young learners (16-24) with seven or fewer years of schooling, who were entitled to up to 400 hours additional tuition in the AMEP. These additional programs are called the Special Preparatory Program (SPP). The AMEP is delivered by a number of different providers across the country, who have been contracted by DIAC through a competitive grant process. AMEP providers are required to work within a national framework, the Certificates in Spoken and Written English (CSWE). The CSWE curriculum is outcome based, with learner achievement assessed through their performance of competencies. The framework has a number of levels, including a preliminary stage that acknowledges the low literacy levels of some learners (NSW AMES 2003).

Many young learners are therefore from refugee backgrounds and have had limited or interrupted experiences of formal schooling. Their social circumstances can be varied. They are often living with their families, while in some cases they have arrived in Australia independently and have no family with them. In some cases

[^1]they have moved away from their families and are living independently. Their characteristics as learners in AMEP classrooms often make them noticeably different from their older peers in their classrooms. They tend to have a very strong orientation to peers of their age group and an awareness of various aspects of youth culture that are not of great interest to older learners. Younger learners are often less able to formulate goals for themselves and are often less aware of options open to them and pathways to access and achieve goals they may have. For young refugee learners with limited formal education, as well as limited English language and literacy skills, accessing mainstream vocational training and education is a challenge.

While some older adolescent refugee students may access schools (this is mainly an option for relatively younger learners aged under 18), this is often not a successful pathway because of the high expectations associated with the final years of secondary schooling. Therefore many younger refugee learners gravitate to the adult sector, sometimes after an unsuccessful experience in a school. These learners usually have a verbal fluency with spoken language that far exceeds their skills with written language. They also tend to learn more quickly (especially spoken language) than the older learners in their class.

In many cases, AMEP classes include learners of all ages, and may have a wide age range. In some places there are concentrations of younger learners, and providers are able to include dedicated youth oriented classes. AMEP classes generally work toward the language specified goals and objectives of the CSWE, but content is not prescribed. The CSWE specified language is often contextualized in content related to the settlement needs and circumstances of its adult learners. However, younger learners do not always relate so easily to such information, which assumes a certain amount of life experience and self-awareness in the formulation of goals.

## 3 The curriculum challenge: What is suitable for this group of learners?

The nature of this group of learners presents challenges for the teachers and AMEP providers working with them. The learners often have less formal knowledge than their peers who have greater experience of formal schooling, and less knowledge and experience of the world than their older classmates. They have gaps in their knowledge of aspects of life in their new country. However, they often have an eagerness to learn and are motivated and adaptive learners who can learn some things (especially spoken language) at a relatively fast pace, while writtenbased tasks can be more challenging. They are often interested in and relate to trends and interests of younger adults and have an interest in, but limited experience of, new technologies as a means of social interaction and entertainment. An extensive research study of such young people from Africa (who represent between one half and two thirds of these learners in the AMEP) found that providers nominated the following priorities for instruction to these learners: literacy; numeracy; settlement issues, including Australian culture and knowledge of educational pathways, and learning to learn (Murray \& Lloyd, 2008, p. 14). Furthermore, the study noted that young people preferred being with like-minded young people, needed classes focused on pathways for young people and a youthoriented methodology.

These learners need a curriculum that will provide them with engagement and motivation, as earlier studies in the AMEP suggested that younger low literacy learners are inclined to lose motivation and drop out relatively easily if they feel their needs are not attended to (Wigglesworth 2003). Curriculum for these learners needs to generate engagement and motivation, as well as developing English language skills, literacy (and numeracy) skills and contribute to their knowledge of the new society. These young LESLLA learners also need to develop more selfautonomy and self-awareness as learners. The Get Wise project sought do produce curriculum materials that would achieve these goals and be useable within the varied contexts of AMEP provision.

## 4 The Get Wise Project

Following other projects in the AMEP in which content-based approaches had produced high levels of engagement and successful language learning outcomes (Hemming et. al. 2004, Williams, 2004) the AMEP Research Centre (AMEP RC) proposed content-based curriculum modules as a way of meeting the needs of young LESLLA learners in the SPP component of the AMEP. The materials had to be compatible with the AMEP curriculum and program organization frameworks and be of particular value for use in classes including SPP youth learners.

### 4.1 Development of the Get Wise modules

Following DIAC's acceptance of the proposal and agreement to fund it, the concept and guiding principles for the materials were developed in consultation with a national working group which included representatives of AMEP providers and experts outside the AMEP who had experience of working with the target group of learners (such as teachers with experience of adolescent low literacy learners in the school sector). This group met early in the project to consider and advise on the format and content of the materials proposed by the AMEP RC team working on the project.

A team of experienced ESL materials writers was recruited to work on the materials. This team included a writer with scriptwriting experience and a teacher with demonstrated experience in working with this group of learners. The whole writing team met to develop the general content and structure of the modules, and members of the writing team worked on designated modules. The writing team member with script writing experience developed the drafts of the scripts for the DVD scenarios that were to be used at the basis of each of the modules. Experienced teachers of young LESLLA learners critically evaluated early drafts of the materials, and the final drafts of the materials were trialed in classes by AMEP teachers of the target group of learners, as well as being reviewed for content by experts in the content area that was addressed. The process of conceptualization, drafting, evaluating and revising, trialing and production took over two years, from the second half of 2005 to the beginning of 2008.

### 4.2 General approach

The following principles guided the production of the materials:

- A Content-based approach was adopted because it was deemed to be useful in engaging learners and providing them with learning of important content related to their settlement and progress in Australian society;
- The Relationship with the CSWE curriculum framework was to be that while the materials would contribute to specified curriculum and assessment objectives, they would not focus primarily on these. The rationale for this was that while some of the needs of this group are not comprehensively covered by the specified curriculum, the content of the materials should contribute to the mainstream curriculum. Teachers may, however, need to supplement the materials in order to fully meet all the program curriculum objectives.
- Modules would be self-contained so that teachers could insert them into a teaching program at the point at which they best fitted that program.
- The materials would assist in the teaching of literacy, as well as contributing to content learning and learning of ESL. There would be a focus on written language and connections made between spoken and written English.
- The materials would also include some attention to strategies for learning how to learn. This was considered in part because the target group of learners has limited prior experience of formal learning and because it is clear learners cannot learn all they need to in classrooms, and so need strategies to assist them in learning in many different contexts.
- The materials should portray realistic youth situations in order to assist the learners and help them to identify and engage with what is being taught.

These principles are illustrated in the materials described in section 4.4 below.

### 4.3 Content and focus

Each module contains four units of work around the topic of the module. The DVD introduces each unit with a social situation that introduces an aspect of the content and relevant language, providing the foundation of the learning activities and tasks in the student workbook. The CD Rom provides sound files for workbook tasks that involve spoken language. Some modules include supplementary materials, such as wall charts (in Your Future and Your Health and Well Being and a board game in Your Money). Teachers' notes for each unit provide suggestions for teachers about the use of the materials and an answer key for the workbook exercises.

The characters in the scenarios are young, of different ethnicities and, while each of the units and modules are self-contained, many of the characters appear across the different modules so there is some continuity of the people involved in the scenarios presented in the DVDs. The scenarios relate to aspects of life in Australia of relevance to the young learners who are the target audience of the materials.

The titles and content areas of the modules are:

- Your future: Work and study. This module looks at the idea of learning pathways and their connections with vocational goals, and the process of vocational goal setting.
- Your time out. This module deals with recreational activities (including water safety and beach safety - an essential survival skill in Australia).
- Your money. This module focuses on managing money, budgeting and strategies for managing money and how to economize.
- Your communication. This module looks at digital technology.
- Your bealth and well-being. This module covers healthy life styles, nutrition and eating.
- You and me. This module looks at interpersonal relations, cross cultural interaction and aspects of life in a multicultural society.

In each module the four self-contained units enable a focus on different aspects of the content and language.

The materials incorporate many of the essential elements of content-based language teaching, including the use of visuals as well as a focus on language as it is used in dealing with the topic under consideration (for example, Brinton, Snow Wesche 1989, Crandall \& Kaufmann 2002). While there is no strong formal framework such as advocated by some advocates of content-based teaching (for example, Mohan 1986 or Chamot \& O’Malley 1992) the Get Wise materials follow a loose framework in which specific elements of language, literacy, learning to learn and in some instances numeracy, are explored following a holistic encounter with language and content in a social situation that relates to the learners' social situation, needs and interests.

In each module the four self-contained units enable a focus on different aspects of the content and language.

### 4.4 The nature of the teaching materials and learning tasks

The workbook tasks in each module unit begin with a fairly common language teaching approach around the DVD scenario. The first part of the video is played, and/or pictures shown, and the students are asked to discuss the person, where they are, what they are doing and what will come next, thereby predicting what they might see when they then view the whole situation.

Figure 1 describes an example of a previewing task, in which the students are invited to discuss the situation and what is likely to occur.

A young African man is looking at a monthly calendar on a wall. He looks serious. His finger is pointing to Tuesday March 6, on which 'Pay Rent' is written in large print. 'Pay rent' is also written on Tuesday March 20. The caption above the photo reads, 'Paying the Rent'.
Activity 1 asks students to look at this photo and discuss who is in the photo, where he is, what he is looking at, what he has to pay, and finally 'What will happen next?' Activity 2 invites the students to watch the video for the unit.

Figure 1: Summary of a Previewing discussion task: Paying the rent, Get Wise: Your Money Student workbook, Page 2. ${ }^{4}$

[^2]The DVD situation for this video is described in Figure 2.

> Luka and Kuol share a house together but are finding it hard to cover their costs. One morning Kuol notes the rent is due and leaves a note for Luka reminding him that he needs to pay his share of the rent. He goes out, and at the shops he meets Luka who has just bought two pairs of running shoes because they were a bargain at half their usual price. Kuol reminds him the rent is due, and Luka offers to give him his card and PIN to get the money out of the ATM. Kuol tells him he shouldn't give his PIN to anyone and suggests they walk to the ATM together. At the ATM Luka is surprised that he has only a little money in his account, but Kuol points out that because it is a debit account the payment for the shoes has already been deducted. Luka is surprised at this. They later meet a friend, SaySay Po, who is experiencing difficulties in his house as he doesn't get on with his brotherin-law. Luka and Kuol invite SaySay Po around to their house to see if he is interested in sharing with them. He will be sharing a (rather untidy) room with Luka but is happy to accept, and Luka promises to tidy up the room.

Figure 2: Overview of the video scenario presented in Unit 1, Your Money Following the situation there are follow up comprehension tasks, such as sequencing pictures of events, answering comprehension questions and so on.

Figure 3 presents the follow up tasks for the same DVD scenario on paying the rent. True false responses check students' understanding of different aspects of the scenario.

> A black and white photo of a scene from the video shows Kuol and Luka walking past two ATMs located at a bank. Luka is carrying a shopping bag containing shoes. Activity 12 asks the students to circle 'True' or 'False' after each of seven sentences. An example is provided. Luka bought a jacket in the sales' is marked 'False'. Most of the sentences relate to the situation presented in the DVD, for example:
> 1. Luka and Kuol have to pay the rent tomorrow,
> 2. SaySay Po bas a problem
> 4. Luka has a credit card.
> But one sentence (number 3) involves the students in relating what they have seen in the video story to themselves:
> 3. You should tell your friends your PIN'.

Figure 3: Summary of comprehension task, Get Wise: Your Money, Student workbook $p 8$.

Students and teachers use the workbook to follow through the learning tasks for the unit, drawing on the CD Rom where a sound file is the basis for a learning task. Other learning materials such as a wall chart or a game are provided with some modules as supplementary materials.

Program) group page on the EDNA (Education Network Australia) Website at http://www.groups.edna.edu.au/course/view.php?id=2051

The tasks that follow provide a range of tasks focusing on language, literacy skills, numeracy extensions of content, and learning how to learn. To conclude each unit there is a word search ${ }^{5}$ and a learner reflection on what they have learned from their work in the unit.
4.5 Focus on language.

These learning tasks focus on an aspect of language relevant to the topic. The focus may be a lexical item, a grammatical structure or a language function. Figure 4 describes a learning task that provides a focus on the use of conditionals in relation to misdemeanors and fines in public places, from Your Money: Unit 3.

Activity 117 invites students to write about fines. The model provided shows a completed sentence written after a prompt. The prompt is (dropping rubbish), and the completed sentence provided is
Ifyou drop rubbish you can get a fine of $\$ 160$ '.
The other prompts are (putting your feet on a seat), (making a journey without a valid ticket), and (drinking alcohol). The shell sentence the students are to complete reads If you $\qquad$ you can get a fine of $\qquad$ .'
A previous task provided information about the amount payable in fines for certain violations of public transport regulations.
Figure 4: Description of a language focused learning task: Get Wise: Your Money, Student workbook, $p 70$.
4.6 Literacy skills.

While there is general literacy work involving students in reading and writing of texts (in some cases copying) many of the literacy focused learning tasks assist learners in seeing the connections between spoken and written language, as is described in Figure 5.


[^3]Relax' has been given as an example. It is under the o $O$ beading.
The other words in the list are 'regularly', improve', 'began', 'recipe', 'supernarket', 'exercise', 'bealthier', 'yogurt', 'tomato', 'aerobics', 'ingredients', 'breakfast', 'preservative', 'lentils', 'appointment'.

Figure 5: Description of learning tasks the involve students in exploring phonemic-orthographic relationships, Get Wise: Your Health and Well Being, Student workbook, $p 68$.
4.7 Numeracy skills

In most of the modules there are learning tasks that focus on numeracy skills or at least provide practice in skills (which may require further attention by the class teacher). Figure 6 shows how the notion of 'rounding' is dealt with in Your Money: Unit 2.

A learning tip is provided under the heading 'Food Shopping'. The tip is that you can use rounded numbers to add up quickly if you don't have a calculator on band. In this way you can estimate a total amount, and check that your calculator is working properly.

Then activity 73 asks students to look at some price labels and estimate the answers. The first 3 items include two price tags and the last three items include three price tags. For each item, a column to the right of the price tags provides a prompt of 'About $\qquad$ ', on the top line and then on the next line 'Total is about $\qquad$ ' and a final column is headed 'Total (using calculator). The completed example bas price tags of $\$ 3.95+\$ 4.79$, in the next column, 'About $\$ 4+\$ 5$, Total is about $\$ 9$ ' inserted, and the final column ' $\$ 8.78$ '
The price tags have amounts in which the dollar amounts are mostly under ten, (though two items are above ten dollars) and the cents amounts are either between 1 cent and 18 cents or between 79 and 99 cents.
Figure 6: Description of a numeracy focused learning task, Get Wise: Your Money, Student workbook p 43.

### 4.8 Extension of content

Some learning tasks provide extension of an aspect of the content of the unit. For example Figure 7 illustrates a task from Your Money Unit 1, in which the difference between debit and credit and some other aspects of a bank account are explored. Note how the learners are encouraged to draw on their existing knowledge and collaborate in exploring their understanding.

Activity 31 presents a facsimile of the top part of a bank statement, showing column beadings, dates and details of some transactions. In boxes below the facsimile students are asked to match some words with meanings, listed in another set of boxes. As an example 'credit' is matched to 'money going into the account'. The other words to be matched to a meaning are 'debit', 'balance', 'transaction' and 'fee'.
Activity 32 asks students what other banking words they know, to write them down and to discuss their meanings with other students.

Activity 33 asks the students to answer two questions and talk with their classmates and teacher about them. The questions ask how often the students get bank statements and whether they check their bank statements.
Figure 7: Description of a learning task that extends the unit content, Get Wise: Your Money, Student workbook p 18.

### 4.9 Learning to learn and reflection on learning

Learning to learn skills are dealt with through 'Learning tips' that are interspersed in the workbook tasks at points where they can be related to particular tasks. These can be elaborated and demonstrated by the class teacher and explored in class. Students are encouraged to reflect on their learning, and they are asked to self rate their understanding of key aspects of the content of the unit.

Each unit is rounded off with a word search based on key vocabulary of the unit, which is followed by the learners' reflections on their learning.

## 5 Conclusion: Response to the Get Wise materials and implications

The materials have been distributed to AMEP providers free of charge and made available publicly on the internet through the EDNA (Education Network Australia) website (http://www.groups.edna.edu.au/course/view.php?id=2051) . While a systematic post-distribution evaluation was beyond the project scope, there have been anecdotal accounts of widespread utilization of the materials in the AMEP and some non AMEP programs, with teachers reporting that the materials have a strong impact on the learners. There have been reports of teachers of students at higher levels of language adapting the materials and writing worksheets with tasks that reflect the higher language and literacy levels of their students. The Your Money module won an award for Excellence in Educational Publishing in the TAFE and Further Education Teaching and Learning Category in the 2008 Australian Publishing Association awards.

The Get Wise project materials illustrate the potential that a content-based approach can make to meeting the complex learning needs of young LESLLA learners. The engagement with content presented in a socially relevant way for young LESLLA learners enables a foundation for the further exploration of aspects of language, literacy, numeracy and learning to learn. Learning tasks based on a foundation of content enable focused exploration of these dimensions and provides the integration of tasks in which the learners apply their learning across these dimensions. While the Get wise published materials represent the outcome of a wellresourced national project, they also illustrate principles teachers can apply in developing more locally focused and less ambitious, but nonetheless valuable, teaching and learning materials.

## References

Brinton, D, Snow, M. \& Wesche, M. (1989). Content-based instruction. New York: Newbury House.

Chamot, A., \& O’Malley, M. (1994). The CALLA bandbook. Reading, MA: AddisonWesley.

Crandall, J. \& Kaufman, D. (2002). Content-based instruction in bigher education settings. Alexandria, Va: TESOL Inc.

Hemming, P., Sydorenko, T., Lloyd, R., \& Murray, D. E. (2004). Fact sheetIntegrating content and language: Meeting the needs of learner drivers. Miscellaneous, 2. Sydney: AMEP Research Centre.

Murray, D. E., \& Lloyd, R. (2008). Uptake of the special preparatory program by African communities: Attitudes and expectations. Sydney: AMEP Research Centre.

NCELTR (2007). Get wise: Your future; work and study. Available from: http://www.groups.edna.edu.au/course/view.php?id=2051

NCELTR (2007). Get wise: Your money. Available from: http://www.groups.edna.edu.au/course/view.php?id=2051

NCELTR (2008). Get wise: Your health and well being. Available from: http://www.groups.edna.edu.au/course/view.php?id=2051

NCELTR (2008). Get wise: Your communication. Available from: http://www.groups.edna.edu.au/course/view.php?id=2051

NCELTR (2008). Get wise: Your time out. Available from: http://www.groups.edna.edu.au/course/view.php?id=2051

NCELTR (2008). Get wise: You and me. Available from: http://www.groups.edna.edu.au/course/view.php?id=2051

Mohan, B. (1986). Language and content. Reading, MA: Addison Wesley.
New South Wales Adult Migrant English Services. (2003). Certificates in spoken and written English (4th ed.). Sydney, Australia: NSW AMES.

Wigglesworth, G. (2003). The kaleidoscope of adult second language learning: Learner, teacher and researcher perspectives. Sydney: NCELTR.

Williams, A. (2004). Fact Sheet - Enhancing language teaching with content (Teaching Issues 3). Sydney: AMEP Research Centre.


## SERVING LOW LITERATE IMMIGRANT AND REFUGEE YOUTH: CHALLENGES AND PROMISING PRACTICES

## Heide Spruck Wrigley, Literacywork International

## 1 Introduction

In the US and elsewhere, we see increasing numbers of first and second generation immigrants with comparatively low levels of education, limited English language and literacy skills, and limited attachment not only to school, but to work or job training as well. Many are young people 16-24 who are no longer in the public school system or may never have been part of that system because they either were too old to enter high school when they arrived or because they realized their chances of graduating were slim and therefore never chose not to enter school. Still others have to work to support themselves and their families. A surprising number of young immigrants live on their own. In addition to the multiple educational and economic needs of this group, there are cultural challenges that confront young immigrants in transition, particularly those whose lack of educational opportunities and subsequent limited literacy skills put them at the margins of society.

Young immigrants often see themselves as neither an integral part of their home culture nor as a valued part of the new society. Most are oriented not to their parents' pasts, but to their own futures, futures that are made possible in large part through access to quality education. These young immigrants may enter adult literacy programs to get a high school diploma or its equivalent, a GED. Some simply want to further develop their skills to increase their job prospect or to gain access to higher education.

In some cases, young immigrants over 16 attend adult ESL classes because they have been mandated by the courts to attend classes as a condition of probation after run-ins with the criminal justice system. In the US, many prisons also offer ESL and GED classes for young offenders in correctional institutions. In fact, all incarcerated individuals who are limited proficient in English must take these ESL courses so that they can communicate in English with staff and other inmates and to help them succeed in GED courses, a requirement for anyone who has not completed high school.

The most vulnerable group among out-of-school youth are those who have had only minimal schooling and therefore are not yet proficient in print literacy, either in the home language the language they are trying to learn. Some in this group may have only a few years of education but have acquired some literacy on their own, while others may still have difficulty expressing even simple ideas and opinions in writing. Still others may be altogether new to literacy and may never have held a pencil before.

This paper explores the special characteristics of young immigrants and provides an overview of the challenges in serving low literate immigrant and refugee youth who are learning the language of their new country ${ }^{6}$. The paper highlights some of the key challenges facing both in-school adolescent second language learners and out-of-school youth and presents exceptional programs and promising directions in serving these populations.

## 2 Educational Contexts

In many countries, young people who are out-of-school may participate in free adult literacy classes designed to improve reading and writing skills. But the slow pace and redundancy of many of these classes - particularly those that have rolling enrollment - the emphasis on conversational language and life skills, and the lack of integration with a "next step" program that can move them into training or higher education often leads to high dropout rates and disengagement from formal learning.

[^4]For the most part, adult education classes that mix older adults with adolescent learners have not been very successful in integrating the two groups. It has been difficult for young immigrant youth, particularly those with little formal or with interrupted schooling, to find programs and places that engender a sense of belonging and give them a voice that can be heard over the stress and confusion of resettlement. As adolescent newcomers try to forge a positive identity that spans languages and cultures, lack of attachment to a positive peer group or to family can make this process of adaptation and integration even more challenging. Gender roles may need to be redefined and new roles within and outside of the family structure may need to be renegotiated. In cases where spouses, families or friends see the wish to become educated as a betrayal of traditional cultural norms, deeper rifts may ensue. In many cases young people without strong social support simply choose the path of least resistance and give up on their educational goals.

Reattaching out-of-school youth to courses within the adult education system has been a challenge because few places exist for youth who don't have a solid foundation in literacy in their home language and who are now attempting to develop these skills in a second or third language (Whiteside, 2009). The goal for many of these students is to "finish school" and get a credential that allows them to enter college or a vocational program. However, few can invest in the many years that it might take to develop the school-based literacy skills that would allow them to gain a diploma. Even in-school youth who start school speaking only the home language require an estimated five to seven years of study to be at par with their native speaking peers (Collier, 1995; Hakuta et. al., 2000). For out-of-school youth who are still acquiring literacy in a new language, the prospect of acquiring such proficiency is daunting. As a result, motivation to persist tends to be low as young people feel discouraged and overwhelmed. For those who start with slightly stronger literacy skills, the academic subject matter that needs to be learned (math, science, social science, English literature and poetry) has little relationship to the language and literacy that are important in the lives of young people who are more apt to want to hear, read and write about peer relationships, new media, technology and social networks. Yet few adult language teachers are trained to make connections between the interests of young immigrants and the knowledge and skills these students are asked to acquire.

### 2.1 The Need for Cognitive Academic Skills

Even in cases where students have developed good L2 conversational skills, they often face difficulties acquiring the cognitive academic skills necessary for school or for success in vocational programs that rely on lectures and textbooks. These challenges are compounded when youth don't have exposure to age appropriate texts written at the students' proficiency level or when there is limited opportunity to participate in discourse that uses the more formal language of academics. Limited knowledge of the vocabulary and concepts that are part of content-based instruction in academic or technical courses can seriously hinder progress of adolescent newcomers who may know the everyday language needed to
negotiate life in the streets but don't yet have an understanding of relatively common words such as analyze, process, observe, reduce, justify, etc. - all part of a set of words that appear in "A High-Incidence Academic Word List" (Coxhead, 2006; 2000), a list that could be helpful to teachers and learners alike. Research tells us that L2 learners with lower vocabulary skills and limited L1 literacy have much greater difficulty comprehending written texts and that even L2 learners with higher proficiency levels face greater challenges making sense of and interpreting print than native speakers (Francis et al., 2006; Calderon et al., 2005).

### 2.2 Socio-cultural Context: Whom Do We Serve?

Immigrant and refugee youth, like all migrants, differ in their languages, countries of origin, newcomer status, and age and gender. Differences in life experiences are highly significant as well: Young immigrants who come from stable communities at home and now are part of strong families still may have language and literacy challenges due to lack of prior education, but they are very different from youth who have fled violent conflicts or brutal wars. Some refugees in their teens and twenties have suffered unspeakable violence - they often have been victims of such violence, but in some cases, may have inflicted violence on others as well, as was the case of the boy soldiers from the Sudan (Beah, 2007; Deng, Deng, Bernstein and Ajak, 2006). Not surprisingly, young refugees who have experienced trauma may have trouble concentrating, may find sitting for hours at a desk physically stressful, and may not be able to fully participate in the educational experience that literacy programs are trying to provide. Only in the last few years have programs recognized the signs of depression caused by the traumatic experiences that young people may suffer, signs that often manifest themselves in acting out or drawing inward, behaviors that few literacy teachers are prepared to understand and address in a positive manner (see also Isserlis, this volume).

## 3 Out-of-school and Out of Mind

Among low educated young immigrants, refugee youth are not the only group who deserves special consideration, although the level of turbulence they have experienced far exceeds that of other uprooted groups. In the US, at least, we have large numbers of immigrant students who are uneducated but whose lives go largely unnoticed since they are no longer in the school system. The most vulnerable among out-of-school youth are students who come in late adolescence and had limited or interrupted schooling as families moved to harvest crops and teenagers helped in the fields. To help these students build the strong academic skills so they can be on par with their English speaking peers and graduate from high school is a challenging task and many schools are unsuccessful in doing so. As a result, we find thousands of youth who share LESLLA characteristics. Although they are outside of the formal system, they nevertheless have a strong need continue their education so as to create a better life for themselves, move out of poverty, and find work that can sustain themselves and a family.

The numbers of out-of-school immigrant youth are particularly high in places like California - where it exceeds a quarter of a million. A report by the Public Policy Institute of California (Hill and Hayes, 2007) reports that immigrant youth who do not attend school fare poorly on many standard measures of well-being; they have lower educational attainment than their in-school counterparts, speak English less fluently, earn lower wages, and are more likely to lack health insurance and live in poverty. They are much more likely to live away from home. Significant numbers of younger immigrants (age 3 to 15) live without their own parents ( $52 \%$ ), compared to $9 \%$ of in-school youth). They also tend to become parents themselves at a younger age ( 3 times more likely than their in-school counterparts). Among the older group of youth (16-22), young men predominate (nearly $2 / 3^{\text {rds }}$ are male). Although poverty rates are high among this group, access to services is limited and state and federal funds that are spent on youth generally do not reach these young people because the dollars go through educational institutions they do not attend. Clearly, these young people face difficult prospects and the cost of not serving them are high, not only in personal terms but in societal terms as well, as the economy increasingly depends on high skilled workers and opportunities to find well-paying work without strong English language and literacy skills are low. Despite the challenges they face, the out-ofschool youth interviewed and surveyed in California expressed a great deal of interest in improving their education. More than $80 \%$ are interested in English language instruction and more than one-third would like to gain a high school diploma or the GED (high school diploma equivalent).

## 4 The Question of Immigration Status

The educational options available to young low-literate immigrants are constrained by the lack of appropriate high quality education available to this group. But in the US, at least, a second barrier constrains not only educational success but access to work, training, and higher education, since access to these opportunities are tied to a young person's immigration status. In the US, young people who were born outside of the US and who came to the US illegally (most with their parents, but some on their own) have the right to go to public school (and must go to school while they are of compulsory school age). Although these students may work hard and obtain a high school diploma, they remain undocumented and live outside of the law in the shadow of society. In most states, they are barred from getting a driver's license (as is anyone who is in the country without proper documentation), and they may not legally work. In states, such as Arizona, that stipulate that only youth and adults who have legal status may participate in adult education programs, undocumented adults and out-of-school youth are not allowed to attend adult ESL classes. As a consequence, thousands of young people end up working in dead-end jobs in the grey economy, where the danger of exploitation is high, or if they are apprehended, may be sent back to countries they barely know.

There have been various attempts in US Congress to regularize the situation of these students who remain in legal limbo. Bills have been and will be introduced to grant "conditional legal status" to young undocumented immigrants. Requirements however are stringent: Only those are eligible who have entered the US before age 16, who have been continuously present in the US for at least five years, have graduated from high school or received their GED, and have demonstrated good moral character.

Permanent legal status can be achieved for those who attend college or join the military service six years after having received conditional status. These stipulations are unprecedented in US history since educational choices or military service have never before been a pre-condition for legal status. The Migration Policy Institute ${ }^{7}$, a think tank in Washington, DC, estimates that 360,000 undocumented high school graduates would immediately be eligible for conditional legal status if such a law were to pass and 715,000 unauthorized youth between 5 and 17 would become eligible sometime in the future. The fate of undocumented students who have dropped out of school remains unclear. While some may feel driven to return to school and graduate from high school in order to qualify, others may lack the language, literacy and academic skills needed to meet high school graduation requirements. Others may need to work or face family responsibilities that make it difficult to persist in an adult literacy program until they obtain a high school diploma or its equivalent. Moral concerns arise as well when receiving legal status is conditioned by volunteering for military service, thus delivering recruits with few choices to the Armed Forces. Many would like to see other options such as apprenticeships or community service in the conditions for eligibility. There is strong support in the Obama administration for passage of the Dream Act and on many college campuses where young advocates rally around the legislation in solidarity with their undocumented peers. However, strong antiimmigrant forces who see any attempt at legalization as a reward for lawless behavior and an effort to weaken rather than strengthen the country may win out in the end.

## 5 Education Profiles: Language and Literacy Proficiencies

The professional futures and economic opportunities open to refugee and immigrant youth are shaped in large part by prior schooling and current language and literacy levels. Compared to their more educated peers, young adults who have had limited or interrupted formal schooling may languish in adult literacy classes where the majority of the students possess literacy skills in the native language although their L2 proficiency may still be limited. Even under the best of circumstances (well designed and well run programs, well trained teachers), it may take those with very limited formal education in the home country and no L2 literacy years before they attain a proficiency level that will allow them to enter college or succeed in job training that leads to a marketable certificate.

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## 5. 1 Proficiency Profiles

The language and literacy abilities of immigrants and refugee youth exist along a continuum ranging from non-literate in any language to literate in a language that uses a script different from that of the target language. The literature of the last 20 years has proposed various taxonomies for classifying second language learners by their literacy proficiencies. Some suggest a continuum from pre-literate to non-literate to semi-literate to literate. One such taxonomy frequently used and cited includes those who are literate in a non-Roman alphabet (Khmer, for example, or Russian) and those who can write using a logo-graphic system (Japanese or Chinese) under the rubric "literacy learners" - learners who are likely to have difficulties developing alphabetic print literacy because of their lack of L1 foundation skills available for transfer.

Inclusion within LESLLA of learners who are literate in one or more language but lack familiarity with alphabetics is likely to mask the vast differences between those who are fully literate but need to learn how alphabet-based languages work and those who still struggle understanding how oral language maps to written language regardless of the writing system used. Taxonomies that fail to be explicit in making these distinctions run the danger of minimizing the contribution that L1 literacy makes to the development of L2 reading and writing. Such an undifferentiated view often has the effect that students who have no or low literacy in any language are taught with the same curriculum used with literate students who come from a non-alphabetic script. Our experience has shown (Condelli and Wrigley, 2009) that although students from logographic systems may need a bit of time before they internalize the alphabetic principle and grasp the notion that each letter is associated with distinct sounds, they nevertheless tend to progress much faster in their literacy development than their peers who may know the alphabet but have only minimal experience with reading and writing. As a result, true literacy learners often fall behind and fail to thrive in programs that combine literate and non-literate learners in a single class without the necessary differentiation.

### 5.2 Cognitive Challenges

Increasingly programs serving low-literate immigrants and refugees are concerned about students who not only have difficulties using and interpreting print but also face other cognitive challenges that make any kind of learning difficult. In their extensive report on Provisions for Refugee Youth with Minimal/No Schooling in the Adult Migrant English Program, written for the Australian Government's Department of Immigration and Citizenship, Moore, Nicholas, and Deblaquiere describe teachers who indicated that incidents of learning disabilities seemed to be highest among students who had experienced trauma. Many of these teachers reported feeling helpless in light of the difficulties that kept their students from progressing in their studies at a normal rate.

In the past (and in some areas still occurring), learning difficulties in L2 students have often been confounded with language difficulties. Assessing students in a language they have not yet mastered can lead to misdiagnoses that find evidence of reading challenges that exist because of incomplete knowledge of the language not because of underlying gaps in phonological processing or insufficient reading comprehension. Professionals concerned about the over-diagnosis of learning disabilities in students who speak a language other than the school language at home, often suggest that only assessments that use the dominant language of the student and administered by a competent bilingual assessor should be used.

As researchers in LD (learning disabilities) have pointed out, the identification and remediation of LD in second language learning is a complex process depending on many factors. Variables to be considered in determining LD in English language learners include native language and literacy skills, English language and literacy skills, cultural factors that may influence test and school performance, family and developmental history, educational history, and the nature of previous reading instruction (Spear-Swerling, 2006). As a general guideline in the classroom, Robertson (2007) suggests that teachers see their students in the context of other young people in the same educational environment: If the progress being made by the student is similar to that of his/her peers with similar language proficiency and literacy profiles, then the student probably does not have special education needs. If, however, the student progresses much more slowly than others with similar backgrounds, some first steps in diagnosis and evaluation should be undertaken. In many cases, meetings with family members and discussions through a bilingual interpreter can help identify important factors such as brain injuries and/or significant learning difficulties in native language.

## 6 Exemplary Practices and Promising Directions

### 6.1 Dual Language Models

Within the in-school population, late entry students - those who enter middle school or high school upon arrival, - face the greatest challenge. Not only do they need to learn to read and write in the target language, they need to acquire the relevant subject matter knowledge in the content areas (history, sciences, literature). As a report (Short and Fitzsimmons, 2007) on the challenges and solutions to acquiring language and academic literacy for adolescent English language learners suggests, immigrant learners are expected to master complex course content, but have fewer years to master such knowledge than their native born peers. In addition, these students are enrolling at an age where most schools no longer teach literacy explicitly, assuming instead that reading and writing skills that are needed to understand lectures and textbooks and compose essays have been acquired in previous grades. Students who have below grade level literacy skills in the native language face severe challenges since they lack both the underlying text processing skills needed to access informational text written at the high school level and the background knowledge needed to understand and manipulate abstract concepts. Students with few years
of schooling in the home country may need additional time to acquire academic skills and subject area knowledge and to become accustomed to the school structures and classroom routines common in the new country.

Students who have had some schooling in the home country should be able to build on the knowledge they have gained and receive credit as well. In the United States, the University of Texas at Austin, through a bi-national cooperation with Mexico, offers services designed to reduce the challenges immigrant students face. These services include obtaining transcripts from Mexico, interpreting transcripts to provide individual graduation credit analysis, and developing diagnostic assessments in Spanish that allow US schools to place students in the appropriate grade level and in appropriate courses. To provide academic support for Spanish speaking English language learners, the university has aligned Mexican online courses with Texas academic standards so that students progress in their education in their dominant language while they learn English and integrate into their new communities.

Helping late entry students succeed in middle and high school is a daunting undertaking that cannot be accomplished in the classroom alone. Policies need to be established that take into account the special challenges faced by language minority students who have limited L2 language and literacy skills, while at the same time offering an academically rigorous curriculum that prepares students for transition to training and higher education. Schools have to be organized in new ways so that students have learning opportunities that engage them. Teachers have to have special training to meet the language, literacy, and academic needs. Programs have to be designed so that students' personal, social, and cultural experiences are not only recognized but built upon. Approaches to teaching and learning must reflect what we know about academic language and literacy development and must built upon "how people learn" (National Research Council, 1999).

### 6.2 Soccer as a Means of Social Integration.

Engaging refugee youth across nationalities and integrating them into the larger community is often a tremendous challenge. One community, Clarkson, an American town in rural Georgia, illustrates how young people's interest in sports can be harnessed to provide opportunities to shine and excel not only on the playing field but in academics as well. Under the innovative leadership of a Jordanian immigrant, a soccer (i.e., football) team was formed and took on the name of "Fugees" - short for refugees and sometimes used derogatively by others (it is also the name of an American hip hop band of the 90s).

The Fugee Family consists of young men from 24 different countries speaking 10 different languages who play both home games and away games and in their wins are bringing fame and glory to themselves and to the wider community (in Clarkson, 1 out of 5 residents is a refugee). Playing on the team is closely linked to academic achievement - students must attend school, stay out of trouble and maintain a passing academic grade average.

Enthusiasm for the game is what attracts the kids' participation, and, once involved, they are impelled to excel not only on the field but off. The Fugees Family, established as a nonprofit in 2006, is one of the few groups in the US whose focus is uniquely and exclusively on refugee youth. By tapping into soccer as a starting point, the project was able to build a community based on common interest and develop trust among young people whose disparate backgrounds could easily have led to distrust and hostilities (the group includes Africans and Asians, Northern and Southern Sudanese, Christians and Muslims (including Shia and Sunni). Much of the credit for the program goes to the founder and coach of the team, Mulah Mufleh, an American-educated immigrant woman from Jordan whose father had disinherited her when she chose to stay in the US. Ms. Mufleh has since started a school, the Fugee Academy. and saw her first refugee graduate from college (see also St. John, 2009).

### 6.3 International Network of Public Schools

The International Network for Public Schools develops and supports a network of small public high schools that successfully educate and graduate late-entry immigrant students from more than 90 countries around the globe who speak over 55 native languages. Unlike many of the international programs operating around the globe, schools in this network overwhelmingly serve families whose income is below the poverty line. The three international public schools (operating in New York City, Oakland, and San Francisco) are student-centered small schools offering a family-like environment, designed to provide a level of personalization that is not possible in large urban school districts.

The schools utilize a learner-centered, project-based curriculum that incorporates performance-based assessment. Heterogeneous groups of students work collaboratively on content-based tasks in a language-rich environment guided by instructors who are both teachers of language and teachers of content. The schools adhere to a philosophy where every adult accepts full responsibility for the total development of the immigrant student (linguistically, culturally and academically. The network itself helps build and maintain the capacity of each school to serve immigrants and refugees by offering a coherent model that includes teacher training, performance based assessments, rubrics, and new teacher toolkits. The network also advocates on behalf of the schools as part of a broader movement for quality.

### 6.4 Meeting the Needs of Out-of-School Youth

Developing the higher level literacy skills needed for transition to higher education and for work that pays a living wage remains one of the key challenges for refugee and immigrant youth. Those with only a few years of education often have little experience reading textbooks, analyzing passages or synthesizing information, skills that are increasingly important in a knowledge-based society, not only for in-school students but for out-of school youth as well. Programs focused solely on life skills often fail to prepare youth for
the rigour of even a Level 1 training curriculum (those that provide a certificate but not academic credit). In the US and in Canada, programs and initiatives are underway to fill the gaps between the skills and knowledge that immigrant youth bring to the learning process and the expectations of training institutions and places of higher learning. These efforts seek to accelerate the process of language learning and literacy development through contextualized courses (courses that teach basic skills while also teaching subject matter knowledge in demand occupations such as health care, information technology, accounting or transportation). Most of these efforts recognize the important role of "coaches" that help youth not only understand and navigate the system, but better understand themselves, their dreams and their circumstances so they can make informed decisions about their future. The new initiatives also recognize that the path to education and training is not a linear one for youth who don't have stipends or other support to allow years in school. In an effort to allow these students to "stop out" for a time to work or raise families, some programs articulate courses across institutions (basic ESL, non-credit training, training in higher education) so that credit and certificates gained on one level will count on another. Through an articulated system, students are able to gain "stackable certificates" that add up to a degree over time, even if schooling is interrupted. While few of these efforts are focused solely on immigrants and refugees, most include non-native speakers of English in their programs. Unfortunately, there is very little data on how foreign-born low-literate youth are faring in these programs, compared to their US born peers who are low-literate but grew up in an English speaking environment.

### 6.5 Team Teaching to Integrate ESL and Technical Skills: I-BEST for Youth in W ashington State:

The US has been experimenting with various models seeking to build language and literacy skills while students are in training, rather than expecting those with limited skills to go through years of classes focused on every day life skills before they can enter a training program. A program that shows particular promise is the I-BEST program in Washington State. The program has language and literacy teachers teach side-by-side with technical instructors in the same classroom. This team teaching approach allows the second language teacher to illustrate key concepts during the lesson (by drawing a graphic organizer, for example), explaining vocabulary that students might not know through examples and paraphrasing, and summing up the point of the training in language the students understand. Crucial to the success of the training is intensive case management that seeks to address the socio-economic barriers that students whose lives are full of turbulence factors face - these might include the support in finding reliable child care, transportation vouchers so they can get to school, access to financial aid, along with peer support and mentor support by faculty.

Recognizing the need for a bridge program for refugee and immigrant youth who may be too old for high school, Bow Valley College in Calgary, Canada has developed a comprehensive program serving low literate refugees, including literacy learners (see Leong and Collins, 2007). The curriculum integrates theory and practice, stresses the acquisition of cognitive and metacognitive skills and draws on instructional methods such as explicit teaching and project-based learning, an approach that helps learners create collaborative projects to be showcased Through a process that includes research, production and presentation of a project, students learn to bond as a group and take on leadership roles, all the while developing the skills and strategies needed for 21st century work (Condelli and Wrigley, 2006).

The Bow Valley program is informed by two key processes: A learner needs assessment at the beginning (repeated through a continuous improvement process) and an analysis of the learning opportunities and essential knowledge that refugee youth need to gain in order to actualize their potential. The program is designed to respond to the needs of a diverse youth population whose past experiences and present circumstances make them vulnerable (see also Isserlis on trauma in this volume). The program has implemented a solid case management approach that helps students negotiate systems. Counselors help to address not just the linguistic needs of refugee youth, but their personal and social needs as well. The program has published a handbook called Bridging the Gap: A Framework for Teaching and Transitioning Low Literate Immigrant Youth (Leong and Collins, 2007), designed to guide other programs serving refugees and immigrants with few years of schooling in the home country and who are not yet prepared to enter training or transition to academic work.

### 6.7 Addressing Social-Emotional Skills Through Counseling and Art: New School Canada

In Surrey, British Columbia, outside of Vancouver, the National Literacy Secretariat funded a demonstration program for disengaged youth who faced significant literacy challenges. The project, which included immigrants as well as First Nations students sought to address not only the academic literacy needs of 15 to 16 year olds, some of whom read at a 3rd grade level and below, but their social emotional needs as well. Recognizing that alienated youth, many of whom had interactions with the criminal justice system, needed the opportunity to learn in new ways in an environment that both challenged and supported them, the program, called New School Canada, implemented practices that had been found to be promising through studies with out-of-school youth. These included a full time counselor who spent time alongside teachers in the classroom, strategies adapted from First Nations cultures, such as non-judgmental listening to thoughts and feelings of others and activities, and conversations focused on developing empathy and building community (for details, see Wrigley and Powrie, 2007b). The program also adopted a response to student irresponsible behavior called "restorative action," an approach that asks an individual to own up to behaviors that hurt others (hurtful remarks as well as physical violence) and to make amends to the group to restore trust (see also Hogeveen, 2006).

To allow these students who struggled with literacy and who had become disconnected from school an opportunity to shine, the New School devoted a full $25 \%$ of instructional time to the visual arts - painting and photography and installed 10 computers in the classroom (a 1:2 ratio of computer to students). Visual arts and technology were used to reinforce and deepen literacy skills and allow students to come to processes such as composing and interpreting texts with an eager mind and a fresh perspective. For example, to prepare for the reading and writing of biographies (a grade 10 activity), students created self-portraits and life maps, depicting high and low points in their young lives. Discussions about sharing life events though powerful language and vivid images followed and students wrote autobiographical essays. The teacher highlighted literature concepts such as character, plot development, hero and antagonist, story climax and denouement, using key events in their lives that students had shared. Only then did students move to the literature component of the provincial curriculum. As they read biographies and short stories, they used the concepts they had gained from writing about their own lives to help them understand the writing of others.

For the students whose self-confidence had been hurt by their inability to read, painting and photography became entry points into academics as they saw themselves and their classmates as becoming "smart in art." In several cases, the work that students created reflected both an increased sophistication in rendering self-portraits and a growing confidence in their own abilities to engage texts in various forms.

The series of self-portraits below shows the progression over one semester of a student from Libya. There is less than six months between the first crude drawing of his father and himself and the final fully rendered self-portrait. When students reviewed their work, the art teacher asked: "What do you think happened with the person who did these drawings over the past six months? Do you think he might feel differently about himself?" A lively discussion ensued.


## 7 Conclusion

The practices discussed above make it clear that providing conventional language and literacy services to low literate immigrant and refugee youth is not sufficient to effect meaningful differences in their lives. The myriad needs of youth who have been uprooted and may now be alienated by a system that does not take their past experiences and current circumstances into account require thoughtful programmatic responses carried out over long periods of time. The deep rooted problems that make social and economic success difficult to achieve for youth and adults with few years of schooling and limited skills are not amenable to quick fix approaches.

The examples outlined above speak to what it takes to provide pathways to a sustainable future for this vulnerable group: Opportunities to engage in tasks and activities that matter outside of school (e.g., sports and technology); opportunities for self expression that are not limited by L2 proficiency; and opportunities to learn marketable skills through programs that combine language and literacy development with training in technical/vocational skills. In addition, young immigrants and refugees who have had only a few year of schooling need to a chance to fill in gaps in knowledge and acquire the academic literacy skills necessary for transition from basic and functional literacy to the literacy required for continued learning in and out of school.

### 7.1 Implications for W orking with LESLL A Adults

Although most of the Promising Practices above were drawn from programs serving in school immigrant and refugee youth ${ }^{8}$, the lessons inherent in them also speak to educators and researchers serving out of school youth and adults. Similarly, the issues that confront immigrant and refugee youth and the challenges they face in trying to maintain a positive identity and integrate into a new society are not that different from those facing low educated adult second language learners. Lessons that LESLLA educators may take away from the research and literature on youth include the importance of recognizing various subgroups among the immigrant population - including youth and the elderly - and meet the special needs of marginalized populations through differentiated programming. Many of the insights gained from studies on with youth transfer directly to our work with LESLLA adults: the need to provide safe and supportive environments for everyone, but particularly those who have suffered the trauma of war and violence; to allow for alternative ways of teaching and learning through drawing and other visual media and to take into account the multiple intelligences that both youth and adults exhibit when creativity is encouraged. Equally important will be instruction

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### 7.2 Implications for policy and research

Serving low literate refugee and immigrant youth and adults requires not only services that are culturally sensitive and linguistically appropriate. It also demands policies that speak to the unique emotional, social and cognitive needs of a vulnerable group of individuals whose potential has not yet been realized. As Van Ngo (2009) suggests in his powerful study "Patchwork, Sidelining and Marginalization" it is now time to shift from the discretionary funding in place in Canada, the US and other countries to an approach that treats meaningful education and training as a right and not a privilege. LESLLA educators and supporters can be instrumental in documenting the specific needs of this population, conducting research with in-school and out-of-school youth as well as with adults who have had few educational opportunities in their countries and in calling for targeted comprehensive services that are sustained over time.

## References

Beah, I. (2007). A Long Way Gone: Memoirs of a Boy Soldier. Sarah Crichton Books.
Calderón, M., August, D., Slavin R., Cheung A., Durán D. and Madden N. (2005). Bringing words to life in classrooms with English language learners. In Hiebert, $A$ and M. Kamil (eds.) Research and development on vocabulary. Nahwah, NJ: Lawrence Erlbaum.

Collier, V. P. (1995). Acquiring a Second Language for School. Directions in Language and Education National Clearinghouse for Bilingual Education, Vol. 1, No. 4, Fall 1995.

Condelli, L. and Wrigley, H. S. (2009). What Works Study: Instruction, Literacy and Language Learning for Adult ESL Literacy Students. In S. Reder and J. Bynner (Eds.).Tracking Adult Literacy and Numeracy Skills: Findings from Longitudinal Research. London and New York: Routledge.

Condelli, L., and Wrigley, H. S. (2006). Instruction, language and literacy: What works study for adult ESL literacy students. In I. van de Craats, J. Kurvers, and M. Young-Scholten (Eds.) Low-educated adult second language and literacy acquisition. Utrecht: LOT.

Coxhead, A. (2006). Essentials of Teaching Academic Vocabulary. Boston, MA: Heinle.

Coxhead, A. (2000). An Academic Word List. TESOL Quarterly, 34, 213-238.

Deng, A., Deng B., Bernstein J., and Ajak B. (2006). They Poured Fire On Us From The Sky: The True Story Of Three Lost Boys From Sudan. Publicaffairs.

Francis, D., Rivera, M., Lesaux, N. K, Kieffer, M., and Rivera, H. (2006). Practical guidelines for the education of English language learners: Research-based recommendations for instruction and academic interventions. Available from http://www.centeroninstrution.org/files/ELL1-Interventions.pdf.

Hakuta, K., Butler, Y.G., and Witt, D. (2000). How long does it take for English learners to attain proficiency? Santa Barbara, CA: Linguistic Minority Research Institute.

Hill, L. and Hayes, J. (2007). Out-of-school immigrant youth. Public Policy Institute of California. San Francisco, CA.

Hogeveen, B.R. (2006). Unsettling youth justice and cultural norms: the Youth Restorative Action Project. Journal of Youth Studies, Volume 9, Issue 1 February 2006 , pages $47-66$.

Leong, M. and Collins, L.(2007). Bridging the gap: A framework for teaching and transitioning low literacy immigrant youth. Bow Valley College, Calgary, Alberta.

Moore, H, Nicholas, H and Deblaquiere, J (2008). 'Opening the Door': Provision for Refugee Youth with Minimal/No Schooling in the Adult Migrant English Program: Project 2.1: 'Modes of Delivery for SPP Youth', AMEP Research Centre, Commonwealth of Australia. http://www.ameprc.mq.edu.au/docs/research reports/research report series/Op ening the door.pdf

National Research Council (1999). How People Learn: Bridging Research and Practice. Donovan, M. S., Bransford, J. D., and Pellegrino, J.W., Eds. National Academy Press, Washington, DC.

Robertson, K. (2007). How to address special education needs in the ELL classroom. Colorin Colorado. Retrieved January 2009, from
http://www.colorincolorado.org/article/19960
Scarcella, R. (2004). Academic English: A conceptual framework. The University of California Linguistic Minority Research Institute Technical Report 2003-1. Retrieved November 17, 2005, from http://lmri.ucsb.edu/publications/03 scarcella.pdf.

Short, D. and Fitzsimmons, S. (2007). Double the work: Cballenges and solutions to acquiring language and academic literacy for adolescent English language learners - A report to the Carnegie Corporation of New York. Washington, DC: Alliance for Excellent Education.

Spear-Swerling, L. (2006). Children's reading comprehension and oral reading fluency in easy text. Reading and Writing: An Interdisciplinary Journal, 19, 199-220.

St. John, W. (2009). Outcasts United: A Refugee Soccer Team, an American Town. Spiegel and Grau; New York.

Van Ngo, H. (2009). Patchwork, sidelining and marginalization: Services for immigrant youth. Journal of Immigrant and Refugee Studies, 7(1), 82-100.

Whiteside, A. (2009). "We don’t speak Maya, Spanish or English":Yucatec Mayaspeaking transnationals in California and the social construction of competence. The Native Speaker Concept Ethnographic Investigations of Native Speaker Effects (Doerr, N.M. (Ed.) Berlin • New York Mouton de Gruyte.

Wrigley, H.S. (2009). From survival to thriving: Toward a more articulated system for adult English language learners. Proceedings of the 2008 LESLL A SymposiumAntwerp, Belgium (Eds: Ineke van de Craats and Jeanne Kurvers).

Wrigley, H. S. (2007a) Beyond the life boat: Improving language, citizenship and training services for immigrants and refugees. Toward Defining and Improving Quality in Adult Basic Education: Issues and Challenges (Alisa Belzer ed.). Mahwah, New Jersey: Erlbaum Publishing.

Wrigley, H.S. and Powrie, J. (2007b). Now I Get It: Final Report of the National Youth Literacy Project, Vancouver, CA; Literacy BC.
http://youthliteracy.ca/reports/reports research/new school final report.pdf
Wrigley, H. S. (2004b). Research in action: Teachers, projects and technology. Literacy Links, Volume 8, 3 http://wwwtcall.tamu.edu/newsletr/jun04/june04a.htm.

# TRAUMA AND LEARNING - WHAT DO WE KNOW, WHAT CAN WE LEARN? 

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#### Abstract

This article describes an ongoing project of enabling practitioners to share understandings of issues underlying trauma and learning and to work together to articulate strategies and approaches to support learning for basic literacy level learners and practitioners. The article also touches upon elements of a workshop offered at LESLLA 2009, reviews common wisdom about supporting victims and survivors of trauma and violence, and proposes ways in which practitioners can consider and address the issue in their own settings and contexts.


## Introduction

Adult educators have long been aware of the fact that many adults face challenges to learning prior to entering into adult classes. Experiences of violence and trauma - in the lives of learners and educators - have a bearing on our abilities to be present to learning and teaching. Understanding how these experiences shape our abilities to learn and teach has been central to the work of a number of educators, particularly Jenny Horsman and others working in networks of practice such as those referenced by or working with Canadian-based Learning and Violence.net (http://www.learningandviolence.net/helpothr/wherwrld.htm). Horsman has been instrumental in helping educators see that particular behaviours and attitudes that may once have been attributed to laziness or indifference may, in fact, be manifestations of responses to prior exposure to stress, trauma or violence. As well, a proliferation of memoir, fiction and learner-generated writing and publishing has also served to demystify the difficulties learners have faced and to offer suggestions of ways of strengthening our provision of adult literacy instruction (see for example http://swearercenter.brown.edu/Literacy_Resources/screen.html\#print\ /\  fiction).

Years ago, I may have thought that the woman who stared out the window or neglected to call me to report an absence just didn't care about school. I now know to consider the fact that she may be a survivor of violence, a partner to someone who controls her use of the telephone or computer, or experiencing other challenges that preclude her being able to come to class or to be present and attentive to learning once she is there. Knowing that I don't know what has happened but that there is a possibility that something likely did happen enables me to provide multiple means of entry and participation in my classes so that learners aren't doubly failed - once by their particular experiences of violence and, again, systemically, by a school that won't acknowledge a range of needs for and abilities to be present to learning. Just as universal design isn't only helpful to people with special needs (the curb cuts are not only useful to people in wheelchairs, but also for moms with prams), this approach to supporting learners can benefit all of us whether or not we've experienced trauma.

Awareness of how trauma affects learning has increased in the field of adult education, but much work remains to be done, particularly as the field experiences frequent turnover with practitioners leaving regularly (largely due to insecure working conditions) and with newcomers taking their places - often as volunteers or novice teachers with varying degrees of training, support, experience and/or preparation.
This article briefly reviews the author's work on the issue of trauma and learning and offers recommendations for next steps and ongoing work in practice and policy.

## Beginning the investigation: On the Screen

Having noticed learners' struggles to attend to learning and encouraged by Horsman's emergent research, the author, through a fellowship from the National Institute for Literacy (On the Screen, 1999-2000), worked with ten adult literacy practitioners in Rhode Island in the northeastern United States to explore the complications and implications of violence and adult learning. The fellowship, informed by the author's classroom experience and by Horsman's work, was undertaken in an attempt to make lasting impacts on adult teaching and learning by raising the visibility of issues pertaining to violence and learning. The Rhode Island practitioner cohort worked together over an academic year to identify impacts of trauma on learning, to develop responses and approaches to supporting learners affected by violence or trauma and to make systemic change, where possible, in order to support access to learning for all.
"[Traumatic events] can overwhelm the ordinary systems of care that give people a sense of control, connection, and meaning" (Herman, 1992,).
"Since language learning demands control, connection, and meaning, adults experiencing effects of past or current trauma are particularly challenged in learning a new language" (Isserlis, 2000).

Herman's (1992) explication of trauma, , serves as a guiding frame in examining how adults, including both learners and practitioners, respond to and cope with the awful things they have experienced. Because victims of violence are disproportionately represented among the ranks of adult learners, it is critical that adult educators understand how people cope with trauma in order to understand how to assist them in attending to learning.

Trauma makes it difficult to attend to learning. For some, a startle reflex may make any loud noise a powerful distraction. A lack of self-confidence and life-long messages that they are "stupid" and "no good" set some learners up to expect failure. Some have yet to experience a self efficacy - a sense of being able to make decisions, to act on the world in ways that allow them to assert their knowledge and skills. Having come to believe that they are indeed stupid, it is difficult to find ways for them to imagine they are smart or competent. Learning becomes another thing at which to fail, something else "that I can't do." Hollow promises, such as you can do it! aren't helpful; concrete indications are: Look. Last week you wrote a paragraph; this
week you've completed two pages. Do you see the progress you've made with your use of punctuation? Providing safe space can also help. Horsman speaks of a providing a comfortable chair in a quiet corner in the classroom. Instead of leaving the class or the program because she feels stressed or upset, a learner can move to the corner of the room; she can just listen to the class from there. Her moving to the corner means she is not expected to participate in discussion. She is taking a small bit of control over what she is and is not able to do in a given moment; it is not all or nothing, it is a place in between. Many people who have experienced violence don't get that. It's all or nothing; fight or flight. I can't concentrate today, so I'll quit school forever. Horsman's work has opened the doors to many of us who wish to create and have created - other possibilities for learning and teaching, by finding ways to accommodate learners' intermittent abilities to be present to and to make progress with their studies.

Over the course of On the Screen's ten-month fellowship, the Rhode Island cohort participated in monthly meetings, engaged in written reflection (through list serv exchanges and journaling) and participated in pair or small group work. In addition to monthly check-ins, explicit training occurred in the areas of domestic violence and its consequences, issues of child sexual abuse and recovery and also in dialogue with Jenny Horsman, whose text, Too Scared to Learn: Women, Violence and Education we had read and discussed. While the majority of the practitioners in the cohort worked with adult ESOL and basic education students, some were former adult educators - one was working in an elementary school, and one was working within the state's child protective system. Another participant was working as an art therapist in a locked psychiatric facility. Over the course of the fellowship period, teachers explored different approaches to classroom practice, drawing on Horsman's work, and paying attention to their own learners' input and to one another's suggestions and reflections.

In addition to providing ongoing direct service through their program or agency work (learning, teaching, case management), members of the group of practitioners engaged in the fellowship considered attendance policy, confidentiality issues and classroom dynamics through the lens of creating and maintaining safe space for learners and developing flexible guidelines for learners to be able to attend classes. Whereas, for example, some programs had held a 'three strikes' policy (three absences would result in a learner losing her or his place in a program), flexibility was increased, expressly to support those learners whose attendance might have been disrupted by sabotaging partners, or periods of dropping out of school in order to deal with consequences of violence or trauma. We struggled to name ways in which participants could maintain confidentiality or not be compelled to share stories but would learn that programs would accept them and accept their absences as well, if family or household issues created challenges in attendance.

As part of the fellowship work, the author also held workshop sessions with adult ESOL program participants, trying to help all learners understand the legal issues underpinning any form of violence as well as to publicize information about services for victims of violence in Rhode Island. In some instances, learners whose cultures 'normalized' violence challenged the suggestion that physical violence against women was an issue; framing the issue as one of abiding by US law posed
one way of addressing that resistance, but there were never any simple answers to many of the questions and challenges posed by male participants. ${ }^{9}$

In addition to classroom-based practice, the project was especially committed to building connections between educators and others in service sectors working with adult learners - welfare and child protective workers, law enforcement and health care providers. It was important for educators to understand the implications of child protective sanctions, welfare regulations and other forms of community control affecting the learners with whom the cohort interacted. For education workers, these adults were students; these same students were also someone else's clients, patients or constituents in some other way. Relationships between learners and service providers are often tense and educators are, at times, drawn into conversations in order to assist learners understand what is being said, what's at risk. By attempting to bridge understandings and communication across the sectors, the project aimed to both ease tensions and to educate service providers about the realities of one another's work as well as about the day to day struggles encountered by adult learners, particularly those who were survivors of violence and trauma.

In order to support the cohort, we used some of our funding to engage the services of an on-call trauma counselor. Participants had access to appointments with the counselor with the understanding that the project would be billed without revealing who had been to visit in the event that participants wished to keep that information private. (In the event, one of the author's students, working in an intergenerational literacy project at a domestic violence shelter did visit the counselor. The author, as well, used some of the counselor's time in a modified supervisory model.). This support was of critical importance in creating safety for the author and cohort members. While programs or communities of practice can take this work on without access to a professional counselor, it is critical that care be taken for those in the group to understand the parameters of what they feel they can and can't undertake. As funding permits access to support workers, all the better for those doing the work in an ongoing manner.

## Barriers and supports

Literacy practitioners teach adults to read and write English. They're not providing therapeutic treatment. They are, however, working with learners whose experiences have included a range of very bad things; the practitioners themselves are also likely to have also experienced bad things. We all find our ways through these experiences in one way or another, with varying degrees of grace and success.

In our classrooms, we rarely speak directly of these experiences. However, we are aware of the fact that any one of us may have had bad things happen. So we ask questions that can be answered with I'd rather not say, and we ask questions that never compel a learner to describe or report anything she or he does not wish to

[^7]discuss. For example, we don't ask directly about a childhood memory, but we might ask about something someone remembers as being fun or interesting - from last night or last year or much earlier. We give people lateral choices; we give them an opportunity to answer questions, but we give them choices in the kinds of questions they choose to answer. We appreciate that language and literacy learning are hard work and require commitment and engagement. We recognize that it is hard to learn when you're too afraid to tell or not tell, when you're too preoccupied with deciding what people can or can't know about you. So we give learners multiple choices and multiple ways of learning, expressing and being with one another.

Increasingly, in large part due to Horsman's work and to the networks of practice her work catalyzed, practitioners are working together to learn more about the particular contexts in which they are working, to learn about local resources and to find ways to strengthen practice for low literacy - and all - adult learners. Study circles, reading groups, list servs (see, for example, a recent thread on a national list serv about couples studying literacy together http://www.nifl.gov/pipermail/diversity/2010/003560.html [retrieved February 4, 2010]) all acknowledge and address the issue as one of many elements having an impact on how people learn and teach. Practitioners are seeing anew how consideration of the needs and strengths of the whole learner is key to supporting learner persistence (see Comings, 2007) and engagement.

As part of a process of initiating discussion or prompting reflection, Figure 1 enumerates obstacles that learners and teachers may commonly encounter. While wanting to maintain an assets-based consideration of the complexities of learning and teaching, it is also important to acknowledge that there will be things that get in the way and that strategies need to be developed to address these barriers. There are also supports to be developed, nurtured and valued as well.

Figure 1: What gets in the way of learning and teaching?

| - violence | - poverty |
| :--- | :--- |
| - racism | - dis/abilities |
| - immigration status/history |  |
| - health and mental health |  |
| - gender | - sexual orientation |
| - un/employment | - housing/food security |
| - religion | - economic status |
|  |  |

Practitioners will find that the elements in Figure 1 will have greater or less saliency, depending on their contexts, but are well advised to consider where the program or agency is able to assist learners in dealing with particular barriers, where the program can develop support and where the practitioners can simply be aware of what is going on even if they are not able to do something to address every issue.

Basic level literacy classrooms commonly include adults of mixed age, culture, gender and nationality. An elderly Cambodian woman might be learning alongside a young Hmong mother. The former may be pressed into service as a family or community child minder; the latter may be seeking employment in an entry level position. Each has suffered her own difficult circumstance as a refugee. Both now are part of a larger learning community that might include using the neighbourhood itself as its curriculum -- photographing street signs, making maps, labeling buildings, or describing where to find particular foods, supplies, clothing. The class builds its learning through the things they know and the things they need to know. For example, days and days could go by without anyone mentioning Pol Pot time or other bad memories. (Pol Pot was the despot responsible for the Khmer genocide of the 1970s) Sometimes these memories might be shared in a very matter of fact fashion; sometimes someone needs to leave the table or the room for a little while but knows it will be safe to come back to the group when she is ready to focus back in on studying. Horsman (1990) and others offer numerous specific examples of how to make classrooms safer spaces. Considerations of physical space (hanging posters, having plants and flowers), physical well-being (nutritious snacks, a kettle for tea) and overall well-being (mutually determined ground rules for daily classroom practice) are some ways to make the classroom a safer place.

In Rhode Island, some small changes were made in program policy; cohort members - some of whom are still in the field - also share their learning with their colleagues. An increase in awareness of issues of violence has occurred, but workshops and meetings - sharing sessions and discussion groups - are still in demand as teachers chronically attempt to help learners come to grips with challenges encountered in the face on daily grinding poverty and violence. One outcome, though tenuous, is an awareness of the fact that there are complications that affect learning and that programs can and should use funding for ancillary support - something that would have been a 'hard sell' in Rhode Island ten years ago.

## At LESLL A: W orkshop purpose

The purpose of the workshop at LESLLA was for participants to understand the impacts of trauma itself and to develop and expand strategies to address issues related to trauma and learning. The goals of the workshop also included: sharing experience and understandings of effective ways of working with adults with limited literacy; exploring classroom approaches designed to accommodate a range of learning needs, strengths, and circumstances, with a particular focus on immigrants and refugees with low literacy; and reviewing research on and strategies for ensuring the development of safe spaces for learning; and moving practice forward to support teaching and learning for all.

While some participants were already actively engaged in or were familiar with prior scholarship, all of us recognized the ongoing need for additional research and opportunities for sharing stories, strategies and materials. As well, as practitioners working in varying cultures and contexts, we were reminded of the need for clarity around and understanding of the ways in which local contexts and cultures understand and address experiences of violence and trauma. For example, women's experiences of female genital mutilation may appear to be 'normalized' in cultures and communities practicing that mutilation and so some women, if they speak out against it, may face censure or worse from other members of their culture related to the practice. Westerners may be appalled by the practice but our role, as educators, is not to condemn or pontificate, but rather to understand the pressures brought to bear and to assist our learners and colleagues in finding strategies for learning despite the challenges that undergoing the trauma that genital mutilation may well have created. We may be aware that a woman underwent that procedure, but we would be ill-advised to discuss it directly in class, or to introduce a discussion of the topic. We are not counselors or therapists, nor do we aspire to do their work. If the subject arises, we might pursue a factual response - what do we know about the practice? What would people want to learn about it? We might have classroom ground rules that enable us to ask if this is a topic everyone wants to pursue. Perhaps some learners might take on the research as part of a larger project on rights around the world, while others may choose to use their time pursuing other learning. If we listen to our learners, we are not likely to be able to control the content or questions that learners bring to classes, nor can we predict what they might find troubling or triggering. We can be aware of the fact that, inevitably, some things will be difficult and that we are responsible for understanding how to support learning, how to avoid questions, prompts and assignments that might disadvantage those experiencing trauma and how to access local resources for referral as needed and appropriate. We also need to know how to listen.

Through an iterative process, the workshop at LESLLA enabled those in the room to share their work, contexts, interest in and concerns about trauma and learning. The facilitator briefly reviewed work undertaken in the past ten years, and participants shared their own experiences of working with adult learners who have experienced trauma.

One purpose of this article is to suggest ways in which practitioners can replicate this process in their own settings and communities - through workshops, informal meetings, or ongoing conversations. The article briefly describes the author's study of violence and learning, and the implicatieons of multiple understandings of the impact of violence on adult learning generally and on basic level literacy learners in particular.

## So what? What difference does this work make in the lives of learners and teachers?

The compilation of the fellowship cohort's collective learning in the form of a final report, detailing the work of the program - including the intergenerational literacy program at the women's shelter, work with incarcerated learners and consideration of sex offender treatment programs - was submitted to NIFL and is also posted online at http://www.brown.edu/lrri/screen.html

In the ensuing decade, many practitioners have continued to work to ensure that thinking of violence and learning is no longer a special topic. The key pieces to consider in addressing issues of violence have to do with enumerating what it is we need to accomplish and finding ways to make these ongoing explorations replicable in numerous contexts (see, for example, www.violenceandlearning.net) over time. Consideration of violence and learning - of the stressors, issues and day-to-day realities that can get in the way of learning to read, write and be present to learning include attention to the elements listed below.

- Work, collaboration and thinking across disciplines - What might it look like?

Who are the people in contact with the learners with whom we work? When/is it useful for us to know who has appointments where, and which community offices are offering services to the people we know? We don't need to know who is receiving public cash assistance but we need to know that the process of applying for and receiving these funds can be demeaning, stressful and demoralizing. We need to understand that this could cut into class time and to be sensitive to the needs of students in order to address basic needs in addition to addressing their learning goals. We need an awareness of the constituency (learners, their families and communities) that we share with child protective workers, case managers (within and beyond adult education), communities of faith, just for example.

Policy shifts, especially recently - (e.g. through persistence studies)

We need to maintain a shared, ongoing system-wide awareness trauma's impact on learning- increased in ways that don't punish programs for serving fewer students, but validate the fact that learners may need to drop out for periods of time possibly engaging in distance learning - and returning to classroom settings as they are able. More is no longer as important as better and better served. It is critical that we develop policy that supports dropping out for whatever reasons and doesn't punish students for missing classes. Distance learning - for some learners will help support continuity while people are out of classes. Research (Comings, 2007) indicates that the relationship building that occurs when programs proactively communicate with students and when students know they can leave and return all mitigate to support learning. Survivors of trauma may need just that much extra time and support; program policy that enables them to have some latitude can make the difference between abject failure and slow but steady progress. Practitioners, too, need to pay attention to their own needs, boundaries and self care. Ignoring practitioners' well-being is likely to risk an increase in burn out, ensuring that we never generate the requisite momentum to create systemic change.

Finally - what next? Ongoing steps

Infusing and integrating awareness into all aspects of adult literacy work of the ways in which adults' life experiences bear on their ability to learn must not be a separate piece of the work. We need to be mindful of the ways in which students and colleagues are able to attend to work and learning, to develop policies that accommodate these various abilities and strengths. We need to understand that some of us have done better at school and have greater confidence than others. Recognizing 'school privilege' with adult learners, practitioners and policy makers ensures that our programs stay true to their missions of supporting learning for those with very little prior education or limited literacy in English or their mother tongue.

Educators working with low educated and limited literacy learners are particularly responsible for recognizing the likelihood of the increased vulnerability of their students' multiple statuses - as (potential) survivors of violence, as people acclimating to new cultures, languages, and new statuses within communities. Our task remains focused on literacy education. Our ability to provide that education effectively depends on our understandings of how to support learners with multiple strengths and challenges. This we can do.

## References

Agger, I. (1994). The blue room: Trauma and testimony among refugee women: A psycho social exploration. London: Zed Books.

CCLOW. (n.d). Making Connections: Literacy and EAL from a Feminist
Perspective. Retrieved January 31 ${ }^{\text {st }}, 2010$ from:
http://www.nald.ca/fulltext/Making_C/Cover.htm.
Comings, J. (2007). Persistence: Helping adult education students reach their goals: Review of adult learning and literacy. Lawrence Erlbaum Associates, Inc. Retrieved February $4^{\text {th }}, 2010$, from: http://www.ncsall.net/index.php?id=1175

Herman, J. (1992). Trauma and recovery, New York: Basic Books.
Horsman, J. (1990). Something in my Mind Besides the Everyday. Toronto: Women's Press. Retrieved January $31^{\text {st }}, 2010$ from: http://www.jennyhorsman.com.

Horsman, J. (1999). Too scared to learn: Women, violence and education. Toronto: McGilligan Books.

Isserlis, J. (2000). Trauma and the adult English language learner. Eric Digest EDO-LE-00-02 National Clearinghouse on Literacy Education. (retrieved January 31, 2010).

On the screen. Retrieved February $1^{\text {st }}, 2010$, from:
http://www.brown.edu/lrri/screen.html
Learning and violence: Dreams of a different world: Towards ending violence and inequality. Retrieved January 31 ${ }^{\text {st }}$, 2010 from: http://www.learningandviolence.net/dreams.htm.

Lewis, T. (1999). Living beside: Performing normal after incest memories return. Retrieved February $1^{\text {st }}, 2010$.

Morrish, E., Horsman, J., \& Hofer, J. (2002). Take on the challenge: : A source book from the women, violence, and adult education project Boston: World education, women, violence, and adult education project. Retrieved February 1st, 2010 from: http://www.worlded.org/docs/TakeOnTheChallenge.pdf. Funded by the U.S. Department of Education, Women's Educational Equity Act (WEEA) Program. World Education, Inc., Boston, MA

# TELLING PICTURE STORIES: RELEVANCE AND COHERENCE IN TEXTS OF THE NON-LITERATE L2 LEARNER 

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## 1 Introduction

This paper describes characteristic L2 productions of non-literate L2 learners of Dutch during the telling of a picture story. The data formed part of an oral pre- and post assessment taken in Dutch L2 literacy classrooms at centers for adult education in the Netherlands. The purpose of the overall study was to get a better understanding of the spoken language proficiency and development of non-literate learners. The aim of the picture stories was to study their proficiency in Dutch in telling a short story given a series of pictures depicting separate events or episodes. Five noteworthy characteristics were found to stand out in the telling of these picture stories. These are: picture-by-picture telling, dialoguing, overuse of deictic elements, picture misinterpretation, and an overall lack of coherence. Before illustrating, describing and making further characterizations of the told picture stories, it is necessary to clarify the terms relevance and coherence as used in this paper.

Picture stories are stories that are told with the aid of pictures. Each episode is depicted in a picture. The story teller tells the story guided by each picture as he goes along from one to the next. The telling of the story must have relevance and coherence in order for it to be characterized as a story. Grice describes relevance in his Maxim of Relation as: ". . . (the) contribution to be appropriate to immediate needs at each stage of the transaction" (Grice, 1975:47). In other words the story must: "Be relevant" (op. cit. p. 46). That which is said must have bearing on the topic at hand.

Transferring this to the situation of the picture story, a response is termed relevant, if the words of the speaker have a direct relation to the picture. In this paper, this is called picture relevance. In the words of Sperber and Wilson (1995:125) "An assumption is relevant in a context to the extent that the effort required to process it in this context is small." In other words, the relationship between what is said by the speaker and what is seen in the picture can easily be perceived.

In telling stories more is involved than conveying relevant meaning for each picture. The utterances within a response must be connected in some way to produce internal relationships. We call this coherence. The text or story is about something. Foster (1990:117) explains that there are two kinds of coherence in a text: horizontal and vertical coherence. Horizontal coherence implies that consecutive utterances are connected to each other, while vertical coherence means that utterances are connected to the topic being developed. In the case of the picture stories this means that the utterances must in some way be connected and it must be easy to infer the relationships between them and the topic of the story depicted through the pictures; there must be connectedness. Such relationships are
called coherence. Coherence is concerned with the continuity of a text. In this case, the text is the picture story telling.

This continuity of a text can be expressed explicitly and implicitly. Coherence expressed explicitly is formed by overt linguistic devices within the text to hold it together (Renkema, 2004; Reinhart, 1980). These devices connect words and utterances of a text and are of a syntactic and lexical nature, such as those of reference, substitution, ellipsis, and conjunction put forth by Halliday and Hassan (1976) and deictic markers identified by Levinson (1983). Reinhart (1980:167) marks this type of coherence as having linear connectedness or cohesion. Within a text each utterance must be formally connected to the previous utterance or adjacent pair. Coherence in a text can also be expressed implicitly by a "connection that is brought about by something outside the text" (Renkema, 2004:49). This type of external coherence involves reasoning, mutual knowledge, and logic. What the speaker says makes sense in the actual context (Renkema, 2004; Stenström, 1994; Blakemore, 1992). The speaker is able to speak in an orderly and logical fashion, producing semantically meaningful utterances and consequently it is easy to infer a relationship between the utterances (Wolf \& Gibson, 2006; Blakemore, 1992). Reinhart (1980:165) calls this derived interpretation. This involves "both semantic and pragmatic conditions, . . . , they restrict not only the relations between the sentences of the text but also the relations between these sentences and an underlying discourse topic, or theme, as well as their relations with the context of the utterance" (Reinhart, 1980:164).

In the following sections of this paper, picture stories told by L2 literacy students will be discussed in terms of picture relevance and coherence. To illustrate the particular outcomes obtained from our non-literate L2 learners we first discuss the data from four representative students out of the 41 that were investigated. The data presented make clear how our evaluation procedure works (including the relevance and coherence criteria), what difficulties our students have to cope with, and what the reasons were for distinguishing specific categories. The outcomes for the total group of 41 are presented in a separate section containing the quantitative results.

## 2 Method

### 2.1 Design

The picture stories discussed here formed a part of an assessment in a longitudinal study on spoken language development of non-literate L2 learners. For that purpose a pre-post test design was applied. The post-test was administered approximately eight months after the pre-test. The picture stories were part of the assessments.

Six L2 literacy classes at centers of adult education were observed and assessed. A total of 41 students were individually tested. The second assessment was a repetition of the first. Both assessments were audio recorded and later transcribed orthographically.

### 2.2 Participants

Table 1 gives an overview of the learner characteristics of the whole group of 41 students as well as the characteristics of the four students used in the qualitative study. Of the 41 students 29 ( $70.7 \%$ ) had had no previous education in their country of origin and were non-literate in their L1 upon arrival in the Netherlands. Approximately 20 students ( $48.8 \%$ ) had had no L2 formal schooling prior to the first assessment. The years of residency in the Netherlands varied from a few months to more than 33 years. The students came from ten different countries. In two classes the students were all from Morocco. These two classes were open to women only, 15 women in total. Eligibility to participate in them was restricted to minority women who were long term residents in the Netherlands and who, due to their poor command of Dutch, had little contact outside the immediate family. Schooling was geared to participation in the society and life skills. In the other classes a vast majority, 23 of the remaining 29 students, were women ( $88.5 \%$ ).

Table 1: Learner characteristics of 41 literay students and four students in detail as of January 2007.

| Literacy students | Age |  | Gender | Country of origin | Years L1 | f sch | ooling DSL |  | Years in the Netherlands |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | SD |  |  | Mean | SD | Mean | SD | Mean | SD |
| Total <br> group (41) | 39.0 | 10.8 | 38F, 3M | various | 1.5 | 2.5 | 0.5 | 0.5 | 9.5 | 8.5 |
| Four individual students |  |  |  |  |  |  |  |  |  |  |
| Yamina | 43 |  | F | Morocco | 0 |  | 0 |  | 20 |  |
| Rojah | 27 |  | F | Afghanistan | 6 |  | 0 |  | 3 |  |
| Gita | 28 |  | F | Afghanistan | 0 |  | 1 |  | 2 |  |
| Asomi | 32 |  | F | Togo | 0 |  | 0 |  | 5 |  |

The four selected students Royah, Asomi, Gita and Yamina, represent typical non-literate DL2 learners. Royah, Asomi and Gita were asylum seekers while Yamina was reunited with her family. Royah, a 27 year old Afghan woman, came to the Netherlands in 2004, three years prior to the start of this research project. In Afghanistan she had had some home schooling only, as schools for girls were forbidden by the Taliban. Her school records show that Royah has had the equivalent of six years of elementary school, which is probably not far from the truth as Royah is literate in Dari, her native tongue. Dari uses the Arabic script. She now lives in Amsterdam. Gita, 28 years old, also came from Afghanistan and now lives in a small village near the town of Oss, in the eastern part of the Netherlands with her husband and a one year old child. She came to the Netherlands in 2005, a year and a half before this project started. Although she had never been to school in Afghanistan, she knows a few words of English and has some knowledge of the Roman alphabet. Perhaps she also had had some home schooling as had Royah. Asomi, a 31 year old woman, came from Togo in 2002. Although Asomi had had no schooling, she does speak a smattering of French. She now lives in Haarlem, a city west of Amsterdam. Yamina is 43 years old and is of Moroccan origin. She had never been to school in Morocco and, as a consequence, had never learned to read or write in her native language. She has lived in the city of Haarlem for almost 20 years. Her social contacts are limited mainly to family and close friends with whom
she usually converses in Berber. All these women had had a little DSL schooling previous to this study: Royah eight months ( 336 hours), Asomi one month (48 hours), Gita a special introduction course of 600 hours and Yamina approximately one year ( 760 hours). School records keeping track of previous and present L2 schooling are often incomplete and inconsistent. In most cases the number of classroom time was only noted in months, rather than hours. Consequently the above noted hours are approximations and are calculated on basis of the classroom hours per week during the observation period.

### 2.3 The picture stories

The student was confronted with three picture stories, reproduced in Figure 1. Each story was composed of a series of four pictures. For this task each student was instructed to recount the story depicted by the pictures. The assessor gestured and explained that the story started at the top and ended at the bottom of the page. The assessor said essentially: Can you tell the story shown by these pictures? You start here and go to this picture and to the next and finally to the last picture. The student utterances for his/her story were analyzed for picture relevance and coherence. The remaining sections of this paper will focus on picture story Number 1.

Figure 1: The three picture stories used for assessment 1 and 2.


### 2.3.1 Picture relevance criteria

As stated in the introduction, the relevance of a response depends on the effect it has on the hearer and the effort that has to be taken to process its meaning (Sperber \& Wilson, 1995). Grice acknowledges the fact that determining relevancy can be problematic (Grice, 1975:46). In order to avoid ambiguity in determining the picture relevancy of a response as much as possible, elements which are central to the interpretation of the picture were predetermined. These elements concern two categories: the entities on one hand, and activities and properties on the other. The entities are the objects or persons (the nouns) about which something is said and concerns the main figures in the pictures, often the agent of the depicted action.

The activities and properties (the verbs, adjectives, adverbs and nouns) express the actions or describe the entities. These entities, and activities and properties are called the minimal distinctive elements. An utterance is termed relevant if these minimal distinctive elements are present. For some pictures various interpretations can be given, depending on the story teller's perspective. Table $2^{10}$ illustrates the minimal distinctive elements for picture story Number 1 and the picture relevance for the stories told by Royah and Asomi. As can be seen in Table 2 three of Asomi's utterances are relevant and one is partially relevant, while Royah has made two partially relevant utterances and two non-relevant ones, as will be explained in more detail below.

Royah was unable to produce wholly relevant utterances for any of the pictures of the picture story. None of her utterances express the agent of the depicted action, creating obscurity as to what the picture is actually showing. For the first picture Royah only utters the word gift. But there is no indication of the action fundamental to the picture - the giving of a gift. Her description of the second picture would have been much more lucid if the agent, woman, had been mentioned. Consequently it was marked partially relevant. The third picture is obviously a case of misinterpretation and marked not relevant. In her description of the final picture Royah again, as in the first picture, mentions only the portrayed object, vase, but does not place it within the depicted scene.

In contrast, Asomi was able to describe three of the pictures with relevance and the fourth partially relevant. For each picture she mentions the agent and the action performed by the agent as shown in the picture. Only picture two was marked as partially relevant. The verb looked did not reflect the main action in the picture; the woman was not looking at the gift, but carrying or holding it.

[^8]Table 2: Picture Story Number 1 with the distinctive minimal elements and two stories illustrating relevance for each picture (relevant utterance $=R$, partially relevant utterance $=P$, non-relevant utterance $=0$ ).

| Picture story number 1 | Minimal distinctive elements (alternative words between parenthesis; dotted line separates alternative responses) |  | Story told by Royah |  | Story told by Asomi | U |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Entities | Activities/ properties |  |  |  |  |
| 里 | $\begin{aligned} & \text { Man } \\ & \text { Gift (present) } \\ & \text { Woman } \\ & \hline \end{aligned}$ | Give | Gift. | 0 | This man gives gift for this woman. | R |
|  | $\begin{aligned} & \text { Woman } \\ & \text { Gift (present) } \end{aligned}$ | Take (hold, carry) | Also gift take. | P | This woman look at gift. | P |
|  | Woman <br> Gift (present) <br> Woman <br> Paper | Open <br> (look) <br> Open <br> (undo) | That maybe T-shirt or so. | 0 | This woman open the gift. | R |
|  | Woman <br> Vase (jug, mug) <br> Gift (present) <br> Vase (jug, <br> mug) <br> Vase (jug, <br> mug) | Get (take out, look, find) <br> Vase (jug, mug) <br> Gift <br> (present) <br> Very <br> pretty | That vase. | P | This woman take the mug. | R |

### 2.3.2 Coherence criteria

Being able to produce relevant utterances for the individual pictures in a picture story does not automatically imply that the story is also coherent. Although, as Foster (1990) states, relevance plays a crucial role in coherence, for a non-relevant picture story is by nature also not coherent, a coherent picture story, however, is not always entirely relevant. Even if individual picture descriptions are partially or not relevant, they may be in some way connected - either horizontally through explicit linguistic devices or vertically through thematic connectedness producing a coherent whole. Table 3 illustrates two pictures stories. One is clearly not coherent due to weak horizontal and vertical coherence while the other is coherent due to its strong horizontal and vertical coherence. The non-coherent story is told by Yamina and the coherent story by Gita.

Table 3: Picture Story Number 1 with two stories illustrating horizontal and vertical coherence.

| The picture story | Story told by Yamina |  | Story told by Gita |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gift, gift. I uuh give. | (Setting the scene.) | The man for this woman passes on gift. | (Setting the scene.) |  |
|  | I here to house. | No No | The woman gift fetches. | Yes | Yes |
|  | Broken. | No No | Then comes for home, maybe to open. | Yes | Yes |
|  | Jug uuh jug. | No No | Then look, pretty, the name I don't know. | No | Yes |
| Coherence | Non-coherent story |  | Coherent story |  |  |

Yamina, in her effort to tell the story, is unable to connect the utterances from picture to picture horizontally, ultimately resulting in a non-coherent story. She goes from picture to picture describing each one separately. At the end she does not make clear that the $j u g$, as she calls it, is the gift given in picture one. Even so, there is evidence of a trace of coherence in the vertical connectedness. Her story is not as fragmented as that of Royah. By enacting the actions in the first two pictures by playing the role of the 'leading actor' or protagonist she brings movement into the story - she livens it up ${ }^{11}$. Were it not for the switching of roles Yamina would have produced horizontal coherence. In the first picture she seems to play the role of the man and in the second one she plays that of the woman. In this way the connection between picture one and two is broken, thus the horizontal coherence is also broken. Yamina's utterance I here to house for the second picture could have contributed to vertical coherence, through shared knowledge between Yamina and the listener. In Morocco it is customary not to open gifts in the presence of the giver. Yamina saying that she is going home, presumably with the gift, actually fits in the theme of the story. But this piece of information is not connected with the previous nor the following picture and stands, as it were, in isolation - there is no vertical coherence. In the third picture she only says broken, presumably describing the torn wrapping paper, although this is not made explicit. In the final picture she identifies the object as a jug, but there is no indication that the breaking of the paper in the previous picture concerns the same object. Distinctly her story, though

[^9]containing some attempts at forming connectedness, is neither horizontally nor vertically coherent.

Gita's story is an example of a coherent one. She was able to connect the pictures bringing about horizontal and vertical coherence. In picture one the scene is set. In picture two the focus of the action switches from the man to the woman. She explicitly states that the woman is the receiver of the gift. In addition, the word gift is repeated, enhancing horizontal coherence. In the third and forth picture she drops the agent and the object but connects the utterances with the previous pictures by using the temporal conjunction then to express sequence of action and maintains horizontal coherence. In the utterance for the forth picture, Gita compensates her still limited vocabulary by describing the appearance of the vase: look, pretty. By not connecting this final utterance to the previous one there is no horizontal coherence, but through inference a connection with the story theme, gift giving, is preserved - resulting in vertical coherence. Gita has connected most of her utterances horizontally and all of them vertically producing a coherent story. She has made it clear that the gift given in the first picture is the object taken out of the box in the final picture.

## 3 Results

All 41 students told six picture stories - three for assessment 1 and, eight months later, the same three stories for assessment 2 . The results were calculated for picture relevance and coherence for all three of the picture stories for assessment 1 and 2.

### 3.1 Results picture relevance

Table 4 shows the mean scores for picture relevance, split out for entities and activities/properties. For each utterance a maximum of two points was given for each relevant entities and relevant activities/properties, 1 point each for partial relevance and no points each for non-relevant elements. In total for each picture story (each story containing four pictures) there is a maximum of 16 points for the minimal distinctive elements. As Table 4 shows story 2 appears to be more problematic, particularly for the entities, than the other two stories, but the differences between the three picture stories are not large. Stories 1 and 3 do not differ greatly in the scores obtained for picture relevance.

Table 4: Mean scores for picture relevance for the three picture stories in assessment 1 and assessment 2 for 41 students. A distinction is made for relevance on entities and relevance on activities/properties.

|  | Assessment 1 |  |  | Assessment 2 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Story 1 | Story 2 | Story 3 | Story 1 | Story 2 | Story 3 |
| Entities (max. 8) | 3.95 | 2.02 | 3.73 | 4.27 | 2.73 | 4.88 |
| Activities / properties (max. 8) | 2.90 | 2.61 | 2.63 | 3.51 | 3.81 | 3.88 |
| Total (max. 16) | 6.85 | 5.63 | 6.36 | 7.78 | 6.54 | 8.76 |

A reliability test revealed a high consistency between the six scores of assessment 1 and the six scores of assessment 2 (alpha $=.900$; alpha for assessment 1 is .865 , for
assessment 2 .838). All item-total correlations have a value above .500. We computed an overall sum scores for assessment 1 and assessment 2 to test whether there was a difference between the two assessments. The results indicated that the difference was significant, indicating that higher scores were obtained in assessment 2 (mean score for assessment 1 is 17.85 , for assessment 2 is 23.14 ; t paired samples $=4.165, \mathrm{df}=40, \mathrm{p}=.000$ ).

### 3.2 Results coberence

Table 5 shows that the mean scores on horizontal and vertical coherence are also consistent. For each horizontal connection 2 points were given if it was coherent, 1 point for partial coherence and 0 points for no coherence. The same applied for vertical coherence. For each a total of 6 points was possible (coherence was established for pictures 2 to 4 ). Table 5 shows that story 2 is just as problematic for coherence as it is for relevance. Stories 1 and 2 do not differ greatly.

Table 5: Mean scores for coherence for the three picture stories in assessment 1 and assessment 2 for 41 students. A distinction is made between horizontal and vertical coberence.

|  | Assessment 1 |  |  | Assessment 2 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Story 1 | Story 2 | Story 3 | Story 1 | Story 2 | Story 3 |
| Horizontal coherence (max. 6) | 1.63 | 0.78 | 1.24 | 2.20 | 1.54 | 1.71 |
| Vertical coherence (max. 6) | 1.56 | 0.85 | 1.10 | 2.59 | 2.17 | 1.83 |
| Total (max. 12) | 3.19 | 1.63 | 2.34 | 4.79 | 3.71 | 3.54 |

A reliability test revealed a high consistency between the six scores of assessment 1 and the six scores of assessment 2 (alpha $=0.931$; alpha for assessment 1 is 0.925 , for assessment 20.868 ). All item-total correlations have a value above .500 . We computed an overall sum score for assessment 1 and assessment 2 to test whether there was a difference between the two assessments. The difference was significant, indicating that higher scores were obtained in assessment 2 (mean for assessment 1 is 7.15 , for assessment 2 is 10.90 ; t paired samples $=4.312, \mathrm{df}=40, \mathrm{p}=.000)$. The increase is not spectacular. But the students showed progress in coherence.

### 3.3 Correlation between picture relevance and coberence

In correlating picture relevance and coherence, assessment 1 had a coefficient of 0.825 , and assessment 2 had a coefficient of 0.856 . These values indicate a strong relationship between relevance and coherence: low relevance implies low coherence and high relevance implies high coherence, but is the relationship so evident? Figure 2 visualizes the relation in a scattergram and the result points to an important conclusion. It shows that, for the same level of coherence, relevance scores may show variation, but more importantly it shows that relevancy does not automatically lead to coherence. A coherence coefficient of 0 can be as great as 22 for picture relevance. In other words, knowing and using the words for the relevant entities and activities/properties does not guarantee the formation of a coherent story.


Figure 2: Scattergram of picture relevance and coherence in assessment 2.

## 4 Discussion and conclusion

The above examples illustrate that producing a coherent story with relevant utterances on the basis of pictures is not an easy task for non-literate learners of Dutch. The percentages given in Table 5 above indicate that picture story telling is complex. The student has to produce utterances relevant to the individual pictures while at the same time he or she has to connect these utterances into a coherent story. These students were also in the process of learning a new language. Often insufficient vocabulary, grammar and knowledge of storytelling conventions make the task of picture story telling even more difficult. Lack of vocabulary cannot explain all low scores on coherence, as shown in Figure 2, where a coherence score of 0 combined with a large range of picture relevance scores. Moreover, a few students were able to effectively apply their limited language resources.

In analyzing the picture stories in terms of relevance and coherence, striking characteristics in the build-up of the stories surfaced. Five characteristics of relevance and coherence were illustrated above. Summarizing, these characteristics are:
(1) Picture-by-picture telling.

The stories told by Royah and Yamina are exemplary for this type of behavior. Each picture stands alone, as it were, separate from all the other pictures.
(2) Dialoguing or enacting

Yamina enacts the actions in the first two pictures of her story. She plays a role in a scenario by saying I give and I here to bome. Such a response is not uncommon and its
occurrence can perhaps be explained by the central position of functional communicative language use in literacy classes as I also observed during this study. Next to this we must also take into account language acquisition processes, which override such assumptions (see notation in footnote 2).
(3) Overuse of deictic elements.

The deictic markers this, that, and bere are used frequently to point to a picture being described. Royah demonstrates such use in her story by saying that maybe T-shirt or so and that vase. Asomi uses the deictic marker this where normally a definite or indefinite article or a pronoun would be used in referring to a specific character, this man/ this woman.
(4) Picture misinterpretation.

Royah clearly misinterpreted picture 3. Such misinterpretations indicate that the student is describing the pictures separately, one by one.
(5) Overall lack of coherence.

We conclude by saying that, although the progress in the time span of eight months between assessment 1 to assessment 2 was shown to be significant, the progress was not spectacular. The maximum difference was just above 3, both for picture relevance and coherence, given a potential gain of more than 10 points. Learning a second language with limited or no education in the L1 is a slow and difficult struggle.

Kurvers' findings (2002) on a picture story task used to ascertain how texts are produced and interpreted are fascinating for this paper. In her study she demonstrated crucial differences in metalinguistic awareness of pre-schoolers, adult non-literates and literates, all with similar ethnic and social backgrounds. In assessing production of texts she used a picture story task. For this task the story could be told in the L1 or L2, which ever the candidate felt most comfortable with. Concerning text coherence Kurvers found that of the stories told by the nonliterate adults, $45 \%$ were coherent. Of the stories told by the pre-schoolers, $73.7 \%$ were coherent, and for the literate adults, $100 \%$ were coherent. Even though Kurvers' study our study and used different picture stories and the criteria varied, the similarities are remarkable. For students who have had no formal education nor experience in 'reading' pictures such a task can be overwhelming. Literacy and schooling is more than simply learning print. New ways of information processing and conveying meaning are involved, which need to be learned in combination with and parallel to learning a new language and the principles of the alphabet.

Our results are just a beginning in unravelling the socio-cognitive complexity of becoming literate through an L2 as an adult. Clearly, there is a need for more of this kind of research into how learners undertake and evolve during such learning processes. When more data become available we will perform additional analyses on the impact of learner characteristics and the amount of instruction on learner development.

A final and important conclusion that needs to be drawn is that the use of pictures in literacy education cannot be taken lightly. Even an apparently simple illustration can be interpreted in another way than is customary for the teacher. Learning to 'read' pictures is, therefore, an essential practice for the literacy classroom. Teachers must be alert to the specific struggles of these second language learners in expressing relevance and coherence and not be too quick in understanding the utterances.

References
Blakemore, D. (1992). Understanding utterances: An introduction to pragmatics. Oxford: Blackwell Publishers.

Foster, S. (1990). The communicative competence of young cbildren: A modular approach. London: Longman.

Foster-Cohen, S. (2000). Review article of: Sperber, D. and Wilson, D. 1995: Relevance: communication and cognition. $2^{\text {nd }}$ edition. Oxford: Blackwell. Second Language Research 16, 77-92.

Grice, H. P. (1997). Logic and conversation. In P. Cole \& J. Morgan (Eds.), Syntax and Semantics, (pp. 41-58). New York: Academic Press.

Halliday, M., \& Hasan, R. (1976). Cohesion in English. London: Longman.
Kurvers, J. (2002). Met ongeletterde ogen: Kennis van taal en scbrift van analfabeten [With unlettered eyes: Knowledge of language and script by non-literates]. Amsterdam: Aksant.

Levinson, S. (1983). Pragmatics. Cambridge: Cambridge University Press.
Reinhart, T. (1980). Conditions for Text Coherence. Poetics Today, 1, 4, 161-180.
Renkema, J. (2004). Introduction to discourse studies. Amsterdam: John Benjamins.
Sperber, D., \& Wilson, D. (1995). Relevance: communication and cognition. $2^{\text {nd }}$ edition. Oxford: Blackwell.

Stenström, A-B. (1994). Introduction to spoken interaction. London: Longman Group UK Limited.

Wolf, F., \& Gibson, E. (2006). Coherence in natural language: Data structures and applications. Cambridge, MA: MIT Press.

# PREDICTORS OF SUCCESS IN ADULT L2 LITERACY ACQUISITION 

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## 1 Introduction

The question as to how many hours it takes an adult student to learn to read and write for the first time in a new language (the learning load) is a crucial issue for all those involved in planning a learning track. It is not only curriculum designers, teachers, and the literacy students themselves who want to know how many hours it takes to be a reader and writer, but funding institutes and the ministry responsible for integration also want to know what the learning load is for an average L2 literacy student. The government of the Netherlands requires immigrants to be able to read and write in Dutch at the A2 proficiency level of the Common European Framework of Reference for Languages or CEF (Council of Europe, 2001). ${ }^{12}$ The literacy track is generally kept separate from integration courses and is seen as a prerequisite for the latter. The description of the CEF levels (in can-do statements) is also based on the assumption that adult language learners are already readers. Therefore, it was necessary to integrate literacy learning into the levels of the CEF. ${ }^{13}$ For Dutch as a second language (DSL), this was done by splitting up level A1 into three smaller parts: the literacy levels A, B, and C, as shown in Figure 1. CEF level A1 for reading is described as follows:
"I can understand familiar names, words, and very simple sentences, for example, on notices and posters or in catalogues." and for writing:
"I can write a short, simple postcard, for example sending holiday greetings.
I can fill in forms with personal details, for example entering my name,
nationality and address on a hotel registration form."
The three literacy levels, into which CEF Level A1 was split up, can be characterized by three decoding steps and related functional skills. They roughly correspond to reading and writing CVC words and words learnt as sight words (level A), reading and writing high-frequency words including words with consonant clusters and regular grammatical morphemes such as plural -en (level B), and reading short and simple texts on familiar subjects (level C).

[^10]

Figure 1: Proficiency levels for L2 literacy and Dutch as L2 (DSL)
However, there is a serious risk that the length of the literacy programme will prevent learners from taking part in the integration programme. An integration programme normally takes one year for a learner who has had primary school and about two years for a learner who has had secondary education in the country of origin. In such programme DSL is taught as well as knowledge of the Dutch society. A literacy track, seen as preparatory to the integration programme, however may last much longer. Moreover, many learners never reach the level of reading and writing required for the integration programme. Therefore, the Ministry of Integration aims at determining a benchmark for learning to read and write based on what is realistic for the average L2 literacy learner. A more efficient way of teaching literacy has become an issue for the Ministry. Therefore, as a first step, a literature review was commissioned by the Ministry and carried out by the Dutch national test institute Cito. This resulted in a long list of potential factors determining success, 12 of which were mentioned most often in the literature as potentially determining the results of teaching L2 and literacy (Cito, 2008b).
As a second step, this list was presented at a national consultation meeting to teachers and experts in the field of adult L2. The literacy field ranked them as follows:

1. possibilities for the learner of having language contact with speakers of the target language by means of language buddies, learning outside school, internship;
2. transparent way of tutoring by means of intake, tracks and student tutoring;
3. use of a literacy portfolio;
4. competent teachers;
5. giving a clear and real context to what is being taught;
6. working with clear targets and a clear structure in the lessons;
7. stimulating learners to become autonomous learners;
8. use of audiovisual course material;
9. adapting the content of the lessons to the interests of the learners;
10. giving learners sufficient time to practice reading and to read extensively.

Until 2009, the Ministry has not had any clear-cut data on the learning load (=how many hours of instruction are required for attaining a specific objective, in this case
to be able to successfully participate in an integration programme) of literacy students because exact data on beginning and end levels was lacking. Therefore, we suggested doing two preliminary studies, partly based on already collected data, to investigate the learning load and search for empirical evidence for the success factors derived from the literature review. The first data collection comprised a sample of 322 students attending literacy classes in 2008 and/or 2009; their literacy level at the start was known exactly and part of them were tested again after one year. This study (Kurvers \& Stockmann, 2009) aims to give an indication of the learning load (in hours of instruction) and to present a number of predictors of success. The second data collection (Kurvers \& Van de Craats, 2009) comprised 720 students who were all candidates for naturalization between 2005 and 2008 but did not meet the requirements for naturalization (i.e. level A2 CEF) and therefore applied for dispensation. Dispensation is given to applicants with less than five years of schooling who can show that they have invested a great deal of time and have applied themselves seriously to the task without being successful. Because their educational history was well documented, the data allowed us to see what they had learned in a fixed interval of time and, maybe also to determine what factors caused their lack of success.

## 2 Study 1: Learning load and predictors of success in adult L2 literacy

The main aims of study 1 were (i) to paint an up-to-date picture of the adult L2 literacy landscape in the Netherlands since the introduction of the new integration policy in 2007, (ii) to investigate the learning load of L2 literacy students for each of the literacy levels, and (iii) to determine potential predictors of success in adult L2 literacy (cf. Condelli \& Spruck Wrigley, 2006). Subsection 2.1 presents the outline of the study, subsection 2.2 gives a description of students, teachers and educational practices in the adult L2 literacy classes, subsection 2.3 continues with the learning load needed for the literacy levels, and subsection 2.4 presents the predictors of success.

### 2.1 Outline of the study

In order to reach the research aims within the time limits set, we decided to search for and investigate the L2 literacy students that had already participated in the pretesting of a newly developed adult literacy test in 2008 (Cito, 2008a). As far as possible, these students were tested again in 2009, and all the relevant background data and educational data were collected.

## Participants

From the 296 students who had participated in the 2008 pre-testing, 190 were still attending classes in 2009. This number of students was expanded by students who started literacy classes after August 2008, leading to a total of 322 students, $80 \%$ of whom were women and $20 \%$ men. They had been attending 58 different classes taught by 50 different teachers in nine different adult education centres in different regions of the Netherlands.

## Instruments

The main instruments used in this study were the adult Literacy Achievement tests for the literacy levels A, B and C (Voortgangtoets Alfa, Cito, 2008a), a student's background questionnaire, a teacher questionnaire and a questionnaire on instructional methods and practices. All questionnaires were filled in by the teachers and were intensively discussed and piloted in a pre-meeting with the participating centres.

The student questionnaire consisted of questions about the students' background (gender, age, home country, L1, length of stay in the Netherlands, years of education in home country, work, marital status and number of children) and data on their literacy and L2 education (starting level in oral (spoken) and written Dutch, the total number of hours already attended, attendance rate, home work, or contact with native speakers of Dutch).

The teacher questionnaire consisted of questions related to age, gender, and educational background, expertise in the mother tongues of their students, their experience and special in-service training on L2 language and literacy teaching.

The educational practice questionnaire consisted of questions about the class (group size, group levels and main backgrounds), the number of hours of instruction a week, division of time spent on reading and writing or on oral skills, and time spent on different activities (individual work, small group work, whole group work). Other questions were devoted to methodologies used (course materials, additional extra-mural activities, homework), student assessments and the use of L1 in teaching (see also Cito, 2008b; Condelli \& Spruck-Wrigley, 2006).

The adult L2 literacy achievement test (Voortgangstoots Alfa, Cito 2008a) consisted of functional reading and writing items at the three different L 2 literacy levels $A, B$, and $C$. An example of reading at level $C$ is reading a letter from the primary school of the children; an example of writing at level B is filling in a form to attend a meeting at the community centre. Teachers filled in the written questionnaires; missing or unclear answers were completed where possible by additional phone call interviews with the teachers.

### 2.2 The adult L2 literacy landscape in the Netherlands

Table 1 presents the main background data of the students in the study. The students originated from 39 different countries: many of them came from Morocco, Afghanistan, Iraq, Somalia and Turkey, while a smaller number came from countries like Ghana, Sierra Leone, Nigeria, China, Thailand and Eritrea. The mean age of the students was 41 (range 17-67). More than $60 \%$ of the students did not attend primary school in their home country; about $35 \%$ attended primary school for some years. More than $40 \%$ of the students had been living in the Netherlands for more than 10 years, while about a quarter had arrived more recently. According to the teachers, about $60 \%$ of the students used only their L1 at home, and more than half of them had very limited contacts with native speakers of Dutch. The majority of the students started the course without any skills in written Dutch ( $80 \%$ ), while a minority had some skills in reading and writing. Most students attended their classes regularly ( $12 \%$ had an attendance rate below $70 \%$ ), and did their homework regularly $(70 \%)$.

Table 1: Background features of adult L2 literacy students

| Characteristics | Value | $\mathrm{N}=322$ | $\%$ |
| :--- | :--- | :---: | :---: |
| Gender | Female | 255 | $79 . .9 \%$ |
|  | Male | 64 | $21.1 \%$ |
| Age | Younger than 30 | 49 | $15.8 \%$ |
|  | $30-49$ | 199 | $64.0 \%$ |
|  | 50 or older | 63 | $20.2 \%$ |
| Country of origin | Afghanistan | 18 | $5.9 \%$ |
|  | Iraq | 26 | $8.5 \%$ |
|  | Morocco | 119 | $38.8 \%$ |
|  | Somalia | 21 | $6.8 \%$ |
|  | Turkey | 37 | $12.1 \%$ |
|  | Other | 86 | $28.0 \%$ |
| Years of schooling | No schooling | 185 | $61.3 \%$ |
|  | $1-6$ years | 108 | $35.8 \%$ |
|  | $6-10$ years | 9 | $3.0 \%$ |
| Stay in Netherlands | $<5$ years | 87 | $28.8 \%$ |
|  | $6-10$ | 76 | $25.2 \%$ |
|  | $11-20$ | 78 | $25.8 \%$ |
|  | $>20$ | 61 | $20.2 \%$ |
| Dutch spoken in family | Yes | 93 | $34.7 \%$ |
|  | No | 175 | $65.3 \%$ |
| Contact with native | Hardly | 188 | $54.9 \%$ |
| speakers of Dutch | Moderate | 87 | $30.6 \%$ |
|  | Much | 42 | $14.8 \%$ |
| Starting level oral Dutch | Zero | 151 | $53.0 \%$ |
|  | $0.5-$ A1 | 115 | $40.4 \%$ |
|  | A1-A2 | 19 | $6.7 \%$ |
| Starting level written | Zero | 239 | $81.6 \%$ |
| Dutch | $0.5-$ Literacy A | 40 | $13.7 \%$ |
|  | $>$ Literacy A | 14 | $4.8 \%$ |
| Attendance rate | $<70 \%$ | 32 | $11.7 \%$ |
|  | $70-89 \%$ | 119 | $43.3 \%$ |
|  | $90 \%$ or more | 124 | $45.1 \%$ |
| Doing homework | Yes | 188 | $69.4 \%$ |
|  | No | 83 | $30.6 \%$ |

The mean age of the 50 teachers in the sample was 52 (range 22-64). Most of them were women $(84 \%)$ and native speakers of Dutch ( $88 \%$ ). The majority of the teachers had been trained as primary school teachers (38\%); others had a background in academic language studies (30\%), while several others had backgrounds such as teaching science or agriculture (30\%). On average, the teachers had been working in the adult L2/literacy field for 15 years (SD 9.0). Not all of them had attended specific pedagogical L 2 training ( $74 \% \mathrm{had}$ ) or L2 literacy ( $49 \% \mathrm{had}$ ). About half of the teachers ( $51 \%$ ) reported having some proficiency in one or more of the students' languages (including English, French and Spanish, second languages for some of the students).

The mean adult L2 literacy class consisted of 12 students (SD 4.2, range 3-26), and was heterogeneous in terms of the students' background, L2-level and gender. About $20 \%$ of the students attended literacy classes of $6-8$ hours a week, $42 \%$ courses of $9-11$ hours a week and $37 \%$ attended more intensive courses of 12-15 hours a week (mean 10, SD 2.4). About $65 \%$ of the groups were taking lessons from two different teachers (at different times), $24 \%$ from one teacher only and $11 \%$ from three or more teachers. Intake was flexible in most of the groups: new students could start every week or month.

The basic course material used for literacy teaching were either a combination of a phonics approach for decoding skills and additional authentic (whole word) material for functional reading and writing skills ( $55 \%$ of the groups), or a combination of literacy materials with regular L2 materials intended for literates $(17 \%)$. In a few groups phonics-only literacy material was used ( $14 \%$ ) or no material at all ( $4 \%$ ). About $74 \%$ of the teachers used some authentic material (i.e. not specifically geared to literacy learners) in their classes, $80 \%$ assigned homework and $67 \%$ used portfolios. Internships were less common (17\%).

On average, $42 \%$ of the time was spent on oral skills in Dutch (range 10-65\%), $47 \%$ on reading and writing (range $30-90 \%$ ), but there was a lot of variation among teachers: while one teacher spent $90 \%$ of her time on reading and writing, another did so only $30 \%$ of the time, spending $65 \%$ of the time on oral skills in Dutch.
Table 2 presents the division of time over the different activities in the adult literacy classes.

Table 2: Percentage of time spent on various classroom activities

| Classroom <br> activities | Mean \% of time | SD | Range |
| :--- | :---: | :---: | :---: |
| Computer work | 16.7 | 9.7 | $0-40 \%$ |
| Individual work | 20.9 | 16.0 | $0-70 \%$ |
| Small group work | 27.4 | 14.7 | $0-68 \%$ |
| Whole class work | 33.2 | 15.8 | $0-75 \%$ |
| Other | 5.4 | 8.8 | $0-35 \%$ |

As can be seen in Table 2, on average, the students spent the largest portion of their time on whole-class activities ( $33 \%$ ), and less on computer exercises or other activities. What is more interesting, however, is the variation among the teachers: some teachers spent $75 \%$ of their time working with the whole group, while others spent only a very small amount on whole group work. Comparable variation among teachers can be seen for all other classroom activities, percentages of time ranging from 0 to $70 \%$.

### 2.3 Learning load

One of the main questions examined in this research was how many hours it took the students to reach one of the literacy levels A, B, or C (see Introduction). Level C is comparable to level A1 in the Common European Framework of Languages, CEF, (and still below the level that is required for citizenship and naturalization).

Table 3 presents the number of students who attained each literacy level and the mean number of hours they had needed to reach that level. Only the hours of instruction were counted here. Only students with a starting level of zero are
included. The learning load is presented separately for non-literates (less than two years of schooling) and low-educated students (2-10 years of schooling).

Table 3: Mean learning load for different literacy levels with non-literates and low-educated students

|  | All <br> $(\mathrm{N}=236)$ | Non-literates <br> $(\mathrm{N}=190)$ | Low-educated <br> $(\mathrm{N}=46)$ |
| :--- | :--- | :--- | :--- |
| Reading | $\mathrm{N}=92$ |  |  |
| No level attained | $\mathrm{N}=71$ | $\mathrm{~N}=79$ | $\mathrm{~N}=13$ |
| Level A attained | 842 | $\mathrm{~N}=57$ | $\mathrm{~N}=13$ |
| Mean number of hours | $103-2786^{*}$ | $103-1490$ | $258-2786^{*}$ |
| Min - max | $\mathrm{N}=40$ | $\mathrm{~N}=29$ | $\mathrm{~N}=10$ |
| Level B attained | 1011 | 1131 | 728 |
| Mean number of hours | $103-3870^{*}$ | $103-3870^{*}$ | $258-1342$ |
| Min - max | $\mathrm{N}=33$ | $\mathrm{~N}=23$ | $\mathrm{~N}=10$ |
| Level C attained | 867 | 909 | 770 |
| Mean number of hours | $155-2150$ | $155-2150$ | $193-2064$ |
| Min - max |  |  |  |
| Writing | $\mathrm{N}=64$ | $\mathrm{~N}=57$ | $\mathrm{~N}=7$ |
| No level attained | $\mathrm{N}=112$ | $\mathrm{~N}=87$ | $\mathrm{~N}=24$ |
| Level A attained | 929 | 972 | 774 |
| Mean number of hours | $103-3870^{*}$ | $103-3870^{*}$ | $206-3096^{*}$ |
| Min - max | $\mathrm{N}=35$ | $\mathrm{~N}=29$ | $\mathrm{~N}=6$ |
| Level B attained | 790 | 827 | 612 |
| Mean number of hours | $103-1741$ | $103-1741$ | $193-1819$ |
| Min - max | $\mathrm{N}=25$ | $\mathrm{~N}=16$ | $\mathrm{~N}=9$ |
| Level C attained | 985 | 976 | 1001 |
| Mean number of hours | $155-2150$ | $155-2150$ | $387-2064$ |
| Min - max |  |  |  |

*= Mean influenced by outliers (> 2700 hours)
As can be seen in Table 3, the variation in learning load among the students is huge. A considerable number of students ( 92 for reading and 64 for writing) did not reach any literacy level at all (in, on average, 850 hours of instruction) and only a small number of the students ( 33 for reading and 25 for writing) reached literacy level C (in on average 985 hours). More students attained literacy level A (71 for reading and 112 for writing) or level B ( 40 for reading and 35 for writing). On average, they needed more than 850 hours of instruction. The variation in the number of hours within each level is tremendous. A few students attained the highest level in less than 300 hours, but a great many students needed more than 1000 hours to reach the lowest literacy levels and quite a few even needed more than 2000 hours. This nicely illustrates the heterogeneity in adult L2 literacy classes compared to nearly all other educational fields. To give some indication, the majority of the children would reach decoding skills comparable to level B in about $300-400$ hours of instruction time, level C in 400-600 hours.

When the non-literates are compared to the low-educated students, it can be seen that on average more low-educated students reach higher levels in fewer hours. The low-educated students reach one of the literacy levels in about 100-200
hours less than the non-literates (outliers not included). If we compare younger students (below 40 years of age) with the older ones ( 40 or above), the older students on average need about 150 hours of instruction more to attain one of the literacy levels.

For additional insight into the learning load we composed groups of students that had attended school about the same amount of hours (400-600, 600-800 etc.) and we investigated how many students attained one of the literacy levels in each of the groups. Figure 2 presents the outcomes graphically.


Figure 2: Reading levels by groups bäsed on attendance bours
The most striking outcome is, once more, the partitioning of literacy levels attained within each of the groups. One might have expected higher numbers of students to have reached level B or C in the bars on the right (more than 1000 hours of lessons) and relatively more students with lower levels in the bars on the left (less than 800 hours). In fact, in each group the number of students that scored halfway level A or level A is the biggest, which again illustrates that for many literacy students it is very difficult to learn to read and write on a functional level, and few students succeed (see also study 2).

### 2.4 Predictors of success

In order to determine success factors, the reading and writing scores and the growth scores (i.e., scores indicating the difference between the scores of 2009 and 2008) of students who were assessed in 2008 and 2009 were correlated with learner variables on the one hand and educational variables on the other. Table 4 presents correlations with learner variable, and Table 5 presents correlations with educational variables. Correlations that were not significant (not shown in Table 4) ranged between -. 14 and . 14 .

Table 4: Pearson correlations of student characteristic with reading and writing scores

|  | Reading | Writing | Growth <br> reading | Growth <br> writing |
| :--- | :---: | :---: | :---: | :---: |
| Age | $-.22^{* *}$ | $-.23^{* *}$ | $-.16^{*}$ | $-.19^{*}$ |
| Years of schooling | n.s. | $.17^{*}$ | n.s. | $.17^{*}$ |
| Contact native speakers | $.38^{* *}$ | $.23^{* *}$ | n.s. | n.s. |
| Attendance rate | $.23^{* *}$ | $.23^{* *}$ | n.s | n.s |
| Student doing homework | $.18^{* *}$ | $.18^{* *}$ | $.21^{*}$ | $.14^{\dagger}$ |

${ }^{\dagger} \mathrm{p}<.10,{ }^{*} \mathrm{p}<.05,{ }^{* *} \mathrm{p}<.01$
n.s. $=$ not significant

Although broadly speaking the correlations are low, five learner characteristics show a significant correlation with one or more of the literacy scores. On all literacy scores, the correlations with the age of the students are significant and negative: the older the student, the lower the scores on reading and writing. Years of schooling correlates significantly with writing scores, not with reading scores. Reading and writing scores also correlate positively and significantly with the frequency of contact with speakers of Dutch, with student's attendance rate and with the students' rate of homework completion.(the latter also being significant for growth scores in reading). Years of stay in the Netherlands (not included in the table) show the same negative correlations as age (most of the older students also have been living in the Netherlands for many years). All other learner variables are not correlated to literacy achievement.

In Table 5, most correlations with educational variables are low as well, although some reach significance. First of all, some educational variables are negatively related to reading and writing in Dutch. These are: group size with growth scores in writing, percentage of time allotted to whole-group work with all the scores, and percentage of time allotted to written Dutch with growth scores. The latter outcome might seem counter-intuitive, but in fact this probably indicates that students who need more time for reading and writing, for example because they progress slowly, are getting more time. Whole-group activities seem to have a negative influence on reading and writing achievements. Positive and significant correlations are found with the number of different teachers (indicating that having two different teachers seems to work better than having just one), percentage of time spent on computer work with reading scores (practising decoding skills is an important part of computer programs in beginning reading), and individual work with writing scores. The use of student's L1 in the lessons correlates positively with scores on reading and writing, and use of the portfolio is positively related to three of the four literacy measures (probably because it offers both students and teachers insight into the learning process and students' progress).

Table 5: Partial correlations of reading and writing scores with educational variables, controlling for age and years of schooling of the students

|  | Readi <br> ng | Writing | Growth <br> reading | Growth <br> writing |
| :--- | ---: | ---: | ---: | ---: |
| Group size | n.s | n.s. | n.s. | $-.18^{*}$ |
| Number of teachers | $.15^{*}$ | $.14^{*}$ | n.s. | n.s. |
| \% time written skills | n.s. | n.s. | $-.19^{*}$ | $-.19^{*}$ |
| Portfolio | $.13^{\dagger}$ | $.18^{*}$ | n.s. | $.21^{* *}$ |
| Use L1 in lessons | $.13^{\dagger}$ | $.16^{*}$ | n.s. | n.s. |
| \% time allotted to computer work | $.17^{*}$ | n.s. | n.s. | n.s. |
| \% time allotted to individual work | n.s. | $.21^{* *}$ | n.s. | n.s. |
| \% time allotted to whole group work | $-.19^{* *}$ | $-.22^{* *}$ | n.s. | n.s. |

${ }^{\dagger} \mathrm{p}<.10$, * $\mathrm{p}<.05,{ }^{* *} \mathrm{p}<.01$
n.s. $=$ not significant

Since correlations cannot indicate causality, a regression analysis was carried out as well, with reading and writing scores as dependent variables and the learner and educational variables as independent variables. Only the variables that had reached significance in the correlation analyses were entered into a stepwise regression analysis. For reading, the following variables reached significance: language contact, use of L1, attendance rate, years of previous schooling, percentage of computer work (all positive), while whole-group work had a significant negative impact on reading. For writing, the same list can be given, but also use of portfolio and percentage of time spent on working individually turned out to be significant.

Summarizing, for older students (i.e. students older than 40) and students without any schooling in the home country it is more difficult to progress quickly in L2 literacy than for younger students or students who had attended primary school. All other significant correlations (language contact with L2 speakers, attendance, home work, portfolio, whole class or individual work, use of L1 and portfolio) seem to point in one major direction: those activities that keep students actively involved seem to work best in L2 literacy learning (cf. Condelli \& Spruck Wrigley, 2006).

## 3 Study 2: Data from the feasibility assessment

### 3.1 Background of the applicants for naturalization

Contrary to the data in Study 1, the data in Study 2 is from a specific group: former literacy students that did not meet the requirements for naturalization (i.e. CEF level A2 for all four language skills including for reading and writing) and therefore applied for dispensation for reading and writing. Dispensation is given if applicants have shown that they have invested a great deal of time (attending an intensive course of two years is equivalent to approximately 1200 hours of instruction) and have applied themselves seriously to the task. There is no dispensation possible for listening and speaking. A specialized institute in Amsterdam is commissioned by the Immigration and Naturalization Service to assess the feasibility of the requirements within five years starting from the moment of testing. Only $1 \%$ of the applicants were assessed as 'feasible within five years', which means that they were
expected to reach level A2 for reading and writing skills within five years. Their mean age was 32.2 and the mean amount of schooling in their native country was 2.1 years (only applicants with less than primary school are allowed to ask for dispensation). This is much younger than the mean age of those who got the assessment 'not feasible', as can be seen in Table 6 below.

Table 6: Assessment of reading and writing skills at A2 level within five years (based on data in the period: 2005-2008)

|  | Raw <br> numbers | Percentage | Mean age | Schooling in country <br> of origin |
| :--- | ---: | ---: | ---: | ---: |
| Feasible | 8 | $1 \%$ | 32.2 years | 2.1 years |
| Not feasible | 715 | $99 \%$ | 39.3 years | 1.1 years |
| Total | 723 |  |  |  |

The applicants for naturalization who requested dispensation came from 50 different countries. The countries of origin mentioned most often are summed up in Figure 3. Most applicants were former asylum seekers from countries currently at war or characterized by internal conflicts such as Sudan and Sierra Leone. These people do not feel safe without a Dutch passport.

The languages most often indicated by the applicants as their mother tongue were consecutively: Dari, spoken in Afghanistan, Kurdish, spoken in Iraq and Turkey and Arabic. Fula, spoken in the western African nation of Guinea, came fifth in the list.


Figure 3: Number of applicants by country of origin (right bar indicates all other countries)
The age of the applicants judged as 'not feasible' varied from 20 to 85 years old, with a mean age of 39.3 . The majority of these applicants ( $80 \%$ ) were younger than 50. From Sierra Leone, Guinea, Turkey and Ghana no applicant was older than 50. As can be seen in Figure 4, applicants from Sierra Leone and Guinea were younger than those from the other countries. This difference turned out to be significant ( p $<.05$ ). Whereas the mean age was 39.3 , the mean age of applicants from Sierra Leone and Guinea was 25.8. They may have been child soldiers or victims of very
traumatic events, as can be deduced from personal communication with the applicants.


Figure 4: Mean age of applicants per country (listed from left to right)


Fig. 5: Years of education in country of origin
The data from the feasibility assessment also provides us with a view on the level of education in the various countries of origin (see Figure 5). In many of these countries, there are great differences in the levels of education between men and women. The 479 women in our data collection on average had had 0.96 years of education, the 244 men had had 1.49 years (a significant difference: $\mathrm{p}<.05$ ). The mean number of years in primary school is given in Figure 5, with Somalia and Guinea showing the lowest mean number ( 0.58 years) and Sri Lanka the highest(2.7 years).

### 3.2 Results for reading and writing

At the beginning of the Dutch literacy course, all applicants had a zero level for Roman alphabet and no or some knowledge of another script. At the moment of the assessment, the same applicants had attained a proficiency level below A1 on average, more precisely, a literacy level (note that this is a sublevel of the CEF level A1) between level A and halfway level B (see Figure 1 for the various levels), not the required A2 level. Since we know the time of the start of the learning process we can compute how many hours it took for this result to be attained.

Table 7: $\quad$ Time necessary for attaining literacy level $A /$ halfway $B$

| Group | Number | Mean number <br> of hours | Standard deviation <br> $(\mathrm{SD})$ |
| :--- | ---: | ---: | ---: |
| Men | 233 | 1429 | 1341 |
| Women | 455 | 1320 | 742 |
| Total | 688 | 1357 | 987 |

As shown in Table 7 the mean number of hours of instruction is high, the variation within the group is also high (see standard deviation) and the skills they have mastered are very modest. What learners know at level A roughly is: decoding simple CVC words and some sight words, while at level B they can read and write longer words with (consonant) clusters as well. The latter, however, has not yet been attained by any of the applicants.

For reasons of comparison with the previous study we have computed the time allotted to reading and writing in hours of instruction and split up the literacy learners according to the proficiency level (A, B, and C according to the Literacy Framework, which are sublevels of the CEF level A1) they attained for reading and writing. The overview of the results can be found in Table 8.

Table 8: Time allotted (learning load) to reading and writing

| Level attained | N | Mean hours | Range |
| :--- | ---: | ---: | ---: |
| Study 1 |  |  |  |
| Literacy level A | 71 | 842 | $103-2786$ |
| Literacy level B | 40 | 1011 | $103-3870$ |
| Literacy level C | 33 | 867 | $155-2150$ |
| Study 2 |  |  |  |
| Literacy level A/halfway B | 688 | 1357 | $80-5400$ |

If the results of the two studies are compared, it becomes clear that the learners of study 2 need more time (with a wider range) to reach a less high level. Their learning load is much higher. What might be the cause of this difference between average literacy learners and those who apply for dispensation regarding the requirements for naturalization?

As far as language education is concerned, the teacher characteristics in principle are not different from those in study 1, and neither is the course material (or so at least one might conclude on the surface). However, a closer look at the basic course material used and reported by the teachers and the education centres does reveal some differences. We divided the answers into the following categories:
(i) course material for teaching how to read and write, (ii) material for teaching how to read and write and teaching Dutch as a second language intended for literate learners as well, (iii) material focused on teaching Dutch only, (iv) any other course material without a special focus. The results of this inventory are given in Table 9.

Table 9: Overview of the focus in course material used in L2 literacy classes

| Course material focused on | Study 1 | Study 2 |
| :--- | :---: | :---: |
| Reading and writing | $69 \%$ | $36 \%$ |
| Reading and writing and Dutch as L2 | $17 \%$ | $\mathbf{3 2 \%}$ |
| Dutch as L2 only | $0 \%$ | $\mathbf{2 1 \%}$ |
| Other course material | $6 \%$ | $5 \%$ |
| Unknown | $4 \%$ | $6 \%$ |

The most striking fact that can be derived from Table 9 is that $21 \%$ of the learners in Study 2 probably did not get the right course material. Instead, they worked with textbooks in printed form compiled for learning Dutch, rather than materials aimed at learning to read and write for the first time. As a result, the materials were too difficult for people with less than a literacy level B. Moreover, the $32 \%$ of the learners in Study 2, who worked with a mixture of literacy material and Dutch as a Second Language (DSL) textbooks (maybe for developing the oral skills) were unable to read these books well enough to profit from what was presented and taught in the lessons.

Summarizing Study 2, we can say that mainly former asylum seekers from countries that are involved in a war inside or outside their borders apply for dispensation and take the feasibility test because they cannot meet the requirements for naturalization. Study 2 also shows that the learning load for this group of learners is high, while the literacy level attained is low. The cause of these low results can, for a minority of the population, be attributed to traumatic experiences in the past (one of the hampering psychological factors in L2 learning) or to their high (advanced) age (cf. Abrahamsson \& Hyltenstamm (2009) and Long (1990:251) for a relationship between age and L2 language skills). Another main cause, moreover, seems to be incorrect placement, whether at the beginning of the learning track (the level of literacy was incorrectly assessed; no or too little literacy material is used) or in the course of the track, for instance, when a student is moved up to the next class at a premature time.

## 4 Conclusions

The two studies presented here lead to two main conclusions. The first conclusion is that it takes most LESLLA learners many hours to attain a level in the use of the written second language that meets the standards of what might be called functional basic skills. It is probably safe to conclude that a small group of fast learners can attain level A1 of the Common European Framework within about 800 hours of instruction, that a larger group needs at least the same amount of time to attain literacy level A, and that the average literacy student needs about 900 hours to attain literacy level B. It is important to add that the individual variation is tremendous and that, therefore, the idea of introducing a benchmark for L2 literacy tracks (with all kinds of implications for funding) does not seem to work very well. A better implication for educational practice might be that teachers need to adapt
their teaching to the students' potential and challenge the faster students so that they do not have to wait for more slowly progressing students. It comes as no surprise that those students that applied for dispensation to get a Dutch passport needed even more time than the numbers mentioned above to attain a very low literacy level, partly because they had learning disabilities or because the materials they got were not well-tailored to literacy learners, and perhaps partly because their traumatic experiences hampered the learning process. However, the studies also show strong indications that literacy and second language teaching of LESLLA learners can be improved.

Secondly, it turns out that the most promising educational measures to improve literacy teaching and learning seem to be all those measures that keep the students active and involved every minute of their time: working on the computer, in small groups or individually, always attending classes and always doing their homework, stimulating all possibilities of contact with speakers of Dutch and using a portfolio to keep both teacher and student alert and aware of what has been achieved or still has to be learned. ${ }^{14}$ Besides this, as the second study implies, literacy learners need teaching materials tailored to what they have to learn first and foremost, which is to read and write, and to prevent them from working with materials that presuppose well established literacy skills.

## References

Abrahamsson, N., \& Hyltenstamm, K. (2009). Age of onset and nativelikeness in a second language: listener perception versus linguistic scrutiny. Language Learning 59, 2, 249-306.

Cito. (2008a). Voortgangstoets Alfa [Literacy Achievement test]. Arnhem: Cito.
Cito. (2008b). Succesfactoren bij bet leren van de taal in het kader van Inburgering. Retrieved from: http://www.vrom.nl.

Condelli, L., \& Spruck Wrigley, H. (2006). Instruction, language and literacy: What works study for adult ESL literacy students. In I. v.d. Craats, J. Kurvers, \& M. Young-Scholten (Eds.) Low-educated Adult Second Language and Literacy Acquisition. Proceedings of the Inaugural Symposium - Tilburg 05 (pp. 111-133). Utrecht: LOT Occasional Series 6.

Council of Europe. (2001). Common European framework of reference for languages: Learning, teaching, assessment. Cambridge: Cambridge University Press.

[^11]Kurvers, J., \& Van de Craats, I. (2008). Literacy and second language in the low countries. In M. Young-Scholten (Ed.) Low-educated second language and literacy acquisition. Proceedings of the third annual forum (pp. 17-23). Newcastle: Rondtuit Publishing.

Kurvers, J. \& Stockmann, W. (2009). Alfabetisering NT2 in beeld. Leerlast en succesfactoren. [Literacy Dutch as L2. Learning load and determinants of success]. Tilburg: Tilburg University.

Kurvers, J. \& Van de Craats, I. (2009). Het Haalbaarbeidsonderzoek van De Voortwizzer [Feasibility Assessment by De Voortwijzer]. Report Tilburg University and Radboud University Nijmegen.

Long, M. (1990). Maturational constraints on language development. Studies in Second Language Acquisition, 12, 251-285.

Stockmann, W. (2006). Portfolio methodology for literacy learners: The Dutch case. In I.v.d. Craats, J. Kurvers, \& M. Young-Scholten (Eds.) Low-Educated Adult Second Language and Literacy Acquisition: Proceedings of the Inaugural Symposium Tilburg 05 (pp. 151-163). Utrecht: LOT Occasional Series 6.

# NON-LITERATE L2 ADULTS' SMALL STEPS IN MASTERING THE CONSTELLATION OF SKILLS REQUIRED FOR READING 

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## 1 Introduction

Can adult immigrants without native language education or literacy learn to read in a second language? That is, can such immigrants reach the point where their literacy practices begin to approximate those of the educated adults surrounding them - their teacher, the supermarket cashier, the doctor? This is a question that LESLLA proceedings have addressed over the past several years, and while there are many LESLLA learners who are low-educated, it is also important to keep in mind that it may be the NESLLA learners - the non-educated learners - who face the greatest challenges. In the last US census, estimates indicated that $40 \%$ of working-age immigrants had primary schooling or less (Coulombe et al. 2004; Mace-Matluck et al. 1999; The Skills Gap 2001). An indication of comparable UK numbers are the statistics Baynham et al. (2007) provide: $14 \%$ of the over 500 learners the authors worked with reported no ability to read or write in their native language As Kurvers et al. (2006:69) observe 'hardly anything is known about the emergent literacy or metalinguistic awareness of adults [=immigrants] in Western countries who never went to school.'.

There are two ways to approach this issue. We can find successful NESLLA readers and ask what internal and external factors underlie their success and then conclude that those who do not succeed lack the skills/opportunities involved. Or, we can look at those cognitive and linguistic pre-requisites which are assumed to underpin young children's reading and study adult first-time L2 readers in the same way that first-time native language readers have been studied while developing literacy. The first option is currently excluded (but see below); we have discovered too few successful first-time L2 readers. Because there are still too few documented cases of success, researchers are thus currently left with no choice but to pursue the second option.

In second language (L2) acquisition it has long been argued that for acquisition of morpho-syntax (e.g. Bailey et al. 1974) and the acquisition of phonology (e.g. Eckman 1981) the errors learners make resemble those made by young children, and indicate that L2 adults make use of the same linguo-cognitive mechanisms children do. Children acquire most syntactic, morphological and phonological competence by ages $4-5$, before they have begun to learn to read. Children also develop considerable linguistic awareness such as pre-literacy skills, prior to learning to read. For example, they develop phonological awareness of the syllable and of sub-syllabic units, onset, and rhyme (Bryant \& Bradley 1983; Goswami 2001). However, without the further phonemic/segmental awareness which is involved in the mastery of grapheme-phoneme correspondences, children cannot sound out new words or read independently. Research points to children's development of phonemic awareness only during the process of learning to read in an alphabetic script (Goswami \& Bryant 1990). Over the past half decade,
contributions to the preceding LESLLA proceedings have pointed to the conclusion that when it comes to learning to read, adults make use of the same mechanisms as do children. However, answers to the question above cannot yet be given affirmatively, and we therefore need to continue to look both at whether first-time L2 readers demonstrate evidence of the knowledge and skills that underlie learning to read in an alphabetic script and also at the myriad additional pedagogical and social factors involved in the adult-level literacy that allows full participation in society.

This chapter is a UK follow-up of a US study conducted prior to the establishment of LESLLA. We begin by taking another look at the results of this study, which suggest a possible categorical difference between those with some schooling/some native language literacy and those without any at all. We then move on to the new study which set out to collect data from only those learners without any schooling, doing so through application of a short-term longitudinal design to measure learners' changes in knowledge and skills relevant to literacy. The data do not point to a categorical difference, but rather reveal small steps similar to those taken by pre- and early school children. We conclude this chapter by noting the importance of documenting such steps in NESLLA learners' progress.

## 2 Cbildren's and LESLL A adults'phonological awareness

In their comprehensive study of phonological awareness, Burt et al. (1999) studied children in the UK and confirmed what a range of other studies before and since have shown. Their results, shown in Table 1, show that regardless of environment (social class in this instance), children exhibit common patterns of development for phonological awareness, where syllable awareness, followed by onset awareness, followed by rhyme awareness have been confirmed to emerge prior to phonemic awareness; and that all aspects of the development of awareness have been found to follow an upwards trajectory once the child begins to work on reading in school. Given the low transparency of English orthography when compared with those of other languages (e.g. Ziegler \& Goswami 2005), mastery of reading in English is later than for other alphabetic orthographies, and it is thus not surprising that children begin to be introduced to the basics of reading somewhat earlier, e.g. in the UK before their fifth birthday.

Table 1: Burt et al.'s (1999) study of UK children in two age groups
3 yrs ten mnths -4 yrs 3 mnths $\quad 4$ yrs 4 mnths -4 yrs 10 mnths

| syllable | $55.6 \%$ | $64.9 \%$ |
| :--- | :---: | :---: |
| rhyme | $39.3 \%$ | $41.3 \%$ |
| onset | $25.6 \%$ | $45 \%$ |
| phoneme | $8 \%$ | $24.9 \%$ |

There is further evidence, from studies of adults who were not exposed to (alphabetic) literacy as children, that the awareness of syllables and sub-syllabic units emerges naturally, but phonemic awareness is dependent on learning to read in an alphabetic script. Individuals who have not been exposed to an alphabetic script in childhood because their language is written with a logographic script (e.g. Chinese) perform well on tasks testing syllable, onset and rhyme tasks, but poorly
on tasks testing phonemic awareness (Read et al. 1986). Moreover, those who have had no opportunity at all to become literate as children in their native language (in this case Portuguese) have been shown to perform well on syllable, rhyme and onset awareness tasks, but much worse on phonemic awareness tasks (Morais et al. 1979, 1987, 1988). Taken together, studies of children and of late literate native language adults point to the natural emergence of syllabic and sub-syllabic awareness on the one hand, and to exposure to an alphabetic script dependent on the development of phonemic awareness. Age does not seem to be a factor.

### 2.1 The previous study

Young-Scholten \& Strom (2006) undertook a partial replication of Burt et al., using much the same tasks. The study involved the collection of data from 17 adult immigrants in Seattle who spoke Somali and Vietnamese, both of which use the Roman alphabet. Eight learners had immigrated with no schooling, nine with 1-5 years schooling. The age range at testing was 26 to 70 years old. The people tested had been in the USA from $3 / 4$ years to 20 years and they had been taking ESL from two weeks to four years. In addition to tests of various reading sub-skills, the test battery also included measures of phonological and morpho-syntactic competence. It was assumed that a language threshold needs to be attained to provide the basis for reading skills to develop (Alderson 2000; Bernhardt \& Kamil 1995). The influential Common European Framework of Reference (CEFR) was not used as a measure for two reasons. (1) It does not go low enough to capture the oral abilities of LESLLA learners, whose proficiency typically places them at a level below A1 - the lowest CEFR level (see Janssen-van Dieten 2006 and Kurvers \& Stockman, this volume); (2) while the CEFR measures what the individual can do with language, it excludes the fine points morpho-syntactic and phonological competence, the acquisition of which is indispensable for those without any native language literacy skills to transfer. NESLLA learners are unique. Unlike the aforementioned Chinese readers being introduced to reading in English, they have no literacy. In addition, unlike the Portuguese adults introduced to literacy for the first time, they do not have target-like linguistic competence in the language in which they must try to read. This means that they must often grapple with reading words that contain consonant clusters not yet part of their interlanguage phonology. It also means that they will be confronted with sentences that contain inflectional morphology and syntactic patterns they have not yet acquired. The inclusion in a study of information about level of phonological and morphosyntactic development is thus instrumental in forming a complete picture of NESLLA learners' emerging knowledge and skills.

The 2006 study's test battery included tasks that measured syllable, onset, rhyme, and phoneme awareness (adapted from Burt et al. 1999). The study also included a word awareness task, based on Karmiloff-Smith et al.'s 1996 study. These tasks were all both in English and also in the learners' native languages, given Morais et al.'s findings regarding native language phonological awareness. The measures of reading were those used in other studies such as Condelli et al.'s (2003), e.g. recognition of signs, knowledge of the alphabet and both single word and paragraph reading. The test battery also included tasks measuring morphosyntactic and phonological competence which were devised by the researchers.

When compared to Burt et al.'s results, Young-Scholten \& Strom's 2006 study revealed child-adult similarities as well as some important differences. The adults in the study patterned like children in both their native language and in English with respect to phonological awareness for those tasks which measured onset, rhyme and phoneme awareness. Performance on the task testing phonemic awareness was considerably worse. There were, however, two differences. First, unlike for children, performance on the syllable awareness task was not invariably as good or better on rhyme and onset tasks (see Table 1). Second, data from the application of Karmiloff-Smith et al.'s word awareness task showed that both non- and lowliterate adults differentiated between content and function words, where their ability to repeat content words exceeded their ability to repeat function words. Karmiloff-Smith et al. found no such differences. We attribute these child- adult differences to L2 learners' low level of morpho-syntactic competence, where function words have not yet been acquired. Importantly, the study showed the expected strong relationship found for children (e.g. Goswami \& Bryant 1990) between phonemic awareness and single word decoding. That is, there were no adults in the study who were able to decode/read words in isolation without manifesting phonemic awareness, and there were no adults in the study who exhibited phonemic awareness but could not decode.

While there was a good amount of variation in the results from those with 1-5 years of schooling (i.e. those with some native language literacy in the alphabetic scripts used in Vietnamese and Somali), including attainment of the highest level in the study for reading and for linguistic competence, results for those with no schooling were almost uniformly low, as shown in Table 1. Arranged in ascending order by morpho-syntactic competence level and reading level, we see that only one of the unschooled adults in the study had moved beyond the lowest two levels (levels 1 and 2) of morpho-syntactic competence, and only two had moved beyond the lowest level of reading development (level 1). Phonological competence varied much more (due to some extent to positive transfer from the learners' native language phonologies) as we see by the percentages of target-like single vowels and consonants and consonant clusters learners produced. Relative to their phonemic awareness, onset and rhyme awareness were impressive, with percentages considerably exceeding those for phonemic awareness for most learners.

Table 2: Young-Scholten \& Strom's 2006 study of non-schooled learners
$\left.\begin{array}{lcccc}\hline & \begin{array}{c}\text { Target-like } \\ \text { oral } \\ \text { phonology }\end{array} & \begin{array}{c}\text { Morpho- } \\ \text { syntactic } \\ \text { competence } \\ (1-5)\end{array} & \begin{array}{c}\text { awareness tasks } \\ \% \text { correct }\end{array} & \begin{array}{c}\text { reading } \\ \text { level } \\ \text { onset and } \\ \text { rhyme }\end{array} \\ \text { Nien } & 3 \% & \begin{array}{c}1-5)\end{array} \\ \text { phoneme/ } \\ \text { segment }\end{array}\right]$

| Aliya | $63 \%$ | 2 | $37 \%$ | $0 \%$ | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Asia | $81 \%$ | 2 | $36 \%$ | $0 \%$ | 2 |
| Sharif | $71 \%$ | 5 | $68 \%$ | $42 \%$ | 4 |

The data from the non-educated adults in the study also reveal variation. For example, Phung had participated in ESL classes for one year at the time of testing, she had lived in the USA for 20 years, her children had all attended school and some were even studying at university level. On this basis, one would predict that she would have made progress in both oral English and in reading. Yet her reading was at the lowest level and her morpho-syntactic competence nearly as low. Sharif, on the other hand, had only participated in ESL classes for two weeks when he was tested, he had lived in the USA for only two years and while his family members were literate in Arabic and Somali, none were literate in English. One would predict a much lower level of success for him, yet he had managed to acquire near-native morpho-syntax (level 4) and to master the basics of reading in English (level 5). Where Kurvers and van de Craats (2008) conclude that fully successful learners who started as complete non-literates are rare, given the evidence that NESLLA learners seem to make use of the same cognitive mechanisms as do children in their reading (and also in their linguistic) development, with sufficient opportunities/time spent on task, we ought to find more individuals like Sharif.

A follow-up study, this time in the UK, was set up to look only at adults with either no schooling or with minimal schooling in a language which does not use the Roman alphabet and to do so over a period of time. Development of phonological awareness in tandem with decoding skills would bolster the case that first-time L2 readers make use of the same cognitive mechanisms as do children when learning to read. In addition, while the 2006 study included a task to measure vocabulary, because Young-Scholten \& Strom concluded on several grounds that the task was not a valid measure, given the importance of vocabulary in reading, another means was developed to test it in the follow-up study. (By one calculation, beginning readers need a vocabulary of roughly 5,000 words and should know $95 \%$ of the words in a text to adequately comprehend it and be able to guess unknown words from context Alderson 2000:35). .

## 3 The follow-up study: Further evidence for child-adult similarities in learning to read

The UK replication of Young-Scholten \& Strom (2006) involved adults from two pre-entry (sub-CEFR A1 level) classes at two local ESL programmes. Information is shown in Table 3 about these learners whose names are shortened to the first syllable protect their identities. Tasks similar to the 2006 study's phonological awareness and reading tasks were administered, with the addition of a test of words learners were learning to read (henceforth 'ESL words') and with a vocabulary test (British Picture Vocabulary Scale). The phonological awareness tasks were not conducted in the learners' native languages. In order to observe the small steps we predicted learners would take on the path to learning to read, they were tested twice, in June 2008 and March 2009.

Table 3: Follow-up study learners

| Learner | Sex | NL(s) | reported <br> NL <br> school | UK <br> arrival | Age | ESL | extra- <br> classroom <br> English |
| :--- | :--- | :--- | :---: | :---: | :--- | :--- | :--- |
| Abd | M | Nouba; <br> Arabic | 0 | 2006 | 32 | 1 yr | Friends |
| Far | F | Urdu | 2 yrs | 2005 | 48 | 1 yr | tv; family |
| Faz | F | Panjabi | 0 | 2001 | 38 | 1 yr | Children |
| Hak | F | Dari | 0 | 2001 | 66 | 3 yrs | Children |
| Nag | M | Tamil | 9 yrs (?) | 1998 | 43 | 2 yrs | tv; children |
| Nig | F | Arabic; <br> Tigrinia | 1 yr | 2003 | 44 | 4 yrs | tv; family |
| Nas | M | Urdu | 0 | 2003 | 48 | 5 yrs | Children |
| Sar | F | Kurdish, <br> Farsi; <br> Arabic | 3 yrs | 2004 | 37 | 1 yr | tv; children |
| Shaf | F | Urdu; <br> Mirpuri | 1 yr | 1999 | 35 | 1 yr | Children |
| Shag | F | Dari; <br> Pushto | 0 | 2005 | 28 | 1 yr | tv; family |
| Yas | F | Panjabi | 0 | 2006 | 35 | 1 yr | tv; family |

A questionnaire was orally administered to gather information about learners' first language(s), their schooling, their arrival in the UK, age at testing, amount of ESL instruction and exposure to English. This information is also shown in Table 3. For those learners who had schooling, it was in a language which does not use the Roman alphabet. Where they reported ' 0 " schooling, we determined that they could not read in any language upon UK immigration. Analysis of the effect of external factors on learners' progress is a complex matter, requiring either a longer-term longitudinal study involving a more qualitative approach and/or cross-sectional study with larger numbers of learners (see e.g. Kurvers and van de Craats 2008), and we leave this for future papers. Ideally, one would also have information about learners' frequency of attendance in ESL classes and treat this as a variable, but this information was not available.

### 3.1 Results

We first look at whether these 11 learners showed improvement over the seven months that elapsed between the two testing sessions. Analysis of the data shows that small steps are indeed taken on the road to literacy. (In Table 4, '(1)' refers to results found only at one of the two classes). Worrying, however, is the drop in learners' medial and final phoneme awareness, but we suggest that this can be attributed to what is essentially a testing effect where due to lack of additional testing in the learners' native language, the learners may not have always understood the requirements of the task. The Young-Scholten \& Strom study included awareness tasks in Somali and Vietnamese to explore whether adults'
native language phonological awareness follows patterns found for children and for adults (i.e. Read et al. and Morais et al.), but due to the greater number of native languages spoken by the learners in the UK study, this was not feasible. We are, however, convinced that simply conducting challenging tasks in the learners' native languages before conducting them in English serves the additional function of aiding their understanding of the task before they attempt it in English.

Table 4: Changes in task performance between June 2008 and March 2009

|  | Stable | improvement | drop |
| :--- | :--- | :--- | :--- |
| linguistic <br> competence | Morpho-syntactic <br> competence | 1. vocabulary <br> 2. phonological <br> competence |  |
| phonological | 1. syllable | 1. rhyme, onset | 1. medial phoneme |
| awareness | 2. rhyme (1) <br> 3. medial phoneme (1) | 2. word-initial <br> phoneme | 2. final phoneme |

Taking a closer look at the data from the phonological awareness tasks and additional tasks, we found a considerable number of positive (and some negative) correlations. We found correlations similar to those found in the studies of children and other studies of LESLLA learners in terms of what learners are being taught (ESL words; the alphabet), actual word attack skills, phonological awareness, environmental print (sign recognition), aspects of linguistic competence, complex onsets/consonant clusters, segments (vowels) and vocabulary. We also looked for correlations between sets of scores (typically correct/attempts made) and found statistically significant correlations between the sub-components of phonological awareness, reading skills and vocabulary. These correlations suggest positive developments in (1) these learners' cognitive processing of graphemes, (2) their linguistic competence and (3) their reading skills. By examining under a microscope these learners' knowledge and skills, we can show that they indeed take steps, albeit small, as they learn to read in English. Before discussing each set of correlations, we briefly describe how the relevant data were collected.

As noted above, vocabulary was tested using the British Picture Vocabulary Scale, which is similar to the Peabody Picture Task used in the USA; both involve the researcher showing the learner pictures which she/he must then name. Knowledge of the alphabet involved learners' identification of letters in different fonts, e.g. B X L $1 \mathbf{p}$. Rhyme awareness required learners to listen to sets of three words, instead of four words as used in Burt et al. 2006 studies (this was suggested by ESL teachers). Learners had to then pick the 'odd one out'. For example: can, SHOP, man; SIT, thin, skin; hot, SHIRT, not; sun, fun, LEG; chip, CAR, lip. Significant and highly significant correlations were found for vocabulary scores at time 1 (June 2008) and time 2 (March 2009), and between the alphabet at time 1 and rhyme awareness at time 1 and vocabulary at time 1 and time 2 . An analysis of the data collected at time 1 revealed that participants' vocabulary scores correlated
positively with their alphabet knowledge scores ( $\mathrm{r}=.93, \mathrm{p}<.02$ ) and with rhyme awareness ( $\mathrm{r}=.92, \mathrm{p}<.02$ ). Also, when looking at time 2 vocabulary score in relation to other variables, we found a strong positive and highly significant correlation with vocabulary score at time $1(\mathrm{r}=.98, \mathrm{p}<.002)$. Strong positive correlations were also found between learners' vocabulary score at time 2 and alphabet score ( $\mathrm{r}=.91$, $\mathrm{p}<.03)$ and rhyme awareness at time $1(\mathrm{r}=.94, \mathrm{p}<.01)$. This suggests that alphabet knowledge and rhyme awareness both underpin vocabulary growth.

We also looked for a relationship between onset awareness, phonemic awareness and one of the aspects of linguistic competence, i.e. phonological production. With respect to onset awareness, learners were tested in the same manner as for rhyme awareness,: which word is the odd one out in a set of three (sleep, sport, CASH; red, WITH, ring; KICK, this, that; big, MILK, bus; fast, fish, PARK). For initial, medial and final phonemic awareness, learners listened to the researcher read a word and were instructed to repeat the word without the first sound, the middle sound or the final sound; they were tested with the words shown in the Appendix. Finally, syllable awareness was measured in terms of counting syllables in familiar words which the researcher read to learners (pencil, Manchester, Victoria, supermarket, Paracetemol) and unfamiliar ones (agility, nomenclature, derelict, abyss, periodical). For phonological production, consonant learners were prompted to say words with word-initial and word-final consonant clusters using pictures of 14 objects (e.g. clock, train, bread, desk, milk, six). This provided an indication of whether learners' interlanguage phonologies contained the syllable onsets and rhymes/codas the awareness of which was also tested. Our assumption was that a language learner cannot be aware of something that $\mathrm{s} / \mathrm{he}$ has not acquired, that metalinguistic knowledge piggybacks on linguistic competence (Gombert 1992). Since adults with little or no native language schooling lack the sort of meta-phonological awareness educated L2 learners have, examination of the low-literate immigrants' linguistic competence is important. Attempts were counted only if the word which learners produced contained a cluster. For vowel production, learners were again prompted with 14 pictures to say words containing monophthongs, especially lax vowels, and diphthongs (e.g. metro, chicken, cat, smile).

For learners in one of the two ESL classes, phonemic awareness with respect to medial segments correlated significantly at time 2 with consonant (onset/coda) production at time $1(\mathrm{r}=.91, \mathrm{p}<.02)$. For the same learners, there was also a strong, significant correlation between consonant production at times 1 and 2 ( $\mathrm{r}=.95$, $\mathrm{p}<.01$ ). Rhyme awareness at time 1 also correlated with single word attack at time 2 ( $\mathrm{r}=.94, \mathrm{p}<.01$ ) while at time 2 rhyme awareness correlated strongly and significantly with phonic/ESL word reading ( $\mathrm{r}=.98, \mathrm{p}<.002$ ). Thus, the improvement reported earlier in relation to single word attack was associated with how well the participants did on the rhyme awareness task at time 1, while their phonic/ESL word reading underpinned their improvement in relation to rhyme awareness at time 2.

For learners in the other class, slightly different correlations were found: consonant production at time 1 correlated strongly and significantly with rhyme awareness at time 1 and 2 and onset awareness at time $2(\mathrm{r}=.99, \mathrm{p}<.0001$ in all cases). Significant correlations were also found between syllable counting at time 2 and alphabet knowledge at time $1(\mathrm{r}=.99, \mathrm{p}<.000)$ and phoneme awareness at time 1 ( $\mathrm{r}=-.98, \mathrm{p}<.000$ ).

To examine single word attack/decoding, learners read familiar words such as mobile phone, supermarket, teacher, station, community, medicine, floor, table, wedding, and breakfast. The phonic/ESL words were mono- and disyllabic words from the ESL programmes' literacy-level syllabuses and included 59 monosyllabic: verbs (crash, sit), nouns (man, leg), adjectives (red, sick) and function words (not, this, can) and four disyllabic words (garden, flower, market, today).

For the first class, time 1 rhyme awareness correlated with time 2 word attack ( $\mathrm{r}=.98, \mathrm{p}<.01$ ) and time 2 rhyme awareness with time 2 phonic/ESL word reading ( $\mathrm{r}=.98, \mathrm{p}<.002$ ). For the other class, correlations were again slightly different. Strong, significant correlations were only found between rhyme and onset awareness at time $2(\mathrm{r}=.99, \mathrm{p}<.000)$.

For this class, ESL/phonic word reading at time 1 correlated with single word attack at time $2(\mathrm{r}=.97, \mathrm{p}<.004)$ while single word attack at time 1 correlated strongly with alphabet reading at time $1(\mathrm{r}=.87, \mathrm{p}<.04)$, and for the second class, there was a strong correlation between ESL phonic word reading at time 1 and single word attach at time 1.

For the second class, correlations were also found between Time 1 segment production and medial phonemic awareness time 2 ( $\mathrm{r}=.97, \mathrm{p}<.001$ ).

## 4 Discussion and conclusion

What the above points to is correlations similar to those found in the studies of children and other studies of LESLLA learners. These are correlations between what learners are being taught (phonic/ESL words; the alphabet), actual word attack skills, phonological awareness, environmental print (sign recognition), phonological competence pertaining to vowels and to syllables and vocabulary. The many correlations point to the development of reading as a complex and systematic process. That we do not see random patterns strongly indicates that immigrant adults with little or no schooling/literacy at their disposal upon starting to read in an L2 are able to draw on cognitive resources that for them have remained dormant since childhood. Our results provide further evidence that first-time second language readers are making use of the same mechanisms children use in learning to read in their native language, given the similar patterns across the child and NESLLA populations. Such adults take small steps that are not detectable by the measures applied to educated second language learners. The use of tasks given to young pre-school and early school children allows us to observe steps that should, in theory, lead to the full development of reading by NESLLA adults. Compared with the considerable amount of research on children's literacy, the amount of research on NESLLA learners is indeed miniscule. While none of the learners in the follow-up study turned out to be as successful as Sharif in YoungScholten \& Strom's 2006 study, until the volume of NESLLA research begins to approach that undertaken with young children, we will not be in a position to know whether it is not only in theory but also in practice that NESLLA learners' small steps will, with persistence by learner and teacher alike, result in the full development of literacy. Until there is an exponential increase in studies contributing to our evidence base, we will be unable to say for certain how those immigrants with no native language schooling/literacy can become proficient readers in a second language at age 20,30 or 70 . In the meantime, teachers can best
do what they are already doing: engage their learners in activities that accelerate their phonological acquisition, promote phonological awareness and build their vocabulary.

## References

Alderson, C. (2000). Assessing reading. Cambridge: Cambridge University Press.
Bailey, N., Madden, C. \& Krashen, S. (1974). Is there a 'natural sequence' in adult second language learning? Language Learning 24, 235-243.

Baynham, M., Roberts, C., Cooke, M., Simpson, J., Ananiadou, K., Callaghan, J., McGoldrick, J., \& Wallace, C. (2007). Effective teaching and learning ESOL. NRDC Report. London: Institution of Education.

Bernhardt, E. B., \& Kamil, M. L. (1995). Interpreting relationships between L1 and L2 reading: consolidating the linguistic threshold level and the interdependence hypotheses. Applied Linguistics. 16, 15-34.

Bryant, P. E., \& Bradley, L. (1983). Psychological strategies and the development of reading and writing. In Martlew, M. (ed.) The psychology of written language (pp. 163-178). Chichester: Wiley.

Burt, L., Holm, A., \& Dodd, B. (1999). Phonological awareness skills of 4-year-old British children: an assessment and developmental data. International Journal of Language and Communication Disorders.

Coulombe, S., Tremblay, J-F., \& Marchand, S. (2004). International adult literacy survey. Literacy scores human capital and growth across 14 OECD countries. Report no. 89552. Ottawa: Statistics Canada.

Condelli, L., Wrigley, H.S., Yoon, K., Cronen, S. \& Seburn, M. (2003). What works study for adult ESL literacy learners: Final report. Washington, DC: American Institutes for Research.

Dunn, L. M., Dunn, L.M., Whetton, C., \& J. Burley. (2007). British picture vocabulary scale II. London: National Foundation for Educational Research.

Eckman, F. (1981). On the naturalness of interlanguage phonological rules. Language Learning 31, 195-216.

Gombert, J-E. (1992). Metalinguistic development. London: Harvester Wheatsheaf.
Goswami, U. (2001). Early phonological development and the acquisition of literacy. In Neuman, S. B., Dickinson, S., \& Dickinson, D. (eds.) Handbook of early literacy research. New York: Guilford Press.

Goswami, U., \& Bryant, P. E. (1990). Phonological skills and learning to read. Hove: Psychology Press.

Janssen-van Dieten, A.-M.. (2006). Common European framework of reference and L2 learners with a low level of education. In van de Craats, I., Kurvers, J., \& Young-Scholten, M. (eds.). Low-educated second language acquisition and literacy. Proceedings of the inaugural symposium. Utrecht: LOT.

Karmiloff-Smith, A., Grant, J., Sims, K., Jones, M-C., \& Cuckle, P. (1996). Rethinking metalinguistic awareness and accessing knowledge about what counts as a word. Cognition 58, 197-219.

Kurvers, J., \& v.d. Craats, I. (2008). What makes the illiterate language learning genius? In Young-Scholten, M. (ed.) Proceedings of the 3 rd annual low-educated language and literacy acquisition conference. Durham: Roundtuit.

Kurvers, J., \& Uri, H. (2006). Metalexical awareness: Development, methodology or written language? A cross-linguistic comparison. Journal of Psycholinguistic Research, 35, 4, 353-367.

Mace-Matluck, B. J., Alexander-Kaparik, P., \& Queen, R. M. (1999). Through the golden door: Educational approaches for immigrant adolescents with limited schooling. Washington, DC: Delta Systems.

Morais, J., Cary, L., Alegria, J. \& Bertelson, P. (1979). Does awareness of speech as a sequence of phones arise spontaneously? Cognition 7, 323-331.

Morais, J., Alegria, J., \& Content, A. (1987). The relationship between segmental analysis and alphabetic literacy: An interactive view. Cabiers de Psychologie Cognitive 7, 415-438.

Morais, J., Content, A., Bertelson, P., Cary, L., \& Kolinsky, R. (1988). Is there a critical period for the acquisition of segmental analysis? Cognitive Neuropsychology, 5, 347-352.

Read, C., Zhang, Y., Nie, H. \& Ding, B. (1986). The ability to manipulate speech sounds depends on knowing alphabetic spelling. Cognition 24, 31-44.

Young-Scholten, M., \& Strom, N. (2006). First-time L2 readers: Is there a critical period? In van de Craats, I., Kurvers, J., \& Young-Scholten, M. (eds.) Low educated second language and literacy acquisition. Utrecht: LOT.

Ziegler, J., \& Goswami, U. (2005). Reading acquisition, developmental dyslexia, and skilled reading across languages: A psycholinguistic grain size theory.
Psychological Bulletin, 131 (1), 3-29.
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Appendix: Phonemic awareness words.
Remove the initial sound

| from | to get |
| :--- | :--- |
| broom room <br> leg egg <br> meat eat <br> clock lock <br> train rain lan |  |

Remove the middle sound

| from | to get |
| :---: | :---: |
| frog | fog |
| swing | sing |
| spoon | soon |
| glass | gas |
| sport | sort |

Remove the final sound

| from | to get |
| :---: | :---: |
| lamp | lamb |
| weak | we |
| fork | for |
| soup | Sue |
| port | poor |

# A CONNECTIONIST ILLUSTRATION OF PRE-LITERATE ADULT IMMIGRANTS' LANGUAGE ACQUISTION - EXEMPLIFIED BY ARABIC-ENGLISH CROSS-LANGUAGE COMPARISONS 

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## 1 Introduction

During the last two decades, connectionist reading theory has gained acknowledgement and importance within the study of reading processes and reading acquisition. In this paper, a connectionist word recognition model freely adopted from Seidenberg \& McClelland (1989) is adjusted and expanded to encompass reading related cognitive resources not considered in their original model in order to include both more general aspects of language and comprehension as well as language specific aspects such as letter detection. The model is then explained and exemplified through cross-language comparisons between English and Arabic, and within this framework of cognitive linkages between language and literacy, the connectionist model is used to explain why preliterate adult immigrants tend to display remarkably poor results in acquisition of the L2. Finally, educational implications are briefly discussed.

## 2 A connectionist word recognition model

For many years, the theoretical discussion about word recognition focused on the extent to which readers rely on phonological vs. lexical 'routes' to the mental lexicon. The impetus was linguistic descriptions of the correspondence between letters and sounds in English words which were categorised as either regularly or irregularly spelled. Psychologists argued that significant differences in subjects' reading speed when decoding regular and irregular words respectively imply that the two types of words are processed differently (Henderson 1984). The findings were explained by a 'dual route model' (see Figure 1): Besides the phonological decoding of letters into sounds which leads to recognition of the word and its meaning, there had to be an alternative, more direct route to the lexicon, by which words are recognised as lexical entities. While regular words could be recognised through both routes, recognition of irregular words had to be a product of the lexical route, as rule-based letter-to-sound correspondences do not apply; moreover, reading of pseudo-words must be a product of the rule-based phonological decoding, as they are not recognisable, lexical units (Henderson 1982;1984).

Since the 1990 s, the dual route model has been under still heavier critique and new theories of word recognition have been gaining ground. Some researchers are advocating a modified and more flexible type of word recognition model, in which phonological and orthographic processes are more integrated (Seidenberg 1992;

Foorman 1994;1995; Vellutino et al. 1995), just as other aspects of linguistic competences are also included (Norris 1990; Sharkey 1990).

In a broader theoretical context, the basic critique of the dual route model is coherent with the general development in modern cognition research, in which nativism, in linguistics represented by generative linguistics, since the mid 1980s have been challenged by a new line of thought based on connectionism (or parallel distributed processing or network theory) (Ravn 1992; Ramsey 1999; Smolensky 1999). Like the development of rationalism, including generative linguistics, which was linked to the invention of computers for processing data, connectionism is closely linked to the research in and development of artificial intelligence. Connectionist theory strives, like generative linguistics, to internalise language. This is in opposition to structuralism's externalisation of and focus on language as system, where language is perceived as manifestation of cognitive processes in general. But while Chomsky perceives linguistic competence as an innate set of syntactic structures as an independent module in the brain, connectionists see language/linguistic competence as experience-based, operating as part of the general cognition. (Ravn 1992; McClelland 1999; Ramsey 1999; Smolensky 1999; Garson 2002). ${ }^{15}$ This difference seems to mirror the difference between the classic computer and the new so-called neuro-computers which are biological neural networks. The classic computer runs a programme which is, in fact, a list of instructions for how various 'knowledge elements' in a carefully controlled order are to be combined in order to produce the right output. In contrast, the neuro-


Figure 1: Word Recognition: Dual Route vs. Connectionist reading model
computer is a network of units (similar to the brain's synapses), typically grouped in input-units and output-units and between these one or several layers of 'hidden units'. The units are combined in a network of connections, and information is spread from the input-units to the rest of the network through a pattern controlled by the weights of the relevant connections. Thus, information (in practice electric power) is weighed against the information which is already stored in the network as different weights within the connections, and the network is 'trained' by adjustments of the weights when the output is wrong. In this way, the network
${ }^{15}$ However, some do accentuate connectionism as a bridge between nativism and empiricism, as the theory at the same time accepts that our perception depends on a set of innate sensors and that knowledge is based on experience (e.g. Adams 1990).
acquires 'experience' which can be used to generalise based on input it has never encountered during its 'training' (Ravn 1992; McClelland 1999; Garson 2002).

Connectionism has been used as a theoretical basis for a new word recognition model which, thus, rejects the mechanism of a dual phonological and/or lexical processing of words. In the connectionist word recognition model, all resources are applied in one process. All relevant knowledge is stored as weights within the connections, so there is no 'mental lexicon'; thus, there is no lexical route to word recognition. Rather, orthographic, phonological and semantic codes are connected within a complete process. Seidenberg, one of the predominant connectionists dealing with word recognition, describes the difference as follows:

> According to this theory, codes are not accessed, they are computed; semantic activation accrues over time, and there can be partial activation from both orthographic and phonological sources. So, for example, whereas in the standard dual-route model, 'phonological mediation' required deriving the complete phonological code for a word and using it to search lexical memory, in the present framework there can be partial activation of phonology from orthography, or of meaning from phonology. Thus, the meaning of a word is built up by means of activation from both routes, [..] rather than accessed by means of whatever route wins the race. (Seidenberg 1992:105)

So, word recognition is still a matter of processing phonological and lexical material, but rather than running through separate routes to a mental lexicon, the information is gathered in a melting pot, where this - together with other kinds of text relevant experiences - creates meaning: Letter combinations give hints about known phonological patterns; phonological constellations provide semantic association, etc. Becoming a proficient reader is a matter of gradually adjusting the connections' weights based on frequency and consistency in the relations between lexical and phonetic units. Grapheme-to-phoneme correspondences are still essential, however, not as isolated rules but rather as characteristic spelling patterns which are gradually recognised when they have been encountered several times.

An interesting and compelling aspect of the theory is that it explains the complexity of the reading process and handles the processing of different resources in a more integrated way than the traditional interactive reading models are able to do: It embraces a very broadly interpreted version of schema theory, as all sorts of knowledge affect the process, while at the same time it includes the smallest components of phonemes and graphemes - even letter segments. So despite the fact that proficient readers recognise words rapidly without relying on phonological decoding, and despite such readers' ability to make use of the holistic form of single words in the word recognition process, this does not mean that words are recognised as wholes. Despite the fact that context influences decoding, it does not mean that reading is based on continuous, context-reliant testing of hypotheses. On the contrary, proficient readers visually process every single letter - but not in isolation from its surroundings:

Even while the individual letters of the text are the basic perceptual data of reading, they are not perceived one by one, independently of each other. Instead,
their efficient and productive perception depends additionally on ready knowledge of words - their spellings, meanings, and pronunciations - and on consideration of the context in which they occur. In the mind of the skillful reader, each such type of knowledge is represented by constellations of elementary units, connected in specific, learned relation to each other: Simple patterns are represented by interrelated clusters of units, more complex patterns of clusters of clusters of units, and so on such that the whole of any percept or idea is defined, at core, by the particular relations that hold among its parts. (Adams 1990:14-15)

Hence, meaning is constructed through connections of segments at several levels: Letters are representations of interconnected visual components, just like words are representations of interconnected letter combinations. Similarly, the pronunciation of a word corresponds with a complex of phonemes just like its meaning is related to interconnected elements of meaning (Adams 1990:15). Thus, word recognition (and reading comprehension) is a multidimensional puzzle of experience-based elements of knowledge which are put into play and connected to each other. A connectionist reading model, taking both the lower level of letter detection and the broader aspects related to comprehension into account, is presented in Figure 2. In


Figure 2: Connectionist reading model
contrast to the original model by Seidenberg \& McClelland (1989), which is the primary source of inspiration behind it, this model retains an element of sequential progression with letter recognition as an independent part of the process. However, this is purely a matter of illustration to highlight the fact that letters are not necessarily the ones used for writing in English. The letter detector box, just like the boxes illustrating linguistic knowledge and general knowledge of the world, should of course not be seen as a static element but as a system within which
information is similarly processed in networks of units which are all part of the greater cognitive network.

## 3 Cross-language comparisons

In order to thoroughly illustrate how language specific features are stored in the word recognition system and to what extent the word recognition network is shaped by language, this section gives a range of examples of word recognition processes in English and Arabic. The Arabic writing system and morphological structure is first briefly introduced to readers who are not familiar with Arabic.

### 3.1 A Brief Introduction to Arabic Script and Morphology

Arabic script is written from right to left. The alphabet consists of 28 letters. The script is cursive, and most letters take slightly different forms depending on their position within words (initial, medial, final). All letters of the Arabic alphabet are consonants and the writing system is primarily consonantal, which is conveyed in the practice of only consonants and long vowels being represented by letters, while short vowels can be marked by diacritics. Diacritics can also be used to mark pronunciation clues such as case endings and consonant doublings. The diacritics take the form of minor strokes or curls which are placed above or beneath the letters, and, compared to the letters, their graphic significance is modest (see Figure 3). Diacritics - including short vowels - are normally omitted, except in some religious and poetic texts and literature for children and beginning readers. In Arabic-speaking countries, children are slowly introduced to texts without vowels from the third grade, and, from around sixth grade, the bulk of texts children read in school is without diacritics. In any kind of text, isolated diacritics can be applied when meaning could otherwise be ambiguous and the ambiguity is not directly clarified by the context.


Figure 3: Unvoweled and Voweled Arabic (/al-gira'a bi-al-logha al-'arabiyyal, 'reading in arabic')

Compared to the Roman alphabet, the letter architecture in Arabic is more uniform, and precise number and placement of dots are crucial to letter identification. From a connectionist point of view, experience with letter forms and letter component constellations shape the reader's letter detection process - just as experience with both whole words and letters shape the word recognition process; thus, reading in Arabic prompts very different scanning strategies than reading in English. Even at this basic level, experience is the key to automatic word
recognition, and, therefore, learning to read a second language writing system based on individual letter recognition alone can be a serious challenge.

Arabic morphology is a three-consonantal, root-based system which is unique for the Semitic languages. The bulk of Arabic words are constructed by (at least) two morphological entities: a root consisting of three consonants carrying a core meaning' of action and a limited number of sets of pre- in- and suffixes, called patterns. In verbs, 10-12 patterns provide information on different aspects such as causal or reflexive aspects. Within the remaining word classes the system is further elaborated. Obviously, one root is never represented in all these sets of patterns, and in relation to the semantic value of these morphemic constituents, the system is far from consistent. However, it is sufficiently coherent to enable Arabicspeakers to make use of it as an analytical and directional tool e.g. for retrieving the

| الجِذر root | فعَل [faiala] <br> basic form of verb | [aaiil] اسم الفايِل <br> 'the actor' | اسم المكان [maffal] <br> place of the action |
| :---: | :---: | :---: | :---: |
| [ 5 ت | كتَبَ [kataba] (he wrote) | كاتِب [kaaib] (writer) | $\begin{gathered} \text { (office) } \end{gathered}$ |
| دO ش [ H -h-d] | شهحَ (he looked) | شاهِ [ C aahid] (spectator/witness) | $\underset{\text { (view) }}{\substack{\text { مَشْهُ } \\ \text { [ma } \\ \text { Shad }]}}$ |
|  | عَملَ [Camila] (he worked) | عامل [faamil] (worker) | $\underset{\text { (factory) }}{\text { مَعْمَ }}$ [ma |

Figure 4: Word Formation in Arabic: Three roots and three patterns


Figure 5: Words Derived from كتب and Example of Homographic Vocabulary in Arabic
meaning of an unknown word.

As some of the word patterns differ only in the short vowels, unvoweled text is plentiful in homographs. A simple example of this rather frequent occurrence of Arabic homographs is shown in Figure 5. Also, Arabic words are often very
information-dense, as articles, prepositions and pronouns are often internalised as affixes while subjects are often implicit in verbal conjugations.

### 3.2 Word recognition in English and Arabic

Considering the differences between the English and Arabic writing systems and morphological structures, it becomes quite clear that the dual route model does not sufficiently explain word recognition. Orthography and phonology are of course at play in both languages, but the model is static, and it does not explain the effect of the different linguistic systems. On the other hand, connectionism, as in the model presented in Figure 2, allows a continuous interplay between orthographic and phonological processes - within which all kinds of relevant resources established by the reader through previous exposure to text are activated. and other cognitive resources relevant to the reading process can easily be incorporated as well. As for Arabic, the model explains how the system of roots and patterns influences the reading process - not only as part of the broader linguistic competence (at the top of the model) but also at the level of word recognition where the morphological structure probably plays a crucial role as a compensatory source of information when vowel diacritics are not included in a given written text. This does not necessarily function as a splitting of roots and patterns into independent morphemes (despite the fact that a number of studies do indicate that this is the case in Semitic languages, see review in Hansen 2008), but as a result of frequency: The limited number of possible patterns leaves the reader with a limited number of possible word structures stored in the hidden units ready to guide the decoding process.

Based on these issues it is possible to list a range of examples of how word recognition in Arabic differs from equivalent processing in English:

In general it seems that phonological processing during reading of unvoweled script is more modest in Arabic. While phonological processes are crucial in word recognition in English just as phonological awareness is "inescapably required" (Adams 1990:305) in order to achieve good reading skills, this is to a lesser extent the case in Arabic, where, on the contrary, orthographic and morphological processes play a more prominent role, simply because the phonology provided in normal text is more scarce (Hansen 2008:27). These orthographic and morphological processes are not explicit in the model but internalised in the hidden units, where the reader's experience with linguistic structures is stored.

This process explains both word frequency effect: high-frequency words are recognised faster than low-frequency words (Monsell et al. 1989), word regularity effect: words with regular spelling and pronunciation are recognised faster than irregular words (Metsala et al. 1998) - and the interplay between these two phenomena, neigbbourfrequency effect (Grainger 1992): word-frequency for neighbours (words with shared letter combinations) influence word recognition speed, so if a word and its neighbours are regularly spelled (e.g. gave, save and shave) the effect is positive and a frequent word increases the speed of recognition for less frequent neighbours. However, for irregular neighbours (e.g. have) the effect can be negative. This is the case for low-frequency words especially, as the effect of highly frequent neighbours
slows down their recognition, while frequency effects in highly experienced readers obliterates the negative effect for high-frequency words (Massaro et al. 1979; Seidenberg \&McClelland 1989; Grainger 1992; Johnson 1992).

In English, high-frequency and low-frequency letter constellations are thus essential in this context, or as Adams (1990) puts it:

> The nature of the stimulation passed along from a donating to a receiving letter depends on the frequency with which the two letters bave occurred together in the reader's lifetime of reading experience. Letters that have often been seen with the donating letter will receive positive excitation; the more often they bave been seen together, the stronger this positive excitation will be. Conversely letters that have rarely been seen with the donating letter will receive negative excitation, or inhibition, that is proportionate to the rareness of their co-occurrence. (Adams 1990:109)

These processes implicitly entail that we have a perceptual tendency to split long words into syllables automatically. If, for instance, the first letter of a word is a 'd', it is more probable that it is followed by a ' $r$ ' than by a ' $n$ ', thus ' $d r$ ' represent a well-known letter constellation while 'dn' would be less expected. While less frequent letter constellations often occur word-internally at the intersection of two syllables, as in 'midnight', the reader would - based on experience - be inclined to split the word at this very spot, if s/he fails to deal with the word as a whole (Adams 1990:116). This is of course very expedient when each syllable represents independent unities of meaning, and the strategy therefore represents yet another resource in the reading process. In other words, neighbour-frequency effect is a result of the reader's storage of syllabic and morphological information in the hidden units, where both orthographic and phonological elements play their part and result in different degrees of ortho- and phonotactic incentives or constraints.

In addition to this linear processing, as readers also rely on a more holistic visual perception of each word. Figure 6 illustrates how, in English, readers are able to achieve word recognition fairly quickly based on word length and a few letters in the right position, despite the fact that the written text triggers notable feedback of several uncommon or even unacceptable letter constellations.

> This eamxlpe sohws taht wehn you raed fmailair wrods, it is not taht imtorpant taht all leterts are in the ringt palce. If olny the frist and the Isat lerttes are in the rhigt pitosions, it mghit look srantge, but we wlil sitll be albe to raed it.

Figure 6: Holistic Word Recogntion

Hence, automatic word recognition, which is essential for good reading skills, relies very much on the perception of single words as wholes. However, the linear letter analysis is still activated (Adams 1990:111). Seidenberg \& McClelland (1989) have shown that at least monosyllabic words are processed through a 'triple-letteranalysis' in which words are treated by the reader as a series of trigrams. For
instance, the word 'end' is processed as [en], [end], [nd ]. This continuous (and overlapping) processing functions as an 'auxiliary engine' which supports the process by confirming the reader's perception of the holistic input, settles the question in matters of doubt, and 'cobbles the pieces together' when needed during the process. All this taken together enables the reader to attain fluency and increase his/her reading speed.

In Arabic it is a totally different matter; as noted above, the phonological information is in comparison scarce, and the morphological structure of the language very different: Since short vowels are not present, the reader does not have the same possibility of establishing a reaction to well-known or unaccustomed letter constellations, and thus it is not possible for there to be positive or negative feedback based on combinations like 'dr' and 'dn'. First of all, 'dr' could represent any of three short vowels in Arabic /dar/, /dur/, /dir/ or a sequence without a vowel: /dr/. Second, orthographic recognition heavily depends on the third consonant of the relevant root. Furthermore, letters which are part of a word's pattern hold fixed positions within the word, and there is no restriction on which consonant such a pattern-letter can be combined with. When it comes to holistic word processing, the information available is minimal, as the limited number of patterns results in a graphically more uniform vocabulary. In short, Arabic words do not look as diverse as English words. Because large groups of words are only distinguishable by the three consonants that make up the root, there is no basis for establishment of the mentioned positive and negative types of feedback based on letter constellations.

However, the tight morphological structure of Arabic provides other kinds of resources in comparison with English: Some prefixes, infixes and suffixes can - like word length - give feedback on which patterns are applicable to a given word. In practice, a prefix will sometimes reduce the number of possible pattern combinations to very few or even a single one. When the pattern is given, the vowels are, too. Recognition of a pattern is in other words essential, when a letter constellation like 'dr' is to be decoded, as it determines whether the reader is dealing with /dar/, /dur/, /dir/ or /dr/. Moreover, recognition of the root can be crucial as well since this recognition will reduce the number of applicable patterns.

Another example of the different kinds of morphological structures stored in the hidden units in English and Arabic, respectively, is that in English we are readily able to distinguish between pseudo-words (which are word-like), e.g. 'kriv' or 'flas' and non-words (which are not word-like), e.g. 'ikvr' or 'lfas': Pseudo-words consist of well-known letter constellations and represent possible phonological structures, and the linear letter analysis yields positive feedback even though they have no semantic value. The non-words, on the other hand, yield negative feedback because the unfamiliar letter constellations collide with the grapho- and phonotactic constraints that have been established within the word recognition system. In Arabic the difference between pseudo-words and non-words does not depend on letter constellations but on licit or illicit patterns based on Arabic morphology. If the pattern is licit, the 'word' will be perceived as word-like, and the difference between words and pseudo-words thus depends solely on whether or not the three root consonants construct a licit word in combination with the given pattern.

Construction of a non-word would demand a non-existent pattern. ${ }^{16}$ Likewise, it would be impossible to construct an Arabic version of the example in Figure 6. A corresponding manipulation of Arabic words would have a totally different result. With three root consonants and an infix for example, it would sometimes be possible to create a range of licit words since interchange of root consonants would often result in another licit root, just as an infix in another position would sometimes result in another licit pattern.

In other words, according to connectionist theory, our experience with text is not just shaped by the word recognition system the word recognition system is also shaped by our experience with text. The system is completely dependent on the input it has experienced in its lifetime, and word recognition both feeds and is fed by the other reading-related resources: At the bottom of the model, we see that learning to recognise letters is learning to differentiate certain kinds of graphical input. At the top of the model we see how linguistic knowledge and general knowledge of the world helps reading comprehension, and how reading comprehension also shapes our linguistic knowledge and knowledge of the world in general - which leads us back to the main topic: Adult immigrants' language and literacy acquisition.

## 4. Adult immigrants' language and literacy acquisition

As illustrated above, the connections between language and reading are inseparable, even at the word recognition level. As a result, language skills and reading skills are closely intertwined. Obviously, people can master a language without being able to read it, but learning to read changes our awareness of language and shapes our awareness of words as abstract forms representing units of (spoken) language.

This has been consistently shown in research investigating pre-readers' awareness of words and their parts. Most of this research has been carried out with preliterate children and has considered phonological awareness in particular. Such research shows that the ability to omit a word's initial consonant, to add an initial consonant, and to name words beginning with a specific phoneme correlate with children's reading skills in alphabetic scripts. It is often argued that this phonological awareness is linked to cognitive maturity and, thus, an expression of an ability to comprehend acoustic abstractions which is a prerequisite for 'normal' reading acquisition. We find a lack of such abilities in developmental dyslexics, and among the most prominent reading researchers, it is a widespread assumption that reading disability is caused by a defective or underdeveloped phonological 'component' in the cognitive system (e.g. Verhoeven 2002). However, researchers concerned with pre-literate or nonliterate adults have found that the ability to perform phonological segmentation as in the examples above is also lacking in these individuals (e.g. Morais et al. 1979; Morais et al. 1986; Van de Craats et al. 2006). Moreover, Kurvers et al. (2009) found that for print awareness, being able to read and write is more decisive than age for learning to read in a language such as

[^12]Dutch. This could indicate that the ability to perform such linguistic abstractions does not emerge automatically as a result of maturation or age but as a result of reading acquisition. The sensible conclusion probably is that there is no clear-cut causal relationship, but that the competences are closely intertwined so that e.g. phonological awareness is not just a prerequisite for becoming a skilled reader - it is also an outcome of reading experience. In light of the connectionist reading model, this makes perfect sense: the model clearly illustrates how the network is trained through experience with text, and awareness of words' smallest phonological units is part of this experience and can subsequently be employed to optimise the reading process.

Similar phenomena are noticeable at the higher linguistic levels in morphological and morpho-syntactic awareness: The ability to recognise words' meaning parts and use them these units in different combinations support the reading process but is also established through reading experience, as the beginning reader gradually becomes aware of how word parts, e.g. roots and conjugation patterns, reappear in different combinations and create different patterns of meaning. At the more general level, experience with texts is crucial for our understanding of the whole idea of texts and reading and what they can be used for. Pre-literate adults, as well as children who have not yet learned to read, often lack awareness of what a word is and how writing is a graphic representation of spoken language (e.g. Olson 2002 on children; Kurvers et al. 2006 on adults). An example is that awareness of word length does not correlate with age and cognitive maturity but with reading ability. Pre-readers, children as well as adults, simply do not perceive word length because they are not familiar with the visual representation of words - irrespective of the fact that the word acoustically lasts longer (Kolinsky et al. 1987). Also, Dellatolas et al. (2003) have shown that pre-literate adults are not very skilled at repeating pseudo-words, and the implications of this are possibly important. Whether or not ability to repeat pseudo-words can be used as a measure of short term or working memory in general (see discussion in Juffs 2006), it may indicate ability in acquiring new vocabulary. Furthermore, vocabulary acquired during adulthood is generally expanded primarily through reading. This issue alone may have serious implications for pre-literate adults as they may not stand a very good chance of developing a rich and varied language. Moreover, Kurvers et al. (2006) found that adult prereaders as well as children often fail to comprehend or accept abstractions and formal conditions not linked to their real life experiences.

Thus, learning to read not only contributes strongly to the development of linguistic or metalinguistic awareness; cognitive consequences of acquiring reading skills may reach much further. One very simple but very far-reaching implication of illiteracy is found in the top of the reading model in Figure 2: Reading processes are, at the same time, dependent on and influence our general world knowledge: More knowledge and better linguistic competence leads to better reading - and more reading leads to more knowledge and better linguistic competence. For successful readers, this creates a positive circular development. Compared to them, non-readers would fall behind because the circular development is negative.

All in all, pre-literate adults who are learning to read for the first time in an L2 with which they are not very familiar may experience shortcomings at many different
levels as they lack many of the relevant skills and resources. Looking again at the model in Figure 2, it becomes quite clear: All the boxes are empty. For this group of learners, letters and sounds, the relationship between them, and comprehension of single words do not bring them very far. In reality, they need to build totally new and very broad field of knowledge that not only involves communicative competence in the target language but also includes the whole sphere related to "the world of written" which to quite an extent involves abstractions - from phonological and morpho-syntactic rules, lexical units, formal sentence structures, written discourse, and other strategic and sociolinguistic competences as well as general understanding of the social practice related to the written world: Who writes what to whom and in which institutional, organisational, or political settings - and why?

## 5. Educational implications

If things are so complicated, should we then forget about teaching reading skills to pre-literate adult immigrants and focus solely on developing their oral skills in the target language? Maybe - but we should be very aware of the positive connections between reading and general language skills and the tight relationship between reading development and ability to comprehend linguistic (and possibly other kinds of) abstractions - skills which are indeed useful for second language acquisition at higher levels. In addition, we should not forget that we are educating these learners for a life in parts of the world where illiteracy is, in fact, a social disability. Written language is not only an access point to new knowledge and intellectual development but it is also a necessary prerequisite for managing daily life in the Western world. Based on this, one could argue that reading acquisition should be an educational objective regardless of whether the political agenda identifies L2 acquisition as a humanitarian educational project or a means of integration into the work force or society in general.

A possible way to start teaching reading in the L2 could be to teach pre-literate adults to read in the L1. After all, it has been consistently shown that using the L1 as a means of instruction helps language acquisition for very low educated learners (e.g. Condelli et al. 2003). Moreover, the reading model in Figure 2 definitely supports this approach at the theoretical level, as not all the boxes will then be totally empty: Learning to read demands a linguistic base to build on, and using the L1 as an entry could be the way to go. However, as the contrastive Arabic-English examples in Section 3 show, reading skills in one language are not necessarily transferable to another language - actually one could speculate that transfer could be negative if the two languages have very different structures and apply different writing systems.

The conclusion is - not surprisingly - that we need more research to shed light on linguistic and cognitive, as well as educational and sociological, aspects of assisting pre-literate adults in order to develop evidence-based recommendations for teaching this group of learners.

References
Adams, M. J. (1990). Beginning to read: Thinking and learning about print. Cambridge, MIT Press.

Condelli, L., Wrigley, H. S., Yoon, K., Cronen, S., \& Seburn, M. (2003). What works study for adult ESL literacy students: Final report. Washington DC, American Institutes for Research.

Craats van de, I., Kurvers, J., \& Young-Scholten, M. (2006). Research on loweducated second language and literacy education. In Van de Craats, I., Kurvers, J., \& Young-Scholten, M. (eds.) Low-Educated Second Language and Literacy Acquisition: Proceedings of the Inaugural Symposium - Tilburg 05. Utrecht: LOT, Occasional Series 6.

Dellatolas, G., Willadino, B. L., Souza, L. N., Filho, G. N., Queiroz, E., \& Deloche, G. (2003). Cognitive consequences of early phase of literacy. Journal of the International Neuropsychological Society 9 (5), 771-82.

Foorman, B. R. (1994). Phonological and orthographic processing: Separate but equal? Kluwer Academic Press.

Foorman, B. R. (1995). Practiced connections of orthographic and phonological processing. Kluwer Academic Publishers.

Garson, J. (2002). Connectionism. Retrieved from: http://plato.stanford.edu
Grainger, J. (1992). Orthographic neighborhoods and visual word recognition. Amsterdam, Elsevier.

Hansen, G. F. (2004). Det arabiske skriftsystems betydning for lasefardighed $i$ arabisk som fremmedsprog. Center for Mellemøststudier, Syddansk Universitet. PhD. dissertation.

Hansen G. F. (2008). Visual word recognition in Arabic: Towards a language specific reading model. Centre for Contemporary Middle East Studies' Working Paper Series 13. University of Southern Denmark.

Henderson, L. (1982). Orthography and word recognition in reading. Academic Press
Henderson, L. (1984). Writing systems and reading processes. Lawrence Erlbaum Associates.

Johnson, N. F. (1992). On the role of cohorts or neighbors in visual word recognition. Amsterdam: Elsevier.

Juffs, A. (2006). Working memory, second language acquisition and low-educated second language and literacy learners. In Van de Craats, I., Kurvers, J., \& Young-Scholten, M. (eds.) Low-Educated Second Language and Literacy Acquisition:

Proceedings of the Inaugural Symposium - Tilburg 05. Utrecht: LOT, Occasional Series 6.

Kolinsky, R., Cary, L., \& Morais, J. (1987). Awareness of words as phonological entities: The role of literacy. Applied Psycholinguistics 8, 223-232.

Kurvers, J., Vallen, T., \& van Hout, R. (2006). Discovering features of language: metalinguistic awareness of adult illiterates. In Van de Craats, I., Kurvers, J. \& Young-Scholten, M. (eds.) Low-Educated Second Language and Literacy Acquisition: Proceedings of the Inaugural Symposium - Tilburg 05. Utrecht: LOT, Occasional Series 6.

Kurvers, J, van Hout, R., \& Vallen, T. (2009). Print awareness of adult illiterates: a comparison with young pre-readers and low-educated adult readers. Reading and Writing 22, 8.

McClelland, J. L. (1999). Connectionist cognitive modelling. Retrieved from: http://cognet.mit.edu

Massaro, D. W., Venezky, R. L., \& Taylor, G. A. (1979). Orthographic regularity, positional frequency and visual processing of letter strings. Journal of Experimental Psychology: General 108, 107-124

Metsala, J. L., Stanovich, K. E., \& Brown, G. D. A. (1998). Regularity Effects and the phonological deficit model of reading disabilities: A meta-analytic review. Journal of Educational Psychology 90, 279-293

Monsell, S., Doyle, M. C., \& Haggard, P. N. (1989). Effects of frequency on visual word recognition. Psychologcal Review 76, 165-178

Morais, J., Bertelson, P., Cary L., \& Algería, J. (1986). Literacy training and speech segmentation. Cognition 24, 45-64.

Morais, J., Cary, L., Algería, J., \& Bertelson, P. (1979). Does awareness of speach as a sequence of phonemes arise spontaneously? Cognition 7, 323-331.

Norris, D. (1990). Connectionism: A case for modularity. Hillsdale, Lawrence Erlbaum Associates.

Olson, D. R. (2002). What writing does to the mind. In Amsel, E., \& Byrnes Erlbaum, J. P. (eds.) Language, literacy, and cognitive development: The development and consequences of symbolic communication. (153-165).

Ramsey, W. (1999). Connectionism. Philosophical issues. MIT Encyclopedia of Cognitive Science.

Ravn, I. (1992). Kognition - computerprogrammeret, netværkserfaret eller handlingsfrembragt? Litteratur \& Samfund 47-48, 6-21.

Seidenberg, M. S., \& McClelland J. L. (1989). A distributed, developmental model of word recognition and naming. Psychological Review 96 (4), 523-568.

Seidenberg, M. S. (1992). Beyond orthographic depth in reading: Equitable division of labor. Amsterdam: Elsevier.

Sharkey, N. E. (1990). A connectionist model of text comprehension. Hillsdale: Lawrence Erlbaum Associates.

Smolensky, P. (1999). Connectionist approaches to language. Retrieved from: http://cognet.mit.edu.

Vellutino, F. R., Scanlon, D. M., \& Chen, H. (1995). The increasingly inextricable relationship between orthographic and phonological coding in learning to read: Some reservations about current methods of operationalizing orthographic coding. Kluwer Academic Publishers

Verhoeven, L. (2002). Sociocultural and cognitive constraints on literacy development. Journal of Child Language 29, 484-488.

# A Personal Account: <br> Ruth Colvin has long been an advocate of beginning with first language literacy as a foundation for second language instruction. At the Banff conference, Mrs. Colvin shared insights from her experience working in literacy. As a leader in this field for over sixty years, she has much to share with other literacy professionals. This personal account shares a snapshot of her global contribution to literacy. 

# TEACHING ENGLISH AS A SECOND LANGUAGE TO THOSE WHO ARE NON-LITERATE IN THEIR FIRST LANGUAGE 

Ruth Colvin

## Introduction

What is the fastest growing minority in the USA? Yes, the Hispanics or Latinos. In this modern mobile world, every country is facing fast growing minorities. Most of our minorities, including Hispanics, want and need to learn English, and many are doing that. But what about those who cannot read or write the language they speak? Research and experience suggest that it's more difficult to learn English or any second language if one is not literate in one's native language. If illiteracy in the native language is the barrier, why not then teach English (or any second language) by teaching basic native literacy as a first step?

## The value of L1 literacy

For over twenty years I have been exploring and experimenting with native language literacy training in many developing countries, adapting not only my own experiences but also the Language Experience Approach from the work of Sylvia Ashton Warner of New Zealand, and illustrations/key words and syllables from the work of Paulo Freire in Brazil. I've written native language literacy books not only in Spanish, but in Tok Pisin for Papua New Guinea, in Malagasy for Madagascar, in Af Maay for the Somali Bantu, in Urdu for Pakistan, in Creole for Haiti - as well as done training in African languages.

I believe that everyone should be able to read and write in the language they speak for several reasons. They should be proud of their background and culture, and they should be able to communicate with others in their native language, not only orally but through the written word as well. But learning to speak, understand,
read and write a second language, particularly when it is the dominant language, is important for living a productive life in a new country.

How do we help those who are not literate in their native language learn a second language? My work is in teaching English as a Second Language, but the techniques described here can be adapted to teaching any second language to those who are not literate in their native language. My demonstrations will be for Spanish speakers who cannot read or write in Spanish and who want to learn English.

Many Hispanics want and need to learn English as a second or third language. I'll repeat - research and experience show that it's more difficult to learn English if one is not literate in one's native language. So, by learning to read and write in Spanish, a person should improve more rapidly in learning English.

Let me share a quote from "The Role of First Language for ESL Learners" by Burt and Peyton( 2003) - "Learners who are literate in some writing system [and in this case Spanish] have the advantage of experience with deciphering and assigning meaning to print and using print [in this case English] to enhance their learning."

## Using the Language Experience Approach

People who are non- literate are often ashamed, have low self-confidence, and expect the teacher to somehow pour knowledge into them, that is, they expect a "teacher centered" approach. Instead, I'm suggesting we become "learner centered," focusing on the students' needs, interests, goals, problems and concerns. Using the Language Experience Approach is an excellent way to break the ice for that first meeting. It's a meaningful way to get the students talking, and to have a collaborative teaching and learning situation.

Many educators use the Language Experience Approach for children, but I've found it even more useful for getting adults to share their thoughts - their successes as well as their problems - giving us, as teachers, opportunities to made realistic lessons that focus on the students' interests.

The Language Experience Approach involves asking your students to share with you their concerns, or dreams, or what they like best to do. You, the teacher, write the students' words and teach them to read their own words.

It's an ice-breaker for a new teaching situation and, as a result, you've found out something about your students, which will help you to pick out meaningful books for them to read. As well, your students probably know more about some subjects than you do, giving them more self-confidence, and giving you a better appreciation of your students. And finally, your students become authors themselves, first dictating, and later writing their own thoughts, dreams, or interests.

## LEA in action - Swariland

I use the Language Experience Approach as I give literacy training in developing countries. One such place I provided training was in Swaziland. Swaziland is a tiny kingdom, the size of New Jersey, completely land-locked, surrounded on three sides by South Africa and one side by Mozambique, ruled by a king and his mother.

In order to help in their training, I insisted that I wanted to visit the rural areas, to see the literacy classes in the villages. One class met under a tree, with a crude blackboard nailed to the tree. But the one I remember best was in a rondoval. A rondoval is a traditional round hut made of sticks, stones and mud, with a thatched roof, a door, and only slits for windows for light - there was no electricity in these villages. Eight women sat on mats on the floor.

I asked through my interpreter what was going on in the village. The ladies couldn't understand why I asked, for no one had ever seemed interested in their opinions. They talked among themselves in siSwati, and I learned that two of their children had died last month. How sad! They were concerned because they had to spend much more time home taking care of their children. It was hard to take care of the crops too, and they couldn't get to their peddling jobs, making money scarce.

Peddling? What was that? I learned that nearly fifty percent of the Swazi women were peddlers. One must get a license to be a peddler, giving them the right to sell goods in a limited area of Swaziland. The women would go to South Africa by bus, buy consumer goods that were unavailable in Swaziland - pots, pans, bedding - and resell them in Swaziland at a modest profit. Indeed, they were small business persons and entrepreneurs.

But times were changing, they said. They used to be able to go to South Africa and register with only a thumb print. Now they must sign their names and keep records of what they bring out.

A wonderful story. I suggested they put the story in their own words and I'd write it down, teaching them to read their own words. Yes, the Language Experience Approach. They were excited for they had never before been given the opportunity to choose the text for their studies. They made their own reading book. They were now authors.

But as we worked together, I noticed that several of the women rubbed their eyes, bringing their faces close to their writing books. It was dark in the rondoval. Didn't they have any kerosene lanterns? Too expensive. What about candles? Too expensive.

I then realized that I had my reading glasses on. I took them off and gave them to the first lady. She hesitantly put them on, and then came a big grin and a stream of words in siSwati - she could see. She took the glasses off and passed them to the next lady - and they made their way around the group. Several of these women needed glasses. My reading glasses, which enlarged the print on the page, were what they needed. How I wanted to leave them, but they were the only pair I had and I needed them. Right then and there, I knew what I wanted for Christmas - four pairs of reading glasses to pass on to my new friends. Yes, sometimes it's as simple as getting reading glasses.

## LEA in action - Zambia

I also used the Language Experience Approach, through a translator, in a maximum security prison in Kabwe, Zambia, Africa. The Commissioner of Prisons said that he felt that ten percent of the inmates were literate, that fifteen percent semi-literate, and that seventy-five percent totally non-literate in any language.

As I walked into a bare room in the prison in Kabwe, I saw perhaps twenty men dressed in ragged white shorts and tops made of old mealie-meal sacks. They
stood with heads down, listening to the instructor talk in Bembe, their language. Soon the instructor indicated it was my turn to talk. What does one say to rugged men who are in prison, who cannot read and write their own language?

I plunged in, and through a translator, asked what they wanted to talk about. There was no response. In fact, they were surprised for they'd never been asked what they wanted. Again - "What do you like best to do?" When I pointed to one young man, he looked up in surprise, and then said, "Ulimi" which means farming. I had the translator write Ulimi on the board. I asked the next man - woodworking -we wrote it on the board in Bembe. A third said, dancing.

With three choices, I reminded them that Zambia was now a democracy and in my classes each man had one vote. They could vote for what they wanted to talk about - farming, woodworking or dancing.

Heads came up; they talked among themselves; they became alive as they voted by raising their hands. I counted in English; the translator in Bembe, and what clapping there was when Ulimi won.

I reminded them that they knew more of farming than I did. We could hardly keep up writing the words that spilled out. They disagreed. They changed the wording. But they finally agreed that their story would start, translated to English,

## Farming is important to give us food.

So you can use the Language Experience Approach not only for one-to-one work but also for working in a small group or in a classroom setting. Let the learners suggest three topics, and have them vote on their favorite.

## Using Lectura y Escriptura en Español

Yes, these students learned sight words with the Language Experience Approach, and there's nothing wrong with sight words. Eventually we read all words by sight; we don't sound them out. But the students must eventually learn the sounds of all the letters, and it's easier in Spanish and many other languages than it is in English because, unlike English, Spanish is phonetically regular - each letter sound is constant.

In addition to using the Language Experience Approach, the teacher might also use a text such as the Lecturay Escriptura en Español. Referring to Lecturay Escriptura en Español - student's book - the teacher and student together look at the first illustration, a picture of two women (or two men) greeting each other. All the conversations, of course, are in Spanish. The teacher asks open-ended questions about the picture (e.g. Who are they? How do they know each other?) as the student responds - there are no right or wrong answers. The teacher leads with questions until she asks what the student thinks the people in the illustration are saying, leading the student to "Hola, amigo mio," the key words for the first chapter. The teacher teaches these words as sight words, eventually breaking them down into syllables, teaching the five Spanish vowel sounds and connecting these vowels with other consonants.

Exercises include writing and reading words both out of context and in the context of a short story, with comprehension questions at the end. The same pattern of teaching new key words and new consonants, of reading a short story
with comprehension questions, is used for the following non-controversial subjects: greetings, family, market, clinic, school, visit to a farm, visit to a city, and a final chapter gives a surprise ending. Details of how to use the student book are in the teacher's guide.

## The next ste力 - Tools for L2 instruction

The teacher now faces the next challenge: When do we start teaching English and how? Having learned the basics of reading and writing in his own language through the use of the Language Experience Approach and the Lectura y Escriptura en Español, the learner now has enough self confidence to start to learn English or another second language.

I suggest you start teaching English when students complete Chapter 5, 6, or 7 in Lectura y Escriptura en Español. Continue teaching half the lesson in Spanish using the book, and then switch to teach the remaining half of the book in English. I encourage teaching English in the following sequence: listening, speaking, followed up by reading the same words or sentences, and, finally, writing these same words or sentences. =

Using Total Physical Response (TPR) and simple commands is a good place to start. The teacher demonstrates as she gives a command in English and the students respond. The students listen and understand (stand up, sit down, open the window, etc.).

Using colored papers as props (adapted from Gattegno, 1963), you can teach simple sentences, adding new vocabulary as quickly or as slowly as students respond. I demonstrated this exercise in Shona, an African language, to show how one can easily understand first, then speak, and eventually read and write the simple sentences in a new language. Detailed instructions are found in I Speak. English.

I encourage teachers to go back to the early chapters of Lectura y Escriptura en Español, familiar to the students, and use similar techniques of teaching but this time in English. After you've read the chapter stories aloud in English (remember, your student knows the stories - having read them in Spanish), ask your student to paraphrase, tell the story in his own words, and check comprehension by asking the questions, this time in English. All words and stories in the student's book have an English translation in the teacher's guide.

You're starting to teach English with subjects already known to your students and you are doing it in the same format as you used when teaching reading and writing in Spanish. Your student is learning English in the most effective sequence - listening with understanding, and speaking. As he gains proficiency and confidence in understanding and speaking English, you can add the reading and writing of those same words, and continue teaching English as suggested in "I SPEAK ENGLISH."

## Summing ир

I hope you're as enthusiastic as I am about teaching basic native language literacy as a first step to learning a second language to those who are non-literate in their spoken language. In this presentation, I have used teaching Spanish literacy as
a first step to learning English for those Spanish speakers who have low literacy levels in their native Spanish. This is just a glimpse into the techniques suggested for teaching English to those who are not literate in their native language. I hope all of this made sense to you; unless it's practical, it's of no use.

You've learned why teaching basic Spanish literacy or basic native language literacy is important to help students who have limited or no literacy in their native language to learn English. You've learned how to teach using the Language Experience Approach and how to use the book Lectura y Escritura en Español to teach basic Spanish literacy. You've learned basic steps in teaching conversational English.

As individuals we can't teach the millions who need our help, but we each can teach one person - and your one person multiplied by thousands of individual teachers, just might make a difference - but there's a big if. That is, if teachers are willing to use learner centered lessons and if teachers are willing to try new approaches, new techniques, and new ways to solve problems those who are nonliterate in their native language might encounter while learning a new language.

## References

Ashton-Warner, S. (1986). Teacher. New York, Touchstone Books.
Burt, M., Peyton, J. K., \& Adams, R. (2003). Reading and English language learners: A review of the research. Washington, DC: Center for Applied Linguistics.

Colvin, R. J. (1963a). Lecturay Escriptura en Espanol: Teacher's Guide. New Readers Press.

Colvin, R. J. (1963b). A way with words: The story of literacy. Syracuse, NY: New Readers Press.

Colvin, R. J. (1987). The story of literacy volunteers of America. Syracuse, NY: ProLiteracy Worldwide.

Colvin, R. J. (1997). A guide to teaching English to speakers of other languages: Listening, speaking, reading, writing. Syracuse, NY: New Readers Press.

Colvin, R. J., \& Smith, C. (2009). Tutor: A collaborative, learner-centered approach to literacy instruction for teens and adults, $8^{\text {th }}$ ed. Syracuse, NY: ProLiteracy Volunteers of America.

Friere, P. (1970). Pedagogy of the oppressed. New York: Continuum Publishing Company.

Gategno, C. (1963). Teaching foreign languages in schools: The silent way. New York: Newbury House.

Lecturay Escriptura en Español - Teacher's guide - by Ruth J. Colvin Lecturay Escriptura en Español - Student's book - by Ruth J. Colvin (New Readers Press)

## More About the Author - RuthColvin@verizon.net RUTH JOHNSON COLVIN, Founder of Literacy Volunteers of

 America, Inc. (LVA)Ruth Colvin is the founder of Literacy Volunteers of America, Inc., a national, non-profit, educational, volunteer organization, to help combat the illiteracy problems in the USA. LVA has merged with Laubach Literacy International and is now ProLiteracy Worldwide.

Since 1962, when Mrs. Colvin started LVA, she and her husband, Bob, have traveled all over the United States and the world (visited 62 countries, worked in 26), giving workshops in Basic Literacy (BL) and English to Speakers of Other Languages (ESOL). The recipient of nine honorary Doctorate of Humane Letters degrees, Mrs. Colvin also received, in 1987, the President's Volunteer Action Award presented by President Ronald Reagan, and in 2006 the Presidential Medal of Freedom presented by President George Bush. She was inducted into the National Women's Hall of Fame in 1991.

Mrs. Colvin is an author of books on literacy for the USA, on teaching English to Speakers of Other Languages, on travel, as well as basic native literacy books in Tok Pisin, Malagasy, Spanish, Af Maay, Urdu, and Creole. She and her husband, Robert Colvin, live in Syracuse, New York, USA.


[^0]:    1 "LESLLA learners" refers to adult language learners with little or no literacy in their first languages. The acronym is derived from the LESLLA: Low-Educated Second Language and Literacy Acquisition, www.leslla.org, which is specifically focused on such learners.

[^1]:    ${ }^{2}$ In Australia, "migrant" is used to refer to immigrants or refugees coming to Australia.
    ${ }^{3}$ Professional and employment and family reunion immigrants are required to pay a fee to access the AMEP. The amount is based on the level of proficiency in English of the Principal applicant in a family group.

[^2]:    ${ }^{4}$ The entire Get Wise student workbook texts, along with other materials for all modules of the Get Wise teaching materials are available to view and download online at the AMEP (Adult Migrant English

[^3]:    ${ }^{5}$ A puzzle with letters on a grid and students are to identify given words that occurred in the chapter by circling or highlighting them.

[^4]:    ${ }^{6}$ While North America refers to foreign born residents as "immigrants", Europeans tend to use the phrase "individuals with migrant backgrounds" for residents of one country who have immigrated from another. Although the term "refugee" can be subsumed under the larger category of legal immigrants, I have chosen to use "immigrants and refugees" to highlight the special needs of individuals from war torn countries who have fled political persecution, natural disasters, or civil strife.

[^5]:    ${ }^{7}$ The author is a Fellow with the Institute for Immigrant Integration, part of the Migration Policy Institute

[^6]:    ${ }^{8}$ Most areas in the US do not have separate programs for out of school refugee and immigrant youth. Out of school youth are served alongside adults with low levels of English in conventional adult ESL programs. Refugee youth receiving stipends as part of resettlement may be served in employment focused adult ESL program.

[^7]:    9 The project's final report http://swearercenter.brown.edu/Literacy Resources/screenpdf.html enumerates these, and other issues that arose in working with mixed-gender and mixed-nationality groups of adult learners and practitioners.

[^8]:    ${ }^{10}$ For Tables 2 and 3 the original Dutch utterances were translated in English as literally as possible.

[^9]:    11 Using of ' I ' in such utterances under influence of the L1 could also be viewed as a morphological marker of finiteness on the verb as Moroccan Arabic, Yamina's L1, has preverbal person markers.

[^10]:    ${ }^{12}$ See Kurvers \& Van de Craats (2008) for a short overview of language and integration policy in the Netherlands.
    ${ }^{13}$ See Stockmann (2006) for details on the DSL Literacy Framework and the description of the three sublevels.

[^11]:    ${ }^{14}$ As one of reviewers noted, the Right to Work requirement which applies to US refugees from shortly after their arrival (i.e. they must seek work while they are still settling in) would be a form of active language learning.

[^12]:    ${ }^{16}$ Note that in both European and Semitic languages there are in fact words - especially loan-words which are licit despite the fact that they violate established grapho- and phonotactic constraints, e.g. in Arabic ' ' (/dimuqratiyya/, 'democracy') and in English 'phthalates'.

