# LOW EDUCATED SECOND LANGUAGE AND LITERACY ACQUISITION 

Proceedings of the Ninth Symposium

Maricel G. Santos and Anne Whiteside Editors

with Hilaire Fong and Stephanie Wells Editorial Assistants

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## Message from the Editors

Maricel G. Santos, San Francisco State University
Anne Whiteside, City College of San Francisco

San Francisco, California, was home to the Ninth Annual Low Educated Second Language and Literacy Acquisition (LESLLA) for Adults Symposium, August 7-9, 2013. The symposium brought nearly 170 practitioners, researchers, and policy makers from 12 countries to City College of San Francisco, Mission Campus, in one of San Francisco's most celebrated and culturally vibrant neighborhoods. If you were able to join us for the symposium, then you may recall a large ceramic disc hanging over the entryway of City College of San Francisco, representing the Tonalmachiotl (La Piedra del Sol, or Sun Stone, an Aztec calendar [see photo on back cover]). Early Mesoamerican culture is thought to have viewed time as circular: by recording events of the past, one could predict the future. And there lies the spirit of our LESLLA 2013 proceedings, which aim to document themes from the 2013 conference in an effort to better understand where we in LESLLA are heading as a subdiscipline within the fields of literacy and second-language acquisition.

The 14 articles in the 2013 symposium proceedings represent a diverse sampling of the more than 52 presentations, which took place over three days. This collection includes original research and descriptions of practical strategies for teaching LESLLA adolescents and adults. As highlighted in works from Canada, Finland, the Netherlands, and the United States, the authors of our proceedings emphasize that our educational policies must account for the diverse learning pathways that LESLLA learners follow as well as be flexible in the way in which they support learners.

The theme of the 2013 symposium - "Expanding Emerging Literacy Practices"-aimed to embrace multiple but complementary perspectives on the learning experiences and needs of LESLLA learners, including
well-established psycholinguistic views as well as less-established sociocultural views on the enterprise of learning to read, write, and speak a second language for beginning-level learners and those with limited schooling. The focus on emergence acknowledges our shared focus on incipient growth in LESLLA learners. This word also implicates our role as educators who must be patient but alert, ever mindful of what emergent growth looks like. The focus on practices emphasizes the need for our LESLLA scholarship, pedagogy, and policies to account for literacy as a social achievement. Through this lens, our policies are better able to account for learners' changing patterns of participation-inside and outside the classroom-as they develop an expanding repertoire of cognitive skills. This expanded view of literacy development hopefully brings together the best of what we have gained from psycholinguistic/cognitivist theoretical orientations and sociocultural theoretical orientations.

Many of the groundbreaking LESLLA studies of the past decade have sought to replicate language acquisition studies of learners with years of primary language education and schooling experience, and to disentangle the effects of schooling, literacy, phonemic awareness, and second-language development. Less common have been LESLLA studies motivated by the findings of the last 30 years of work in literacy studies, which demonstrate that reading and writing, far from being universal processes, vary profoundly across situational contexts. These literacy studies point to the critical role of social context in interpretive processes, and the extent to which meaning-construction is a sociocultural as well as a mental process. It is our hope that future research will take on the sociocognitive dimensions of literacy practices in ways that benefit from both strands of research.

As you read this year's proceedings, we are confident that you will have an opportunity to reflect on these themes of emergence and expanding theoretical orientation.

> Maricel G. Santos and Anne Whiteside, Editors
> January 2015

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# Expanding Emergent Literacy Practices: Busy Intersections of Context and Practice 

Stephen Reder, Portland State University


#### Abstract

This paper examines how adult education classrooms serving LESLLA students engage learners in literacy practices, support the growth of their reading proficiency, and prepare them to utilize and continue developing their emerging literacy practices outside of program contexts. In addition to a review of previous research, two new studies are presented that inform these issues. One study looks critically at LESLLA student data from standardized reading tests used for evaluating and improving programs. The second study examines the long-term growth of literacy proficiency and literacy practices and elaborates a model of how the two interact and support each other across the life span. Taken together, these findings suggest a new paradigm for evaluating program impact and designing continuous program improvement processes. Implications for program design and policy to better meet the needs of LESLLA learners are discussed.


## Introduction

The highly contextualized nature of literacy practices has profound implications for adult literacy education. Literacy has been socialized in Western societies within the context of powerful institutions, particularly schools and organized religions (Goody \& Watt, 1963; Olson, 1977). Individuals typically acquired basic literacy skills as participants in these institutions, with access to reading and writing gated by these powerful
institutions. It is thus not surprising that early efforts to teach literacy to adults were based on a conception of inculcating in the adult learners not only the technical skills required to read and write, but also the system of values and practices associated with the institutional sponsor of literacy. Over time, the number and types of these sponsors has increased in Western societies, including the United States (Brandt, 2001).

Ethnographic research in the sociohistorical development of literacy in a variety of ethnic communities found that cultural features of both sending and receiving communities-particularly their histories with writing systems-exert powerful influences on the resettlement and integration of adult migrants, including LESLLA migrants and their emerging literacy practices (Reder, 1987). Systematic comparisons of emerging literacy practices in different sociohistorical contexts of contact between indigenous cultures and their host societies found organization of literacy practices in functional domains of life such as commercial activities, religious activities, governance activities, and school activities. Each domain had characteristic literacy practices (often in distinct languages or scripts) with multiple roles for participants and means for socializing individuals into those literate roles. Emergent literacy practices were organized and socialized differently in the various domains of activity, with social meanings of literacy derived from the domain itself. The domain of schooling is but one of the life contexts in which literacy practices occur, one carrying very different social meanings than, say, literacy practices in the church domain, the commercial fishing industry or village governance. Adult education programs in the studied communities were often socially constructed as extensions of other domains, including schools, and would not be familiar to individuals unless they had prior experience with, say, the school domain.

Adult basic skills programs attempt to facilitate adult literacy development by engaging adults in basic skills programs or other social practices that involve the use of writing. This involves recruiting adults to participate in those basic skills programs or other social practices and retaining them sufficiently long to develop the needed new skills and knowledge. Such efforts often entail large differences between the
settings, the materials, and the literacy practices of the program and those of the learner. These contextual differences may create logistical or cultural barriers to participation for many learners. These contextual differences sometimes engender conflicts between the goals, needs, and assumptions of program providers and those of the learners they seek to serve (Brandt, 2001; Purcell-Gates et al., 2000; Reder, 2007; Reder \& Green, 1985; Street, 1985).

Adult LESLLA learners are particularly impacted by these contextual differences. Qualitative observations of adult LESLLA learners in language classrooms show difficulties they encounter in comprehending and engaging with the schoollike contexts of programs and classrooms and interacting in the language of instruction (Hellermann, 2006). Having not previously engaged deeply with literacy in an educational domain, adult LESLLA students encounter special challenges when navigating second-language and literacy classrooms because of their lack of experience with the literacy practices, social meanings, and participation structures that characterize so many of these educational settings (Hellermann \& Harris, in press; Ramírez-Esparza, Harris, Hellermann, Richard, Kuhl, \& Reder, 2012). For example, in a videobased observational study of second-language classrooms, RamírezEsparza et al. (2012) concluded that low-education second-language learners more often assume a novice role in interactions, more often let their partners who have more education initiate pair activities, and less often ask for help from others, demonstrating their difficulties with the interactional practices of formal classroom settings.

Although these second-language classrooms are intersections of many linguistic, cultural, and institutional systems in which all students must engage, the intersection framework is particularly compelling for understanding the educational process of LESLLA students. LESLLA students must not only acquire the target language and literacy abilities of the program, but they must also do so in an unfamiliar classroom and institutional context imbued with implicit assumptions about the relationship between literacy and educational experiences. Most programs rely on the written word, whether in the target language or in
translation, for getting information to students. Instructors frequently use print directly in teaching language-board work, textbooks, handouts, and so forth. LESLLA learners need to develop three intersecting sets of skills simultaneously: learning the target language, processing print itself, and reading in the target language they are acquiring (Kruidenier, MacArthur, \& Wrigley, 2010).

Researchers and practitioners have developed effective pedagogical practices for "bringing the outside in" to classrooms to better support LESLLA learners (e.g., Wallerstein, 1983; Weinstein, 1999; Wrigley \& Guth, 1992).

Although some practitioners have acquired considerable experience and expertise working with LESLLA students in such contexts, they frequently report that their ability to implement effective instruction for LESLLA students in their classrooms is constrained by limited systemic resources and conflicting programmatic priorities. Even though researchers and practitioners have learned much about working with LESLLA students in the classroom, these program-level constraints hamper needed pedagogical innovation, dissemination, and professional development.

This paper reviews, expands on, and connects two lines of research that bear on these difficulties faced by LESLLA learners and the programs serving them. The first line of research examines the "parking lot" paradigm of adult education and its logic model for evaluating the impact of instructional programs on adult LESLLA students' literacy. New research findings are presented that point to some serious empirical problems with the "parking lot" paradigm, prompting consideration of an alternative, the "busy intersection" paradigm. The second line of research is about practice engagement theory (PET). After reviewing previous research bearing on PET, new findings are introduced that extend its reach into lifelong literacy development. These two conceptions-the "busy intersection" paradigm and practice engagement theory-when considered together, offer a new way to think about literacy development in adult LESLLA learners and point to some important implications for programs and policies that will better support them.

## The Parking Lot: A Paradigm of Program Impact

In many countries, adult literacy programs have historically acquired important characteristics of local primary/secondary school systems in which attendance is compulsory. The similarity of these noncompulsory adult education programs to compulsory $\mathrm{K}-12$ programs has been described as the parking lot conception of education, in which programs try to recruit and retain students in order to keep the seats in classrooms full, analogous to filling the spaces in parking lots with cars (Leander, 2009). There are also growing financial and accountability pressures within adult education programs that are formulated in terms of student flows into classroom programs, hours of attendance in programs, and various types of exits from programs. These concepts and terminology are indeed reminiscent of the business of operating a fee-based parking lot. This paradigm is often believed to make adult literacy education programs easier to fund, evaluate, and manage, which also makes them accountable to and scalable within larger systems.

A central but generally untested assumption of this paradigm is that more instructional hours lead to larger learning gains. Federal and state agencies in the United States, for example, often report crosstabulations of adult student test scores to show that greater learning gains are associated with increased hours of program attendance. Such results are used to demonstrate the effectiveness of instruction: the more instruction students receive, the larger are their learning gains (California Department of Education, 2004; CASAS, 2003; Connecticut State Department of Education, 2009). This relationship is seen as important for demonstrating program effectiveness in the absence of a control group, since literacy proficiency may grow over time in adults who do not participate in programs as well as in adults who do participate (Reder, 2009, 2012). Although this relationship is consistent with a picture of instructional effectiveness, other mechanisms could underlie the positive relationship between hours of attendance and learning gains. For example, students who sense that they are learning
more might be more likely to persist with the program (attendance typically being noncompulsory in adult education classes).

Problems in the Parking Lot: To illustrate how the challenges faced by adult LESLLA students develop within adult education programs, let's examine some comprehensive administrative data from adult education programs offered within the state of Oregon in the United States. These data were collected by numerous programs as part of their reporting and accountability process for the federal funds received for providing adult education. Students' demographics and standardized CASAS (Comprehensive Student Assessment Systems) English reading, listening, and math test scores were collected by programs as students entered and progressed through adult education classes. ${ }^{1}$ The CASAS reading tests are the same as those used in the previously cited reports by California and Connecticut that both show positive associations between instructional hours and reading gains. These data reflect all student activity in all federally funded adult education programs in each state over a three-year period, July 1, 2001, to June 30, 2004. Unique statewide student identifiers allow linkage of records across programs so that students in the data set who move from one program to another in different locations in the state can be followed. Student characteristics in the data set include age, gender, race/ethnicity, native language, years of schooling, and highest degree attained (in any country).

Demographic characteristics about native language and years of schooling were used to identify LESLLA students within this large set of student records. Of the 87,150 unique adult education students in this data set, 7,653 had a native language other than English and three or fewer years

[^0]of schooling, operationally identified here as LESLLA students. Sixtyfour percent of these LESLLA students were female, and $36 \%$ were male. At the start of the three-year study, their average age was 33 years. The most common first languages among these LESLLA students were (in descending order) Spanish, Vietnamese, Chinese, Russian, Lao, Korean, Cambodian, Tagalog, Farsi, and Hmong. Looking at their English reading proficiency test scores, we see a wide range of proficiencies among the adult education students with LESLLA backgrounds. The largest group, comprising 28\% of the LESLLA students, scores in the lowest CASAS range (level A, "Beginning Literacy/Pre-Literacy," according to CASAS documentation). But the remaining $72 \%$ of the LESLLA students have English reading proficiencies scattered broadly among the higher CASAS levels, B, C, D, and even E. The details of this wide distribution are less important here than the conclusion that many adults with LESLLA backgrounds do progress over time and gradually acquire proficiency in reading English.

We cannot assume that the LESLLA students testing at higher English reading proficiency levels necessarily acquired their proficiency within the adult education system. The analytical database does not contain information about how long they have been in the country or how much adult education they may have taken prior to July 2001. But we can get a good idea of how their proficiency develops while they are participating in the adult education system by looking more closely at changes in their reading test scores within the data set.

Among these LESLLA students, 1,023 had two or more reading test scores. Of these, 1,008 also had complete demographic and attendance data records. Students with fewer than two reading test scores in the data set either had been given a listening test rather than a reading test (depending on the program's assessment policy) or, if given an initial reading test, had not stayed in the program long enough to be assessed a second time. ${ }^{2}$

[^1]Overall, the LESLLA students' lack of progress on the reading tests is stunning: the mean reading gain is about two CASAS scale points, with widely distributed differences in individual reading gains. To provide an understanding of some of the variables associated with LESLLA students' (lack of) progress in reading, ordinary least squares linear regression analyses were conducted on their demographic, attendance, and reading test data. The dependent variable is the student's gain in reading test scores between the initial assessment and the final assessment. Independent variables are the initial reading test score, the number of total hours of attendance between the first and last reading test, age (at the time of the first reading test), and gender. Table 1 shows the results of three regression analyses, each summarized in a column of the table.

|  | Standard Model | Corrected Model | 2-Test Model |
| :--- | :---: | :---: | :---: |
| Initial Reading Proficiency | $-0.098^{* * * *}$ | $-0.089^{* * * *}$ | $-0.181^{* * * *}$ |
| Hours of Attendance | $0.005^{* * * *}$ | -0.002 | -0.001 |
| \#Tests Taken | --- | $2.021^{* * * *}$ | --- |
| Age | $-0.033^{* *}$ | $-0.040^{* * *}$ | $-0.059^{*}$ |
| Gender | -0.254 | -0.513 | -0.722 |
| Constant | $23.589^{* * * *}$ | $19.707^{* * * *}$ | $44.427^{* * * *}$ |
| Adj. $\mathrm{R}^{2}$ |  |  |  |

${ }^{* * * *} \mathrm{p}<.001^{* * *} \mathrm{p}<.01^{* *} \mathrm{p}<.05^{*} \mathrm{p}<.10$

Table 1. Regression Models of LESLLA Students' Gains in Reading Proficiency

The labels for the independent variables, the N and the adjusted $\mathrm{R}^{2}$ (proportion of variance explained) for each model, are shown in the first column. Estimated coefficients of the independent variables in the "Standard Model" are shown in the second column (except for number

[^2]of tests taken, which is not in the Standard Model). This model accounts for only $8 \%$ of the variance of the gain in reading test scores based on initial reading test scores, hours of attendance between the initial and final tests, age, and gender. Initial reading proficiency, hours of attendance, and age are statistically significant predictors of proficiency growth (younger students gain more proficiency over time, with other variables held constant). Gender does not predict proficiency growth.

An important feature of the Standard Model is its significant positive coefficient for attendance hours. One interpretation of this coefficient is that it reflects the positive impact of instruction on learning gains: the more hours students attend, the more they learn. As important as this interpretation seems for program evaluation purposes, there are other possible interpretations that should be considered.

In general, program assessment policy is that students be reassessed after so many hours of instruction or attendance, often to make sure that the institution does not lose the assessed student head count for accountability and funding purposes (which requires periodic progress tests). This results, of course, in a positive relationship between the number of hours and the number of times a student has been tested. Since all test score results are maintained in the student database, we can control for the number of times a student has taken the reading proficiency tests. In the "Corrected Model," the number of tests (two or more) is added as an independent variable in the regression model. In the " 2 -Test Model," only students having exactly two reading tests are included in the regression model.

The Corrected Model shown in the third column of Table 1 adds the number of tests taken as an independent variable to the Standard Model. With the number of reading tests entered into the model, the number of attendance hours is no longer statistically significant, whereas the number of tests taken is a statistically significant and positive predictor of learning gains. Since we excluded any students from our analysis who took the same form of the reading proficiency test within a six-month period (based on technical specifications of the test maker), the effect of number of tests should not be interpreted as a test item repetition artifact but as a more general measure of familiarity/skill with testing procedures. The
major difference between the Standard and Corrected Models, of course, is that hours of attendance is no longer a significant predictor of reading gain once the number of tests taken is statistically controlled.

The same result is found in the 2-Test Model, shown in the fourth column of Table 1. Instead of controlling for the number of tests by entering this number into the model, as is done in the Corrected Model, only students with exactly two reading proficiency tests are included in the analytical data set used in the 2-Test Model. This restriction eliminates two-thirds of the LESLLA students from the data set, leaving 333 students. As in the Corrected Model, the number of attendance hours is not a statistically significant predictor of LESLLA students' reading gains in the 2-Test Model.

Interestingly, other recent classroom research studies also find no significant relationship between hours of instruction and changes in a variety of literacy measures. Condelli, Wrigley, and Yoon (2009) reported weak and inconsistent effects of attendance hours on reading outcomes in adult ESL students. Miller, Esposito, and McCardle (2011) compiled results on a set of large random control trials (with adult education students randomly assigned to instructional conditions), none of which found statistically significant relationships between instructional hours and pretest/ posttest changes in a wide variety of reading measures.

Do the small overall reading gains in the present study, coupled with the lack of relationship between instructional hours and reading gains, imply that these programs are ineffective for LESLLA students? Not necessarily. The lack of association between hours of attendance and learning gains found in these data is consistent with numerous recent experimental classroom studies of adult reading instruction that have found no significant effects of hours of classroom attendance on a broad range of outcome measures (Condelli et al., 2009; Miller et al., 2011). Although a lack of program effectiveness is one possible interpretation, there are a number of other possibilities to consider. It is possible that students are learning and progressing in these programs but that the standardized assessments are not well aligned with what is being taught and learned in the classes. It is also possible that the relatively short intervals between
tests are too short to capture the impact of instruction-what is essentially a slow, long-lasting learning trajectory that is stimulated by program participation, one that does not materialize on the timescale of the testretest cycles used by programs for accountability purposes. Proficiency development that has occurred outside of classroom-based programs may have resulted in many students' (with LESLLA backgrounds) acquiring the relatively high levels of English reading proficiency evident in the distribution of their test scores when they later enter programs.

Can these results regarding the impact of classroom instruction be seen by looking only at the lowest-level LESLLA students as opposed to the broader population of LESLLA students, many of whom had already developed higher levels of reading proficiencies? To consider this, the three regression models described above were applied to the subpopulation of LESLLA learners whose initial reading scores placed them in what CASAS defines as Level A-"Beginning Literacy/Pre-Beginning"-which includes those with initial reading scores of 200 or below. Table 2 summarizes the results for this lowest level of LESLLA students. This subpopulation consists of 378 students compared to the larger group of 1,008 students considered above, about one-third of the broader LESLLA student population.

|  | Standard Model | Corrected Model | 2-Test Model |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Initial Reading Proficiency | $-0.131^{* * *}$ | $-0.157^{* * * *}$ | $-0.287^{* * * *}$ |  |  |  |  |
| Hours of Attendance | $0.010^{* * * *}$ | -0.002 | -0.001 |  |  |  |  |
| \#Tests Taken | --- | $3.015^{* * * *}$ | --- |  |  |  |  |
| Age | $-0.077^{* *}$ | $-0.071^{* *}$ | $-0.059^{*}$ |  |  |  |  |
| Gender | -0.093 | -0.315 | -0.722 |  |  |  |  |
| Constant | $30.052^{* * * *}$ | $31.362^{* * * *}$ | $44.427^{* * * *}$ |  |  |  |  |
| N |  |  |  |  | 378 | 378 | 119 |
| Adj. $\mathrm{R}^{2}$ |  | .075 | .169 |  |  |  |  |
| .102 |  |  |  |  |  |  |  |

${ }^{* * * *} \mathrm{p}<.001^{* * *} \mathrm{p}<.01^{* *} \mathrm{p}<.05^{*} \mathrm{p}<.10$

Table 2. Regression Models of Lowest-Level LESLLA Students' Gains in Reading Proficiency

Comparison of Tables 1 and 2 reveals that all statistically significant model coefficients estimated for the larger LESLLA student population
are also statistically significant in the corresponding models for the lowlevel LESLLA student subpopulation (and vice versa). For LESLLA students at all literacy levels, hours of attendance is a statistically significant predictor of reading gains only within the Standard Model; hours of attendance is not significant in either the Corrected or 2-Test Model. This is the case of looking only at the lowest literacy level of LESLLA students (Table 2) or at the broader group of LESLLA students at all literacy levels (Table 1). Hours of attendance does not predict reading gains when test-taking experience is controlled as it is in the Corrected Model and the 2-Test Model.

These results pose a serious problem for the parking lot paradigm. With programs strongly incentivized to maximize seat time by keeping classes full, by students' attending regularly, and by measuring learning outcomes as test score gains, there should be demonstrable positive relationships between hours of attendance and reading gains. Such a relationship is seen in programs' own accountability data only when instructional hours is confounded with test-taking experience. When test-taking experience is controlled, we do not find this positive relationship. There is another way to conceptualize how programs impact LESLLA students' literacy development. To understand this, we need an alternative paradigm of the classroom.

## An Alternative Paradigm: The Busy Intersection

The parking lot paradigm has found great traction in adult education in the United States (and perhaps in other countries as well), in part because the typically short duration of adult students' participation in programs tends to privilege correspondingly short-term conceptions of learning and program impact on learning. An alternative to be considered is the "busy intersection" paradigm. The busy intersection paradigm emphasizes how the adult education classroom/program fits into the life histories and learning trajectories that students bring with them to adult education and the formative or even transformative classroom
experiences that shape the direction, motivations, skills, and tools they take with them to support continued learning and development outside of the program. Some of the distinctive differences between the parking lot and busy intersection paradigms are summarized in Table 3.

| "Parking Lot" | "Busy Intersection" |
| :--- | :--- |
| Bring people to literacy | Bring literacy to people |
| Fill seats \& retain students | Adults come to programs along different <br> life pathways |
| Programs provide services to students | Programs are resources used by active <br> learners |
| The longer students stay, the more they <br> learn | How long students stay is not as important <br> as the directions and tools they exit with |
| Learning pathways are within program | Program is part of learning pathways <br> through life histories |
| Key program outcome is short-term <br> proficiency gains | Key program outcome is increased <br> engagement in literacy practices |

Table 3. Two Paradigms of Adult Literacy Programs
For LESLLA students in particular, their intersections are personal histories and migrations that are deeply embedded in sociohistorically constructed intersections of cultures, nations, and languages. Ethnographic research on the development of literacy in a range of ethnic communities indicates that literacy development is socially organized into domains of literacy practices, such as domains of religion, commerce, government, and education, all of which coexist and intersect as historically situated literacies. The social meanings and participation structures of specific literacy practices are influenced by both domainspecific values and role-based distinctions within collaborative literacy practices. These social meanings and participation structures shape the opportunities that individuals have for becoming literate in various contexts (Reder, 1987; Reder \& Green, 1983).

Many classroom-based programs initially attract and retain LESLLA learners because of the social environment constructed and shared by the students and teachers (Baynham, 2006; Santos \& Shandor, 2012). In many respects, classrooms and programs can function as "communities of practice." Socialization into such communities is integral to the learning
processes taking place among participants (Wenger, 1998). Many loweducated adult students may bring "legitimate peripheral participation" (Lave \& Wenger, 1991) into these classroom communities, giving rise to expansive social interactions that engage them in new literacy practices and mediate their cognitive development and transformational learning (Kegan, Broderick, Drago-Severson, Helsing, Popp, \& Portnow, 2001; Mezirow, 2000). The distinctive styles of adult LESLLA students when interacting, learning, and navigating in these classroom environments have been examined through a range of qualitative methods, including observational, video, interview, and conversation analysis (e.g., Beder, Tomkins, Medina, Riccioni, \& Deng, 2006; Hellermann, 2006; Hellermann \& Harris, in press; Ramirez-Esparza et al., 2013; Santos \& Shandor, 2012; Whiteside, 2009).

A central pedagogical goal in the busy intersection paradigm is to engage and support the participation of adults in new literacy practices. In this paradigm, instruction engages students in literacy practices, those characteristic of the education domain as well as ones taken from other domains such as home, community, and work. The impact of instruction on literacy proficiency is directly on engagement in literacy practices. This impact would not generally be captured by short-term changes in assessed proficiency but might well be reflected in short-term changes of engagement in literacy practices. Several studies of adult education students are consistent with this view. In my own previous research (Reder, 2009b, 2010), the most direct and immediate impact of classroom instruction on adult literacy was not on proficiency but on engagement in literacy practices. Purcell-Gates and colleagues (Purcell-Gates, Jacobson, \&Degener, 2004; Purcell-Gates, Degener, Jacobson, \& Soler, 2000) found that adult students in programs that focus instruction around authentic literacy practices report greater changes in their literacy practices than do students in programs not centered around such practices. Sheehan-Holt and Smith (2000) analyzed the U.S. National Adult Literacy Survey (NALS) data, looking at cross-sectional differences between recent program participants and nonparticipants. With statistical controls for many background characteristics, they found no significant proficiency
differences between participants and nonparticipants, but they did find significant differences in their reading practices.

The busy intersection paradigm and practice engagement theory together can help us make sense of these findings and alternative interpretations. The busy intersection paradigm emphasizes the trajectory that students are on as they enter adult education and the formative or even transformative classroom experiences that shape the direction, motivations, skills, and tools that students take with them to support their continued learning and development outside of the program. The central pedagogical goal is to engage and support students' participation in a growing repertoire of literacy practices. In this framework, the full impact of instruction on proficiency typically may not be realized until well after a student's participation in the program, even if program impact on engagement in literacy practices is more direct and immediate. The next section describes a process through which such gradual impact could take place over a long period of time.

## Practice Engagement Theory

Practice engagement theory (Reder, 2009b, 1994; Sheehan-Holt \& Smith, 2000; Smith, 2009) provides a mechanism through which a slow-developing, cumulative impact of instruction on LESLLA students' proficiency occurs. Practice engagement theory (PET) posits that literacy proficiency develops across the life span as individuals engage in literacy practices. Higher levels of engagement in literacy practices lead to greater growth of literacy proficiency. Reciprocally, higher levels of literacy proficiency lead to increased engagement in literacy practices.

To better understand some of the dynamics of PET in literacy development, we will look at the interplay between literacy proficiency and engagement in literacy practices over an eight-year period in which both were repeatedly measured. A statistical model of PET is fitted to data from the Longitudinal Study of Adult Learning (LSAL). LSAL was a long-term panel study that collected repeated measures of individuals'
literacy proficiencies and engagement in literacy practices at six time points over an eight-year interval between 1998 and 2007. The overall design and methodology of LSAL are described in detail elsewhere (Reder, 2009a), so only the essential details are summarized here.

The study population for LSAL was defined as adults who, at the start of the study in 1998, lived in the Portland (Oregon) metropolitan area; were ages 18-44; had neither completed high school nor were enrolled in high school or college; and were proficient but not necessarily native speakers of English. The LSAL population is a major segment of the target population of ABS (adult basic skills) programs operated by community colleges and other organizations in Oregon and across the country. Although most of the adults being followed were not from LESLLA backgrounds, the effects of migration/linguistic status and education within this analysis will be considered to inform the application of the findings to LESLLA learners.

The sample was drawn through random-digit dialing, with an oversampling of current participants in ABS programs to ensure adequate numbers of both program participants and nonparticipants in the sampled "panel" of 934 adults, who then were followed from 1998 to $2007 .{ }^{3}$ At study onset, the LSAL population had an average age of 28 and was evenly divided among males and females, with one-third from minority groups and one-tenth from immigrant populations. Nearly one in three reported having a learning disability.

Some of these defining characteristics of LSAL's population changed over time. Everyone's age increased, of course, while some adults received high school equivalency certificates and college degrees, experienced changes in their employment and family situations, or moved away from the Portland area. LSAL followed its panel members regardless of these and other changes, with about $90 \%$ of the original panel retained in the study until data collection ended in 2007. ${ }^{4}$

[^3]Literacy proficiency was assessed in each wave using alternate forms of the Document Literacy Scale of the Test of Applied Literacy Skills (TALS) developed by the Educational Testing Service. TALS assesses the ability of adults to extract and process written information in a variety of everyday document formats, such as forms, maps, tables, text displays, labels, and so forth. TALS instruments are similar to those used in many major national and international surveys of adult literacy, including the recently conducted Program for the International Assessment of Adult Competencies (PIAAC). ${ }^{5}$ TALS measures proficiency on a $0-500$ scale, with scores often reported in terms of five proficiency levels.

Measures of engagement in everyday reading, writing, and math activities were constructed from interview questions about how often respondents performed each of a set of specific reading, writing, numeracy, and computer activities in various everyday contexts (home, community, work). Two questions were asked about each practice. Respondents were first asked if they ever engaged in a practice-for example, "Do you ever read the news section of the newspaper?" ("yes" or "no"). If they answered yes, then they were asked about the frequency (e.g., "How often do you read the news section of the newspaper?"), on a five-point scale ranging from 1 ("rarely") to 5 ("every day"). Answers to the two questions for each practice were combined so that the possible range of scores for each practice was from 0 ("never") to 5 ("every day"). Analyses identified two longitudinally stable scales, engagement in literacy practices and numeracy practices.

The development of literacy proficiency and engagement in literacy practices in LSAL have previously been analyzed as separate linear growth processes (Reder, 2009a). These growth models were not dynamic (i.e., the

[^4]current values of a dependent variable for individuals do not depend directly on earlier values), nor were the two dependent variables interdependent as specified in practice engagement theory. We want proficiency at later time points to depend on preceding levels of proficiency and engagement in literacy practices and, simultaneously, levels of practice engagement at given time points to depend on preceding levels of proficiency and practice engagement. These relationships are illustrated in Figure 1.


Figure 1. Structural relationships over time between literacy proficiency and engagement in literacy practices as specified by practice engagement theory

These relationships can be represented by the following system of simultaneous panel equations:
(1) $l_{t+1}=\alpha_{0} l_{t}+\beta_{0} p_{t}+\chi_{0}+\varepsilon_{0, t+1}$
(2) $p_{t+1}=\alpha_{1} l_{t}+\beta_{1} p_{t}+\chi_{1}+\varepsilon_{1, t+1}$
where $l_{t}=$ literacy proficiency at time $t$
$p_{t}=$ literacy proficiency at time $t$
$\chi_{0,} \chi_{1}=$ vectors of individual characteristics (gender, age, etc.)
$\varepsilon_{0, t} \varepsilon_{1, t}=$ disturbances at time $t$
These simultaneous linear panel equations are fit to the LSAL data with parameters estimated by three-stage least squares. Table 4 summarizes the results of this estimation. Estimated coefficients for the (1) proficiency and (2) practices equations are shown in the two rightmost
columns of the table. Both of the lagged effects of proficiency on prior proficiency and practices on prior practices are positive, substantial, and highly significant. Cross-lagged effects between the proficiency and practices variables are also positive and highly significant. These results confirm the basic reciprocal cross-lagged structure of practice engagement theory. These equations predict $50 \%$ of the variance in the longitudinal proficiency data over Waves 1-6 and $22 \%$ of the variance in the longitudinal literacy practices data.

|  | Proficiency Equation | Practices Equation |
| :--- | :---: | :---: |
| Proficiency at Previous Time | $0.664^{* * * *}$ | $0.002^{* * * *}$ |
| Practices at Previous Time | $0.924^{* *}$ | $0.430 * * * *$ |
| Age | $-0.460^{* * * *}$ | -0.002 |
| U.S. Born (0/1) | $9.298^{* * * *}$ | 0.039 |
| Years of Education (0-12) | $1.977^{* * * *}$ | 0.026 |
| Constant | $77.797^{* * * *}$ | 0.633 |
| N | 3722 | 3722 |
| $\mathrm{R}^{2}$ | 0.50 | 0.21 |

**** $\mathrm{p}<.001^{* * *} \mathrm{p}<.01^{* *} \mathrm{p}<.05^{*} \mathrm{p}<.10$
Table 4. Three-Stage Least Squares Estimation of Simultaneous Proficiency and Practices Equations for the LSAL Data, Waves 1-6

Some individual characteristics have significant effects as covariates within this PET modeling framework. Age, years of education, and birthplace/linguistic status significantly affect the dynamic process through which proficiency changes over time, but these indicators do not have significant effects on the process through which engagement in literacy practices changes over time. Age has strong negative effects on changes in proficiency such that older adults gain less proficiency over time. This dynamic age-dependent effect is consistent with other research on the effects of age on proficiency. Both growth-curve models of proficiency change (Reder, 2009a) and synthetic cohort comparisons of
proficiency in selected age groups from repeated cross-sectional surveys of adults (Organisation for Economic Cooperation and Development, 2013; Willms \& Murray, 2007) show corresponding effects of age. Age does not, however, have statistically significant effects on changes over time in engagement in literacy practices, a result also found in growthcurve models of literacy practices (Reder, 2009a).

Although LSAL's defined study population included few adults with LESLLA backgrounds, some findings in this PET analysis suggest important ways that PET may be usefully applied to LESLLA learners. The variables "years of education" and "U.S. born" (reflecting second-language status) exhibit interesting patterns of effects within this PET model. Years of education and native-born status each have significant positive effects on the amount of proficiency growth from one time point to the next (with other variables controlled), but neither has a significant effect on changes in literacy practices. With everything else held constant, adults with fewer years of schooling gain less proficiency from one time point to the next. Foreign-born adults (equivalent here to second-language learners) also acquire literacy proficiency more slowly than native-born adults. There is not a significant difference between the two groups' changes in literacy practices.

## Discussion

A major finding reported in this paper is the lack of relationship for adult LESLLA students between hours of attendance in adult education programs and gains in reading proficiencies. This holds for LESLLA students at a wide range of initial reading proficiencies, including those at the very lowest literacy levels. Although program evaluations and reports using these tests regularly report positive associations between instructional hours and test score gains, our analysis indicates that those relationships confound instructional hours with test-taking experience. ${ }^{6}$ The regression analyses presented in the paper show that the assessments

[^5]confound the target literacy skills with test-taking skills in LESLLA students. The lack of a significant relationship between instructional hours and reading gains once test-taking experience is controlled is not consistent with the "parking lot"-based logic model that connects instructional hours with proficiency gains.

Given the nature of program impact on literacy in the busy intersection paradigm, the effects of participation on proficiency typically will not be fully realized until well after a student's participation in the program. Although there may well be measurable effects of participation on engagement in literacy practices, the changes of engagement lead to changes in literacy proficiency on a slower and more gradual time line. Practice engagement theory describes one process through which short-term changes in literacy practices lead to longer-term changes in literacy proficiency.

Previous research on PET demonstrated that adults at higher levels of engagement in literacy practices at one point in time gained more proficiency over a five- to six-year period than adults who had been at lower levels of engagement (Reder, 2009b). The present results replicate this earlier proficiency-affects-practices finding and also demonstrate a reciprocal practices-affect-proficiency effect and show the two effects fitting together in an ongoing, braided structure of interaction. The braid can sustain literacy development across the life span. Importantly for LESLLA adults, although schooling and immigration/linguistic status both affect the proficiency strand of this structure, they do not have significant effects on the literacy practices strand.

There are, of course, some important limitations to the research findings presented in this paper that should be kept in mind as we think about their implications. The data examined here have been measures of reading and literacy proficiencies and literacy practices. These are quite relevant to the conference focus on emergent literacy practices. There is good reason to suppose that other measures of reading and literacy skills would show similar results, given the lack of association between instructional hours and assessed changes for a wide range of measures used in other research reviewed in the paper. But this literacy development does not occur independently of other language-involved
skills that LESLLA students are acquiring. Further research is needed to clarify the extent to which the findings presented and theories developed here apply more broadly to the emergence of listening and speaking skills, for example. Further research will also help clarify the extent to which some of the conclusions drawn about the busy intersection paradigm may apply more generally to other adult ESOL (English for speakers of other languages) and adult education students.

The PET analyses of the LSAL data indicate that literacy proficiency and literacy practices are differentially sensitive to adults' educational and second-language backgrounds. In the PET model of LSAL data, short-term growth of literacy practices, unlike short-term growth of literacy proficiency, is not affected by either low education or secondlanguage status. Although LSAL included both low-education adults and second-language learners, it did not include many adults who had both characteristics together (i.e., LESLLA learners). Thus, additional research is needed to generalize PET specifically to LESLLA learners. Nevertheless, the LSAL findings do suggest that a programmatic focus on engagement in literacy practices may not disadvantage LESLLA learners in the way that a focus on literacy proficiency does.

## Implications

The results in the paper have a number of implications for developing programs and policies that will better support LESLLA learners and also practitioners who support their emergent literacy development.

Program design. Literacy support for adult LESLLA learners, whether based in ESL classrooms or other settings, may be more effective if focused on building engagement in everyday literacy practices rather than focused directly on proficiency development. Contextualizing instruction to written materials and tasks that students encounter in home, community, and workplace settings will help build engagement in those emergent literacy practices. Providing support and motivation for students to engage in those literacy practices in the classroom will facilitate their engagement
outside of the classroom. Adults from LESLLA backgrounds will not likely encounter the same disadvantage with instruction focused on building engagement in literacy practices as with instruction focused directly on the more abstract skills involved in literacy proficiency development. According to practice engagement theory (and the results of this paper), LESLLA students' heightened engagement in practices will lead, over time, to increased proficiency levels. Key instructional design decisions have to do with selecting culturally authentic and personally meaningful literacy practices for the classroom. Given appropriate demonstrations and prompts, students can often bring such materials and practices into the classroom from their everyday activities.

These authentic literacy practices will then have positive social meanings for learner engagement in contexts outside of the classroom. Building engagement in the classroom can be designed to facilitate extraclassroom support processes that gradually expand the learner's engagement in these emerging literacy practices. Particularly helpful in this regard are collaborative literacy practices on which a small number of participants work together, pooling their skills and expertise to accomplish a task that a LESLLA learner might not be able to accomplish alone. LESLLA learners often work with family and community members, sharing skills and expertise to accomplish challenging literacy tasks such as filling out forms or reading labels and instructions. By engaging in such collaboration in the classroom, the LESLLA learner develops increased capacity to work with friends, family members, and community members, who then become part of the LESLLA learner's emerging literacy practice.

Policy. Although scholars and practitioners have developed a repertoire of promising pedagogical practices for accomplishing some of the needed programmatic developments, there has not been a supportive programmatic and policy environment in which it has been possible to conduct needed systematic experimentation, research, and evaluation.

A vital goal of policy development for adult literacy education needs to be the creation of a programmatic space that encourages innovations, experimentation, systematic evaluation and dissemination,
and professional development about programmatic and pedagogical practices that work well with LESLLA and other adult learners.

The emphasis of funders and agencies on short-term proficiency gains provides too little opportunity for programs to demonstrate their impact and experiment with ways to improve. To assess literacy practice engagement for measuring learner progress and program effectiveness, better ways and tools for measuring engagement in literacy practices (both observational and self-report) need to be systematically developed. The research tools used to date offer a starting point for this needed development. The definition of program for funding and accountability purposes should be broadened to include a variety of ways of facilitating engagement in literacy practices (tutors, technology, counselors, resource centers, professional development for librarians working with LESLLA learners, and so forth). This needs to be coupled with a shift to long-term (five to six years') accountability and return-on-investment frameworks.

It is time to rethink the traditional logic model that links classroom hours to learning outcomes for LESLLA learners. To serve LESLLA learners more effectively, the prevailing logic model grounded in the parking lot paradigm needs to be replaced by a logic model grounded in the busy intersection paradigm. What matters is not how long students are "parked" in the program, that is, how long they spend waiting in the intersection, but the direction they take when they leave it. In this conception, students come to the program from different directions and depart for different destinations. The adult education program helps them choose the best path as they leave the program and provides them with the resources and support to become persistent lifelong learners and reach their destinations (Lesgold \& Welch-Ross, 2012; Miller et al., 2011). In this paradigm, the program's impact on learning is best seen in different ways at different points along the adult's trajectory. According to results presented here, the short-term program impact on adult literacy is best measured in terms of engagement in literacy practices. Over time, these changes in practice will lead to increased proficiency levels and associated social, economic, and educational outcomes. Literacy will indeed emerge and develop as a busy intersection of contexts and practices.

## References

Allemano, J. (2013). Testing the reading ability of low educated ESOL learners. In T. Tammelin-Laine, L. Niemenen, \& M. Martin (Eds.). Proceedings from Low Educated Second Language and Literacy Acquisition $8^{\text {th }}$ Symposium (pp. 127-144). Jyväskylä, Finland: University of Jyväskylä.
Barton, D., \& Hamilton, M. (2005). Literacy, reification and the dynamics of social interaction. In D. Barton \& K. Tusting (Eds.), Beyond communities of practice: Language, power and social context. Cambridge, England: Cambridge University Press.
Baynham, M. (2006). Agency and contingency in the language learning of refugees and asylum seekers. Linguistics and Education, 17(1), 24-39.
Beder, H., Tomkins, J., Medina, P., Riccioni, R., \& Deng, W. (2006). Learners' engagement in adult literacy education. Cambridge, MA: National Center for the Study of Adult Learning and Literacy, report no. 28. Retrieved January 10, 2014, from http://www. ncsall.net/fileadmin/resources/research/report28.pdf
Brandt, D. (2001). Literacy in American lives. Cambridge, England: Cambridge University Press.
California Department of Education. (2004). The relationship of adult ESL reading performance to instructional time. Research brief no. 2. Sacramento, CA: California Department of Education. Retrieved July 26, 2014, from https://www.casas.org/docs/ pagecontents/no2eslcitizenshipreadingperfbrief.pdf
CASAS. (2003). Analysis of California ESL and ABE learners at low educational functioning levels (2001-2002). San Diego, CA: CASAS.
Condelli, L., Wrigley, H. S., \& Yoon, K. S. (2009). What works study: Instruction, literacy and language learning for adult ESL literacy students. In S. Reder \& J. Bynner (Eds.), Tracking adult literacy
and numeracy skills: Findings from longitudinal research (pp 132159). London and New York: Routledge.

Connecticut State Department of Education. (2009). The relationship between learning gains and attendance. Retrieved July 26, 2014, from http://www.sde.ct.gov/sde/lib/sde/pdf/deps/adult/ accountability/esl_learning_gain_final.pdf
Goody, J., \& I. Watt. (1963). The consequences of literacy. Comparative Studies in Society and History, 5(3), 304-345.
Hellermann, J. (2006). Classroom interactive practices for literacy: A microethnographic study of two beginning adult learners of English. Applied Linguistics, 27(3), 377-404.
Hellermann, J., \& Harris, K. A. (in press). Navigating the languagelearning classroom without previous schooling: A case study of "Li." In D. Koike \& C. Blyth (Eds.), Dialogue in multilingual, multimodal, and multicompetent communities of practice. Amsterdam: John Benjamins.
Kegan, R., Broderick, M., Drago-Severson, E., Helsing, D., Popp, N., \& Portnow, K. (2001). Teaching a new pluralism in ABE/ESOL programs: Teaching to multiple "cultures of mind." Cambridge, MA: National Center for Study of Adult Learning.
Kruidenier, J. R., MacArthur, C. A., \& Wrigley, H. S. (2010). Adult education literacy instruction: A review of the research. Washington, DC: National Institute for Literacy.
Lave, J., \& Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge, England: Cambridge University Press.
Leander, K. (2009). Studying and designing for adult literacy learners on the move: What's missing from the "network" metaphor? Position paper prepared for the Summit on the Future of Adult Education in the New Digital World, Virginia Commonwealth University, Richmond VA, November 5-6, 2009.
Lesgold, A., \& Welch-Ross, M. (Eds.) (2012). Improving adult literacy instruction: Options for practice and research. Washington, DC: National Academies Press.

Mezirow, J. (2000). Learning to think like an adult: Core concepts of transformation theory. In J. Mezirow \& Associates (Eds.), Learning as transformation: Critical perspectives on a theory in progress (pp. 3-34). San Francisco: Jossey-Bass.
Miller, B., Esposito, L., \&McCardle, P. (2011). A public health approach to improving the lives of adult learners: An introduction to the special issue on adult literacy interventions. Journal of Research on Educational Effectiveness, 4, 87-100.
Organisation for Economic Cooperation and Development (2013). OECD skills outlook 2013: First results from the Survey of Adult Skills. Paris: OECD Publishing.
Olson, D. R. (1977). From utterance to text: The bias of language in speech and writing. Harvard Educational Review, 47, 257-281.
Purcell-Gates, V., Degener, S., Jacobson, E., \& Soler, M (2000). Affecting change in literacy practices of adult learners: Impact of two dimensions of instruction. Cambridge, MA: National Center for the Study of Adult Learning and Literacy, Harvard Graduate School of Education.
Purcell-Gates, V., Jacobson, E., \& Degener, S. (2004). Print literacy: Uniting cognitive and social practice theories. Cambridge, MA: Harvard University Press.
Ramírez-Esparza, N., Harris, K., Hellermann, J., Richard, C., Kuhl, P. K., \& Reder, S. (2012). Socio-interactive practices and personality in adult learners of English with little formal education. Language Learning, 62(2), 541-570.
Reder, S., \& Green, K. R. (1983). Contrasting patterns of literacy in an Alaska fishing village. International Journal of Sociology of Language, 42, 9-39.
Reder, S., \& Green, K. R. (1985). Giving literacy away: An alternative strategy for increasing adult literacy development. San Francisco: Far West Educational Laboratory.
Reder, S. (1987). Comparative aspects of functional literacy development: Three ethnic American communities. In D. A. Wagner (Ed.),

The future of literacy in a changing world (pp. 250-270). Oxford, England: Pergamon Press.
Reder, S. (1994). Practice engagement theory: A sociocultural approach to literacy across languages and cultures. In B. Ferdman, R. M. Weber, \& A. Ramirez (Eds.), Literacy across languages and cultures (pp. 33-74). Albany, NY: State University of New York Press.
Reder, S. (2007). Giving literacy away, again: New concepts of promising practice. In A. Belzer (Ed.), Toward defining and improving quality in adult basic education: Issues and challenges (pp. 255-276). Mahwah, NJ: Erlbaum.
Reder, S. (2009a). The development of literacy and numeracy in adult life. In S. Reder \& J. Bynner (Eds.), Tracking adult literacy and numeracy: Findings from longitudinal research (pp. 59-84). New York and London: Routledge.
Reder, S. (2009b). Scaling up and moving in: Connecting social practices views to policies and programs in adult education. Literacy and Numeracy Studies, 16.2/17.1(1), 35-50.
Reder, S. (2010). Participation, life events and the perception of basic skills improvement. In J. Derrick, J. Field, P. Lavender, S. Meyer, U. Howard, \& T. Schuller (Eds.), Remaking adult learning: Essays on adult education in honour of Alan Tuckett (pp. 31-55). London: Institute of Education.
Reder, S. (2012). The Longitudinal study of adult learning: Challenging assumptions. Montreal: The Centre for Literacy.
Santos, M. G., \& Shandor, A. (2012). The role of classroom talk in the creation of "safe spaces" in adult ESL classrooms. In P. Vinogradov \& M. Bigelow (Eds.). Proceedings from Low Educated Second Language and Literacy Acquisition: $7^{\text {th }}$ Symposium (pp. 110-134). Minneapolis: University of Minnesota.
Sheehan-Holt, J., \& Smith, C. (2000). Does basic skills education affect adults' literacy proficiencies and reading practices? Reading Research Quarterly, 35(2) 226-243.
Smith, M. C. (2009). The educational psychology of reading in adulthood. In M. C. Smith (Ed.), Handbook of research on adult
learning and development (pp. 201-218). New York and London: Routledge.
Street, B. V. (1985). Literacy in theory and practice. New York and Cambridge: Cambridge University Press.
Wallerstein, N. (1983). Language and culture in confict: Problem-posing in the ESL classroom. Reading, MA: Addison-Wesley Publishing Company.
Weinstein, G. (1999). Learners' lives as curriculum: Six journeys to immigrant literacy. McHenry, IL: Delta Systems.
Wenger, E. (1998). Communities of practice: Learning, meaning, and identity. Cambridge, England: Cambridge University Press.
Whiteside, A. (2009). "We don't speak Maya, Spanish or English": Yucatec Maya-speaking transnationals in California and the social construction of competence. In N. M. Doerr (Ed.), The native speaker concept: Ethnographic investigations of native speaker effects (pp. 215-232). Berlin and New York: Mouton de Gruyte.
Willms, D., \& Murray, T. S. (2007). Gaining and losing literacy skills over the lifecourse. Ottawa, ON: Statistics Canada.
Wrigley, H. S., \& Guth, G. J. A. (1992). Bringing literacy to life: Issues and options in adult ESL literacy. San Mateo, CA: Aguirre International.

# The Invisible Learners in the Classroom: Macrolevel Politics and Microlevel Experiences of LESLLA in Italy 

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#### Abstract

The increasing politicization of adult immigrant language learning in conjunction with insufficient financial resources and limited teacher training has resulted in inadequate language and literacy learning opportunities for many adult students. In 2009 and 2010, Italy enacted two pieces of legislation that require most immigrants to pass a preintermediate Italian language test in order to receive both temporary and permanent residency permits. This language test is mostly written. Consequently, it significantly disadvantages LESLLA test-takers. As we will show, in the anti-immigrant political context of Italy, the voices, experiences, and expectations of LESLLA students-in particular, migrant women-are largely absent from the political debate. Through the discussion of a small qualitative study conducted in Rimini, Italy, we argue for the need to document women learners' experiences in order to nuance, and perhaps even challenge, the political rhetoric that tends to privilege xenophobic and anti-immigration ideologies.


## Introduction

Over the last decade, adult immigrant language learning has become increasingly politicized in Italy. This politicization was epitomized by recent legislation that requires the passing of a level A2 (in the Common European Framework of Reference for Languages, or CEFR) Italian language test for both permanent and temporary residency permits. Rooted in often xenophobic and anti-immigrant political discourses, these new laws' central assumption is that (some) immigrants are not learning the Italian language and, therefore, are not integrating into Italian society in ways that are supposedly dangerous to "national security." On both the national and local levels, there are numerous teachers and other stakeholders fighting against these new laws through activism and advocacy; nevertheless, the laws' consequences can already be felt in adult immigrant language classrooms throughout the country, as legal immigration status is now directly tied to Italian language learning (Love, 2014). This is especially true in low-education second-language and literacy-acquisition (LESLLA) classrooms, as the language test is almost exclusively written and, therefore, requires a certain level of school-based literacy, which may be a prohibitive obstacle for some migrants who have limited education and literacy backgrounds. Compounded by large funding cuts for adult education and limited LESLLA teacher training throughout Italy, the result has often been inadequate educational opportunities for many migrant students who show the greatest need.

Given this politicization, there is a growing need for responsive and appropriate pedagogy for adult LESLLA immigrants. Yet, the symbolic and practical meaning of second-language and literacy learning from the perspective of migrants has mostly been ignored in language-ineducation policy discourses and second-language acquisition (SLA) research agendas in Italy. This is particularly true for migrant women because, while little sociological research has been conducted on nonliterate adult migrants in general (Gonzalves, 2012), even less is known about LESLLA migrant women in Italy. In this sense, we argue that
emerging-literate migrant women are often the invisible learners in the classroom, whose needs must be understood in order to strengthen LESLLA education for the most marginalized of students. In this chapter, we aim to juxtapose the political discourses of immigrant language learning with the voices of some emerging-literate migrant women in Italy. In order to do this, we will first briefly examine the impact of macrolevel immigration discourses and policies on adult Italian language education. Then, we will discuss the results of a small qualitative study that aimed to listen to and document the voices of some emerging-literate women in Italy in order to bring their experiences into a discussion that often neglects their unique subjectivities.

## Immigration Discourses and the Politics of Adult Second-Language Learning

Italy has recently transformed from a country of mass emigration to one of mass immigration. Since the late 1970s, Italy received more immigrants than it sent emigrants abroad for the first time in the history of the Italian nation-state. Between 1870 and 1970, it is estimated that 26 million Italian emigrants left Italy and that millions upon millions more migrated internally (Totaro-Genevois, 2005). Today, foreigners residing in Italy make up about $8.2 \%$ (around 5,011,000 total) of the resident population and $8.4 \%$ of the elementary and secondary school student body ( $44.2 \%$ of which were born in Italy) (Caritas-Migrantes, 2012). In addition, it appears that several immigrant communities in Italy have begun to establish themselves as permanent linguistic and cultural minority groups (Chini, 2011). While Italy is a destination country for many migrants, it has also become a type of crossroads or borderland for immigrants from the global south heading toward the more prosperous countries of northern Europe. As Italy is both an immigration destination and a zone of transit for migrants, migration in Italy embodies the growing interconnectedness and complexity of migration today (Castle \& Miller, 2003).

In this context, Italian academic research and educational discourses have increasingly focused on migration as a central theme in schooling today. Research on the acquisition and pedagogy of Italian as a second language has boomed over the last few decades. Yet, adult SLA and literacy education scholarship in Italy, as in most other national contexts, has weighed disproportionately toward students from relatively advanced and privileged schooling and literacy backgrounds, often overlooking the needs of marginalized adult LESLLA students (Bigelow \& Tarone, 2004; Bigelow \& Vinogradov, 2011; Lukes, 2011; Mathews-Aydinli, 2008; Minuz, 2005; Ramírez-Esparza et al., 2012). While the international dearth of research and materials has certainly made LESLLA teaching in Italy a challenge, other sociopolitical factors specific to the Italian context have further exacerbated the problem. This is because, as Burns and Roberts (2010) have noted, "second language learning policies are highly susceptible to agendas other than educational ones, and thus, to ideological changes which can lead to ad hoc, unstable, ideologically based and incremental funding structures" (p. 413). In Italy, the second-language learning of adult immigrants has been greatly impacted by anti-immigrant and xenophobic ideological and political discourses.

Exemplifying this politicization of adult immigrant language learning, the Italian legislature passed two pieces of legislation in 2009 and 2010, which, in addition to other obligations, require immigrants to pass a level A2 Italian language test in order to receive residency documents and even avoid expulsion in certain cases (Ministero dell'Interno, 2012). The 2009 law was passed as part of the pacchetto sicurezza (national security package), which requires all "mentally and physically" capable residents over the age of 14 applying for permanent residency status (permesso di soggiorno di lungo periodo or carta di soggiorno) to demonstrate their linguistic abilities through a standardized language test (with a few exceptions for those with Italian school diplomas or other formal Italian language certificates). In 2010, the accordo d'integrazione (integration agreement) mandated that immigrants (over the age of 16 who wish to live in Italy for over one year and receive a permesso di
soggiorno) sign an agreement aimed to "support" their integration into Italian society. This agreement obligates immigrants to complete certain activities within a two-year period or risk having their residency permits revoked or even being expelled from the country (Ministero del Lavoro e delle Politiche Sociali, 2013; Ministero dell'Interno, 2012; Venanzetti, 2011). Most problematically for LESLLA migrants, the Italian language test appears to be mostly, if not exclusively, written; consequently, it privileges test-takers with relatively high levels of formal literacy and schooling backgrounds. While there is no evidence that low-educated immigrants were specifically targeted by this legislation, the result has been that LESLLA test-takers are, in the best case, significantly disadvantaged and, in the worst case, unable to pass the test.

Throughout Europe, the national language testing of adult immigrants has emerged as an increasingly popular legislative tool that functions under the assumption that language learning and usage is a measurable indicator of an immigrant's willingness and ability to integrate into society (Hogan-Brun, Mar-Molinero, \& Stevenson, 2009; Kostakopoulou, 2010). Yet exactly what is intended by the term integration is often unclear and vaguely defined, especially in terms of how adult language testing demonstrates such processes. This is especially the case in Italy, where rampant employment and housing discrimination, an infamously inefficient and arduous state immigration bureaucracy, and inadequately funded education and services make socioeconomic equality and mobility exceedingly difficult for many migrants (Calavita, 2005; Love \& Varghese, 2012; Venanzetti, 2009). Yet, despite the elusiveness of the concept of integration, many policy makers, administrators, and adult Italian language teachers often cite integration as one of the most important motivations and outcomes of requiring national language learning for legal immigration status (Love, 2014). In this context, it is necessary to ask these questions: What language or register of the national language will be tested to measure integration? What level and category of proficiency will be deemed acceptable? And most importantly for migrants with limited literacy and education backgrounds, are reading and writing in the national
language considered to be essential aspects of integration? Addressing these issues is particularly important as more and more educational scholars have called into question and critiqued the capability of standardized language testing to measure the complex functions and usages of language in the everyday lives of individuals and communities (Blommaert \& Backus, 2011; Warriner, 2007).

In addition to the politicization of immigrant language learning, the adult education system of Italy (known as the centro territoriale permanente, or CTP) has suffered from devastating cuts to school funding and an overall underdevelopment on the national scale (Boriani, 1999; Zabeo, 2009). As a result, instead of professional, public education for all adult immigrants, charity and other private/social organizations have developed language schools, which are often taught by volunteer teachers. In fact, these organizations now provide at least half of adult language and literacy education for immigrants in Italy (Venanzetti, 2011; Zabeo, 2009). For example, in Rome, a city with one of the largest immigrant populations in Italy, a significant majority of free language courses (around $60 \%$ ) are conducted by volunteer organizations. Even so, there are not enough spaces available to satisfy all the requests for Italian language courses (Venanzetti, 2011). To be sure, volunteer-based schools have many important benefits for migrants and autochthonous individuals alike; these positive outcomes and advantages may include increased intercultural interaction, free or affordable courses, and education programming that is more flexible to immigrants' work and family schedules. Yet, this dependency on volunteer teachers in Italy may inadvertently devalue the necessity for well-trained professional adult language and literacy educators. Well-trained teachers may be especially important for LESLLA students, as significant evidence suggests that learners with limited literacy and education backgrounds learn a second language differently than other higher-education students (Bigelow \& Tarone, 2004; Bigelow \& Vinogradov, 2011; Lukes, 2011; MathewsAydinli, 2008; Minuz, 2005; Ramírez-Esparza et al., 2012).

Since the language-testing laws were first implemented throughout Italy, some adult SLA educators have expressed great concern to the
government regarding how the test's overwhelming reliance on writing and reading disadvantages students with limited literacy and educational backgrounds. As Love (2014) documented, the government appears to have informally responded to such concerns by giving more flexibility to each individual CTP to weigh the importance of formal literacy for passing the test. As a consequence, some evidence suggests that the uneven application of this exception for LESLLA students may be a cause of the discrepancies in test results on the national level. For example, initial reports by the Ministero dell'Interno (2012) state that, on the national level, $85 \%$ of all immigrants have passed the first round of the language test. In Veneto and Lombardy, the two regions with the largest number of testtakers, only $71.1 \%$ and $83.9 \%$ of immigrants passed the test, respectively. In Piedmont and Lazio, a respective $92.3 \%$ and $93.9 \%$ of students passed the test. One hypothesis for why such wide discrepancies between the regions have emerged may be linked to the flexibility of individual CTPs described above. More generally, highlighting difficulties on the part of the central government to communicate the new requirements, only $31.1 \%$ of all migrants with the appropriate prerequisites registered for the test, and many who registered didn't show up on the day of the test. In other words, the majority of migrants who were required to take the test by law were not present on test day. As this policy moves forward in the future and more immigrants are tested, we will be able to better interpret these statistics and understand the consequences of these laws on the legal lives of migrants.

## From the Macro Context to the Microlevel

 Experience of LESLLA StudentsIn the second half of this section, we will step back from the macrolevel context of immigration and language-in-education policy in Italy in order to move toward the microlevel experiences of, expectations for, and meanings of literacy for a small group of LESLLA women in Rimini, Italy. Here, we aim to demonstrate how powerful ideologies and politics around literacy and language learning often differ substantially from the
personal ways by which migrant women see themselves as learners and possessors of linguistic and literacy knowledge. This discussion's focus on migrant women is important for many reasons. First, according to UNESCO statistics, around $21 \%$ of all women globally are non-literate, and about $64 \%$ of all non-literate people on the global scale are women (UNESCO, 2010). Second, as Gonzalves (2012) points out, despite this significant male-female discrepancy in the experience of literacy and non-literacy worldwide, there is very little research from the framework of gender that focuses specifically on female learners with no or very limited formal literacy. Gender-specific research is important since the meanings of both literacy and gender are inherently tied to evershifting power dynamics constructed culturally, socially, and politically. In other words, like many other socioculturally rooted activities, literacy is sometimes practiced and experienced by women and men in different ways, often with important legal, socioeconomic, and cultural implications and consequences (Rockhill, 1993). Finally, neither secondlanguage nor literacy acquisition is a neutral, apolitical activity. MathewsAydinli (2008) argues that SLA is "more than just language learning but, rather, constitutes a social process of reconstructing a new self in the target language culture" (p. 203, original emphasis). Therefore, in the case of LESLLA learners, it is imperative to better understand how interwoven and intersectional identities-which encompass gender, personal life experiences, racial and ethnic membership, socioeconomic status, and culturally and historically contextualized views of literacy and language-might impact the process of learning and approaching formal literacy for the first time (Wallace, 2007; Ferdman, 1990).

We sustain that theorizing non-literate or emerging-literate adults in abstract terms outside the greater sociopolitical context and the deeply individual and personal experiences that constitute the lives of learners is not sufficient for a complex understanding of LESLLA students. In addition, we argue that the symbolic, economic, and cultural meanings, and the consequences and possibilities of literacy, can change considerably from one sociocultural, geopolitical, and personal context to another (Walter, 1999). As Warriner (2007) illustrated, "Literacy is a situated social activity
and a process-rather than something one has or does not have-and ... its consequences are never predictable nor guaranteed but instead mediated by context, situation, audience, purpose, and relations to power" (p. 307). By understanding the experiences of emerging-literate migrant women in Italy, one may be able to shed light onto how the meaning of literacy is impacted by the migration process. This may be especially interesting in the case of certain migrant women coming from countries with significantly higher rates of non-literacy than those reported in Italy.

In the context of print-rich Italy, immigrant women with limited literacy might perceive themselves to be marginalized because of a sort of "double handicap" of discrimination and hardship-first, as immigrants, and second, as individuals with limited literacy (Goussot, 2011). In Italy, limited literacy in adults is commonly characterized in negative terms or, as in the case of current Italian language testing policy, ignored almost entirely. Therefore, because identity is often challenged and reinvented as a result of the migration trajectory (Cattaneo \& Del Verme, 2005; Devereux, 1978), women might reevaluate their own limited literacy and, perhaps, internalize ideas of themselves as inadequate, unable, or incompetent, which is accompanied by emotions such as shame and feelings of inferiority. Such phenomena should not be underestimated, since "the feeling of marginality has been found to affect the development of student self-concept and academic performance and has been used to explain low academic performance and a high dropout rate among minority and immigrant students" (Lee \& Sheared, 2002, p. 30). With these above considerations in mind, we will now discuss a study aimed at understanding the educational needs, experiences, and expectations of a small group of adult female LESLLA students in Italy.

## Methodology and Analysis

This small qualitative study of semistructured interviews was conducted in Rimini, Italy, between February 2012 and April 2012. Using a convenience sample, coauthor Kotai, who taught an all-female literacy
class, contacted for interviews all of the students who frequented the class. Five of these women chose to participate. Also interviewed, in order for us to compare across schooling contexts, were an additional two women who studied the Italian language and literacy at another school and under a different instructor. The women had migrated from five African countries within the last 10 years-Morocco (Rihab and Ana), Tunisia (Lisa), Senegal (Asia), Nigeria (Beth), and the Ivory Coast (Rebecca and Clara). The names are pseudonyms to protect the interviewees' privacy. All the women had little to no schooling and had migrated from countries in which female non-literacy rates are relatively high (UNESCO, 2010).

A 30-minute-long semistructured interview session was conducted with each woman. The interview questions inquired about demographic information, childhood schooling and literacy backgrounds, the experience of being non-literate in the country of origin and in Italy, the reasons behind enrolling in literacy/Italian language courses, and the informant's future expectations for literacy.

The transcripts of 142 minutes of tape-recorded interviews were analyzed manually using quantitative content analysis of keyword frequencies, homonyms, and synonyms. The transcripts were coded and categorized to determine elements concerning the following: (1) how the experience of literacy is impacted by the migration process, (2) how one's sense of self is constructed in connection to perceptions of literacy, and (3) what symbolic and practical meanings the women attributed to becoming literate.

## Results

## Premigration to Post-migration Shifts in Literacy Perceptions

By comparing their experiences before and after migrating, it appears that the women experienced a small change in their perception of literacy over time. While these changes at times appear to be subtle, the data support the notion that perceptions of literacy are not fixed and
timeless, but are instead culturally situated and constantly changing. Almost all of the women reported having suffered from both practical and psychological complications arising from their limited literacy in their countries of origin. Subsequently, all of the women after migrating to Italy explained that they continued to perceive their limited literacy as problematic and a source of frustration, though not in the same ways as before they migrated. For example, Rihab described the socioeconomics around non-literacy in her native country of Morocco:

> I always found difficulties. ... If you pay someone, she/ he will write for you whatever you want, [for example] a letter. Because a lot of people haven't gone to school, therefore you pay someone to write whatever you tell him/her. (Rihab, Morocco, February 17, 2012)

Having to pay out-of-pocket for solutions to everyday literacy needs-such as going to the bank or the post office, writing one's name, trying to read warnings or labels, and searching for a job-was one of the ways that the women reported experiencing difficulties with their non-literacy in their countries of origin. Yet, even if limited literacy caused frustrations in their countries of origin, all the women revealed that the problems and concerns around non-literacy seemed to increase upon their arrival to Italy. This may be because Italy's employment market is heavily dependent on the services sector, which often requires a basic level of literacy. In any case, a certain level of literacy is often taken for granted. Lisa explains how her experience of non-literacy changed from her country of origin to Italy:

> When I had to go anywhere [in Tunisia], I usually could say that I don't read well. But there was always someone [who could read/write], so it was enough to say what I wanted ... Now [in Italy], when I go to look for a job or to see something, I have [to be able] to read. For a job ...
when I don't understand something, I feel ... bad. (Lisa, Tunisia, March 23, 2012)

To put it simply, as the socioeconomic context changes from the women's country of origin to Italy, the perception of the impact of literacy on one's life also shifts, even if subtly. Importantly, most of the women noted that their difficulties with non-literacy in Italy were coupled with other layers of discrimination that they experienced as migrant women. As we will now discuss below, these changes appear to have some significant psychological impact on the women.

Psychosocial consequences of literacy. The data provide evidence that perceptions of literacy are firmly rooted in the social context in which literacy is practiced and, consequently, in the psychosocial experiences of such contextually situated activities. Many of the women shared during the interviews that some of the emotions associated with nonliteracy, which include shame, uneasiness, embarrassment, and feelings of lack of self-confidence and self-esteem, are derived from a lack of autonomy and the need to ask for help to complete daily tasks. Ana addressed this explicitly:

> I felt ashamed. When they showed me a piece of paper with an address and asked me where it was, I didn't know, because I wasn't able to read, so I had to say [that I don't read and write]. And when there was a birthday and they showed me the [birthday] card, I didn't know what was written in it and I couldn't sign it. It is such a bad feeling. (Ana, Morocco, February 17, 2012)

Quotidian situations that required literacy often provoked a sense of uneasiness or distress in the women, particularly in terms of literacy's social repercussions. In the interviews, the women commonly expressed how their self-perception and self-esteem were based on how they compared themselves to others in their social group, in this case at an

Italian language school: "At (our) school ... everybody knows how to read and write[,] but I don't" (Rebecca, Ivory Coast, February 4, 2012).

When comparing themselves to others, some of the women addressed their limited education backgrounds with a sense of regret and shame. Rihab said:
> [I felt] really bad ... always bad, nervous [and] asking myself, "Why? Why [didn't I go to school]?" [I was] thinking bad [thoughts] about my parents because they didn't send me to school ... maybe it was just an excuse that I was always sick [when I was a child]. (Rihab, Morocco, February 17, 2012)

Rihab's sense of anger about her parents' choice demonstrates how literacy is inextricably tied to how it's practiced and experienced within the family, with peers at school, at work, and within the community.

The practical role of literacy. In addition to naming the social context, the women tended to attribute meaning and purpose to literacy as fundamentally tied to how it could facilitate the practical and personal goals they set for themselves. Literacy was seen as a tool or instrument for the realization of the life project. Finding work was a central component of all of the women's migration goals. Clara, for example, perceived her main difficulty not as her limited literacy but her inability to find employment. "The only difficulty I have now is work" (Clara, Ivory Coast, February 27, 2012).

In this context, the women often linked emerging literacy with work opportunities, which, with the high level of unemployment in Italy, can often be experienced as disheartening. Yet, despite the seemingly desperate economic situation described by the women, many of them expressed future expectations of literacy-driven positive changes in their lives, such as finding a job, acquiring greater autonomy, and being able to better understand the surrounding world. Clara emphasized how important it was for her to be able to carry out everyday life activities autonomously:
[W]hen you can do something by yourself and don't need the help of someone else ... when you go to an office and you are able to do everything on your own ... now I can do some things by myself ... Yes, [my life] could be very different. ... I imagine that I could work, but if not working, anyway, I could do so many things by myself. (Clara, Ivory Coast, February 27, 2012)

It is important to note that acquiring literacy for its own sake was not mentioned by any of the women; instead, the interviewees focused on the practical implications and consequences of literacy.

## Discussion and Conclusion

From the results of this small qualitative study, certain important themes emerge that nuance and perhaps even challenge the macrolevel political discourses at the heart of adult language-in-education policy in Italy. First, the women's narratives contest the central assumption of current language testing policy, which claims that adult language and literacy acquisition is apolitical, is neutral, and can be accessed and experienced equally by all learners based mainly on the migrant's willingness to study. Through the descriptions of the difficulties that the women faced vis-à-vis their limited Italian language and literacy skills, it becomes clear that this "one size fits all" language testing policy cannot possibly address the unique linguistic and educational needs of all individual migrants in Italy. Understanding and addressing the specific socioeconomic and personal contexts in which students develop as learners is essential to coming up with educational solutions that work for all students, especially those who are the most marginalized. In the case of LESLLA learners, this means adult language schooling that is capable of providing opportunities for learners who have experienced a lifetime of unequal access to education. By ignoring the unique subjectivities of each student and prioritizing standardized language
testing, current migrant language policy in Italy does not create the space to provide such opportunities.

The interviews detailed how the process of migration impacts perceptions of literacy and its psychosocial and practical consequences in the daily lives of emerging-literate women. For all the women interviewed, the hardships associated with non-literacy, while present in their countries of origin, were accentuated in Italy. One reason for this may be that the women perceived their literacy within the context of their unstable social position as migrants in the often-hostile environment of anti-immigration politics in Italy. Much like Goussot's (2011) concept of the "double handicap," the women believed that the various levels of psychological difficulty and socioeconomic hardship that they faced in Italy was based partially on their status as female migrants and partially on their limited literacy. An understanding of the adversity and discrimination that many migrant women experience in Italy weakens the assumption that Italian language learning, especially as demonstrated through standardized language testing, will greatly aid integration into Italian society. Instead, without major structural changes to the unemployment situation, housing market, and adult education system, which are supported by a fair and effective legal immigration system, integration is not likely, despite the push toward Italian language learning. Instead, the language-testing policy appears to create yet another barrier and obstacle in the already arduous immigration bureaucracy.

Concerning LESLLA classrooms, our findings confirmed Lee and Sheared's (2002) notion that feelings of marginality and low selfconfidence can greatly impact the educational experiences of migrant students. As discussed before, the emerging-literate women in this study often expressed the idea that the sense of shame and discomfort associated with their limited literacy intensified in Italy, whether in school, the workplace, or the community. We argue that contemporary Italian language-in-education policy that mandates written language testing without consideration of non-literate and low-literate learners will not help to alleviate these complex psychosocial experiences and
dynamics. Instead, notwithstanding the neutral language of the law that supposedly aims to promote language learning, Italian policy may serve to further isolate and marginalize emerging-literate learners.

Finally, the common, macrolevel conceptualization that binds together the politics of language learning and the ill-defined notion of integration often ignores the unique backgrounds, motivations, and needs of adult migrant students. In turn, this context often renders invisible the emerging-literate LESLLA students in the classroom. Several of the women interviewed in this study made the link clear: Italian language and literacy learning serves a fundamentally practical purpose in their lives. In the political and policy-making arena, on the other hand, Italian language and literacy learning is spoken about in mostly symbolic terms, which conflates adult migrant language learning with rhetoric that defines migrants as dangers to national security and identity. This significant difference between the women's concentration on the practical functions of language and literacy and the government's focus on its symbolic importance may be one of the sources of the government's failure to provide adequate learning opportunities for many adult migrants.

In conclusion, a nuanced understanding of female migrant learners' experiences with limited literacy is becoming more and more important because migrant language learning has become increasingly politicized in Italy. The voices of LESLLA learners are needed in order to provide counter-discourses to the dominant narrative in contemporary Italian politics, which tends to equate the perceived ability of a migrant to learn the Italian language (as demonstrated through standardized language testing) with a migrant's integration into Italian society. In fact, the results of this small qualitative study point toward the need for adult schooling that is rooted in practical socioeconomic opportunities for adult migrants as a means to bolster Italian language and literacy acquisition.

## References

Bigelow, M., \& Tarone, E. (2004). The role of literacy level in second language acquisition: Doesn't who we study determine what we know? TESOL Quarterly, 38(4), 689-700. Retrieved from http:// www.jstor.org/stable/3588285
Bigelow, M., \& Vinogradov, P. (2011). Teaching adult second language learners who are emergent readers. Annual Review of Applied Linguistics, 31, 120-136. doi: 10.1017/S0267190511000109
Blommaert, J., \& Backus, A. (2011). Repertoires revisited: "Knowing language" in superdiversity. Working Papers in Urban Language E Literacies, paper 67, 1-26. Retrieved from https://www. academia.edu/6365319/WP67_Blommaert_and_Backus_2011. _Repertoires_revisited_Knowing_language_in_superdiversity Boriani, M. (Ed.). (1999). Educazione degli adulti: Dalle 150 ore ai centri territoriali permanenti. Rome: Armando.
Burns, A., \& Roberts, C. (2010). Migration and adult language learning: Global flows and local transpositions. TESOL Quarterly, 44(3), 409-419. doi: 10.5054/tq.2010.232478
Calavita, K. (2005). Immigrants at the margins: Law, race and exclusion in southern Europe. Cambridge: Cambridge University Press.
Caritas-Migrantes (2012). Dossier statistico immigrazione: $22^{\circ}$ rapporto. Rome: IDOS—Redazione Dossier Statistico Immigrazione Caritas-Migrantes.
Castle, S., \& Miller, M. (2003). The age of migration. New York: Guilford Press.
Cattaneo, M. L., \&Del Verme, S. (2005). Donnee madri nella migrazione: Prospettive transculturali e di genere. Milan: UNICOPLI.
Chini, M. (2011). New linguistic minorities: Repertoires, language maintenance and shift. International Journal of Sociology of Language, 210, 47-69. doi: 10.1515/IJSL.2011.030
Love, S., \& Varghese, M. (2012). The historical and contemporary role of race, language, and schooling in Italy's immigrant
policies: Public discourses and pedagogies. International Journal of Multicultural Education, 14(2). Retrieved from http://ijmejournal.org/index.php/ijme/article/view/491
Love, S. (2014). Language testing, "integration" and subtractive multilingualism in Italy: Challenges for adult immigrant second language and literacy education. Current Issues in Language Planning, 16(1/2), 26-42.
Devereux, G. (1978). Saggi di etnopsichiatria generale. Rome: Armando.
Ferdman, B. M. (1990). Literacy and cultural identity. Harvard Educational Review, 60(2), 181-205.
Retrieved from http://her.hepg.org/content/k10410245xxw0030/
Gonzalves, L. M. (2012). We want to depend on us: Yemeni women name success. In P. Vinogradov \& M. Bigelow (Eds.), Proceedings from the $7^{\text {th }}$ Annual LESLLA (Low Educated Second Language and Literacy Acquisition) Symposium (pp. 92-109). Minneapolis: University of Minnesota Press. Retrieved from http://www. leslla.org/files/resources/leslla_2011_Proceedings.pdf
Goussot, A. (2011). Bambini stranieri con bisogni speciali: Saggio di antropologia pedagogica. Rome: Aracne Editrice.
Hogan-Brun, G., Mar-Molinero, C., \& Stevenson, P. (Eds.) (2009). Discourses on language and integration. Amsterdam: John Benjamins Publishing Co.
Kostakopoulou, D. (2010). Introduction. In R. Van Oers, E. Ersbøll, \& D. Kostakopoulou (Eds.), A re-definition of belonging? Language and integration tests in Europe (pp. 1-23). Leiden, Netherlands: Koninklijke Brill.
Lee, M. Y., \& Sheared, V. (2002). Socialization and immigrant students' learning in adult education programs. New Directions for Adult and Continuing Education, 96, 27-36.
Lukes, M. (2011). "I understand English but can't write it": The power of native language instruction for adult English learners. International Multilingual Research Journal, 5, 19-38. doi: 10.1080/19313152.2011.539488

Mathews-Aydinli, J. (2008). Overlooked and understudied? A survey of current trends in research on adult English language learners. Adult Education Quarterly, 58(3), 198-213. doi: 10.1177/0741713608314089

Ministero dell'Interno. (January 2012). Primo rapport sui test di lingua Italiana per gli stranieri. Dipartimento per le libertà civili e l'immigrazione, direzione centrale per le politiche dell'immigrazione e dell'asilo. Retrieved from http://ssai.interno.it/download/allegati1/ amelio_dati-rapporto_test_italiano_per_stranieri_v2.pdf
Ministero del Lavoro e delle Politiche Sociali. (2013). Immigration, how, where, when: The handbook for integration. Direzione generale dell'immigrazione e delle politiche di integrazione. Retrieved from http://www.integrazionemigranti.gov.it/Attualita/IlPunto/ approfondimento/Documents/vademecum\%20INGLESE\%20 2013.pdf

Minuz, F. (2005). Italiano L2 e alfabetizzazione in età adulta. Rome: Carocci Editore.
Ramírez-Esparza, N., Harris, K., Hellermann, J., Richard, C., Kuh1, P. K., \& Reder, S. (2012). Socio-interactive practices and personality in adult learners of English with little formal education. Language Learning, 62(2), 541-570. doi: 10.1111/j.1467-9922.2011.00631.x
Rockhill, K. (1993). Gender, language and the politics of literacy. In B. Street (Ed.), Cross-cultural approaches to literacy (pp.156-175). Cambridge : Cambridge University Press.
Totaro-Genevois, M. (2005). Cultural and linguistic policy abroad: The Italian experience. Tonawanda, NY: Multilingual Matters Ltd.
Wallace, C. (2007). A socio-cultural approach to literacy instruction for adult ESOL learners new to literacy. In M. Young-Scholten (Ed.). Proceedings from the $3^{\text {rd }}$ Annual LESLLA (Low Educated Second Language and Literacy Acquisition) Symposium (pp. 91-98). Durham, England: Roundtuit Publishing. Retrieved from http:// www.leslla.org/files/resources/LESLLAproceedings2007.pdf

Walter, P. (1999). Defining literacy and its consequences in the developing world. International Journal of Lifelong Education, 18(1), 31-48. doi: 10.1080/026013799293937
Warriner, D. S. (2007). "It's just the nature of the beast": Re-imagining the literacies of schooling in adult ESL education. Linguistics and Education, 18, 305-324. doi: 10.1016/j.linged.2007.07.004
UNESCO. (2010). Adult and youth literacy: Global trends in gender parity. Paris: UNESCO Institute for Statistics, 3. Retrieved from http://www.uis.unesco.org/FactSheets/Documents/ Fact_Sheet_2010_Lit_EN.pdf
United Nations Statistics Division. (2005). Social indicators: Indicators on illiteracy. Retrieved from http://unstats.un.org/unsd/ demographic/products/socind/illiteracy.htm
Venanzetti, A. (2009). Scuolemigranti: Un soggetto composito e nuovo nel panorama dell'insegnamento dell'italiano L2 agli stranieri. In C. Peri (Ed.), L'Italiano per l'integrazione, quaderno 7 (pp. 46-55). Rome: Associazione Centro Astalli per l'Assistenza agli Immigrati.
Venanzetti, A. (2011). Le scuole pubbliche e il volontariato del Lazio nell'era dei test di Italiano per gli immigrati: Prove di sistema. In Osservatorio romano sulle migrazioni, ottavo rapporto (pp. 98-105). Rome: Caritas di Roma.
Zabeo, E. (2009). Istituzione e finalità dei centri territoriali permanenti (CTP). In C. Peri (Ed.), L'italiano per l'integrazione, quaderno 7 (pp. 56-59). Rome: Associazione Centro Astalli per l'Assistenza agli Immigrati.

# Learning Apart Together: Student Profiles in Adult Literacy Classes in the Netherlands 

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#### Abstract

Until recently, the Dutch adult education policy distinguished between L1 and L2 adult education. Times have been changing, however, and the traditional L1 classes have evolved into increasingly multilingual ones. This paper presents the results of a study aimed at investigating the different student profiles in these adult education classes. Participants in the study were 237 students from eight different adult education centers and their teachers. In addition to background data on the students (e.g., age, age upon entry to the Netherlands, education, L1), we collected data on five different skill areas: Dutch language proficiency (vocabulary and syntax), word reading/fluency, text comprehension, spelling, and text writing. The teachers and the centers provided data on intake, instructional practices, and teaching materials for reading, writing, and oral Dutch proficiency. The analysis yielded five different student profiles. The two most frequently occurring student profiles were the more advanced low-literates (both L1 and L2 students), who were focused on improving their reading and particularly writing skills. Additional profiles represented the beginning second-language learner, the adult learner with specific reading problems, and students who never had been to school as children or exhibited general learning problems. Some educational implications of the different profiles are discussed.


## Introduction

In the Netherlands, adult basic education traditionally has been serving two different groups with two different programs: L1 reading and writing classes for low-literate, native speakers of Dutch, and adult literacy and second-language classes for low-educated immigrants in integration programs. For some decades, this two-pronged approach made sense programmatically. The first learner group included learners who had attended regular education for quite some time but who (for several reasons) lacked the literacy levels needed in their daily lives or at work; the L2 classes consisted of migrants who had less formal schooling or had not been to school at all and who had to learn to read and write Dutch from scratch. However, times have changed in the Netherlands and other European countries: over the last few years, adult education centers have observed a growing cultural and linguistic diversity in their traditional L1 classes (Simpson, Cooke, \& Baynham, 2008). Not much is known about the variation in literacy and language abilities among the students in these Dutch L1 classes, compared to Dutch as a second language (DL2) classes (Kurvers \& van der Zouw, 1990; Kurvers \& Stockmann, 2009). For these reasons, a research project was started, funded by the Dutch Ministry of Education (OCW), to investigate the backgrounds of the students, the instructional practices in the classes, and the different literacy and language ability "profiles" of the students. A secondary aim of the study was to inform adult educators about how the different student profiles could be used to improve instruction.

The term profile will be used to capture the pattern of underlying component abilities in language and literacy. Kruidenier's (2002) review of research on basic reading indicates that phonics and fluency, vocabulary, and comprehension all contribute to building a reliable profile of adult literacy learners (see also Chall, 1994). The studies of Sabatini (2002) and Eme (2011) revealed that low-ability adult readers had problems mainly with speed and accuracy in (phonological) decoding, but fewer problems with comprehension and vocabulary. Davidson and Strucker (2002) compared 135 native and 77 nonnative,
low-literate English speakers. The two groups did not differ significantly in decoding skills, but the native speakers scored significantly higher on vocabulary- and comprehension-related measures. Mellard, Fall, and Mark (2009) investigated the reading abilities of 295 adult basiceducation students selected from six different level groups. Although the cluster analysis they used revealed seven ability groups, they distinguished three instructional groups: $48 \%$ of the sample needed basic reading instruction, $48 \%$ needed to work on fluency, and $4 \%$ needed to work on comprehension. Although six level groups were included in the study, a remarkably high percentage of the whole group lacked even basic reading skills in English.

The studies on student profiles mentioned so far mainly looked at reading ability. Because writing is often considered even more problematic for low-literates than reading, we also wanted to include writing ability. On the other hand, oral language skills often do not get much attention in L1 adult literacy classes because L1 students mainly attend(ed) these classes because they have problems with reading and writing, not with oral skills. That, however, can be less taken for granted now that nonnative students are attending these classes, even if they already have attended Dutch education before. For that reason, we also wanted to include some oral skills in Dutch.

The main research questions for our study were as follows:

- What are the main features of the instructional practices in the Dutch L1 literacy classes?
- What range of student profiles can be distinguished in these adult literacy classes?
- In what ways do students differ in their language and literacy skills and therefore in their learning needs?

This paper concludes with a discussion of the educational implications of our analysis of instructional practices and different student profiles.

## Method

## Description of Student Sample

We collected data from 237 students who were attending Dutch L1 adult literacy classes during the first months of 2013. The students were selected from nine different educational centers geographically spread over the country. We drew a stratified random sample of about 25 students from each of the centers, taking care that different literacy levels, native and nonnative Dutch students, and students working in subsidized workforce development programs were included in the sample. The students were attending classes taught by 20 different teachers.

The mean age of the 237 participants in the sample was 46 , with ages ranging from 20 to 77 . Slightly more than half of the students ( $52 \%$ ) were born in the Netherlands, while $48 \%$ were born in 44 different countries, such as Morocco, Turkey, Surinam, Indonesia, Somalia, or Afghanistan. The mean length of stay of the foreignborn group was 20 years (ranging from 1 to 55 years). Of the native Dutch students, $40 \%$ spoke only a regional dialect at home. For about $12 \%$ of the learners (nearly all of them Dutch), the teachers reported that the students experienced personal or health problems that likely hindered learning, including (supposed) dyslexia. Nearly two-thirds of the students (63\%) were employed in 51 different occupations, and $23 \%$ worked in subsidized workplaces for handicapped or long-term jobless adults. The majority of the students had 7-10 years (range: 0-16 years) of prior schooling, while $33 \%$ of the students (mainly Dutch natives) had attended special education.

All students consented and agreed to participate in the study. Afterward, all teachers were given the results of their own students so as to discuss them with their students and offer feedback on the difficulties experienced during the assessments.

## Description of Teacher Sample

Through a teacher background questionnaire, data on the teacher demographics were collected. All 20 teachers were highly educated and experienced. Most were women ( $85 \%$ ), and half of them had attended second-language training courses.

## Assessment Instruments

A variety of assessment instruments were used to investigate the language and literacy skills of the students, the backgrounds of the students, and the characteristics of the teachers and their teaching.

Oral language skills. The oral language skills assessment consisted of a vocabulary test and a sentence comprehension test. The vocabulary test consisted of five subsets of the Dutch version of the Peabody Picture Vocabulary set (Schlichting, 2004), from subset 6 (some high-frequency words) to subset 10 (several very infrequent words). The selection of subsets was based on a comparison of the test words with the 2,000 high-frequency words in Dutch that are required to reach level A2 of the Common European Framework of Reference (CEFR) for Languages (Council of Europe, 2001). This level is used as an entrance level in most adult literacy courses. The test consisted of 60 words, which were presented orally. The students were given four pictures and had to pick out the one that corresponded to the word.

The sentence comprehension test was a subtest of a language test battery used in primary education (Verhoeven \& Vermeer, 2001) and consisted of 10 sentences, testing more subtle knowledge of Dutch such as function words and grammatical constructions. The assessor would, for instance, say, "If I only had an umbrella," and the student would then have to pick out one of three pictures, indicating a man walking in the sunshine, a man walking in the rain without an umbrella, and a man walking in the rain under an umbrella.

Literacy skills. The literacy assessment consisted of four tests: word reading (decoding and fluency), reading comprehension, spelling, and writing. The word reading fluency subtest was part of the frequently used intake test battery for second-language courses (Bureau ICE, 2009) and consisted of 80 words ranging from simple monosyllabic words like jas (coat) to multisyllabic words with consonant clusters like sneeurwstorm (snowstorm). Students were asked to read the words aloud and fast. The score indicated the number of words read correctly in one minute, according to the guidelines.

The reading comprehension subtest consisted of five texts with three to four comprehension questions each, ranging from a text at literacy level B to level B1 of the CEFR. ${ }^{7}$ Literacy level B indicates the ability to read a very short and simple text of about 50 words with monosyllabic or simple disyllabic words and short sentences; a text at CEFR level B1 is roughly comparable to a text at grade 10 level. The texts were taken from different sources (Cito, 2008; Borgesius, Dalderop, \& Stockmann, 2012; State exams, Dutch L2), and were calibrated at the levels for which they were intended (Language Policy Division, 2009). All students started with the text at literacy level B. The comprehension score was the number of correctly answered multiple-choice questions. For the students who could not answer the questions on this text correctly, two more simple texts were used. These students had to read the text silently, but the questions were presented orally and the student could answer the questions orally.

The spelling test was a dictation task with 30 words ranging from simple monosyllabic words like mes (knife) without consonant clusters to longer words with consonant clusters, like gebracht (brought). Thirty sentences were read aloud, and the student had to fill in the word

[^6]that was repeated after the whole sentence had been presented orally, e.g., "The man is looking for his book. Write book." The spelling score indicated the number of correctly spelled words.

Text writing was based on a picture story consisting of eight pictures. The students were asked to look carefully at the pictures and then write the story. The pictures showed a man who throws away a banana peel and a little girl who slips on it and drops her ice cream. The man returns and buys her a new ice cream. The writing task was judged on nine different aspects: legibility (readability), adequacy (i.e., if it had any relation with the pictures), comprehensibility, syntax, morphology, spelling, punctuation, wording (choice of words in the text), and coherence (connecting the pictures in a story line). Assessors (the researchers) scaled all aspects of the students' writing on a three-point judgment scale, ranging from 0 (poor) to 2 (good). If a student scored 0 on the first two aspects, then the scoring stopped. Each student was assessed twice by two different assessors. When the assessors disagreed (which happened only incidentally and virtually only on wording and coherence), the score was discussed (including with a third assessor) to reach agreement. The total score served as the writing score.

Questionnaire. The questionnaire consisted of several parts: students' backgrounds, teachers' backgrounds, intake procedures, and instructional practices. The questions about the students' background (filled in by the teacher) asked them about their age, gender, employment, country of origin, first language, and age of entry into and length of stay in the Netherlands.

The questions about intake asked about the procedure and the diagnostic instruments that the center used for assessing language and literacy skills. The questions about instructional practices were about levels and literacy goals of the groups, main activities, time spent on different language and literacy skills, and organization of lessons. An assessment administration guideline was developed, which consisted of
the order of the assessments, the instructions for each of the tests, and the criteria for scoring.

All instruments were presented, explained, and discussed thoroughly in a meeting with the centers' coordinators and assessors, wherein the guidelines were explained thoroughly. All assessments were carried out by experienced assessors, one for each of the adult education centers. A detailed guideline was provided showing the order of the tasks, the instructions, and the criteria for scoring the answers. Teachers and assessors were paid for the hours they spent collecting the data.

## Analysis

To check the validity (are we measuring what we wanted to measure?) and reliability (consistency) of our research instruments, we first carried out a factor analysis to be sure that our tests really covered a literacy and a language dimension and a reliability analysis (Cronbach's alpha). To answer the first research question, we mainly used descriptive statistics. To answer the second research question, we conducted a cluster analysis (see below for further information).

## Assessment Quality

Factor analysis is a statistical technique used for investigating relationships among variables for complex concepts, such as, in our study, in the language and literacy skill sets. Factor analysis enabled us to look at patterns in skill performance across multiple assessmentsin this case, to see whether the smaller number of underlying factors could indeed be interpreted as a literacy and a language factor. Our factor analysis revealed two clearly distinguishable dimensions: a literacy dimension with high factor loadings on all written language tasks, and a language dimension consisting of the two oral language tasks (Table 1). Text writing, the only productive literacy task, also had a relatively high loading on the language factor.

|  | Factors and loadings |  |
| :--- | :---: | :---: |
|  | Literacy | Language |
| Vocabulary | .01 | $\mathbf{. 8 8}$ |
| Reading fluency | $\mathbf{. 9 4}$ | -.12 |
| Sentence <br> comprehension | -.01 | $\mathbf{. 8 6}$ |
| Reading <br> comprehension | $\mathbf{. 8 5}$ | .02 |
| Spelling | $\mathbf{. 8 9}$ | .02 |
| Writing | $\mathbf{. 6 2}$ | .37 |

Table 1: Factor loadings of the assessments ( $n=237$ )
To check the reliability of the tests, we conducted a reliability analysis. That is, we included a measure to indicate that the several items in a test consistently measured the same skill. A Cronbach's alpha of . 75 or higher is considered to be good. Table 2 presents descriptive data of the various measurements, the $p$-value and the internal consistency (Cronbach's alpha). The $p$-value indicates the general difficulty of the task; a $p$-value of .60, for example, indicates that, on average, $60 \%$ of the items were answered correctly, with the range indicating the lowest and the highest score on the test. Vocabulary and sentence comprehension were combined into one oral language measure indicating oral language skills with a main focus on receptive vocabulary.

|  | Max score | Range | p-value | Cronbach's <br> alpha |
| :--- | :--- | :--- | :--- | :--- |
| (Oral) Language | 70 | $9-69$ | .79 | .94 |
| Reading fluency | 80 | $1-79$ | .72 | .98 |
| Reading <br> comprehension | 19 | $0-19$ | .75 | .86 |
| Spelling | 30 | $0-30$ | .59 | .93 |
| Writing | 18 | $0-18$ | .60 | .80 |

Table 2: Maximal score, range of scores, p-value and Cronbach's alpha
The range indicates that on nearly all assessments, the range of scores was maximal. Thus, some students did not answer any of the questions correctly, while others achieved the maximum score. The reliability (internal consistency) of the assessment instruments was good to excellent for all assessments (Cronbach's alpha > .80). For these students, spelling
and writing, on average, were more difficult than reading fluency, reading comprehension, and vocabulary.

## Results

## Teaching Practices

Our first research question sought to describe the main features of the instructional practices in the Dutch L1 literacy classes. From the teacher questionnaires, we learned that all centers started the intake process by interviewing the students about their aims and needs, their educational history, and their perceived obstacles. It also tested their reading ability. Six of the nine centers also tested the students' writing ability, and one of the centers assessed oral language skills, as well.

The participants in this study attended 30 different classes in nine different adult education centers. Most of the students (53\%) were enrolled in classes/programs together based on literacy level; others, because they were living in the same neighborhood or shared the same workplace. The average group size was 15 , ranging from five to 25 ; the average attendance rate was estimated at around $60 \%$. For about $20 \%$ of the students, the teacher reported improving the students' general literacy abilities as an aim; for another $20 \%$ of students, improving their functioning in the workplace; for the other $60 \%$ of students, a combination of targets. Nineteen of the groups attended day courses, and 11 groups attended evening courses. Most of the groups attended the courses once a week (about three hours); five groups, twice a week; and one group, three times a week. More than half of the students (59\%) were attending mixed groups with DL1 students and DL2 students; $41 \%$ attended DL1 or DL2 classes. Table 3 presents an overview of the average (reported) time spent on the different skills and the variety of classroom organization.

| Skills Focus | \% of time <br> (range) | Classroom organization | \% of time (range) |
| :--- | :--- | :--- | :--- |
| Reading: | $27 \%(5-45)$ | Whole group work | $40 \%(20-80)$ |
| Writing | $42 \%(20-85)$ | Small group work | $12 \%(0-50)$ |
| Oral skills | $17 \%(0-35)$ | Individual computer <br> work | $19 \%(0-50)$ |
| Digital skills | $15 \%(0-50)$ | Other individual | $28 \%(0-75)$ |

Table 3: Average time spent on different skills and grouping activities in 30 Dutch L1 classes

Writing received, relatively speaking, the most attention in the classes: on average, $42 \%$ of the lesson time was spent on writing, ranging from $20 \%$ to $85 \%$ across the 30 classes. Reading was the second most frequently addressed skill, with an average of $27 \%$ of lesson time and a range of $5 \%$ to $45 \%$. On average, $17 \%$ of the lesson time was spent on oral skills, ranging from no time spent at all (six classes) to $35 \%$ of the time, while $15 \%$ of the time was spent on digital skills, ranging from no time at all (six classes) to $50 \%$. In most of the groups, numeracy, or math, was not part of the learning goals.

All groups showed a mixture of group work and individual work. On average, about $40 \%$ of the time was spent on whole-group work, ranging from $20 \%$ to $80 \%$. Students, on average, worked $47 \%$ of the time individually, either at the computer or doing paperwork, together ranging from $19 \%$ to $75 \%$. On average, students worked together in small groups for $12 \%$ of the time-although this never happened in about half of the classes-while in the other classes, half of the time was spent on small-group work.

Instructional materials. The teachers reported using a large variety of teaching materials, which were mostly focused on reading, spelling, writing, and, to a lesser extent, grammar; nearly all teachers mentioned the use of an easy-to-read newspaper. For example, sample materials included, for reading, leaflets, books, and a newspaper written in easy-to-read Dutch; for spelling, worksheets focused on specific spelling problems; and for writing exercises, filling in a form or writing a letter to the children's primary school. All teachers also reported using authentic materials to contextualize
teaching, such as local magazines, insurance forms, and communications with housing corporations. Also utilized were story-writing exercises.

## Student Profiles

For the second research question, we sought to determine the range of language/literacy profiles for the students enrolled in Dutch L1 classes. A cluster analysis technique was applied (Morris et al., 1998; Mellard et al., 2009) to identify subtypes of low-literacy students. A cluster analysis is a technique used to group students based on their skills so that students within a cluster are more similar to each other than to students in all other clusters. We used a hierarchical cluster analysis based on the raw scores in three steps, with one restriction: since the second step already differentiated three rather small groups (of 13 to 25 students), we used the results of the third step only to further distinguish the large cluster of about 180 students. We also compared the students' abilities in each of the profiles with the levels in the literacy and language frameworks used in adult education, and we analyzed each subtype's ability patterns to identify the instructional emphasis for each profile group. The cluster analysis revealed five different student profiles, based on the assessments of the five assessment variables (see Figure 1).


Figure 1. Mean percentage correct, per profile group

The bars in Figure 1 present the percentages of correct scores on each of the assessment tasks: (word) reading fluency, reading comprehension, oral skills, spelling, and text writing. Profile 1 scores high on all tasks. Profile 2 scores a bit lower on all tasks, but particularly on spelling and writing. Profile 3 is more or less similar to profile 2 in reading, but relatively weaker in relation to writing and oral language skills. Profile 4 is more or less the opposite of profile 3: students in profile 4 are good at oral language skills, but they score low on reading and writing. Profile 5 only scores a reasonable average on oral language skills. We will come back to each of the profiles later on.

Table 4 presents the distribution of the profiles, and Table 5 describes the seven skill areas by the mean scores and standard deviations for each of the measures, also indicating the outcomes of the analysis of variance.

| Profile | N | DL1 | DL2 |
| :--- | :--- | :--- | :--- |
| 1 | 92 | $58 \%$ | $42 \%$ |
| 2 | 86 | $49 \%$ | $51 \%$ |
| 3 | 18 | $0 \%$ | $100 \%$ |
| 4 | 25 | $88 \%$ | $12 \%$ |
| 5 | 13 | $39 \%$ | $61 \%$ |

Table 4. Number of students in each of the profiles, and percentages of DL1 and LD2 students

The cluster analysis revealed two fairly large clusters (profile 1 and profile 2) with more than 85 students, and three smaller clusters of 1325 students. Three profiles are rather mixed (profiles 1, 2, and 5) with respect to students' linguistic backgrounds. In profile 1, $58 \%$ of the students are native Dutch; in profile 2, about half of the students are native Dutch. In profile 5, about $40 \%$ of the students are native Dutch, and about $60 \%$ are DL2-speakers. Profile 3 ( $100 \%$ DL2 students) is an L2 profile, while profile 4 consists virtually exclusively of native speakers of Dutch.

|  | Profile | Mean | SD | F-value |
| :---: | :---: | :---: | :---: | :---: |
| Reading fluency | 1 | 72.66 | 5.25 | 316.21** |
|  | 2 | 55.13 | 7.06 |  |
|  | 3 | 53.67 | 12.57 |  |
|  | 4 | 26.96 | 6.64 |  |
|  | 5 | 18.33 | 9.37 |  |
| Reading comprehension | 1 | 16.01 | 2.32 | 44.74** |
|  | 2 | 14.24 | 3.09 |  |
|  | 3 | 12.69 | 2.94 |  |
|  | 4 | 9,12 | 4.06 |  |
|  | 5 | 6.67 | 4.68 |  |
| Spelling | 1 | 22.46 | 4.09 | 46.11** |
|  | 2 | 17.52 | 6.33 |  |
|  | 3 | 13.11 | 7.22 |  |
|  | 4 | 10.48 | 6.61 |  |
|  | 5 | 5.08 | 3.70 |  |
| Text writing | 1 | 13.01 | 2.42 | 41.28** |
|  | 2 | 10.33 | 3.02 |  |
|  | 3 | 7.76 | 2.51 |  |
|  | 4 | 9.56 | 3.20 |  |
|  | 5 | 3.69 | 3.50 |  |
| (Oral) Language | 1 | 59.85 | 6.59 | 85.45** |
|  | 2 | 54.34 | 8.81 |  |
|  | 3 | 29.11 | 6.94 |  |
|  | 4 | 58.92 | 6.57 |  |
|  | 5 | 34.69 | 8.34 |  |

Table 5: Summary of means, standard deviations for language/literacy assessments for each of the profiles, and F-value to indicate whether the profile differed on the assessment ( $n=237$ )

Table 5 shows that on all literacy assessments, the average scores of the profile groups decrease from profile 1 through profile 5 (the only exception is text writing in profiles 3 and 4). The table also shows that this is different for the average oral language scores: profile groups 3 and 5 score far below the other three profile groups. The $F$-values indicate significant differences between the profile groups on all measures. This indicates that the different profile groups do differ, but it does not yet indicate which groups differ from each other. Post hoc pair-wise comparison indicates, first of all, that profile 1 and profile 5 differ significantly from all other profiles on all measures ( $p$
<.05). On the two reading tasks, profiles 2 and 3 differ significantly from profile 4, but not from each other. On the spelling task, profiles 2,3 , and 4 do not differ significantly. On text writing, only profile 4 does not differ significantly from profiles 2 and 3 . For oral language skills, the pair-wise comparison reveals different results: profile 4 does not differ significantly from profiles 1 and 2, and profile 3 does not differ significantly from profile 5 . All other differences between the profile groups are significant.

A further analysis of the different aspects of text writing completes the pattern of strengths and weaknesses of the different profiles (see Figure 2).


Figure 2. Mean scores for aspects of writing per profile group
On average, the students in profile 1 do not have any serious problems with comprehensibility and coherence, but they do have problems with punctuation and spelling. The pattern of profile 2 is comparable, although all scores are slightly lower. Profile 3 deviates from these profiles in those aspects that are most clearly related to
language ability: syntax, morphology, and coherence. Profile 4 scores high on wording, but very low on spelling and punctuation. For profile 5 students, writing a text is clearly a challenge. On average, only readability has a reasonable score here.

When the ability scores of all students are included, all correlations between the task scores are positive, high, and significant ( $p<.001$ ); the highest correlations are those between the two writing tasks ( $r$ $=.72$ ), between the two reading tasks ( $r=.70$ ), and between the two decoding tasks of reading fluency and spelling $(r=.71)$. The correlations between literacy and oral language skills are lower, the highest being the correlation between text writing and oral language skills $(r=.55)$. The correlations between literacy skills and oral language skills are higher if correlations are calculated separately for DL1 and DL2 students. This is caused by the fact that some of the DL1 students score high on oral language skills but (very) low on literacy skills, whereas for some of the DL2 students, this is the other way around: fairly high on literacy skills, but low on oral language skills.

The different judgment aspects of the writing task also correlate significantly, except for the correlation between punctuation and wording. The highest correlations are those between comprehensibility and adequacy ( $r=.69$ ), comprehensibility and coherence ( $r=.59$ ), and comprehensibility and spelling ( $r=.47$ ).

If we compare all DL1 students with all DL2 students (see Figure 3), then our analysis reveals that the DL2 students, on average, are significantly better at reading comprehension ( $t=-.207, p<.05$ ) than the native Dutch students, but they are significantly worse at oral language skills and text writing $(t=10.33$ and $t=3.72$, respectively; $p=<.01)$. On reading fluency and spelling, the two groups do not differ significantly. A closer look at the different aspects of text writing reveals that the DL1 students are significantly better at syntax, morphology, and wording ( $p<.01$ ); on the other aspects of writing, the groups do not differ significantly.


Figure 3. Mean scores, aspects of writing for first (DL1) and second (DL2) students

A closer look at the profiles. Profile 1 can be characterized as the "advanced" low-literate students. It consists of 92 students who scored above average on all assessment tasks. This profile consists of 58\% DL1speakers and $42 \%$ DL2-speakers. The majority of the students in this profile group are at levels A2 and B1 (CEFR) on reading and below or around level A2 on writing; most of them are at or above level B1 on oral language skills.

Profile 2 can be characterized as the "average" low-literate students. It consists of 86 students who scored average on all assessments. Half of the students in this profile are DL1; the other half DL2 students. Most of these students are at CEFR level A2 on reading, below A2 (A1) on writing, and more or less similar to the profile 1 group on oral language skills: at or above level B1.

Profile 3 can be characterized as the L2 students in the adult lowliteracy classes. In this sample, this profile consists of 18 nonnative students who scored relatively high on reading skills, but low on oral language skills. It should be remembered, however, that beginners in

Dutch as a second language are not in these classes. In adult education, there are a lot more low-educated second-language and literacy (i.e., LESLLA) students to be found (Kurvers, Stockmann, \& van de Craats, 2010). On reading comprehension, this profile group is similar to profile groups 1 or 2; most of them are at level A2. On writing, however, the abilities of this group are below level A1: mainly at (rudimentary) literacy levels A and B. On oral Dutch, the majority of this profile group scored below level A2, with the rest scoring between A2 and B1.

Profile 4 students are the students with reading and writing difficulties. These students scored relatively high on oral language skills, but low on reading and writing. Unlike with all the other profiles, the scores of the students in this profile are lower on the decoding-related skills (reading fluency and spelling) than on the comprehension-related skills. This profile mainly consists of DL1 students (88\%); the majority in this group (68\%) has a background in special education, and nearly half of them are judged by their teachers as being dyslexic. Unlike profile 3 students, this group is at level B 1 or above on oral language skills, but partly below or at level A1 on reading. On writing, the majority of this profile group clearly perform at the beginning literacy levels A and B.

Profile 5 is more difficult to characterize in general. For the native Dutch students in this subtype, it seems safe to conclude that these are students with general learning disabilities who score (very) low on all assessments. This is about $40 \%$ of the group. The second-language learners in this profile $(60 \%)$ are the only ones in the whole sample who did not attend primary education as children. The low scores of this group might also be caused by the fact that progress in general is very slow for adult learners who have to learn a second language and also learn to read for the first time in their lives. As far as reading is concerned, the students in profile 5 are somewhat similar to the students in profile 4 (beginning literacy level A and B), but for writing, most of them score even lower than literacy level A. As for oral language skills in Dutch, the students in this profile group are similar to the secondlanguage learners in profile 3: below A2 or between A2 and B1.

## Conclusions and Discussion

A cluster analysis of the assessment scores on reading, writing, and oral language skills of 237 learners attending adult literacy classes revealed five clearly distinguished learner profiles. There were two profiles of more advanced or average low-literates who had some problems with reading and particularly with writing. Another profile of secondlanguage learners mainly showed weaknesses in oral language skills and text writing, and two additional profiles of students lacked basic literacy skills in decoding, speed, and accuracy, probably caused by reading and writing problems, cognitive learning disorders, or limited experience in schools. The outcomes confirm the instructional value of looking at the different literacy components of decoding and fluency, vocabulary, and comprehension-related skills, as indicated by Kruidenier (2002), Sabatini (2002), and Mellard et al. (2009). The group of adult learners investigated in this study was similar to the group in the Mellard et al. study, although the percentage of nonnatives in our study was much higher ( $49 \%$ versus $18 \%$ ). What was different from the Mellard et al. study, however, was the distribution of students over the profiles. The two groups of learners who lacked basic literacy skills were rather small in our study, while the two profile groups who lacked more advanced reading and writing skills were large in size.

The group of second-language learners in our study was also small, due to the fact that in most of these classes an entrance level of oral language skills in Dutch was required. The second-language learners, on average, had more problems with Dutch syntax, morphology, and vocabulary than did the native Dutch students in the same profile groups.

## Implications for Education

Adult literacy education is intended to be meaningful for a wide variety of learners in the courses, and teachers are expected to tailor their teaching to the specific needs of each learner. Although the adults in this study
were all low-literate adults, the patterns of strengths and weaknesses in the five profiles imply that the most important instructional needs varied considerably.

These results suggest that major attention in the profile 1 group should go to writing. For L2 students in this group, syntax, morphology, and the nuances of word meanings in particular require special attention.

The students in profile 2 would seem to benefit from attention to both reading and writing; again, L 2 students need additional instruction in the specifics of Dutch syntax and vocabulary. The second-language learners in profile 3 seem to need attention to their oral language skills and vocabulary, next to a great deal of attention for reading comprehension and writing. Their technical decoding skills do not seem to require special attention.

The students in profile 4 exhibited specific difficulties with reading and writing, even if they already attended previous education for quite some time. These students attended adult literacy education for a long time, but, because progress in general is slow, it is more important to look at the specific needs of the individual students.

For the native Dutch students in profile 5, teachers should look carefully at the feasibility of attaining certain reading and writing standards. It does not seem to be realistic to strive for these standards for most of these students. The picture might be different for L 2 students, since the overall low scores might also be caused by the lack of any previous education in their home country. Teachers should be aware of the "potentials" in these groups, i.e., those who haven't had any education in their home country and simply need more time to learn.

For all profiles, it should be remembered that the second-language learners require more attention paid to the peculiarities of (oral) Dutch in relation to vocabulary and syntax. The profiles indicate that teachers need to be confident in teaching literacy skills and oral language skills. A teacher friendly assessment instrument might be helpful here. But as a caveat, note that these implications for education are based on the average assessment scores of the profile groups.

If teachers want to tailor their teaching to their students, then it is worthwhile to carry out comparable assessments for each individual student beforehand, in order to optimize teaching, to keep the students engaged, and to monitor a learner's progress adequately. A teacher friendly assessment instrument might be worthwhile in this respect. And although we stress the importance of carefully looking at the profile of component skills of students, we do not suggest using only these assessments for creating level-groups. Teachers need to address the dynamics of within-group heterogeneity, including other features like the students' needs in daily life, their motivation, and their interests, in designing and tailoring education.

## References

Borgesius, M., Dalderop K., \& Stockmann W. (2012). Melkweg: Lezen van alfa B naar alfa C. Arnhem, Netherlands: Stichting Melkweg+.
Bureau ICE. (2009). Toolkit intake wet inburgering (TIWI). Culemborg, Netherlands: Bureau ICE.
Chall, J. (1994). Patterns of adult reading. Learning Disabilities, 5(1), 29-33.
Cito. (2008). Beginttoets alfa. Arnhem, Netherlands: Cito.
Council of Europe. (2001). Gemeenschappelijk Europees referentiekader voor moderne vreemde talen: Leren, onderwijzen, beoordelen. Nederlandse vertaling: Nederlandse Taalunie (2006). Den Haag, Netherlands: Nederlandse Taalunie.
Davidson, R., \& Strucker, J. (2002). Patterns of word recognition errors among adult basic education native and non-native speakers of English. Scientific Studies in Reading, 6(3), 299-316.
Eme, W. (2011). Cognitive and psycholinguistic skills of adults who are functionally illiterate: Current state of research and implications for adult education. Applied Cognitive Psychology, 25, 753-762.
Kruidenier, J. (2002). Research-based principles for adult basic education reading instruction. Washington, DC: National Institute for Literacy.
Kurvers, J., \& van der Zouw, K. (1990). In de ban van her schrift. Over analfabetisme en alfabetisering in een tweede taal. Amsterdam: Swets \& Zeitlinger.
Kurvers, J., \& Stockmann, W. (2009). Wat werkt in alfabetisering NT2? Een onderzoek naar succesfactoren alfabetisering NT2. Tilburg, Netherlands: Universiteit van Tilburg.
Kurvers, J., Stockmann, W., \& van de Craats, I. (2010). Predictors of success in L2 adult literacy acquisition. In T. Wall \& M. Leong (Eds.). Proceedings from Low Educated Second Language
and Literacy Acquisition $5^{\text {th }}$ Symposium. Calgary, AB: Bow Valley College.
Language Policy Division. (2009). Relating language examinations to the Common European Framework of Reference for Languages: Learning, teaching, assessment. Strasbourg, France: Council of Europe.
Mellard, D., Fall, E., \& Mark, C. (2009). Reading profiles for adults with low-literacy: Cluster analysis with power and speeded measures. Reading and Writing, 22, 975-992.
Morris, R., Stuebing, K., Fletcher, J., Shaywitz, S., Lyon, G. R., Shankweiler, D., \& Shaywitz, B. (1998). Subtypes of reading disability: Variability around a phonological core. Journal of Educational Psychology, 90, 347-373.
Sabatini, J. (2002). Efficiency in word reading of adults: Ability group comparisons. Scientific Studies of Reading, 6, 267-298.
Schlichting, L. (2004). Peabody Picture Vocabulary test-III-NL. Amsterdam: Harcourt Assessment B.V.
Simpson, J., Cooke, M., \& Baynham, M. (2008). The Right Course? An exploratory study of learner placement practices in ESOL and literacy. London: National Research and Development Centre.
Stockmann, W., \& Dalderop, K. (2007). Raamwerk alfabetisering NT2. Arnhem, Netherlands: Citogroep.
Verhoeven, L., \& Vermeer, A. (2001). Taaltoets alle kinderen. Arnhem, Netherlands: Citogroep.

# Learning Supports for Underachieving LESLLA Learners 

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#### Abstract

ESL instructors in Calgary, Alberta, Canada, determined a need for additional support to English language learners (ELLs) who were not making expected progress in their language acquisition. This paper outlines the needs assessment process and applied teaching practices undertaken to support LESLLA learners and ELLs with learning difficulties. It also outlines the role of learning support services for ELLs at the Calgary Immigrant Women's Association. A connection between supporting LESLLA learners and ELLs with learning difficulties is also made by highlighting best practices from multiple disciplines.


## Introduction

It is widely understood that learners progress at varying rates and in different ways. Still, some learners find themselves in a languagelearning system that does not meet their needs. What happens when an adult second-language learner, despite the efforts of both the instructor and the learner, does not make observable progress?

This paper describes a service created to address the problem faced by language training programs for immigrants and refugees when a learner's language and literacy skills do not develop as expected. The framework
for service delivery involves these actions: observe, understand, and support (Wall, 2013). A description of these components is detailed in Section 3. The process results in an individualized plan to implement learning and instructional strategies. Instructional teams implement strategies in a way that works with available resources in their language training program.

## Context

The learning support service described is housed by the Calgary Immigrant Women's Association (CIWA) in Calgary, Canada. CIWA is an immigrant-serving agency offering services related to settlement and integration, family, employment training, language training, and child care. In 2012, the federal department Citizenship and Immigration Canada awarded CIWA a contract to offer specialized support to adult English language learners who had learning difficulties. The service was put into place just as two major changes in Canada's immigration policy and the Language Instruction for Newcomers to Canada (LINC) program were implemented: (1) the previous federal funding limit of 1,200 hours per learner was lifted, and (2) the listening and speaking benchmarks required to apply for the Canadian citizenship test were increased to Canadian Language Benchmark (CLB) 5. Struggling learners who would have previously exhausted LINC hours may now remain enrolled in the same program for as long as an agency will allow them. Learners who do not make sufficient gains over the course of multiple terms may stay at the same level indefinitely. The latter change to citizenship prerequisites means that many learners are now anxious to progress to CLB 5. This may lead struggling learners to stay in school longer in the hopes that they will eventually make the progress needed to apply for citizenship, despite lack of significant progress. Learners who had previously timed out of programs at very beginning levels after limited progress may now be eligible for further L2 schooling. These
changes have the potential outcome of a renewed effort to provide instruction that meets LESLLA learners' needs.

In its first year of operation, Learning Support Services worked primarily with CIWA's general LINC program, women in a communitybased ESL literacy program, and an employment training program for low-literacy women. LESLLA learners were the large majority of learners who accessed learning support services in 2012-13. Of the 37 learners who underwent the full referral and recommendation process, 17 reported zero to three years of formal education in L1; 15 reported four to nine years; and five reported 10 or more years. These data are complicated by factors such as the language of instruction in the country of origin, which was often different from that which the learner spoke in the home as a child. In some cases, the language of instruction changed as a result of a change in government.

While the host agency recognizes the importance of providing unique programming for unschooled and low-educated adult L 2 learners, the reality is that most ESL programs for newcomers to Canada are general programs that do not offer a specialized ESL literacy program beyond the foundation level. Many learners are unable to access the one program in Calgary that provides ongoing literacy instruction because of conflicting schedules or a lack of access to child care. As a result, many learners who successfully develop the most basic literacy skills move into mainstream ESL classes.

## A Framework for Learning Support Services

The learning support service offered by CIWA is available to language training programs for newcomers to the city of Calgary. Instructors, educational assistants, and program coordinators can refer any learner whom they feel is not making expected progress and for whom they would like further teaching and learning strategies. An instructional team that wishes to refer such a learner makes a referral to learning support services with the permission and understanding of the learner.

The subsequent process involves three interacting components, which are described below.


Figure 1: Framework for Learning Support Services, Calgary Immigrant Women's Association (Wall, 2013)

1. Observe. Once a learner has been identified as having difficulty, more specific observations can be made that will help pinpoint her strengths and problem areas. An instructor's observations might be that a learner is grasping little of the course content, as evidenced on weekly tests. Observations could also be behavioural in nature; for instance, the learner may appear distracted or disengaged, or may frequently make off-topic interruptions in class. These observations provide a starting point for the process. Teachers' observations, however small they may seem, are an important first step in recognizing what it is that is hindering a learner's progress.

While limited progress is the overarching concern in most cases, more specific observations of a how a learner interacts with various tasks are invaluable as the instructional team works to find tools to assist a struggling learner. At higher levels of English reading and writing proficiency, instructors might cite trouble with reading comprehension, spelling, or organization. At beginning levels, observations include ongoing difficulty with letter orientation, using a calendar, and reading at the word or sentence level. Other observations have included difficulty in following oral instructions, and pronunciation that makes the learner's speech difficult to understand. Instructors include their observations in
a basic referral form, initiating the involvement of CIWA's learning support services.

After a referral is received, four to six sessions are arranged to identify a learner's strengths and gaps in learning. Components of this needs assessment process can include classroom observation, one-on-one work with the learner, paper-based assessments, and a learner interview. Learners identified as having difficulty with reading and writing tasks in class are given a variety of tasks to ascertain their familiarity with emergent literacy skills. The tasks are based on two primary tools for LESLLA programming in Canada: the Canadian Language Benchmarks: ESL for Literacy Learners ESL Literacy (Johansson, Angst, Beer, Martin, Rebeck, \& Sibbileau, 2001) and the ESL Literacy Curriculum Framework (Bow Valley College, 2011). Those referred mainly for spelling and reading difficulties were assessed for phonemic awareness. The needs assessment also includes an interview with L1 support to inquire about any additional factors that might be affecting a learner's progress.

The learner interview is part of the needs assessment, recognizing that learning involves the whole person. Interviewing a learner can be an effective way to better understand her strengths and challenges (Schwarz, 2005). Whenever possible, the learner is interviewed with the assistance of a first-language interpreter. The interview involves questions about the learner's prior experiences with formal schooling, learning style and preferences, language use outside the classroom, and health considerations that might affect L2 learning. Learners are notified that they can opt out of answering any question. Information disclosed that is pertinent to instructional delivery may be shared with the instructor, if the learner permits. When a learner notes that she is unable to clearly see the text on a page, for instance, this information could be useful to inform how materials might be adapted.

Observations made throughout this process inform an understanding of factors affecting a learner's language acquisition.
2. Understand. Observations provide a starting point for understanding possible causes for an individual learner's limited progress. Factors affecting a language learner's progress vary. The learning support service approaches the learner holistically, taking into account the possibility of a learning disability, but also recognizing linguistic, sociocultural, and socio-affective factors.

Learning disabilities. In other adult learning environments, a learning support service might involve testing for learning disabilities. One in 10 persons in Canada is thought to have a learning disability (Price \& Cole, 2009). If learning disabilities affect such a large percentage of a population, then it would make sense that one in 10 ELLs and one in 10 LESLLA learners has a learning disability. While CIWA's Learning Support Service can refer a learner for learning-disability testing if deemed beneficial, it is not equipped to assess learning disabilities. The issue of testing for learning disabilities in adult English-language learners, however, is problematic. For example, diagnosing a person with a learning disability requires eliminating any other cause of the learning difficulty. Also, most adult ELLs who are referred for additional support experience multiple barriers. For LESLLA learners, developing literacy skills for the first time and in a new language means that language acquisition will look different from that of most adult ELLs. In addition, physical health issues, lack of sleep, and trauma can all affect learning. On top of this, test questions are culturally biased. For example, a person raised outside of a Western culture may understand a question differently from how it was intended (PANDAMinnesota ABE Disability Specialists, n.d.). In addition to all of these complicating factors, the tests are in a language that the individual is still learning.

Given the complexity of factors affecting LESLLA learners' language and literacy acquisition, concentrating on learning disabilities is likely not a productive objective. Instead, Learning Support Services has concentrated on identifying a learner's strengths and challenges, determining which skills are developed or not, and pinpointing strategies
that are currently observed. Learning disability research is used to better understand best practices in supporting multibarriered learners.

Linguistic factors. Linguistic factors are a key consideration when identifying strategies that will support a learner's language acquisition. Learners who accessed learning support services in 2012-13 were affected by multiple linguistic factors. First, language literacy, English orthography, and contextual knowledge are some of the linguistic factors considered in understanding an adult ELL's language skills development. Additional linguistic factors, which are beyond the scope of this paper, affect second-language and literacy acquisition.

Most referred learners in 2012-13 reported no or limited formal education in the first language, including those learners from the general ESL program. Literacy skills often acquired in L1 that are transferable to second-language literacy acquisition were not in place for these individuals. During the needs assessment, outcomes from the ESL Literacy Curriculum Framework (Bow Valley College, 2011) and the Canadian Language Benchmarks for Literacy Learners (Johansson et al., 2001) served to approximate the ESL literacy benchmarks at which a learner was working. Some learners were at the foundational level, working on conceptual skills like connecting meaning and print at the most fundamental level. Other LESLLA learners who were referred were able to read at the sentence level, but had missed some of the literacy skills for which their classmates with more formal schooling may not have needed instruction.

Ten years of LESLLA research to date highlights the importance of recognizing the impact that limited formal education in L1 has on literacy development as an adult in L2. Studies in the Netherlands and United Kingdom note learning differences for those with limited formal education in L1 and those with no formal education in L1 (Kurvers, Stockmann, \& van de Craats, 2009; Young-Scholten, 2009). One study showed that no years of formal education in L1 significantly differentiates the time it takes to develop literacy skills in L2 from those who have had limited formal education in L1 (Kurvers, Stockmann, \&
van de Craats, 2009). Most LESLLA learners in Calgary study English in classes alongside high school and university graduates. Given recent findings about how LESLLA learners acquire language and literacy, it is no surprise that these learners plateau in their literacy acquisition.

Adding to the complexity of L2 literacy acquisition for many language learners is the opaque nature of the English orthographic system (Lems, Miller, \& Soro, 2010). Relying on sound-letter correspondence alone will enable readers to decode words like rent, but not bought. ESL literacy learners must learn to engage multiple decoding and encoding strategies to achieve reading fluency. Phonological awareness, phonics skills, and word patterning strategies are all integral features of effective reading and writing instruction.

Gaps in background knowledge can mean that a learner misunderstands or misses the intended meaning of a text or classroom activity. Roessingh (2005) notes that even when a learner can read the words and sentences in a text, the meaning can be lost when the text is culturally embedded. She argues that part of teaching the text is uncovering the underlying concepts together before reading. For LESLLA learners who have developed the literacy skills to begin preparing for adult basic education programs (e.g., grade 5-6 preacademic upgrading course work), support to develop awareness of common themes and contexts that they will encounter as they continue their education can be helpful.

Socio-affective and socio-cultural factors. Socio-affective and sociocultural factors can also contribute to a learner's progress or act as a barrier to further language and literacy development. A learner's level of acculturation, affective filter, and experience with violence can also affect her ability to learn a language.

The ability of a newcomer to adapt to the host country while maintaining her heritage can increase or decrease stress levels and make it easier or more difficult to complete tasks like grocery shopping or visiting a doctor. Some learners describe the difficulty of raising children in a culture very different from their own. A case study by Norton and

Toohey (2001) shows how the acceptance and value of an immigrant by the dominant culture can influence L2 development. In their study, acceptance into the dominant culture resulted in increased opportunities to speak the target language and achieve stronger language gains.

The affective-filter hypothesis suggests that stress levels faced by a language learner impact her language acquisition (Krashen, 1982). Stressors connected to language learning or from life beyond school increase the affective filter, making language learning more difficult. Learners might experience fear of embarrassment in the classroom and difficulty adjusting to life in a new country.

Violence and trauma, both past and present, are also factors that affect adult language learners. Jenny Horsman and the Spiral Community Resource Group (n.d.) note that acting out, spacing out, and attending sporadically are sometimes related to experiences of violence or trauma. Given that many LESLLA learners in Canada arrive as refugees, considering trauma as a possible factor may be helpful.

The above description of how learning disabilities and linguistic, socio-affective, and socio-cultural factors might influence language and literacy acquisition is brief and omits numerous other factors that are beyond the scope of this paper. However, they illustrate ways in which taking a holistic approach to understanding a learner makes it possible to offer individualized support that will meet that learner's needs.

## Support

The resulting support that came from observing and understanding the learners varied. Specific instructional strategies were recommended to the instructional team in a type of learning plan. In year one of the service, all referred learners received either some individual or smallgroup instruction, as educational assistants were available within the programs in addition to the in-class modifications made by classroom instructors. The following chart breaks down the types of support provided for low-educated and formally educated learners.


Figure 2: Individual versus small-group supports for low-educated and formally schooled learners

Professional development was also made available to agency staff. Finally, the learning support service liaised with other departments within the agency to increase learners' support networks. What follows is a description of the types of support offered to LESLLA learners in year one.

Pulloutinstruction. One instructional team made accommodations for a small group of LESLLA learners who were studying in a mainstream ESL class. Recommendations for providing focused support for this group were grounded in best-practice guidelines in two areas: working with LESLLA learners and working with learners with reading difficulties.

The educational assistant worked with five learners for 30-60 minutes a day, focusing on literacy instruction and strategy development. The classroom instructor and learning-support specialist worked together to develop reading materials at two levels. They also developed supplementary materials for each group. For the group of LESLLA learners, these materials included highly supported tasks to develop skills required in a classroom setting, such as matching exercises and
true-or-false comprehension questions. (See DeCapua and Marshall's work, 2010, for a discussion on developing academic skills in lowliteracy learners.) By creating two sets of leveled materials, the classroom instructor and educational assistant were able to carry out instruction with similar content and with level-appropriate materials for each group of learners. While this process might be considered time-consuming, the result was that the group of LESLLA learners was able to work with materials at their instructional level and develop both literacy and academic skills.

In this instance, the classroom instructor and educational assistant incorporated balanced literacy instruction into their lesson planning, beginning with a context that is familiar and relevant to learners, and then engaging learners in phonics and grammatical learning within that context (Vinogradov, 2009). The group of low-educated learners received daily instruction using the same text for one week. The instructor and educational assistant working with these learners were then able to follow a Whole-Part-Whole model (Trupke-Bastidas \& Poulos, 2007) to work on reading and writing skills. LESLLA research recognizes the importance of making connections between learners' lives and literacy activities (Condelli \& Spruck Wrigley, 2008) and building literacy skills on already existing oral language skills (Vinogradov \& Bigelow, 2010).

Best practices in working with young emergent readers who have reading difficulties were also incorporated into the literacy instruction of LESLLA learners. Marie Clay's Reading Recovery program was developed as an early interventionist model to prevent literacy difficulties for the lowest-scoring students after one year of school (National Reading Recovery Centre, n.d.). Reading Recovery is a highly rigorous model that may not be fully implemented with adult L2 learners. Aspects of the program, however, have been helpful in informing the development of learning plans at CIWA. Clay (1993) recognized the necessity of intensive, daily reading instruction that emphasizes targeted literacy strategy and skills development. This reading interventionist methodology involves carefully scaffolded instruction that supports struggling young readers to come up to grade level. Instructors at the

Calgary Immigrant Women's Association drew from Clay's methodology when working with the group of five LESLLA learners. These students' strategy work included the use of sound boxes, or Elkonin boxes (see below), to develop phonological awareness. Learners worked with word families and developed analogy-recognition skills within their texts. These tasks were helpful in progressing these learners' literacy skills.


Figure 3: Sound boxes are used to develop phonemic awareness. A learner listens to a slowly articulated word. She moves one token onto the card for each phoneme she hears. Above, a card with three boxes is used for a word with three phonemes (Clay, 1993), such as bus or phone.

Torgesen's (2002) recommendations for the prevention of reading difficulties also influenced the development of CIWA's learning plans. In his work on reading difficulties in children, Torgesen argues that explicit, intensive, and supported reading instruction is key if young readers who are struggling with literacy are to avoid ongoing reading difficulties throughout their school years. Since LESLLA learners have had limited exposure to literacy in L1 and are now learning to read and write in a new language, it would follow that LESLLA learners also need explicit, intensive reading instruction. Torgesen offers phonemic awareness as an example of a skill that must be explicitly taught and rehearsed regularly (intensively) to build a foundation for phonological awareness. In the LESLLA group described in this paper, instructors used sound boxes with bingo chips instead of letters as one tool to develop phonemic awareness.

Individual support. Some learners worked with a tutor in or out of class, for periods as short as 15-20 minutes a day and up to one hour,
two times per week, targeting their specific needs. Those receiving individual support either were in different classes or had dissimilar needs. Both previously unschooled and schooled learners worked on tasks to develop phonological awareness. Phonological awareness and pronunciation exercises were often taught together, particularly with vowel sounds, which tended to be the most problematic for referred learners.

Learners in an employment training program for low-literacy women were referred for assistance with language, literacy, and content area. These learners participated in individual support at the beginning, when the focus of support was largely language and literacy. The focus of their support later shifted to developing study skills that would enable them to recognize the main ideas in their courses and learn industryspecific language. These learners functioned at a slightly higher level of English literacy than did the LESLLA learners described earlier.

In-class modifications. In addition to using a pullout model of instruction for referred learners, recommendations were made for possible in-class modifications. One instructor who referred students for learning support services noted that a number of learners in her class were not making the connection between a simple worksheet-based medicine label reading activity and the purpose of the text. Most of the learners who had difficulty with the task were LESLLA learners in her mainstream classroom. After consulting with learning support services, the instructor carefully scaffolded the medicine label reading activity task by attaching simplified labels to old medicine bottles. This use of realia with adapted medicine labels was found to be highly successful when paired with explicit instruction and ongoing practice. This reflects the importance of providing clear instruction to LESLLA learners on how to perform abstract classroom tasks, as described by DeCapua and Marshall (2010). Still, one LESLLA learner unable to complete the task was confused by a later stage of the task, which involved transferring the information from the medicine bottle to a paper-based matching
activity-a reminder that applying concrete knowledge and decoding skills to abstract tasks can be problematic for unschooled learners.

The same instructor began incorporating regular phonological awareness-building tasks into her classroom instruction, with the idea that there might be additional learners who would benefit from it. While this was found to support more than the group of referred LESLLA learners, those who had more experience with formal education were observed to require less emphasis on these types of metalinguistic tasks than did the low-educated and previously unschooled learners.

Teaching strategies employed in the first year of the service were implemented via pullout instruction, individual support, and in-class modifications for referred learners. This service would not have been complete, however, if it focused only on these individual learners.

Professional development and training. The creation of learning plans was a collaborative process that involved working with the instructional team to identify and understand learner needs and determine potential teaching and learning strategies that would work in class. As noted earlier, support was offered in the process of adapting or writing texts and supplementary materials. This type of work created opportunities to consider the unique needs of LESLLA learners collaboratively and increase the instructor's ability to identify learner needs independently.

In its first year of service, CIWA's learning support service offered professional development workshops to family literacy practitioners. This particular family literacy program works primarily with mothers who have limited formal education in L1. The program's objective is to provide parents with the skills and tools needed to develop schoolreadiness skills in their preschool children. Workshops addressed topics such as the role of L1 literacy in second-language literacy and the impact of trauma on learning.

Recognizing the whole person. Referred learners were immigrants and refugees with varied life experiences. Supporting the LESLLA learner may be as much about making connections to resources outside
of the classroom as it is about language and literacy learning. During the intake interview, a learner sometimes chooses to disclose information that learning support services is unable to handle directly. In such cases, referrals to counselors are made for housing, employment training, and one-on-one counseling. Services for settlement and integration, family counseling, and employment are available in numerous languages from CIWA staff or volunteer interpreters.

During the first year of service, referred learners identified numerous issues affecting their learning. A number of learners cited problems with eyesight. Some lived in precarious situations or were near homelessness. Others experienced distress over separation from children, or they identified financial concerns that distracted them from learning at school. Learners who chose to name these issues were offered assistance in scheduling an appointment with professionals who were then able to offer more specialized services.

Addressing the material and affective facets of a learner's life helps to alleviate immediate needs. It also provides an additional person in the learner's support network for the future. Working closely with other departments has proven to be fruitful, as learners who have a place to live and who have adequate nutrition are better able to concentrate than those who live in shelters or wonder where they will find their next meal.

In its first year of existence, CIWA's learning support service provided holistic support to learners and instructors by (1) suggesting instructional strategies for individual support, pullout support, and in-class modifications; (2) offering formal and informal professional development to practitioners; and (3) expanding a learner's support network for needs in the areas of settlement and integration, family counseling, and employment skills development.

## Significance to the LESLLA Community

After 10 years of research in the LESLLA community, second-language literacy programs now have a bank of best practices from which to draw.

LESLLA's mandate to connect research and practice will continue to be a critical element in the successful support of unschooled and low-educated adult L2 learners in language training programs for immigrants and refugees. The service described in this paper endeavors to contribute to this effort.

The learning support service described was implemented within programs for low-educated L2 learners and also in general ESL programs for newcomers to Canada. Employing a model to observe, understand, and support learners who had not made noticeable progress proved to be valuable in addressing unmet needs and facilitating the growth of L2 and literacy skills of referred learners. Successful implementation of the model described depended on the collaboration of instructors, program coordinators, settlement practitioners and counselors, and the learning support specialist to provide a holistic approach to supporting referred learners.

## References

Bow Valley College. (2011). Learning for Life: An ESL Literacy Curriculum Framework. Retrieved from ESL Literacy Network,: http://www.esl-literacy.com/curriculum-framework
Clay, M. (1993). Reading Recovery: A guidebook for teachers in training. Portsmouth, NH: Heinemann.
Condelli, L., \& Spruck Wrigley, H. (2008). The What Works Study: Instruction, literacy and language learning for adult ESL literacy students. In S. Reder, \& J. Bynner (Eds.), Tracking adult literacy and numeracy skills: Findings from longitudinal research (pp. 132159). London and New York: Routledge.

DeCapua, A., \& Marshall, H. (2010). Serving ELLs with limited or interupted education: Intervention that works. TESOL Journal, 49-70.
Johansson, L., Angst, K., Beer, B., Martin, S., Rebeck, W., \& Sibbileau, N. (2001). Canadian Language Benchmarks 2000: ESL for literacy learners. Centre for Canadian Language Benchmarks and the Government of Manitoba.
Krashen, S. D. (1982). Principles and practice in second language acquisition. Oxford, England: Pergamon Press.
Kurvers, J., Stockmann, W., \& van de Craats, I. (2009). Predictors of success in adult L2 literacy acquisition. In T. Wall, \& M. Leong (Eds.). Proceedings from the $5^{\text {th }}$ LESLLA Symposium-LowEducated Second Language and Literacy Acquisition (pp. 64-78). Banff, AB: Bow Valley College.
Lems, K., Miller, L. D., \& Soro, T. M. (2010). Teaching reading to English language learners: Insights from linguistics. New York: Guilford Press.
Lovrien Schwarz, R. (November 2005). Taking a closer look at struggling ESOL learners. Retrieved from the National Center for the Study of Adult Learning and Literacy, http://www.ncsall.net/ fileadmin/resources/fob/2005/fob_8a.pdf

National Reading Recovery Centre (n.d.). Reading Recovery. Retrieved June 3, 2014, from Reading Recovery New Zealand, http:// www.readingrecovery.ac.nz/reading_recovery/index.php
Norton, B., \& Toohey, K. (2001). Changing perspectives on good language learners. TESOL Quarterly, 35(2), 307-322.
PANDA—Minnesota ABE Disabilty Specialists. (n.d.). Learning disabilities: English language learner applications. Retrieved from the Adult Basic Education Manual, http://mn.abedisabilities.org/ abe-disability-manual/learning-disabilities/english-language -learner-ell-applications
Price, A., \& Cole, M. (2009). Best practices in teaching students with learning disabilities. Department of Education, Nova Scotia. Calgary, AB: Calgary Learning Centre.
Roessingh, H. (2005). The intentional teacher: The mediator of meaning making. Journal of Educational Thought, 39(2), 111-134.
Spiral Community Resource Group. (n.d.). Impact. Retrieved September 7, 2014, from Learning and Violence, http://www. learningandviolence.net/impact.htm
Torgesen, J. K. (2002). The prevention of reading difficulties. Journal of School Psychology, 7-27.
Trupke-Bastidas, J., \& Poulos, A. (2007). Improving literacy of L1 non-literate and L1 literate adult English as a second language learners. MinneWITESOL Journal, 24.
Vinogradov, P. (September 2009). Balancing top and bottom: Learnergenerated texts for teaching phonics. In T. Wall, \& M. Leong (Eds.). Proceedings from the $5^{\text {th }}$ LESLLA Symposium-LowEducated Second Language and Literacy Acquisition (pp. 3-14). Banff, AB: Bow Valley College.
Vinogradov, P., \& Bigelow, M. (August 2010). Using oral language skills to build on the emerging literacy of adult English language learners. Retrieved from CAELA network briefs, http://www.cal.org/ caelanetwork/resources/using-oral-language-skills.html
Wall, T. (2013). English language learning for everyone. Calgary, AB: Calgary Immigrant Women's Association.

Low Educated Second Language and Literacy Acquisition
Young-Scholten, M. (2009). Non-literate L2 adults' small steps in mastering the constellation of skills required for reading. In T. Wall, \& M. Leong (Eds.). Proceedings from the $5^{\text {th }}$ LESLLA Symposium-Low-Educated Second Language and Literacy Acquisition (pp. 80-91). Banff, AB: Bow Valley College.

# Determining What LESLLA Learners <br> Want to Do in Class: A Principled <br> Approach to Needs Assessment 

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#### Abstract

Trying to assess what literacy learners want to learn in class when they have limited English oral and written skills is a challenge. For this project, we reviewed current needs assessment tools designed for LESLLA learners and found them lacking. We used action-research methodology to design a new needs assessment tool to help LESLLA learners prioritize potential topics of interest, which could then be covered in an ESL class. We found that learners enjoyed this particular needs assessment and that it helped them to focus on learning goals. As instructors, we noted that this activity was a good use of class time and also that it helped us to focus our instruction. We argue that this method is one way of conducting a needs assessment for LESLLA learners, and that the field would still benefit from additional approaches.


## The Role of a Needs Analysis in Teacher Planning

Developing a language learning program that meets the stakeholders' outcomes as well as the learners' skills, needs, wishes, and goals consists of following many steps (Brown, 1995; Graves, 2000; Richards, 2008). According to Brown (1995), language program development should involve conducting a needs analysis to identify learners' needs;
determining objectives; testing to identify placement, proficiency, and learning; finding or creating appropriate materials; and teaching the learners. These steps are not completely linear and may need to be revisited once new information at any stage has been uncovered. Therefore, it is essential to continue to evaluate the program and make additional changes according to learner needs.

Graves (2000) also describes multiple steps in designing an appropriate language course. In the following, she defines needs assessment as:
> a systematic and on-going process of gathering information about students' needs and preferences, interpreting the information, and then making course decisions based on the interpretation in order to meet the needs. It is an orientation toward the teaching learning process which views it as a dialogue between people: between the teacher and administrators, parents, other teachers; between the teacher and learners; among the learners. It is based on the belief that learning is not simply a matter of learners absorbing pre-selected knowledge the teacher gives them, but it is a process in which learners - and others - can and should participate. (p. 98)

Again, Graves (2000) specifies that needs assessment is greater than simply identifying learners' interests and abilities; it is used to develop self-reflection skills in learners, to learn how to identify personal learning needs, and to create personal ownership of the learning process. Moreover, it establishes a line of communication between the learner and the instructor. Some of the methods she suggests for initially collecting this information are questionnaires, interviews, educational activities (grids, charts, lists, writing, and ranking), and group discussions. Brown (1995) also lists examining existing learner information and test scores, and engaging in meetings.

In the LESLLA classroom, most of these needs assessment tools are inappropriate, given the very nature of our learners. For example,
a typical suggestion for a classroom may require learners to write a paragraph outlining what they want to achieve over the semester. LESLLA learners struggle with basic writing and are in no position to complete a task like this without substantial assistance. We cannot conduct many of the suggested activities such as ranking or charting even in a first language because our learners lack the school-related skills that make the task seem relevant to them. Previous test scores and existing learner information are probably most effective for determining that certain learners belong in our class rather than for determining what learners want to know-and even then, they are problematic. Using formal tests, whether for placement or to assess learners, is a socially constructed reading practice that comes from formal education. In fact, even our best option, interviewing learners, is fraught with challenges. It implies that we are speakers of the learners' L1 or that we have available translators, and that we have adequate time to sit with each learner. Even more challenging, asking learners what they want to learn in class implies that they have enough experience with formal language education to be specific about what they want, and even that they understand the purpose of the question. In our experience, when LESLLA learners are asked (even in their L1) what they want to study, their response is, "English!" When prompted to be more specific, they generally reply with something such as, "Everything. I need to know everything in English."

## Our Methodology

Our research question emerged when we were informed that we would need to conduct a needs assessment for our learners. We looked at the tools currently available to us but found them lacking. We knew they needed improvement, yet we were not sure how best to go about improving them. We decided that this would make for an excellent action-research project. We used Lodico, Spaulding, and Voegtle's (2010) seven steps for developing action research as a guide. These steps
included identifying a problem, understanding the current teaching context, reviewing the literature, creating a plan of action, carrying it out, and then collecting data, reflecting on the data, and making tentative conclusions.

Once we delved into the current definition of needs assessment, we had the language to define our problems with the other needs assessment tools and to discuss why they were insufficient. Once we knew what we did not want and why, we were able to start working on creating what we did want. This project was refined over three semesters. Each time that we followed our procedure for conducting the needs assessment, we returned to our definition and added to our steps. We have concluded that a needs assessment, at least for LESLLA learners, involves planning, delivery, and ongoing work. Our current procedure is described below.

## Our Teaching Context

In our teaching context, students come to us having already been screened by a government agency called the Language Assessment Referral and Counselling Centre (LARC). At LARC, learners with permanent-resident cards are tested and informed about potential programs offered in the city. If the assessor believes that the learner has little formal education or if the learner self-reports this, then the assessor administers a nationally designed literacy test called the Canadian Language Benchmarks: Literacy Placement Tool (LPT) (Tang \& Fraser, 2005), which determines abilities in the four skills. In addition to being asked about their previous education, students are asked about their academic needs and aspirations. The students then select a program or school that they would like to attend (full time, part time, seniors' courses, parenting classes, etc.) and are presented with a Canadian Language Benchmarks (CLB) card. They take this card to the institution of their choice and present it in order to inform the school of their language proficiency level.

After arriving at our institution, students meet with an intake worker who helps them fill out a registration form. They are then placed on a waiting list for a suitable class. When a spot becomes available, students are called and told that they can attend the class. On the first day, each student receives a placement slip that he or she gives to the teacher. If the student has a child in day care, then the student registers the child with the day-care staff, fills out necessary paperwork, and receives a brief orientation to the day-care program. While we have ongoing enrollment, students typically begin at the start of the academic semester. Although it is possible for multiple students to enter midway through the program, it is rare. With small class sizes (only 12 students for each literacy class) and a long waiting list, our students tend to value their opportunity to attend class.

While there are some exceptions, LESLLA learners are generally placed appropriately in our classes. At our institution, learners are placed according to their reading/writing abilities, numeracy skills, and previous education, rather than their oral skills. We keep files on students that identify the languages that they speak (when known), their contact information, initial placement scores, intake interviews, previous report cards, and familial information. Without exception, our learners are adults. Most are refugees from Africa or Asia, although some are immigrants by choice. Approximately $75 \%$ are mothers of large families and have little formal schooling.

## Developing Our Needs Assessment

Conducting a needs assessment that focuses on both students' interests and the curricular expectations of the Canadian Language Benchmarks requires many more steps than a typical needs assessment conducted in a class with more-advanced language and literacy skills. In our experience, LESLLA learners have a difficult time with prioritizing and goal setting, both of which, we believe, are school-related and culturally embedded skills. As a result, our system for needs assessment
takes place in three distinct phases: planning, delivery, and ongoing needs assessment.
Planning. The planning phase of our project was conducted over three steps: brainstorming potential topics, linking the potential topics to the Canadian Language Benchmarks, and selecting images that correspond to potential tasks.

Step 1. Brainstorming potential topics. We began planning our needs assessment by brainstorming potential appropriate topics. Since we have a mandate of teaching settlement English (i.e., those topics that are most relevant to learners' immediate living needs), we are somewhat restricted in the range of what we can offer our students. While Valentine's Day might be interesting to our learners, we exclude it because it does not help our learners find jobs, contact landlords or seek medical attention. Accordingly, our first step was to create a mind map listing key topics that might be covered in class (see Figure 1). We admit that the map is not exhaustive, but it did provide us with ideas.


Figure 1. Brainstorming of potential topics to be covered in class

Once we brainstormed potential classroom themes related to settlement, we limited our learners' choices by selecting only four. We picked four themes for two main reasons: first, we wanted our learners to prioritize, so it was important not to flood them with options; and second, we wanted to link our themes to our curriculum guides: the Canadian Language Benchmarks: English as a second language for adults (Hajer \& Kaskens, 2012), and the Canadian Language Benchmarks 2000: ESL for literacy learners (Johansson et al., 2001). While any of the potential topics could have been interesting to our learners and instructors, we looked at what we had covered previously and then thought about our resources. We were prepared to cover community, law, children's schools, and banking.

When we examined the obtained needs assessment tools for LESLLA learners, we found that they unfortunately stopped at step 1. Typically in the existing needs assessments, the analyst creates a page with potential topics and asks the learner to select from these abstract nouns (see Figure 2 for a sample of a typical needs analysis). We feel that this style of needs analysis does not work, for several reasons. First, abstract nouns such as transport are not always easily represented in pictures. While a picture of a bus may be used to refer to transport, it could also mean learning different forms of transportation, taking a bus, becoming a bus driver, or fixing a bus. Bruski (2012) refers to these sorts of images as symbolic and says that many second-language learners have challenges when interpreting them. Second, learners have difficulty linking images with tasks. For example, LESLLA learners may not equate the abstract noun law with the task of speaking to the police about traffic violations. Since instructors need to deliver tasks, learners' choices should be presented to them in the form of tasks if the needs analysis is to be relevant to the learners. Strube, van de Craats, and van Hout (2009) discovered that LESLLA learners of L2 Dutch found it challenging to retell picture-stories even after eight months of instruction. These learners often saw the pictures as separate elements instead of part of a whole; they misinterpreted them and lacked coherence when describing them.


Figure 2. Typical needs analysis
Step 2. Linking the potential topics with the CLB. After having chosen potential themes (community, law, children's schools, and banking), we examined how each theme could be linked to our curriculum guides. In LINC programs, literacy instructors are expected to use two guides for planning. The first, Canadian Language Benchmarks: English as a second language for adults (Hajer \& Kaskens, 2012), outlines speaking and listening goals. Canadian LINC instructors, regardless of the previous educational experience of their learners, use this document for guiding the speaking and listening portion of their lessons. Speaking competencies are listed as interacting with others, giving instructions, getting things done, and sharing information. Similarly, listening competencies are interacting with others, comprehending instructions, getting things done, and comprehending information. Instructors who do not teach LESLLA learners use the remainder of this document for guiding the reading/writing portion of their classes.

The second, Canadian Language Benchmarks 2000: ESL for literacy learners (Johansson et al., 2001), is used by instructors to guide reading, writing, and numeracy instruction for LESLLA learners. The authors have broken reading instruction into four language
competencies: reading and understanding formatted and unformatted interactional messages, reading and understanding short instructions, reading and understanding formatted and unformatted information, and reading and interpreting written ideas and feelings. They have broken writing into four language competencies, as well: conveying formatted and unformatted interactional messages, recording formatted and unformatted information, presenting formatted and unformatted information, and expressing written ideas and feelings.

We created the following table to assist us in selecting images.

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| Community | Banking | Children's Schools | Law |
| Interacting with others <br> Task: Make an appointment for a flu vaccine | Giving instructions <br> Task: Send money overseas | Getting things done <br> Task: Call your child's school to report an absence | Sharing information <br> Task: Call emergency services |
| Listening |  |  |  |
| Community | Banking | Children's School | Law |
| Interacting with others <br> Task: Get rid of bed bugs/ head lice | Comprehending instructions <br> Task: Understand the bank teller | Getting things done <br> Task: Listen to the menu options on the telephone | Comprehending information <br> Task: Learn about car safety |
| Reading |  |  |  |
| Community | Banking | Children's School | Law |
| Read and understand short messages <br> Task: Read the names of shops and services in the community | Read and understand short instructions <br> Task: Read ATM instructions | Read and understand information <br> Task: Follow your child's school calendar | Read and interpret ideas and feelings <br> Task: Read major traffic signs |
| Writing |  |  |  |
| Community | Banking | Children's School | Law |
| Convey formatted and unformatted messages <br> Task: sign up for a community event | Record formatted and unformatted information <br> Task: completing a form to send money overseas | Present formatted and unformatted information <br> Task: fill in a child's reading log | Express written ideas and feelings <br> Task: exchange insurance information after an accident |

Step 3: Selecting images for the needs assessment. Once we had established a potential list of tasks that might occur within a particular theme, we selected images that reflected these tasks. In total, we selected 20 images. The images represented the following categories: headings (one image each that represented the concept of speaking, listening, reading, and writing; four images for speaking tasks based on the previous chart; four images for listening tasks; four images for reading tasks; and four images for writing tasks). We chose our pictures based on certain principles:

- Use photographs instead of clip art. We believe that clip art or cartoon images are difficult for our learners to understand (Bruski, 2012; Dowse, 2004; Strube, van de Craats, \& van Hout, 2009).
- Use pictures that reflect the task, rather than pictures that reflect the theme (i.e., remove symbolic images). For example, a picture of a judge could represent the theme of law, yet it most likely would not be clear from the context what exactly the students were expected to learn about law. A photo of people exchanging information at the scene of an accident makes it clearer to learners that they will be learning about law specifically regarding traffic accidents (Bruski, 2012).
- Avoid photos with busy backgrounds, unless the background makes the picture more comprehensible (Szwed, Ventura, Querido, Cohen, \& Dehaene, 2012).
- Use photos of adults, unless children are specifically a part of the theme; avoid images that look childish (Bell \& Burnaby, 1984).

Delivery. The delivery phase of our project was conducted in class with our learners. It took approximately 15-20 minutes of class time.

Step 4: Beginning the needs assessment with the learners. We used the images from step 3 in order to identify the interests of our learners. We began by giving each student an adhesive-backed memo note and asking her to write her name. For a learner who was not yet able to write her
name, we used a highlighter pen to write the name for her and asked her to trace it. We posted the four pictures that represented speaking, listening, reading, and writing on the board. We asked the students to identify the four skills and then asked them if they knew what they meant. During the discussion, some students made statements such as, "Speak to my friend," "Listen to music," "Read the book," and "Write on the paper." We took these statements as proof of student comprehension. We then asked our learner who spoke the most English which skill she wanted to learn the most. We asked her to bring her adhesivebacked memo note to the front of the class and place it on the picture of the action that she most wanted to do. We then asked our second most orally proficient student to do the same. Finally, we invited the remaining students in our class to do the same. We reviewed the student choices with statements such as, "Three people want to study speaking, and six people want to do listening."


Figure 3. Students have placed their names on their chosen activities to be covered in class

Next, we removed three of the four photos from the board and left the photo for speaking. Under it, we placed the four potential speaking tasks that learners might complete with us. Again, we talked about each photo: "You must call the school when your child is sick, when you want to make an appointment for the flu shot, when you want to
send money to your family, and when you want to talk to the police." Students began talking to each other in their first language and began translating for each other; they discussed what each photo meant. We handed each student an adhesive-backed memo note, asking them to write their name on it, come to the board, and choose the task they most wanted to do. The photo below demonstrates how the students completed this activity.


Figure 4. The first student places her name under the listening activity that she most wishes to cover in class.

We completed the same exercise for the three remaining skills: listening, reading, and writing. With each set of pictures, we discussed the potential tasks and asked learners about them. We passed out a new adhesive-backed memo note to each student and asked her to choose. We observed that some students appeared to randomly place their note, while others looked pensive. Some students said that they wanted more than one note, but we told them that they could only choose one.


Figure 5. Examples of students' names placed on their chosen activity
Ongoing needs assessment. An essential component of our needs assessment process is that it is ongoing.

Step 5. Charting student responses. We found that it was important to show our learners that we used their responses for planning and developing classroom activities. Therefore, it was essential that we have some kind of long-term visual representation in the classroom. Without this visual, the learners would not see the link between the selecting activity that we just completed and the tasks that we would be completing in class. We typed the learners' choices onto a chart, which we displayed in a prominent place in the classroom. Whenever we worked on a new activity, we pointed out to our students that it was a speaking, listening, reading, or writing activity so as to remind students of their priorities. For example, we might make a statement such as, "This is a speaking activity. We will learn how to speak to your child's teacher. Maryam, you said it was important for you to speak to your child's teacher." While not every learner was able to study the theme of her choice, each learner at least worked on activities that related to her preferred skill.

Step 6: Creating a unit plan. After we determined what the interests were from the learners, we started to plan our unit. Our theme was the one chosen by the greatest number of responses from the voting activity of step 3. In this case, the majority of our students chose the tasks associated with the law. We created four tasks based on the learners' choices. These are presented in the chart below.

| Tasks | Canadian Language <br> Benchmark Competencies | Skill-building activities |
| :--- | :--- | :--- |
| Following police instructions <br> at a traffic stop | II. Comprehending <br> Instructions <br> -Understand[ing] very short, <br> simple instructions, <br> commands and requests <br> related to immediate personal <br> needs. P. 4 | Imperative verbs for the police <br> (give me your licence, put <br> your hands on the wheel, etc.) <br> What your rights are when <br> you are stopped |
| Speaking <br> of an accident | II. Giving Instructions at <br> -us[ing] imperative forms and <br> memorized stock expressions | Knowing what you must do at <br> the scene of an accident <br> Formulaic expressions to <br> make sure everyone is okay |
| -us[ing] appropriate courtesy <br> words such as please and <br> thank you) p. 40 | Knowing how to call an <br> ambulance |  |
| Leading <br> Looking up wheighbourhood snow they are <br> removal on the city website <br> (This means there is a parking <br> ban in effect.) | Read[ing] and understand[ing] <br> formatted and unformatted <br> messages (simple notes and <br> letters) p. 17 | Reading the days of the week. <br> Identifying the city website. <br> Typing one's address. |
| Writing <br> Exchanging information at the <br> scene of an accident | Record[ing] formatted and <br> unformatted information <br> (copy[ing] or reproduc[ing] <br> information from a student <br> card) p. 19 | Practicing copying down pink <br> card information, licence <br> plates, driver's licence <br> information, and phone <br> numbers |

Step 7: Ongoing assessment. As mentioned in step 5, we felt it important to remind students of the choices that they had made previously. We also made a point to note the activities that the learners seemed to enjoy. At the end of each week, we looked over the activities completed in class and had the students vote on which were their favorites. Once we had completed the unit (approximately six weeks), we repeated the needs assessment.


Figure 6. Another example of students' names showing their chosen activity

## The Significance of Our Project

Teaching second-language-learning adults with no first language literacy presents special challenges. Our adult students have never been to school and, as a result, often lack more than the ability to read; they lack other school-related skills (Bell \& Burnaby, 1984; Faux, 2004). Some of the missing skills are interpreting pictures (Bigelow \& Vinogradov, 2011; Dowse, 2004), making realistic short- and long-term goals (Fritz \& Alsabek, 2010), completing worksheets (Trupke-Bastidas, 2007), and understanding why they are being asked to complete certain tasks (Crevecoeur, 2010).

When we measured the previously available needs assessment tools against the definition presented by Graves (2000), we found those tools lacking. According to Graves' definition, needs assessment was meant for more than mining learners' interests. By participating in a needs assessment, learners were meant to open an instructor-learner dialogue, to identify their own learning goals, to take ownership of their learning, and to develop metacognition (Hardy, Albertsen, \& Millar, 2009). As instructors, we wanted these for our learners as well, yet we realised that to develop these, we would need to create tools that would help us achieve these things. To do this, we needed something to bridge the actual needs assessment activity with what was done daily in class. We could not assume that our learners drew connections between our needs assessment and our tasks. This meant that our procedure would require multiple steps.

We found that by conducting our needs assessment in this way, we were able to talk to learners about what they wanted in a manner that we were not able to do previously. The pictures of the tasks (as opposed to the abstract nouns) transformed the needs assessment from something theoretical and foreign to something concrete and comprehensible. When we asked the students to choose among the four skills (speaking, listening, reading, and writing), we were certain that they understood the task. This scaffolding helped the learners understand that we were asking them to prioritize and make choices. Yet, our communication with our learners did not end there. We continued to engage them in dialogue by posting their choices in the classroom and referring to them often, and by reviewing activities each week and voting to decide which activities were the favorites. And while some learners took these steps more seriously than others, all expressed their preferences and were heard.

In addition to creating dialogue between our learners and ourselves, the needs assessment helped us to set meaningful goals. Once learners chose tasks that were personally relevant, they were in a better position to articulate what they wanted to learn. We used this information to write learner contracts-a requirement at our institution. We found
that our students' goals became not only more specific, but also purpose driven. They changed from "I want to improve my reading" to "I want to be able to read store signs so that I know what each store is selling." This, in turn, helped learners to take ownership of the learning process.

Teaching one's learners how to learn is an important aspect of a LESLLA instructor's job. Yet, we know very little about developing metacognition in our learners. We found that this project helped us to teach learners both to prioritize and to see an interconnectedness between all of the activities we do in class. By forcing the learners to vote with only one adhesive-backed memo note, they had no other choice but to prioritize. The initial choice of the four skills (reading, writing, speaking, and listening) led to an increasing narrowing of options, which, in turn, made goal setting specific and achievable. This also helped our learners to see the connectedness between the activities in class. Because our learners also voted regularly and reviewed what was covered in class, they started to see how all of the small activities fit into the larger task.

By completing a needs assessment in this way, we also found benefits for us as instructors. As mentioned previously, it helped us to complete learner contracts. Since our learners came to us with goals in mind, writing our learner contracts was far less stressful than it had been in the past. As soon as we started to prepare our needs assessment, our tasks became self-evident. We were creating the tasks that the learners truly wanted to do; we no longer needed their buy-in. We also found that while there was a lot more work at the onset of a unit, it reduced our workload in the end.

## Future Research

There are other alternative options for gathering what can be covered in class. One suggestion put forth by Dr. Olenka Bilash and others is the creation of a fotonovela project (Emme, Kirova, Kamu, \& Kasanovich, 2006). For this method of needs assessment, learners take
their smartphones or digital cameras into the community and take photos of personally relevant situations, with the intention of bringing these photos back into the classroom. This suggestion has great merit. It allows learners to demonstrate what is important to them and to show what they struggle the most with in their daily lives. While we feel that this idea has great value, it is not the path we chose. As instructors in the Language Instruction for Newcomers to Canada program, we are given a fairly narrow scope of what we are permitted to teach. We felt that this method would have required a great deal of translation, at least initially, since many of our learners have weak oral language skills. Unfortunately, we simply do not have access to enough translators. We also feel that this kind of fotonovela project, while very worthwhile and interesting, has the potential to take on a life of its own. We also realize that the LESLLA field needs multiple evidence-based teaching methods and that our action-research project is but one. We strongly encourage our colleagues to explore and implement our needs assessment, a fotonovela project, and any and all other methods that they find appropriate.

## References

Bell, J., \& Burnaby, B. (1984). A bandbook for ESL literacy. Toronto: Ontario Institute for Studies in Education.
Bigelow, M., \& Vinogradov, P. (2011). Teaching adult second language learners who are emergent readers. Annual Review of Applied Linguistics, 31, 120-136. doi: 10.1017/S0267190511000109
Brown, J. D. (1995). The elements of language curriculum: A systematic approach to program development. Boston, MA: Newbury House.
Bruski, D. (2012). Graphic device interpretation by low-literate adult ELLs: Do they get the picture? MinneWITESOL, 1-22. Retrieved from www.minnewitesoljournal.org.
Crevecoeur, E. (2010). Identification of specific research-based instruction methods to teach pre-literate ESOL students. In C. Schoneberger, I. van de Craats, \& J. Kurvers (Eds.). Proceedings from Low-Educated Adult Second Language and Literacy Acquisition $6^{\text {th }}$ Symposium (pp. 21-32). Cologne, Germany: Center for Language Studies.
Dowse, R. (2004). Using visuals to communicate medicine information to patients with low literacy. Adult Learning, 15(1/2), 22-26.
Emme, M., Kirova, A., Kamau, O., \& Kasanovich, S. (2006). Ensemble research: A means for immigrant children to explore peer relationships through fotonovela. Alberta Journal of Educational Research, 52(3), 160-181.
Faux, N. (2004). Receta medica: Communicating medication information across the language/literacy divide. Adult Learning, 15(1/2), 18-21.
Fritz, N., \& Alsabek, B. P. (2010). Improving student persistence at the Genesis Center. Adult Basic Education and Literacy Journal, 4(2), 104-108.
Graves, K. (2000). Designing language courses: A guide for teachers. Scarborough, ON: Newberry House.

Hajer, A., \& Kaskens, A. M. (2012). Canadian language benchmarks: English as a second language for adults. Ottawa, ON: Citizenship and Immigration Canada.
Hardy, D., Albertsen, E. \& Millar, V. (2009). Learning for LIFE: An ESL literacy bandbook. Calgary, AB: Bow Valley College.
Johansson, L., Angst, K., Beer, B., Martin, S., Rebeck, W., \& Sibilleau, N. (2001). Canadian language benchmarks 2000: ESL for literacy learners. Ottawa, ON: Centre for Canadian Language Benchmarks.
Lodico, M. G., Spaulding, D. T., \& Voegtle, K. H. (2010). Methods in educational research (2nd ed.). San Francisco: Jossey-Bass.
Richards, J. C. (2008). Curriculum development in language teaching. China: Cambridge University Press's Foreign Language and Research Press.
Strube, S., van de Craats, I., \& van Hout, R. (2009). Telling picture stories: Relevance and coherence in texts of the non-literate L2 learner. In T. Wall \& M. Leong (Eds.). Proceedings from Low Educated Second Language and Literacy Acquisition $5^{\text {th }}$ Symposium, 52-64. Banff, AB: Bow Valley College.
Szwed, M., Ventura, P., Querido, L., Cohen, L., \& Dehaene, S. (2012). Reading acquisition enhances an early visual process of contour integration. Developmental Science, 15(1), 139-149.
Tang, P., \& Fraser, J. (2005). Canadian language benchmarks: Literacy placement tool. Ottawa: ON: Centre for Canadian Language Benchmarks.
Trupke-Bastidas, J., \& Poulos, A. (2007). Improving literacy of L1-non-literate and L1-literate English as a second language learners. MinneWITESOL Journal, 25. Retrieved from www. minnewitesoljournal.org.

# Extensive Reading in Low-Level ESL: Can It Be Done? 

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#### Abstract

Extensive reading (ER), or free voluntary reading, refers to frequent reading of self-selected material for pleasure, understanding, or information, which is done on the learners' own time, separate from academic reading. Research shows the effectiveness of extensive reading in bolstering reader confidence and fluency in English, building vocabulary, and allowing the reader to notice sentence structure (Bamford \& Day, 1998, 2004; Krashen, 2004a). After having observed extensive reading used effectively in a low beginning-level ESL (English as a second language) class that included LESLLA learners, the author was intrigued to see for herself if ER was feasible in her adult ESL class consisting of students with varying levels of education. Three basic questions came to mind: Can it even be done? Why do it? How would one implement it in such a class when graded readers are too difficult? The author turned to children's literature and to fiction, nonfiction, and biographies that are of interest to adults. She found that her adult LESLLA students enjoyed the benefits of reading books. In this paper, she shares examples of how she adapted and evaluated ER for her ESL class, offering guidelines and advice to others who may wish to implement a similar program at the lower levels of language proficiency.


## Introduction

Even with research evidence in its favor, Extensive Reading is not normally pursued as an activity in the adult ESL classroom for many reasons, the main ones being the difficulty of finding suitable reading material, the time commitment, and skepticism regarding how LESLLA learners might benefit from such a program. These LESLLA students come to ESL classes with a dual purpose: to learn English and to acquire literacy. These adults are often just beginning to connect meaning with print (Vinogradov, 2008).

The author believes that ER can be incorporated into ESL programs for beginning and intermediate-level students, which include LESLLA learners, and that the power of ER will become evident. She was curious if she could implement an ER program into a class that included loweducated second language literacy acquisition (LESLLA) learners. Is ER even feasible in such a context and for these learners? Why do it? What are the benefits to the learners? What are the steps and cost to set up ER? How could ER materials be adapted to a multilevel class? The purpose of this paper is threefold: to answer these questions; to show how, using her own class as a test case, the author evaluated the feasibility of implementing an ER program and met with success; and to share pedagogical advice. The question of "Can it be done?" was answered with a resounding, "Yes, it can!"

The author will first provide a review of relevant published literature on the use of extensive reading: its defining characteristics, why it is thought to be so important to language learning, and some potential limitations and criticisms. Evidence will be offered from the author's observations and personal experiences. The remainder of the paper gives guidelines, advice, and resources for teachers interested in implementing ER in their own ESL adult classes that include LESLLA learners, which is followed by the author's conclusions.

## A Review of Relevant Literature

The characteristics and benefits of extensive reading for ESL learners at intermediate and higher levels have been discussed a great deal in published literature over the past two decades, but little work has been done on its benefits for emergent readers with intermediate language proficiency. In this literature review, the author will highlight some of the main points to provide rationale for ER's importance to secondlanguage literacy development. This will be followed by key scholarly suggestions for the implementation of an ER program.

## What Is Extensive Reading?

Extensive reading, also known as ER and free voluntary reading, in the ESL/EFL student's own free time is defined by Bamford and Day (1998) as an approach to the teaching and learning of second-language reading in which learners read large quantities of interesting books that are at their reading level, with an emphasis on the enjoyment of reading, not detailed comprehension, language study, or instruction in reading skills. According to many scholars (Bamford \& Day, 1998; Krashen, 2004a; Vinogradov, 2008; Young-Scholten \& Maguire, 2008), ER refers to the practice of students' frequent reading of a variety of self-selected books or other materials, with a focus on understanding the overall meaning. Maley (2009) summarizes the benefits of ER as discussed by Bamford and Day (1997), Krashen (2004a), and Waring (2009), including promotion of learner autonomy while reading extensively: learners can start and stop at will, read at their own speed, visualize and interpret what they are reading, and notice language and vocabulary. Extensive reading is only one of several terms used to describe this type of reading practice. Krashen (2004a) uses free voluntary reading or recreational reading, while others refer to the activity as Sustained Silent Reading (SSR). He has also used the term compelling input to refer to the type of input or reading material that is so interesting that one forgets it is in another language.

Why is extensive reading important to L 2 literacy development? What are the benefits of ER to ESL learners in general and to LESLLA learners in particular? Research (Bamford \& Day, 1998, 2004; Maley, 2009; Chen \& Squires, 2011) has shown that those who recreationally read a lot of books in the second language show improvement in reading, writing, grammar, and vocabulary. Mason (2005) stated that L2 learners who are thoroughly involved with books on a frequent basis also show evidence of improvement in comprehension and sentence structure. Extensive reading may increase reading fluency and confidence, since the learners are reading at their own reading level as they build new vocabulary and sight word recognition in the context of the everyday language of interesting stories (Krashen, 2004a). ER can lead learners to want to read more and more books.

Good things happen to students who read a great deal in the new language. Research studies show they become better and more confident readers, they write better, their listening and speaking abilities improve, and their vocabularies get richer. In addition, they develop positive attitudes toward and increased motivation to study the new language. (Bamford \& Day, 2004, p. 1)

The benefits of ER in an ESL class are shown to be numerous, but what would be the impact of extensive reading on LESLLA learners, for whom reading is often laborious? ER offers comprehensible input through print awareness and repeated exposure to vocabulary in context to help build language competence. Krashen (2004a) has argued emphatically that recreational reading results in L1 and L2 language and literacy development, which should also be true even at the lowest levels of education within an adapted ER program. A study by Greenberg, Rodrigo, Berry, Brinck, and Joseph (2006) discussed the benefits of extensive reading courses for adult ESL students. "Students increased their reading ability in the target language, developed positive attitudes toward reading, increased motivation to read, and made gains in various
aspects of proficiency in the target language, including vocabulary and writing" (Bamford \& Day, 1998, as cited in Greenberg et al., 2006, p. 82). It seems that these resulting benefits of ER could apply to all levels of emergent readers, assuming that easier-to-read materials can be found.

## Limitations and criticisms of extensive reading in ESL classes-and

 some answers. One of the limitations of extensive reading in general is that interesting books for adults at the lower literacy levels are in very short supply. Vinogradov (2008) wrote that key to the development of literacy in LESLLA learners is the quantity of books necessary for ER to be common practice in low-literate L2 adult programs. Some teachers may feel that their students could not successfully utilize an ER program. Bamford and Day (1998) argue that reading should not be put off until the students can understand the language. "ER is appropriate at all stages of language learning: it is never too early-or too late-to learn to read in a second language" (p. xiv). Another criticism against ER is the work involved to set up a new ER program and the perceived insufficient time given an already crowded curriculum, combined with skepticism concerning ER's benefits. According to Rodrigo et al. (2007), it is true that little time is devoted to any sort of ER in L2 classes. Vinogradov and Liden (2009) stated that teaching LESLLA learners is different from teaching learners with strong first-language literacy. There is often a mismatch between the oral skills of a LESLLA learner and his or her very low skills with the written word, making ER seem impossible. Another deterrent is the cost of books to fund an adequate library. However, Bamford and Day's (1998) answer is just to start small and "let the positive results of ER prove itself" (p. 46), because the importance of ER in the curriculum will outweigh these issues as the teacher realizes the resulting benefits.What about the lack of ER books at the lowest levels? YoungScholten and Maguire's (2008) article on the topic of extensive reading for very low-literate immigrant adults concluded that the lowest-level adult L2 readers are not well served: "ER cannot be considered without a much better supply of fiction than currently exists for LESLLA readers"
(p. 155). Can easy-to-read books be developed to serve these adult ESL learners? Young-Scholten's undergraduate students developed and wrote books specifically for LESLLA learners at different morpho-syntactic stages and at several reading levels, with a goal of six books per reader. After visiting with particular LESLLA students, the ESL program writers wrote and rewrote their books with these students in mind. They field-tested their books as they considered features common to children's literature to which adults can relate: cohesion; narrative voice; patterned repetition; relating pictures to text; standard literacy devices of plot, characterization, and setting; sophistication level; interest; appeal; and cultural sensitivity (Young-Scholten \& Maguire, 2008, pp. 149-151). This program is an example of how the need for more literacy-level books can be fulfilled.

So, does extensive reading, a key to the development of literacy for ESL learners, have to wait? Perhaps not, if teachers can persevere and turn to sources besides the scarcely available graded readers at the "starter" stage.

## Possible Reading Texts for LESLLA Learners

Graded readers or graphic readers are written with second-language learners in mind, but they are still too difficult for LESLLA learners. The search for other texts can be challenging. Like Young-Scholten's graduate students who wrote books for a neighboring ESL program, ESL teachers can write their own books. Vinogradov (2008) suggested the Language Experience Approach (LEA) to use classroom experiences to create texts in students' own words, accompanied by pictures. The texts tap into the oral strengths of students and are later printed and shared, which creates ownership of the stories since the learners created them. Another suggestion comes from scholars (Reid, 2002; Chen \& Squires, 2011) who recommended children's literature for native speakers of English. This literature provides entertainment and information on a wide variety of
topics for all age groups, including adult ESL emergent readers, to help them get "hooked on books" (Bamford \& Day, 1998, p. 61).

This leads into the subject of this paper: how ER was implemented into an ESL class with 75\% LESLLA learners. Guidelines and reflections will be offered for other teachers interested in starting ER in their classes.

## Implementing and Evaluating the Success of Extensive Reading

The central aim of this paper is to explore through research the possibilities of adapting an ER program to even the lowest level of emergent reading. Where LESLLA learners are concerned, the teacher should first consider how reading develops with adult learners of reading in an L2 program and then try different approaches (Vinogradov \& Liden, 2009). Think about how the procedures and materials should be adapted so that an ER program will have a successful outcome in a multilevel class with emergent readers and LESLLA learners. The author's observation of a successful pilot ER program in a low-level beginning ESL class provided some answers to the research questions mentioned above.

Extensive reading in low-beginning ESL classes with LESLLA learners. An ER pilot program was developed in two noncredit openenrollment low-beginning ESL adult classes at a community college. The classes met five days per week. The learners were of mixed gender and ages, ranging from the twenties to the seventies, and mostly came from Spanish-speaking countries. The two classes were chosen because of the high number of LESLLA learners with a low level of education from their native countries. The exact education level of the class members was not recorded, but suffice it to say that many of the students had less than an elementary sixth-grade level of education. The author observed 20 of the 20 -minute extensive-reading sessions out of approximately 26 hours of extensive reading over 16 weeks.

The teacher's goals and implementation steps for the pilot project shed light on the logistical challenges, such as getting the timing for the ER portion of class on a workable schedule and obtaining books. The core idea was that, as the learners' extensive-reading opportunities increased, their language and literacy development would progress. To convince the students of this, one teacher introduced ER by saying, "Reading every day is one of the best ways to learn vocabulary. English has so much more vocabulary than most languages. When you read, you will learn lots of new words to help your English" (personal communication, April 19, 2012). Daily ER time of 20 minutes was provided for each class period, during which the students chose a book from about 50 graded readers on display within the classroom. Students did not take books home because of the scarcity of books at the starter level. The teachers had oral literacy events once a week, during which the students interacted in pairs or groups and discussed their books. The students kept a reading $\log$ and were proud of their reading accomplishments. They reported that the ER program helped them learn new vocabulary and enabled them to share book reading with their children. The students said that their reading confidence increased. Because they loved to read the books so much, they wanted more time to read in class. These observations convinced the author that ER was not only feasible in a low-beginning ESL class, but that it was also extremely beneficial in stimulating the students' language development and oral communication skills.

## Extensive reading in an ESL adult class with LESLLA learners.

 The author implemented extensive reading in her ESL one-day-a-week women's class, which consisted of $15-20$ adults in their twenties to fifties, all native speakers of Arabic from the countries of Yemen or Morocco. A third of the students were preliterate, while others were LESLLA learners who had little or no primary language education and little experience with the Roman alphabet. The class was multilevel English, with the majority of the students at a very low level of reading and writing, although a few students had an intermediate level of listening to and speaking English.The author became intrigued with the idea of piloting an extensivereading program into her curriculum based on her observations of its success in the low-beginning class. Since ER had never been done before with this group, the author wondered if it would boost these students' language and literacy development in English. A bit of experimentation was needed: find books at an easy enough reading level, present the idea to the students, and then let the students borrow the books. In the end, the author discovered that, yes, ER can work with LESLLA learners, even one day a week and for only a short period of three to six months. Any interested ESL teacher can start an ER program in his or her lowbeginning or LESLLA-learner class.

## Guidelines for Implementing and Evaluating Extensive Reading in an Adult ESL Class

The remainder of this paper provides guidelines and steps based on the author's research, following the key points for implementing ER given by Bamford and Day (2004) and Maley (2009). Examples will be given from the author's own experience with adapting ER for her class.

## 1. Gain support from the ESL program director/coordinator

 to start extensive reading. Speak with the director of the ESL program about implementing a balanced literacy program to include top-down and bottom-up approaches to reading (Vinogradov \& Liden, 2009) by teaching intensive reading skills and strategies and introducing extensive reading to improve reading fluency and confidence. Waring (2009) suggested that ER should fit within the goals, aims, and objectives of the larger ESL curriculum. When making a case for an ER program, it is important to explain that ER would complement the existing intensive instruction and enable students to practice their reading skills independently. Vinogradov (2008) contended that althoughthe Whole-Part-Whole method of going back and forth between top-down and bottom-up activities is critical ... emergent readers need the constant engagement and high interest of top-down learning, as well as the systematic and building-block approach of bottom-up learning. We have to keep going up and down the ladder. (p. 10).
2. Search for books at or below the learners' reading abilities. Since graded readers were too difficult for her class, the author searched a popular online bookstore for easy-to-read whole books or "reading readiness" books of children's literature. According to Krashen (2004a), easy books provide a taste for reading and a background knowledge that will lead to and facilitate the reading of other books. Both Krashen (2004a) and Mason (2005) have called ER a bridge to heavier reading that leads to more-advanced stages. Mikulecky (2011) concurred: "Readers will not stay with light and easy reading as their tastes develop and broaden" (p. 20). Price becomes an important factor. Some ESL programs may fund the books for the extensive reading program, which keeps the cost burden off the teacher. In this case, the author self-funded her own ER book collection fairly inexpensively.
3. When selecting books for the ER library, look for "chapter books." Obtain a wide variety of whole books at various reading levels, starting with the very early basic level (preschool or kindergarten) and moving on to more-advanced, longer books with chapters (in the second- to third-grade range) and of different genres that are culturally appropriate for the student population of the class. Reid (2002) and Mikulecky (2011) stressed the importance of a student's not just reading magazines, newspapers, and short stories for ER experience, but of his or her reading whole books by one author whom the student self-selects. These "chapter books" will help the students feel a sense of accomplishment as they read them. Think about what your adult ESL students might enjoy reading.

Studies have shown (e.g., Krashen, 2004a) that the more interesting the texts are to the readers, the more the readers will enjoy them and begin looking for more to read on their own. Again, Krashen (2004a) called this compelling input, or input that is so interesting that a reader forgets he or she is reading in another language and is in a state of "flow," which happens when the reader is "lost in a book" (p. 1).

The author looked for reading books starting at the lowest elementary grade levels, ones that provided good picture support (no comprehension questions or lists of vocabulary). She ordered books at the earliest beginning reader level on up to higher levels, because her multilevel class was populated by preliterate, LESLLA, low to beginning, and higher readers. As some fiction titles can be childish, it was necessary to carefully select titles that would be appropriate for and interesting to adults. The author successfully found books at these lower levels by turning to reading-readiness or step-into-reading books in children's literature with a variety of titles in the genres of fiction, nonfiction, and biography.
4. Introduce extensive reading to the class. Explain to the students the benefits of $E R$, and say that they will be reading for their own understanding and enjoyment. Reading books extensively is a new experience for most ESL students, not only LESLLA learners. The author explained to her students that they would be able to choose real books to benefit their reading, learn new vocabulary, and acquire information. The purpose of reading for pleasure and information involves no tests, no exercises, and no dictionaries (Bamford \& Day, 2004).
5. Read aloud from the books to the class, modeling how to read. Reading aloud to ESL students helps motivate them to read independently. Model how to read, paying attention to concepts of print-such as where to start reading in a book, the page numbers, and the main events and ideas-and prediction, and demonstrating
pronunciation, expression, and emotion. This intensive reading practice "helps build sound/symbol correspondences and helps students feel comfortable in the alien print environment" (Bamford \& Day, 1998, as cited in Greenberg et al., 2006, p. 85).

When the author introduced the ER program to her class, she read aloud, with emotion and expression, $A$ Girl Named Helen Keller (by Margo Lundell), a book in Scholastic's Growing Reader category, level 3. The students were mesmerized and touched by the story. Who does not enjoy listening to a story read with great expression? Rodrigo et al. (2007) included reading aloud with feeling and expression as a main component of an ER program. Krashen (2004a) claimed that read-alouds are a powerful means of motivating reading and providing growth in second-language literacy. New readers need to know that when they are enjoying an interesting book, their emotions may be touched. Without even realizing it, they will be learning and building their language skills. The author found that the books she read aloud to the students became the most popular to take home.

It is also important that the teacher model a love of reading by reading silently along with his or her students (Mason, 2005).
6. Assess the students' level of reading. Research suggests using a guided approach to help students assess their own reading level and choose an appropriate book. One way is to listen to students read part of a page aloud. A text needs to be about $98 \%$ comprehensible (Krashen, 2004b). Ask the student to try a book at a lower or higher level (go by printed levels on books or color-coded levels) until a suitable book is found. Emergent readers will be interested in books with short sentences and lots of pictures. It is important to the students' autonomy that they learn to find their own readinglevel ooks.
7. Set up and explain the book checkout system. Explain the care of books. Print checkout cards if you allow learners to check out books to read in class or to take home. Make decisions with the class about book care responsibilities. The students in the author's once-aweek ESL class used a checkout system to take books home, using "library" checkout cards with the title of the book, author, and level, and with space for the student's name, the student's phone number, and the date of checkout. The class discussed the responsibility of caring for books and the cost of a book if brought back damaged. Some of the students renewed books, some borrowed more than one, and a few did not take any books home.
8. Make time for follow-up accountability and assessment through interaction. Hellermann (2006) contended that interaction is the key to negotiating meaning with peers and teachers in literacy events around their extensive reading. A literacy event is "any occasion in which a piece of writing is integral to the nature of participants' interactions and their interpretive processes" (Heath, 1982, as cited in Hellermann, 2006, p. 380). Literacy events are integral to implementing extensive reading in any ESL class.

Teachers can be creative in the interactive event when students discuss their books with each other in English. Book discussions in pairs or by way of group interaction should be modeled using simple questions. Examples: What is the name of your book? Is it easy or hard to read? What is the book about? Do you like it? More advanced students can choose to give short summaries and opinions about a book they have read.
9. Ask students to keep a reading log. Reading should be its own reward, but learners are encouraged to keep a reading log for accountability, a feeling of accomplishment, and teacher assessment. Ask students to keep a log of books they have read on a form on which they can write the date finished; book title; if the book was easy, hard, or so-so; and whether they liked it or would recommend
it (yes or no). Some students have never read a whole book before, so it is imperative to congratulate them on their accomplishment when they finish one.
10. Know the teacher's role in ER instruction. The teacher's role is to help the students find interesting, comprehensible texts; provide some ER class time to read and introduce new books to the students; and have read-alouds from the books to catch students' interest. Teachers can also provide background information about book topics to build on prior knowledge before students read. It is important to help students express themselves verbally about their book reading with other students.

## Evaluation of ER from Students' Testimonials

In the low-beginning class observed by the author, the students reported that they learned new vocabulary from the context of the ER books and that they learned about new topics of interest from the variety of books available. The ER helped their reading fluency, and their confidence improved.

In the class taught by the author, after only three months of meeting one day a week but with students' taking a book home each week, all of the students reported that they benefited from the ER program; even the lowest-level LESLLA students enjoyed those books with lots of pictures and little writing. All the learners, including the LESLLA students, reported learning new vocabulary from the stories and said that ER helped them read faster, with more confidence and understanding. This way, their reading fluency improved. They liked the variety of books about people and places, and they appreciated being able to borrow the books to take home and read over and over. They liked to read the books to their children, which benefited the parent and child alike. The students enjoyed reading the books so much that they wanted to continue ER in their next classes and were excited by their gains in reading skills.

## Conclusions and Reflection

Research still does not sufficiently address the issue of successful ER programs for adult LESLLA learners with emergent literacy needs. Further research on the results of reading extensively and the benefits of ER to such learners is needed to determine whether and how ER programs should be expanded in the future, and the kinds of materials such programs would need.

The author discovered that by adding ER into her ESL class curriculum, her students not only benefited from reading, but also enjoyed books at their reading level on topics about which they had no previous knowledge. It was immensely interesting to watch the learners' excitement when it came to choosing books to read. It would be advantageous to their success in literacy and language development for students to continue ER experiences over a longer period of time.

Other ESL teachers who implement ER in their low-level classes may find similar results. This small study found that ER increased students' reading confidence, fluency, and vocabulary. ER inspired them to read more and more, and to read to their children. The students discovered a whole new world through reading interesting books at their reading level. And most importantly, the author discovered that ER can be done successfully in a program involving LESLLA learners. Even though this program was a short trial period, it made a difference in the students' lives. It is the author's hope that the experiences and advice shared here will encourage other teachers to try out ER in their ESL classes-and also find that ER is indeed worthwhile for their LESLLA learners.

## References

Bamford, J., \& Day, R. (1997). Extensive reading: What is it? Why bother? The Language Teacher Online, 21(5). Retrieved from http://jalt-publications.org/old_tlt/files/97/may/extensive.html
Bamford, J., \& Day, R. R. (1998). Extensive reading in the second language classroom. New York: Cambridge University Press.
Bamford, J., \& Day, R. R. (2004) (Eds.). Extensive reading activities for teaching language. Cambridge: Cambridge University Press.
Chen, M., \& Squires, D. (2011). Using literature for children and adolescents for intermediate language acquisition. TESOL Journal, 9 (2), 312-329.
Greenberg, D., Rodrigo, V., Berry, A., Brinck, T., \& Joseph, J. (2006). Implementation of an extensive reading program with adult learners. Adult Basic Education, 16 (2), 81-97.
Hellermann, J. (2006). Classroom interactive practices for developing L2 literacy: A microethnographic study of two beginning adult learners of English. Applied Linguistics, 27(3), 377-404.
Krashen, S. (2004a). The compelling (not just interesting) input hypothesis. The English Connection (KOTESOL). Retrieved from http://www.sdkrashen.com/content/articles/ the_compelling_(not_just_interesting)_input_hyothesis.pdf
Krashen, S. (2004b). Free voluntary reading: New research, applications, and controversies. RELC Conference. Singapore. Retrieved from http://www.sdkrashen.com/content/articles/singapore.pdf
Maley, A. (2009). Extensive reading: Why it is good for our students ... and for us. Retrieved from http://www.teachingenglish.org.uk/ articles/extensive-reading-why-it-good-our-students...-us
Mason, B. (2005). Extensive reading: Why do it, how to do it, how not to do it. ELT News.com. Retrieved from http://www.eltnews.com/ features/special/2005/06/extensive_reading_why_do_it_ho.html

Mikulecky, B. S. (2011). A short course in teaching reading: Practical techniques for building reading power. White Plains, NY: Pearson Education.
Reid, S. (2002). Book bridges for ESL students: Using young adult and cbildren's literature to teach ESL. Lanham, MD: Scarecrow Press, Inc.
Rodrigo, V., Greenberg, D., Burke, V., Hall, R., Berry, A., Brinck, T., and Oby, M. (2007). Implementing an extensive reading program and library for adult literacy learners. Reading in a Foreign Language, 19 (2), 106-119.
Vinogradov, P. (2008). "Maestra! The letters speak." Adult ESL students learning to read for the first time. MinneWITESOL Journal, 25.
Vinogradov, P., \& Liden, A. (2009). Principled training for LESLLA instructors. In I. van de Craats, \& J. Kurvers (Eds.). Proceedings from $4^{\text {th }}$ Annual LESLLA Symposium (pp. 133-144). Antwerp, Belgium. Retrieved from http://www.leslla.org/workshops/2008.htm
Waring, R. (2009). Getting an extensive reading program going. Extensive Reading.net. Retrieved from http://extensivereading. net/docs/get_ER_going.pdf
Young-Scholten, M., \& Maguire, D. (2008). Stories for extensive reading for LESLLA learners: Low-educated second language and literacy acquisition. Retrieved from http://www.researchgate.net/publication/242672103 _STORIES_FOR_EXTENSIVE_READING_FOR_ LESLLA_LEARNERS

# Developing Technology-Enhanced Literacy Learning for LESLLA Learners 

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#### Abstract

Among the reasons why LESLLA learners are less successful than children who learn to read and write in their mother tongue are fewer instructional hours and the lack of individualized instruction. The Digital Literacy Instructor is a European Union-funded Multilateral Lifelong Learning project that is developing software in Dutch, English, Finnish, and German for beginners to learn the grapheme-phoneme correspondences in these four languages. The aim of this software is to give these learners more intensive and extensive practice through clearer, more systematic, and more consistent feedback. What is most innovative is the use of automatic speech recognition (ASR) for providing feedback on words read aloud by the learner while taking into account the specific language background of the learner.

This article also describes the pedagogical ideas that form the basis of the materials and how these ideas are realized in the software. The stepwise work plan of the project is sketched, and the first results are shown in the form of seven exercise types. The software presents 300 words with accompanying audio and photographs along with ASRbased feedback in one and the same exercise type. All stages in literacy learning (direct word recognition, visual and auditory analysis and synthesis) can be practiced with the 300 words.


## The Problem

It is generally known that most non-literate adult second-language (L2) learners have difficulty becoming independent readers. In the Netherlands, for instance, the proficiency level that is required for the so-called integration exam and which indicates the start of independent reading-level A2 of the Common European Framework of Reference for Languages-is attained by few students and, even then, after many hundreds of hours of instruction (Kurvers \& Stockmann, 2009).

One of the main reasons why LESLLA learners are not as successful as children who learn to read and write in their mother tongue may be that they receive fewer hours of reading instruction; hundreds of hours for these students is less than the thousands of hours that even children in economically developed countries receive. Often, it is also the case that the course material is of a lower quality in the sense that it is not geared to the specific situation of the adult non-literate or lowliterate L2 learner. Moreover, materials rarely enable individualization of instruction, which is important in the typical multi-level LESLLA class (see Kurvers \& Stockmann, 2009). Adults who learn to read for the first time in their lives in an L 2 with a phonological system different from that of their native language and whose social exclusion results in minimal vocabulary need considerable time and patience to build up their vocabularies and to become familiar not only with new sounds or sounds that are slightly different (similar to literate L2 learners), but also with the metalinguistic awareness of linguistic units that is required for reading in an alphabetic script that includes words, graphemes, and phonemes (see, e.g., Kurvers, van Hout, \& Vallen, 2007). This is because they do not have native language reading skills to transfer. Moreover, such learners present different learning trajectories and vary in the pace at which they proceed in their acquisition process (Dalderop, 2011). If the classroom is a teacher-fronted one, then learners may listen to sounds in the L 2 several times during a lesson. Even under the most favorable conditions, they may pronounce those sounds only once or twice and receive teacher feedback. Then, the learners are expected to practice
the correspondence between grapheme and phoneme on their own, without the feedback of the teacher or another native speaker. This leads to an L2 phoneme's native-language-based pronunciation becoming entrenched and thereby hindering the learning of grapheme-phoneme correspondences that learners who have native language literacy skills to transfer accomplish without great effort. Although there are learning tools (DVDs, for instance) with words and individual sounds pronounced for L2 learners available to LESLLA learners, the project discussed below has created materials for augmenting practice through more intensive practice (always with feedback) and more extensive practice (for a longer time and more often). The Digital Literacy Instructor project is designed to increase practice time and the speed of learning basic grapheme-phoneme correspondences of 300 words in the four project languages: Dutch, English, Finnish, and German.

## A Solution

Feedback that is systematic, consistent, intensive, clear, and at the learner's current level increases the quantity and also the quality of practice time, since learners can move at their own pace. Such feedback can realistically only be provided by an "artificial instructor" who is virtually present inside and outside the classroom at any moment when the learner wants to practice. In the project described below, this takes the form of a Computer Assisted Language Learning (CALL) application. CALL offers potentially enormous advantages compared to teacher-fronted classes: learners can practice as much as they want at their own pace in any environment they wish, all the while receiving individualized, adaptive feedback from the computer. This is particularly important for adult L2 learners who lack the basic literacy skills to be able to work on many existing materials outside the classroom, without the support of a teacher. Learning that can and should be individualized releases the teacher so that he or she can do what only a teacher can do: for example, involve learners in interaction with other learners.

In the project described here, feedback techniques are enhanced: well-known ways of providing feedback in the classroom are individualized, digitalized, and extended with ASR feedback, which automatically detects errors when learners read aloud. Below, we describe the organization of the project, the steps that have been completed thus far, the steps the project will take on this work in progress, and the pedagogical ideas underlying the software. Next, we present various types of feedback and explain why we have chosen explicit and immediate forms of feedback for this group of learners. Finally, we show how the feedback is integrated into the system's seven exercise types, and we close with an example of how corrective feedback at the word level is presented to the learner.

## The Digital Literacy Instructor Project (http://diglin.eu)

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The European Union's Grundtvig-funded Lifelong Learning Multilateral Project Digital Literacy Instructor (DigLin) aims to provide concrete solutions for adult literacy students by developing L2 literacy learning materials in Finnish, Dutch, German, and English (listed here in order of transparency of their orthography). The five project partners in four countries are departments at universities and an institution for vocational education (Friesland College). All have contacts or collaborate with teachers and education centers where adult L2 literacy students take courses. The five collaborating partners are the Netherlands: Radboud University, Nijmegen (lead and automatic speech recognition); Friesland College (software creation); Germany: Herder Institute, University of Vienna; United Kingdom: Newcastle University; and Finland: University of Jyväskylä.

The DigLin project combines the system of existing reading instruction materials for non-literate and low-literate L2 learners developed at Friesland College (FC-Sprint ${ }^{2}$ ) with ASR. The former provides the software for the exercises; the latter is used to recognize what the learners say as they read aloud, to diagnose errors, and to extend practice and feedback.

Steps involved in creating the DigLin software. Creating literacy software for four languages with different orthographies and pedagogical approaches to literacy instruction over the course of only four face-toface meetings and fortnightly Skype meetings is a complicated and challenging task. Elaborate discussions preceded the final selection of the content, i.e., which words, sounds, and photos to accompany words; the level of support for learners; etc. Here, we outline the steps we have taken and will take to create seven exercise sets. In chronological order, the steps are as follows:
11. Gather facts about each language's phonology, orthography, and approaches to teaching reading to (children and) LESLLA learners. The irregularity of English orthography has been and still is the cause of much debate on how children and adults should be taught to read. Teachers in the United Kingdom are currently directed to use a synthetic phonics approach alongside sight word reading. In the other three countries (whose orthographies are more transparent), reading instruction for children and LESLLA learners initially focuses solely on cracking the alphabetic code simply by analysing of the word in phonemes and graphemes and by blending these into a word. It turned out to be difficult to make the much more opaque English orthography fit the model used for the exercises.
12. Agree on selection criteria for words for the software.

In a pure phonics approach, the choice of basic words is primarily determined by those words' usefulness to literacy instruction. Relevance of words for adult immigrants and frequency of words selected are of
secondary importance. For this project, words were selected according to their degree of simplicity. For the most basic words, the choice was twofold:

- monosyllabic CV or CVC words
- words with phonemes that are affected as little as possible by neighboring sounds and which therefore contribute to the categorization of a specific phoneme in the L2

As we were dealing with L2 learners unfamiliar with the phonemic inventory and allophonic rules of the L 2 and for whom all the graphemes were new and (almost) equally difficult, it seemed better to start with phonological simplicity, that is:

- typologically frequent (i.e., unmarked) phonemes
- graphemes representing less allophonic variation
- regular orthography

There were also technical requirements for the selection of words depending on the possibilities of the software. Therefore, we had to do the following:

- select words that could be supported by photos (not drawings, because these are less well understood by non-literates)
- restrict the number of new elements (graphemes or allophones) within one set of 20 words to be used for a series of seven exercises in each exercise set

13. Create a "sound bar" for each language for use with exercises in each set.
The sound bar is a tool for the learner to use as support in most of the seven exercises. In the sound bar, the user can see and listen to all of the single graphemes, digraphs, and trigraphs that are used in the software. For Finnish, Dutch, and German, these are almost all the letters of the alphabet; this is not the case for English, as we can see
when we compare the sound bar for Finnish and (British/Received Pronunciation) English in Figure 1.

| a | b | c | d | e | f | g | h | i | j | k | l | m | n | o |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| p | q | r | s | t | u | v | w | x | y | z | ä | ö | ng | nk |


| a | b | c | d | e | $f$ | g | h | i | j | k | 1 | m | n |  | 0 | p | q | r |  | s | t | u |  |  | w | x | y |  | z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ae | ai | air | ar | ay | ch | ck | ea | ear | ee | ie | igh | ir | m |  | ng | oa | Oe | 0 | i | 0 | ou | ow |  | u | sh | th | ue |  | wr |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Figure 1: The sound bar for Finnish (above) and English (below). The pale graphemes ( $c, q, w, x$, and $z$ ) for Finnish are not used in the exercises. The grey buttons in the English sound bar indicate that we are dealing with more than one correspondence for that grapheme. When the learner clicks on the square, the basic (most common/regular) phoneme can be heard; when clicking on the grey button, the less common/regular allograph can be heard.
14. Use the Learning Company (Leerbedrijf) of Friesland College's FC-Sprint ${ }^{2}$ technology to create 15 exercise sets for each language.
Five different types of exercises, adapted from FC-Sprint ${ }^{2}$, are implemented in the course material for each of the four languages. In each of these, subskills of the reading process are practiced, as shown in Table 1 . The series is supplemented by exercises 6 and 7 , in which reading aloud can be practiced. (This requires integration of ASR technology, which the project is only now developing.)

| Number and name of the exercise | Focus |  |
| :--- | :--- | :--- |
| 1. | Presentation | The meaning and form of a word |
| 2. From letters to words | Making grapheme-phoneme correspondences (analysis) |  |
| 3. Dragging words 1 | Recognizing whole words |  |
| 4. | Dragging words 2 | Recognizing strings of phonemes (synthesis/blending) |
| 5. | Dictation | Automatizing grapheme-phoneme correspondences |
| 6. | Reading with help | Reading with sound bar |
| 7. | Reading: Test yourself | Reading without help |

Table 1: Overview of the Exercises and Their Focus in DigLin
15. Collect data from nonnative speakers of these four languages for training and testing the ASR engine and the error-detection algorithms.
Developing the ASR technology required for the oral production exercises is not an easy task, given the relatively low language proficiency and variation in native language background of the target group and the difficulties these imply for ASR and error detection (Van Doremalen, Cucchiarini, \& Strik, 2010). For this reason, the project team collected speech data and corresponding orthographic annotations at the various locations. These data are being used to train and test the ASR engine and the error-detection algorithms. Speakers use the native languages of the major groups of literacy learners in the four countries, i.e., Arabic (Moroccan and other dialects), Tarifit Berber, Somali, Kurdish, and Bengali (Sylheti dialect).
16. Test the software with LESLLA learners in classrooms for 50 hours as they work with the software.
All technical components will be tested in isolation and then improved. As soon as the new CALL/ASR course material is ready, the teachers of the experimental literacy classes will familiarize themselves with relevant digital pedagogy and the newly developed software. At one-day workshops at each project site, they will be instructed on how to use the DigLin course materials. Then, their students will start working with the materials.
17. Evaluate results and reactions of the students to the software after 10,25 , and 50 hours of working with the software. Teachers will be interviewed at the end of the testing period.
The evaluation is twofold: pedagogical and technical. Both dimensions are integrated into interview questions regarding students:

- How do learners use the DigLin materials?
- How does DigLin contribute to achieving learner goals and increasing motivation?
and regarding teachers:
- Which components of the material do L2 literacy teachers rate as more or less conducive to learning how to read?
- Which suggestions do they have for improving the materials?

Digital questionnaires and an interview manual are currently being developed for these purposes. To evaluate technical aspects, the interactions between the system and learners' responses will be logged. The accuracy of the system in recognizing learners' responses and identifying the errors made in reading will be measured.
18. Disseminate results and expand DigLin.

Dissemination is not the final step, but it has already started, by means of a website that presents gradually increasing information about the project, through presentations at national and international conferences, and by way of academic publications in conference proceedings and journals.

At the time of writing (1.5 years into the three-year project), we are working on steps 4 and 5. The field testing is planned to take place halfway through the second year.

## The FC-Sprint ${ }^{2}$ Concept

Since the DigLin system makes use of the learner system of FC-Sprint ${ }^{2}$ materials, we include here an introduction to the basic pedagogical ideas underlying FC-Sprint ${ }^{2}$. The name comes from Friesland College, a school for advanced vocational education in the Netherlands, where this pedagogical concept has been implemented. This name suggests the speed and motivation that the idea promotes.

The concept of FC-Sprint ${ }^{2}$ rests on two cornerstone ideas.

1. An approach to learners by teachers under which control moves from the teacher to the learners. FC-Sprint ${ }^{2}$ starts with high expectations. Learners are not told what they should do. Instead, they are asked what they can show the teacher, who then conveys to them the idea that they will impress the teacher. Then, the learners are asked to present to their classmates what they have learned. This requires learners to work with the resources the teacher has made available, which range from books to audio recordings; classmates can also be resources. The teacher is the last resort. That is, if the required knowledge is really not available from any of these resources, then the teacher acts as a resource. This is a radical departure from many LESLLA classes, in which the learners are heavily dependent on the teacher.
2. Providing students with resources so that they can become more autonomous learners. Students require the right resources, a large part of which are being built by advanced students and teachers at Friesland College who are part of the Application Development and Media Design tracks. Together, they build small programs so that other students-in this case, adult L2 literacy learners from the education department where literacy for first-time L2 Dutch readers is being taught-can autonomously find the information needed for discovering how reading works, instead of relying on the teacher.

Under the FC-Sprint ${ }^{2}$ approach, learners are not directed to specific materials (resources) that they should use at a particular moment in the learning process. Rather, all the material is provided at once. Learners are then guided (by the teacher, but also by the program itself) to first discover which resources they can use to reach a target set. Learners are expected to negotiate these teacher-set targets and come up with what they themselves want to learn. The teacher is thus the guardian of the learner's education. If a learner comes up with a target independently, then the teacher has to decide whether it is an appropriate target. If so, the teacher then defines the target based on the learner's input. This involves high expectations. Learning materials are built in such a way
that there is a top layer (e.g., the exercise shown on the computer screen) with information underneath, which a learner can access if needed. The idea behind using the former is that the learner is in charge and is not led by the computer. However, there is immediate feedback so that a learner does not repeat errors only to find out at the end (with a "check the answers" button) that errors were made. Such a "check the answers" button at the end of an exercise constitutes a summative test (e.g., exercise type 7) and are not an effective learning exercise.

At first sight, this seems contradictory to the need for systematic and sequential instruction, a main characteristic of the phonics approach. Although the digital material has been organized very systematically, it allows the learner to follow more than one system. There is a carefully designed sequence of increasing difficulty in the selection of phonemes and graphemes (see step 2) and in the exercises within a set of words (see Table 1). The learner has to discover that order independently and determine if using it makes sense for the given circumstance. When it comes to digital resources, these are structured so that a learner can dig deeper to find more information. For example, when a learner needs to know how a word sounds, he or she can click on a button to hear it.

## Feedback

Research indicates the overall effectiveness of corrective feedback (CF) (e.g., Lyster, Saito, \& Sato, 2013). A study relevant to users of the DigLin materials, one that compares feedback to learners in language laboratory settings with those in the classroom, indicates that "in the classroom context, there is more distraction, and feedback is often not directed toward individual learners" (Li, 2010, p. 345). Moreover, L2 learners express a preference for receiving CF over having their errors ignored (Plonsky \& Mills, 2006). Studies also show that explicit CF on pronunciation is important for improvement (Saito \& Lyster, 2012). Because acquisition of phonology is closely linked to LESLLA learners' ability to make accurate grapheme-phoneme correspondences, as noted
above, CF can play an important role. Here, we argue that explicit CF will be more effective than implicit CF techniques; this is because learning to read in an alphabetic script involves conscious awareness of phonemes as linguistic objects.

Adults learning to read and write for the first time in their lives are often entirely dependent on the feedback of their teachers in the classroom, and more so than literate learners. Their lack of transferable native language literacy skills greatly restricts options for independent work, as these are invariably tied to literacy. In a classroom, however, continuous explicit feedback for one and the same learner-although useful-is neither practical nor effective. When the learner experiences negative attention in front of classmates, CF typically results in anxious learners who may decline to participate. Explicit, negative CF does not create the safe environment fundamental to learning for LESLLA learners (see, e.g., Santos \& Shandor, 2012). Practitioners and researchers have experimented with materials to create a safe environment while providing opportunities for systematic, consistent, intensive, and clear feedback when learners need it. Paralinguistic signals, both explicit and immediate, contribute to this safe environment and serve to show the learners what they answered correctly and incorrectly. In this way the learners are nonverbally encouraged to find the correct answer. This is replicated in many ways in the FC-Sprint ${ }^{2}$ and the DigLin materials.

Types of feedback techniques. In order to operate autonomously, the DigLin learner needs ample opportunities for getting feedback. All feedback techniques provided in DigLin are forms of immediate feedback (except exercise 7, "Test Yourself"). In Ranta and Lyster's (2007) CF taxonomy, this falls under explicit feedback with a paralinguistic signal. In the DigLin exercises, this is a disappointed sound, or an item that refuses to stay in the blank into which it has been dragged. The learner can make repeated attempts, and the system responds each time rather than at the end. This prevents the possibility of the learner's automatizing his or her errors.

CF (when the answer is incorrect) takes a friendly form, as shown in the screenshots in Figures 2-6. Positive feedback is signaled after the learner's successful dragging action by the appearance of a green $\sqrt{ }$, a green button, or an encouraging sound.

The feedback techniques in FC -Sprint ${ }^{2}$ can be divided into two main types:
Feedback created by the system. When there is a certain action, for instance when the learner drags, reads, or types a word or grapheme, the system reacts with immediate feedback (correct or incorrect).

Feedback created by the learner independently by clicking on buttons, hovering over buttons, comparing sounds, listening to sounds and words, and looking at photos (necessary to understand why an answer is incorrect). This type of feedback can be compared to the use of a dictionary by literate learners.

## Exercises

The exercises are constructed in such way that non-literates are challenged to do something: to touch (with a mouse) colored buttons, to listen and look, and to do so time and again. The DigLin course materials consist of 15 sets of 20 words for each language. In these exercises, clicking a mouse on the leftmost green button activates the audio for that word, and the next, smaller button activates a photo of the word. For Finnish, German, and Dutch, the basic orthography for each language is involved in this selection; for English, more sets of 20 words would be needed to cover all grapheme-phoneme correspondences. Although learners can start with any set of words they choose, the exercises within a set are presented in a specific order (see Table 1) that reflects the pedagogical steps in a phonics-based method aiming at associating specific sounds (phonemes) with specific letters (graphemes). This is done on the basis of a whole word, which is visually and auditorily divided into smaller units (analysis). Traditionally, this is done with a sheet of paper when
a teacher's voice clearly shows the sub-lexical structure of a word (the analysis) and supports the blending of the sounds into words (synthesis).

In computer-aided systems like FC-Sprint ${ }^{2}$ and DigLin, these processes are taken over by the visual and auditory form of the exercise shown in Figure 2. The visual form shows a written word as a composite unit of separate elements. The squares with graphemes can be activated to play the specific vowel or consonant sound. In this way, both the visual and the auditory character of the word can be realized as often as needed for systematically developing letter-sound associations. The computer program takes over not only word analysis, but also synthesis, to a certain extent. That is to say, a learner can understand what the result of the synthesis is (the entire word played by the green button to the left) without being challenged to read it aloud. DigLin will add this possibility to the five exercise types taken from FC-Sprint ${ }^{2}$ in the form of ASR's providing assessment of the read word. Here, pronunciation plays a role as well.

The presentation exercise (Figure 2), in Dutch, is meant as an orientation for the learner. In the German exercise called "From Letters to Words" (see Figure 3), the learner is challenged to fill in the blanks with the correct graphemes.


Figure 2. Presentation of 20 Dutch words with the sound bar at the bottom. The meaning of the word boom is activated by the learner and shown on the screen.

The learner whose screen is shown in Figure 3 has followed a strategy of finding out where to place the first letter of the alphabet. She has found all blanks for the $a$ at this point, since the block with $a$ in the alphabet is no longer grey. By the end of this exercise, all grey blocks in the alphabet will have become white. Other learners may follow different strategies, for instance, first filling in all the blanks of the first word.


Figure 3. From Letters to Words (German version)
In Figure 4, words are dragged and dropped. There are two rows of words and two rows of blanks.


$$
\begin{array}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \text { a } & \text { b } & \text { c } & \text { d } & \text { e } & \text { f } & \text { g } & \text { h } & \text { i } & \text { J } & \text { k } & \text { l } & \text { m } & \text { n } & \text { o } & \text { p } & \text { q } & \text { r } & \text { s } & \text { t } & \text { u } & \text { v } & \text { w } & \text { x } & \text { y } & \text { z } & \text { alk } \\
\hline \hline \text { ch } & \text { ck } & \text { ew } & \text { ea } & \text { ee } & \text { ei } & \text { gh } & \text { gi } & \text { ie } & \text { ir } & \text { ire } & \text { ng } & \text { oa } & \text { oi } & \text { old } & \text { one } & \text { oo } & \text { ou } & \text { ow } & \text { ph } & \text { qu } & \text { sh } & \text { th } & \text { ue } & \text { ui } & \text { ull } & \text { vy } \\
\hline
\end{array}
$$

| a | b | C | d | e | $f$ | g | h | i | j | k | 1 | m | n | 0 | p | q | r | S | t | u | v | W | X | y | z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ae | ai | air | ar | ay | ch | ck | ea | ear | ee | ie | igh | ir | mb | ng | oa | Oe | oi | 00 | ou | ow | qu | sh | th | Ue | wr |
| Mgify |  |  |  |  |  |  |  |  | 02013 |  |  |  |  |  |  | Lerbedni |  |  |  |  |  |  |  | Spr | $\mathrm{nt}^{2}$ |

Figure 4. Screenshot of exercise 3: Dragging Words-1 (English version)

The learner needs to drag the listed words to the blanks. The learner whose screen is shown has successfully dragged seven words and dropped them into the correct blanks on the left and the right. This can be seen by the fact that the words remain in the blanks. Words dropped into the wrong blank cannot stay there but jump back to the position where they came from. A learner can use several strategies: (1) visually recognize the word as a unit and connect it the correct photo, or (2) first listen to the word, try to analyze its orthography (with help of the sound bar), or (3) try to recognize the written word on the basis of the first grapheme-or use similar strategies.

Figure 5 also shows a drag-and-drop exercise, this one based on the dragging of individual graphemes in German. This exercise is particularly useful for blending individual phonemes into a word. It requires the learner to first synthesize the phonemes "hidden" under the four buttons to the left of each blank; then, when the learner locates the word sofa, he or she must search for it in the list of written words, find it, and drag it to the blank. This learner has successfully dragged and dropped five words to the appropriate blanks (a green button appears at the right of the blank when the action is correct).

This feedback takes the form of being able to check the synthesis of phonemes without reading the word aloud. It is a way of disentangling reading (i.e., synthesis of graphemes to silent word reading) from pronunciation and thus provides evidence that it is possible for even beginner-level learners to practice (and test) their skills without reading aloud, although this is not DigLin's ultimate target. Rather, the aim is that the learner will read aloud at a level which native speakers of the target language are able to understand without great effort.


Figure 5. Screenshot of exercise 4: Dragging Words-2 (German version)
In exercise 5, shown in Figure 6 for Finnish, the learner has to type the word he or she hears into the blank. This requires the learner to analyze the spoken word and then to find and type the corresponding graphemes. The sound bar at the bottom can help locate the appropriate graphemes. The screenshot in Figure 6 shows that this student has correctly written 14 words; an incorrect answer simply does not get the green sign $(\sqrt{ })$.


$$
\begin{array}{|c|c|c|c|c||c|c||c|c||c|c|c|c|c|c|c|}
\hline \text { a } & \text { b } & \text { c } & \text { d } & \text { e } & \text { f } & \text { g } & \text { h } & \text { i } & \text { j } & \text { k } & \text { l } & \text { medestaan } & \text { n } & \text { o } \\
\hline \hline \text { p } & \text { q } & \text { r } & \text { s } & \text { t } & \text { u } & \text { v } & w & \text { x } & \text { y } & \text { z } & \text { ä } & \text { o } & \text { ng } & \text { nk } \\
\hline
\end{array}
$$

Figure 6: Screenshot of exercise 5: Dictation (Finnish version). The leftmost button provides the spoken word that the student has to type.

ASR-based corrective feedback on read words. Exercises 6 and 7 (not shown here) form the last phase of the beginning reading process (see Table 1) for each set of words. These exercises consist of reading 20 words from a Dutch, English, German, or English set. There are no photos and no opportunities to listen to words. Exercise 6 includes only the 20 written words and the sound bar; exercise 7 is without the sound bar, and the words are in an arbitrary order. This exercise enables the learner to assess the quality of their pronunciation by receiving explicit feedback on words read aloud.


Figure 7: Screenshot of feedback by ASR (Dutch version)

Because this form of feedback is not included in FC-Sprint ${ }^{2}$, the DigLin project has been developing additional exercises using ASRdedicated technology and error-detection algorithms. The application of ASR technology and automatic error detection in the non-literate classroom is innovative and challenging, particularly because we are dealing with the non-native speech of low-proficient learners (van Doremalen et al., 2010). The process in this exercise will work as follows: The learner reads a word aloud and receives detailed feedback after every word. This feedback is gradient rather than absolute; it indicates the degree of correctness. The student in Figure 7 has pronounced <kam> (comb), but the pronunciation is not sufficiently close to the target (amber color). The phoneme $a$, which was most incorrect, appears in red. The learner's realization now appears on the screen so the learner can compare this with the target sound and try again.

## Conclusion

The concept of learning built into FC-Sprint ${ }^{2}$ might appear to conflict with the systematic and sequential instruction essential to a phonics approach. The Digital Literacy Instructor, however, has the potential to retain the learner autonomy embodied in these features. As seen above, DigLin presents the structure of the word to the learner's eye and ear in a systematic way, while allowing the learner more freedom. It allows individual routes based on native language influences and on individual problems, interests, and learning strategies. Teacher feedback is replaced by DigLin's systematic, consistent (always the same exercises, with always the same feedback), intensive (practice is unlimited), and clear (visual signals) corrective feedback. The teacher supports and encourages the learner by setting high expectations. One might ask if this is really feasible for the non-literate adult L2 learner. In the beginning, the learner might have a hard time; however, our experience with nonliterate students at Friesland College, elsewhere in the Netherlands, and in Denmark at Lower Dansk has shown that this approach is successful (see Koot, van Binsbergen, van der Burg, \& Gerbenzon, 2011). Learners become more active and explore on their own how to solve problems they encounter. As a consequence, their motivation increases. Can non-literate adult learners even work with the computer without first receiving a thorough introduction to digital skills? FC-Sprint ${ }^{2}$ assumes that they can. Many skills can be learned just by doing, as evidenced by preschool children who start using computers, tablets, iPads, and so on, without any instruction or the help of older children or adults. If we only challenge them, then this is possible! The next phase of the project (September 2014 - February 2015) will reveal, in the four project countries, precisely how learners rise to this challenge.

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## References

Dalderop, K. (2011). Instrument startfase alfabetisering Amsterdam [Amsterdam Literacy Placement Toolkit]. Arnhem, Netherlands: unpublished document.
Koot, N., van Binsbergen, W., van der Burg, L., \& Gerbenzon, C. (2011). Wat groeide er in de Friese Alfa-Sprint²-tuin? (pp. 1113). Alfa-nieurws, 3.

Kurvers, J., van Hout, R., \& Vallen, T. (2007). Literacy and word boundaries. In N. Faux (Ed.). Proceedings from Low-Educated Second Language and Literacy Acquisition 2nd Annual Forum (pp. 45-64). Richmond, VA: The Literacy Institute.
Kurvers, J., \& Stockmann, W. (2009). Alfabetisering NT2 in beeld. Leerlast en succesfactoren [Literacy in Dutch as L2. Learning load and determinants of success]. Tilburg, Netherlands: Tilburg University.
Li, S. (2010). The effectiveness of corrective feedback in SLA: A metaanalysis. Language Learning, 60(2), 309-365.
Lyster, R., Saito, K., \& Sato, M. (2013). Oral corrective feedback in second language classrooms. Language Teaching, 46, 1-40.
Plonsky, L., \& Mills, S. (2006). An exploratory study of differing perceptions of error correction between teacher and students: Bridging the gap. Applied Language Learning, 16(1), 55-74.
Ranta, L., \& Lyster, R. (2007). A cognitive approach to improving immersion students' oral language abilities: The awareness-practice-feedback sequence. In R. DeKeyser (Ed.), Practice in a second language: Perspectives from applied linguistics and cognitive psychology (pp. 141-160). Cambridge: Cambridge University Press.
Saito, K., \& Lyster, R. (2012). Investigating the pedagogical potential of recasts for L2 vowel acquisition. TESOL Quarterly, 46(2), 385-396.
Santos, M. G., \& Shandor, A. (2012). The role of classroom talk in the creation of "safe spaces" in adult ESL classrooms. In P. Vinogradov \& M. Bigelow (Eds.). Proceedings from 2011 LowEducated Second Language and Literacy Acquisition $7^{\text {th }}$ Symposium
(pp. 110-134). Minneapolis: University of Minnesota. Van Doremalen, J., Cucchiarini, C., \& Strik, H. (2010). Optimizing automatic speech recognition for low-proficient non-native speakers. EURASIP Journal on Audio, Speech, and Music Processing. doi: 10.1155/2010/973954

# Implementing a Mutually Adaptive Learning Paradigm in a Community-Based Adult ESL Literacy Class 

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#### Abstract

This study examined the engagement of one teacher with the Mutually Adaptive Learning Paradigm (MALP) in community adult basic education ESL literacy programs and her development as she implemented this model in a community-based adult language and literacy program for Haitians. We adopt a qualitative methodology to study teacher practices consistent with this model, which is designed to transition learners with little, interrupted, or no formal education to Western-style formal education and literacy practices. We examine how, using MALP, the teacher was able to encourage active participation, develop a sense of community, and reduce the cultural dissonance (Ibarra, 2001) that students were experiencing. Our results describe how these practices led to increased engagement in and ownership of learning and greater self-confidence. We conclude the study with an examination of the difficulties of doing research with immigrant adults in community-based organizations and a consideration of the importance of continuing to conduct such research despite the barriers.


## Introduction

The extent of prior exposure to Western-style formal education varies greatly among ESL students. Those familiar and comfortable with the expectations of such education are likely to progress satisfactorily. In contrast, emerging empirical research indicates that students new to formal education learn languages, become print literate, and engage with school differently, which points to the need for alternative pedagogical approaches (e.g., Bigelow, 2010; DeCapua \& Marshall, 2011; Marshall \& DeCapua, 2013; Peyton, 2012; Young-Scholten, 2007). Here, we follow an ESL literacy teacher as she engages Haitian adult learners in an innovative approach designed to transition them to formal education and increase their comfort level with school-based learning processes and activities. Together, they forge a learning community that succeeds in moving students toward a new level of confidence and achievement, where literacy practices are centered around their needs, interests, and lived experiences to empower them in their lives (Freire, 1994).

## Different Ways of Teaching and Learning

Western-style formal education is equated with formal classroom settings, trained teachers, standard curricula, and specific classroom behaviors and ways of thinking. Although this style of formal education has cultural variations around the world (Anderson-Levitt, 2003; Grigorenko, 2007), the underlying assumptions remain the same. Students are expected to engage in ways of thinking and learning derived from systematic, logical, and controlled ways of examining and understanding the world-ways that have their basis in scientific thought (Flynn, 2007; Ozmon \& Carver, 2008). Much of this learning has no direct application to life in the real world or any immediate relevance because learning is future-oriented, whether as a foundation for a more advanced course, preparation for a test, or simply for the sake of learning (Bruner, 1961; Crumpton \& Gregory, 2011). Strong literacy skills are central in the learning and teaching process, and students are
held individually accountable for their work, which is manifested most commonly on tests. This is the learning paradigm with which U.S. educators are familiar and comfortable (DeCapua \& Marshall, 2011; Marshall \& DeCapua, 2013).

Many low-educated ESL students, however, come from a different learning paradigm, that is, informal ways of learning. Learning is not separated and compartmentalized from daily life as in formal schooling, but it takes place as part of the sociocultural practices of a community (Paradise \& Rogoff, 2009; Silva, Correa-Chávez, \& Rogoff, 2010). It is immediately relevant learning that occurs when necessary; this learning focuses on the tasks, endeavors, skills, procedures, and rituals that comprise daily life. Teaching and learning consist of modeling, demonstration, imitation, and practice to gain mastery (Lave \& Wenger, 1991; Paradise \& Rogoff, 2009). Literacy is neither central nor necessary, even. This is the learning paradigm that many low-educated ESL students find familiar and comfortable (DeCapua \& Marshall, 2011; Marshall \& DeCapua, 2013).

We emphasize that these two paradigms do not represent neat dichotomies but provide a means for clarifying differences between distinct approaches to teaching and learning. Just as not all students in Western-style formal education systems demonstrate the same degree of mastery, so, too, will low-educated ESL students fall all along the continuum of ways of teaching and learning (DeCapua \& Marshall, 2011; Marshall \& DeCapua, 2013). At the farthest end of the continuum, away from formal education, are students who are primarily or exclusively oral. They come to U.S. classrooms with no or very limited literacy skills, both in their native language and in English, and with zero or little exposure to formal Western-style schooling. Others come with more developed literacy skills and have some content background; still others approach expected literacy and content knowledge, but are still used to nonschool-based, decontextualized ways of thinking. What all of these low-educated learners share is their being accustomed to engaging in different cognitive processes shaped by culturally influenced learning experiences that are distinctive from those that are the norm
in formal classroom settings (Cole, 2005; Gauvain, Beebe, \& Zhao, 2011; Silva et al., 2010). Students finding themselves in such settings must master decontextualized school tasks removed from the context of sociocultural practices, and also develop their literacy skills and content and/or vocational knowledge. Thus, we argue that the focus for instructors must be threefold: literacy, content knowledge, and new ways of thinking. It is this third factor that few educators are aware of, because it derives from hidden cultural factors. Yet it is these new ways of thinking that must be explicitly taught.

To accomplish this, DeCapua and Marshall (2010a; 2010b; 2011) and Marshall and DeCapua (2013) suggest that teachers of low-educated ESL students implement the Mutually Adaptive Learning Paradigm. The struggles faced by these students often stem from cultural dissonance (Ibarra, 2001) because they generally do not share the assumptions about teaching and learning prevalent in formal school settings and find themselves confounded by the ways in which language and content are presented, practiced, and assessed. These underlying cultural differences must be made explicit to educators so that they can develop effective strategies to address the needs of this population. It is essential that educators understand how cultural values, beliefs, and practices influence educational beliefs and practices (DeCapua \& Wintergerst, 2004). To address the cultural dissonance described above, DeCapua and Marshall (2011) and Marshall and DeCapua (2013) developed an instructional model, the Mutually Adaptive Learning Paradigm, which is designed to transition students to formal school settings through a mutually adaptive approach. In MALP, the priorities of both learners and the formal educational setting are taken equally into account, thereby reducing the cultural dissonance these students experience in formal classroom settings. Literacy and learning must be relevant and built around their needs, interests, and daily lives.

Implementation of MALP promotes academic achievement for low-educated ESL students by: (1) accepting the conditions students need to learn; (2) combining the processes for learning essential for them with those that are key to learning in U.S. classrooms; and (3)
engaging students in school-based ways of thinking and performing decontextualized tasks, initially scaffolded by the use of familiar language and content.

Accepting conditions for learning necessitates teachers' adapting to learners' needs by ensuring that lessons have immediate relevance and are not simply provided as a means to reach some future end point. It also entails teachers' personal investment in making meaningful connections with learners, along with promoting strong bonds among learners to form an interconnected web of relationships.

Combining processes for learning asks both teachers and learners to adapt their learning paradigms. Learners transition from their preference for relying on the oral mode and on fellow students for constant support during learning. Teachers reach across to the learners' paradigm by including oral elements combined with the written word and sharing responsibility, along with tasks requiring individual accountability.

Focusing on new activities for learning involves students' adapting to formal educational expectations by developing new ways of thinking. Teachers ensure that new school-based tasks are accessible by introducing them with material familiar to learners and using language that learners have encountered previously.

Finally, teachers must develop effective instruction, that is, present content and develop literacy and school skills so that these are accessible to their students. This does not mean dumbing or watering down the curriculum, but it entails presenting and practicing literacy, content, and school ways of thinking by culturally scaffolding them with culturally responsive teaching, which incorporates the diverse funds of knowledge, heritage, experience, and student perspective into the curriculum and the classroom (Gauvain et al., 2011; Gay, 2002; González et al., 2005).

## The Study

The study took place in a Haitian community-based organization (CBO) located in an urban-suburban area near the New York City
metropolitan area. This CBO, which has little external funding, is run almost exclusively by volunteers. The organization provides training in a variety of family and social services, acts as social center for the local Haitian community, and offers various entry-level courses. There is high demand for literacy and ESL classes, but resources are limited. Classes are offered for free, running whenever the CBO has available teachers-often volunteers without any pedagogical training, which is problematic. At the time of the study, a teacher had resigned suddenly, and a graduate student from the TESOL program of one of the researchers agreed to step in to teach and assist the researchers in a study of the implementation of the MALP model in this type of setting.

## Method

## Data Collection

Data were qualitative and gathered over a five-month period through (1) an informal intake assessment; (2) classroom observations by the researchers and by a fellow graduate student of the volunteer teacher; and (3) the completion of MALP checklists (see Table 1 in Appendix) by the researchers and the graduate students.

Intake assessment. New students were given a short questionnaire asking about their age, time in the United States, prior schooling, and English proficiency. When available, the community liaison, or another volunteer, assisted. At other times, the class assistant or one of the researchers administered the questionnaire with help from moreproficient students. However, with new students coming in at any point, even during a lesson, it was not always possible to do this.

Classroom observations. The two researchers took turns observing the class and taking extensive field notes using the MALP checklist. At times, they engaged in participant observation where they were actively involved in interacting with students and participating in the
day's lesson. On other occasions, they disengaged from the class, merely observing and recording class dynamics. For the last three months, a graduate student also assisted in and observed the classes, using the MALP checklist.

MALP checklist. To ensure full and effective implementation of the MALP instructional model, DeCapua and Marshall (2011) and Marshall and DeCapua (2013) developed the MALP Teacher Planning Checklist (see Appendix A). Teachers use the checklist in planning to ensure that they are fully incorporating the model, and they use it again after their lessons to review areas of strength and weakness. The checklist is also valuable to observers for assessing classroom execution of MALP. In the present study, the teacher, the researchers, and the graduate student who observed completed checklists (see Appendix A for a sample).

## Participant Population

The teacher and the assistant. The teacher, Katie (not a pseudonym), already a certified elementary and special education teacher, was now completing a master's degree in TESOL and had received MALP training. Erika (a pseudonym), a fellow graduate student who was also a certified classroom teacher and familiar with MALP, regularly helped Katie and acted as another observer.

The students. The director, himself a Haitian immigrant, was intimately connected to the community and able to provide valuable insights into the students taking the ESL/literacy class. The students were all Haitian, ranging in age from 16 to 77, although the majority of students were in their midtwenties to early forties. They were Creole speakers with little knowledge of French. Their native language literacy skills ranged from alphabet recognition to being able to write basic sentences, and they had had anywhere between two and 14 years of schooling in Haiti. The students had been in the United States anywhere from three
months to seven years, and their oral English proficiency varied from low to advanced beginner. Class size ranged from 18 to 27 students, almost all female. The participants were not consistently the same, as Katie was working with a large number of constantly rotating students.

The intervention. The study took place over the course of five months. Initially, classes met twice weekly for two hours, changing after the first two months to once weekly due to Katie's course load.

## Data Presentation and Analysis

Here, we examine two lessons, one from early in the intervention and one toward the end. In each case, there is a description of the lesson and an analysis of the elements of MALP using the MALP checklist.

Lesson no. 1 description (week 3). In creating her lessons, Katie thoughtfully considered topics that would resonate with her students. One evening, she came with a bad cold and used this as the basis for a lesson on illness. Katie showed the students photos of people sneezing, coughing, and holding their throat. Pointing to each photo, she asked, "What is wrong?" Some pictures elicited one-word responses or students' demonstrating what they saw.

Katie was careful to write down each word that her students produced. Some words and phrases, such as headache and sore throat, proved difficult to pronounce, so, for example, she worked with the students on the initial $b$ and the initial cluster, $\theta r$. In addition, Katie pointed out the morphology of compound nouns, such as headache, toothache, stomachache, and earache, so that the students could appreciate the commonality with the word ache.

Next, with Katie's guidance and prompting, the class constructed sentences for each photo, such as, "I have a sore throat," which Katie wrote on the board. Students composed sentences and practiced changing the sentences to third person, as in, "She has a sore throat." Finally, Katie gave the students time to copy sentences from the board.

Lesson no. 1 analysis. Undoubtedly, Katie was considering the MALP model in this lesson. By selecting illness as the topic when she herself was ill, she was both making the lesson immediately relevant and increasing her interconnectedness with the class. As the students and Katie shared their experiences with illnesses, they also increased the level of their openness with each other. Katie clearly accepted the students' conditions for learning.

Regarding the processes for learning, Katie consistently used both oral and written forms of all language introduced and practiced. She took dictation as students participated orally (speaking). She wrote their sentences on the board, editing as needed (reading). She read the sentences first herself (listening) and then along with the student(s). Students then shared their sentences with their classmates without reading from the board (speaking). Finally, the students copied their sentences into their notebooks (writing). However, because the students preferred the oral mode, they focused more on their pronunciation than on their writing, which consisted entirely of copying from the board once the vocabulary word or sentence had been written on it.

Katie incorporated shared responsibility by allowing students to help each other with pronunciation and with remembering their sentences, and allowing them to provide each other with cues in Haitian Creole. Nevertheless, although Katie attempted to hold students individually accountable for their oral participation and for writing down the sentences they had created, there was some resistance, particularly from the less proficient and/or less literate students in the group. Moreover, as Erika stressed in her checklist, not every student had an opportunity to participate as an individual. Overall, Katie still needed to work on transitioning the students to the less familiar and less comfortable processes for learning: using the written mode and demonstrating individual accountability.

Finally, as indicated in the MALP model, there must be a focus on new activities to support the development of new ways of thinking. In this case, the learning activities themselves were essentially familiar tasks of repeating, copying, and recombining words to make sentences.

Katie was not requiring academic tasks to build facility with unfamiliar ways of thinking. Vocabulary related to illness is familiar content in the sense that all human beings have been sick at one time or another. Katie noted in her reflection on this lesson that it is necessary for students to be able to respond when asked how they are feeling. While this is no doubt the case, the focus of her teaching was exclusively on English language development. Katie clearly had much to offer her students regarding phonology, morphology, and syntax. Yet, in this and in the subsequent lessons which were similar, Katie remained focused on language, not moving the students toward decontextualized, schoolbased tasks as called for in MALP.

Lesson no. 2 description (week 18). We now turn to another lesson, nearly four months later, after Katie had been coached and debriefed weekly by the researchers. The purpose of this lesson was to introduce the academic tasks of categorizing and sorting, using a relevant topic: familiar stores where the students lived.

Katie began the lesson by showing photos of area stores and asking the students to identify them. This led to conversation about differences between supermarkets, department stores, and superstores. Katie and the students together created a graphic organizer to categorize each of the stores provided by the students. Referring to the T-chart, the class reviewed the types of products they could purchase at both supermarkets and department stores. Using this information, Katie showed additional photos of other stores and asked the class to decide whether the photo belonged on the chart labeled "supermarkets" or on the chart labeled "department stores." She also had advertisement circulars from stores and showed the students pictures of the products inside these circulars to help them to make a connection between the visual representations and the written words on the board. Katie's final task was for the students to write one sentence using a product from the circulars to say what they wanted for Christmas or what they had already bought for themselves or a family member. To assist them, Katie provided the sentence frame on the board.

Lesson no. 2 analysis. This lesson represented Katie's development as a MALP instructor. In her notes, Erika commented that she had witnessed all elements of MALP being successfully incorporated into the lesson. Our analysis of the data on this lesson confirms the conclusion from Katie's peer observer.

The lesson was immediately relevant because it involved real stores in the area that the students had seen and had frequently shopped in. Katie and the students developed and maintained interconnectedness by sharing shopping experiences at these stores.

Regarding combining processes for learning, Katie was much more effective than in earlier lessons. The students continued to assist each other throughout the lesson by speaking in Creole to clarify vocabulary and ideas. They also individually shared examples of times they went to specific stores and things they bought there. Katie wrote everything they said on the board. The process of oral communication to printed word was reinforced by having students read the sentence or words aloud after Katie wrote them. Later, the students were asked to independently write a sentence describing an item they had bought or wanted to buy from their store of choice.

Most importantly, the component of MALP that had earlier eluded Katie was clearly present in this lesson. She focused on academic ways of thinking and on decontextualized, school-based tasks. She asked students to categorize each store as either a supermarket, a department store, or a superstore, introducing an academic way of thinking, i.e., categorization. All tasks were created and performed using studentprovided language. The basic sentence patterns Katie used were familiar, and the vocabulary had been generated by the students during previous lessons. The content was also familiar, as the students all went shopping regularly and knew the stores and store products.

## Overall Analysis of MALP Implementation

In analyzing the checklists completed by the researchers and the peer observer, the following themes emerged.

Katie was cognizant of the elements of MALP, yet it took her until well into the intervention to be able to implement the model fully. The easiest component of the model for Katie was to accept the conditions for learning. All of her lessons were driven by immediate relevance. There was no prescribed curriculum or prescribed materials. Katie could elicit topics from students and use whatever material spontaneously emerged, such as the lesson on illnesses. That lesson sprang from her own illness, and she used it to involve the students in exploring ways to express themselves in English.

The other condition, interconnectedness, manifested itself naturally, as the students were all members of a close-knit local Haitian immigrant community. Katie's focus was on having them deepen their connections, as well as on establishing a strong relationship with them. This she did by having the students share family photos and important personal dates such as birthdays, and by encouraging them to share personal examples for each of her lesson topics.

Somewhat more perplexing for Katie were the processes for learning. The students were much more comfortable with oral transmission and shared responsibility. They became nervous when they had to write or speak on their own without help. Katie struggled to create situations wherein they would naturally transition into the new behaviors, but their resistance frequently thwarted her. Initially, writing remained as copying, not generating print. Speaking or reading aloud from the board remained as repeating after the teacher or being prompted by fellow students. However, in the later part of the intervention, Katie did gradually succeed at moving many students along in terms of these new processes.

Finally, it was the academic tasks, the new activities for learning, which eluded Katie until the very last class sessions. Until that point, she, as an ESL teacher, was focusing primarily on language instruction. The lessons were about vocabulary-for holidays, for food, for illnesses, and so on-or about grammar, including past tense, subject-verb agreement, etc. Furthermore, these were traditional ESL lessons in terms of the activities Katie conducted insofar as they consisted of familiar ways
of students' practicing what they were learning, such as watching the teacher model, repeating after her, or copying. During debriefings, the researchers emphasized that these were not new academic tasks and did not serve to introduce the students to academic ways of thinking. Subsequently, Katie went on to create a series of lessons in which the students had to identify, discuss, and, finally, categorize types of stores. It was in these lessons that Katie succeeded in introducing academic ways of thinking by using familiar language and content.

## Summary of Findings

It is unrealistic to expect low-educated ESL students to engage immediately in the cognitive practices of schooling to which they have limited or no exposure or with which they have limited practice. MALP helps transition this population, in that teachers accommodate students' priorities and, at the same time, prepare them to engage in the standard and essential practices of schooling: accessing and transmitting information via print (literacy); taking individual responsibility (grades and testing); and employing academic ways of thinking (decontextualized tasks).

The data analysis indicates that Katie was ultimately successful in implementing MALP. During each lesson, Katie used various techniques to ensure that the material was immediately relevant to the students. The topics Katie selected evolved naturally from the students' own interests. She based all lessons on these interests, keeping in mind their literacy and language needs and proficiency. This also allowed Katie to promote the interconnectedness that is so important to these Haitian students. In her completed checklists and debriefing sessions, Katie noted how much more engaged the students had become over the five-month period and how much more willing they were to move beyond copying and recitation. It was gratifying to Katie to see how those students who consistently attended her classes worked with newly arrived students to encourage them in the "new" style of teaching.

Throughout each step of her lesson, Katie explicitly connected the oral and the written. In traditional ESL pedagogy, four skills are usually distinguished: speaking, listening, reading, and writing. Oral production is viewed as separate from reading; however, in MALP, making explicit connections between oral transmission and print is essential. When students orally responded to Katie, she immediately wrote what they said. Pointing to each word and/or phrase, she had the students read the information back to her individually and/or chorally. While many of the students gravitated toward the oral and away from the written, Katie gradually moved them closer to using print and away from relying solely on oral modes.

Haitians, as members of a very collectivistic culture, prefer being with others, working with others, and interacting with others (James, Noel, Favorite, \& Jean, 2012). Katie was conscientious in encouraging students to work both together and individually. Since individual accountability is expected in U.S. schools, the MALP model, as a transitional model, requires that opportunities for both group work and individual work be incorporated in lessons. Here again, there was initial resistance to individual participation, which Katie overcame as time passed and students became more relaxed and confident, as well as more proficient.

These students were used to informal ways of learning and to pragmatic tasks. They were accustomed to learning what they needed to learn as circumstances required, generally by watching and doing rather than by engaging in school-based ways of interacting, thinking, and receiving and processing information. For many, the goal was to eventually be able to find jobs beyond the most menial ones, which most of them held, given their limited literacy, lack of English proficiency, and, as we have argued, unfamiliarity with school-based, decontextualized ways of thinking. Although we realize that MALP is not a panacea for the numerous societal obstacles that low-educated immigrants face, we believe that accessing language, literacy, and formal ways of thinking will make a difference in their ability to navigate these obstacles. Katie, by including tasks derived from this type of thinking, was helping them
learn to think in new ways, using familiar language and content so that the focus was exclusively on the task when the task itself was the focus. Her struggles and eventual success in helping the students (categorize) validated, from our point of view, the necessity of introducing classroom ways of thinking by using familiar language and content.

In addition to the data gathered from the observations, both by Katie's fellow graduate student and by the researchers, there was positive anecdotal evidence pointing to the effectiveness of the MALP intervention. At every class, new students arrived; the class mushroomed from a handful of students to nearly 30 on a typical night. Through word of mouth, these students heard about Katie's class and wanted to become a part of the positive learning experience she was creating. The director also indicated to Katie, both at the time and in subsequent months after the intervention, that the students found the class to be quite different from anything they had experienced before and that they very much wanted her to continue and, later, return.

## Limitations of the Study

The exploratory findings need to be considered in light of several limitations. The plan for the study included intake and outtake assessments. Although in many cases it was possible to collect intake assessment data, it was not possible to do any outtake assessments, due to the nature of the program. Because the CBO operated with an open enrollment policy, students could join the class whenever they wanted or when they learned about it. Moreover, they attended whenever they could, which meant that there was a lack of consistent attendance over the course of the entire intervention.

Another limitation of the study is that there was only one teacher. Results may differ when more than one teacher is involved: Are the findings justifiably the result of the implementation of the MALP model, or are there personality, professionalism, or other characteristics of the teacher in question at play? With only one teacher participating in the study, it is difficult to draw the conclusion that MALP alone made
the difference. Nevertheless, the literature indicates a richness of data and a breadth of qualitative research, which is lacking in quantitative studies and which can significantly contribute to our understanding of pedagogy and classroom practices (Cresswell, 2012; Maxwell, 2012). Here, for example, through a qualitative approach, the researchers gained valuable insights into Katie's developing ability to implement MALP over the course of the study. Furthermore, this approach gave Katie a voice to reflect on experiences and record her thoughts about the implementation and her growing familiarity and comfort with it in her teaching.

The nature of CBO s is another issue that impacted this research. There are many different types of CBOs. Some of these receive significant and consistent funding and support, are highly structured, have paid staff, and offer a variety of formal support services, including language and literacy classes. However, many others, like the Haitian one described here, are more informal, receive little consistent funding, and are consequently more loosely structured, with their services depending on what the current funding will support and what the volunteers can offer. The classes at such a CBO will be less consistent and will frequently offer open enrollment. In terms of conducting a controlled research study, open enrollment and the concomitant lack of consistent attendance over the time frame of an intervention make collecting data and drawing valid conclusions difficult.

Difficulties of implementing studies in CBOs. The diverse types of CBOs, with their varied foci and institutional structures, present both opportunities and challenges for researchers. While these factors are somewhat different from those that are present in $\mathrm{K}-12$ settings, there are similarities between the two. For example, Marshall, DeCapua, and Antolini (2010) found in the research on high school students who had limited or interrupted formal education that inconsistent attendance, a major problem in the current study, was also an issue.

On the other hand, unlike most CBOs, teachers in $\mathrm{K}-12$ public school settings are certified and have appropriate pedagogical training,
although the latter is often not the case with ESL populations, especially low-educated learners (Darling-Hammond, 2012). Nevertheless, the fact remains that public schools are not "drop-in institutions"; they are highly structured and formally organized in ways that many CBOs, such as the Haitian one, are not.

From this brief discussion, the question arises as to whether or not research should (or can) be conducted in CBO . We argue here that low-educated adult ESL learners are an understudied population that deserves to be researched in order to better serve them. Despite the difficulties of conducting such research, employing qualitative methods of data can provide insights and direction. In this study, the use of the MALP checklist by all the vested parties, and the subsequent analysis of these by the two researchers, along with debriefings, provided rich sources of data regarding the development of Katie's full implementation of the MALP instructional model. It is important that other researchers replicate and extend our study with the expectation that the promising findings of the current study will lead to progressively more extensive implementation of MALP.

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## References

Anderson-Levitt, K. (2003). Local meanings, global schooling. Hampshire, England: Palgrave.
Bigelow, M. (2010). Mogadishu on the Mississippi: Language, racialized identity and education in a new land. Malden, MA: Wiley-Blackwell.
Bruner, J. (1961). The act of discovery. Harvard Educational Review, 31(1), 21-32.
Cole, M. (2005). Cultural and historical perspectives on the developmental consequences of education. Human Development, 48(4), 195-216.
Cresswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research ( $4^{\text {th }} \mathrm{ed}$.). Boston, MA: Pearson.
Crumpton, H. E., \& Gregory, A. (2011). "I'm not learning": The role of academic relevancy for low-achieving students. The Journal of Educational Research, 104(1), 42-53.
Darling-Hammond, L. (2012). Powerful teacher education: Lessons from exemplary programs. New York: John Wiley \& Sons.
DeCapua, A., \& Wintergerst, A. (2004). Crossing cultures in the language classroom. Ann Arbor: University of Michigan Press.
DeCapua, A., \& Marshall, H. W. (2010a). Serving ELLs with limited or interrupted education: Intervention that works. TESOL Journal, 1, 49-70.
DeCapua A., \& Marshall, H. W. (2010b). Students with limited or interrupted formal education in US classrooms. Urban Revierw, 42, 159-173.
DeCapua, A., \& Marshall, H. W. (2011). Breaking new ground: Teaching students with limited or interrupted formal education. Ann Arbor: University of Michigan Press.
Flynn, J. (2007). What is intelligence? New York: Cambridge University Press. Freire, P. (1994). Pedagogy of hope. New York: Continuum.

Gauvain, M., Beebe, H., \& Zhao, S. (2011). Applying the cultural approach to cognitive development. Journal of Cognition and Development, 12(12), 37-41.
Gay, G. (2002). Preparing for culturally responsive teaching. Journal of Teacher Education, 53, 106-116.
González, N., Moll, L., \& Amanti, C. (2005). Funds of knowledge: Theorizing practices in households, communities, and classrooms. Mahwah, NJ: Lawrence Erlbaum.
Grigorenko, E. (2007). Hitting, missing, and in between: A typology of the impact of Western education on the non-Western world. Comparative Education, 43(1), 165-186.
Ibarra, R. (2001). Beyond affirmative action: Reframing the context of bigher education. Madison: The University of Wisconsin Press.
James, L. E., Noel, J. R., Favorite, T. K., \& Jean, J. S. (2012). Challenges of post-disaster intervention in cultural context: The implementation of a lay mental health worker project in post-earthquake Haiti. International Perspectives in Psychology: Research, Practice, Consultation, 1(2), 110-126.
Lave, J., \& Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge: Cambridge University Press.
Marshall, H. W., DeCapua, A., \& Antolini, C. (2010). Engaging English language learners with limited or interrupted formal education. Educator's Voice, 3, 56-65.
Marshall, H. W., \& DeCapua, A. (2013). Making the transition to classroom success: Culturally responsive teaching for struggling language learners. Ann Arbor: University of Michigan Press.
Maxwell, J. A. (2012). Qualitative research design: An interactive approach ( $3^{\text {rd }}$ ed.). Thousand Oaks, CA: Sage.
Ozmon, H., \& Carver, S. (2008). Pbilosophical foundations of education (8 ${ }^{\text {th }}$ ed.). Upper Saddle River, NJ: Pearson.
Paradise, R., \& Rogoff, B. (2009). Side by side: Learning by observing and pitching in. Ethos, 37(1), 102-138.
Peyton, J. (2012). Understanding adult learners as multilingual/ multicultural individuals: Practice and research implications.

Proceedings from Low Educated Second Language and Literacy Acquisition $7^{\text {th }}$ Symposium, (pp. 135-156). Minneapolis: University of Minnesota Press. Retrieved from www.leslla.org
Silva, K., Correa-Chávez, M., \& Rogoff, B. (2010). Mexican-heritage children's attention and learning from interactions directed to others. Child Development, 81(3), 898-912.
Young-Scholten, M. (2007). Introduction. In M. Young-Scholten (Ed.). Proceedings from the $3^{\text {rd }}$ annual Low Educated Second Language and Literacy Acquisition: Research, Policy, and Practice Symposium (pp. 5-6). Newcastle upon Tyne, England: Newcastle University. Retrieved from www.leslla.org

## Appendix: Teacher Planning Checklist



# The Educational Outcomes of U.S. High School English-Learner Students with Limited or Interrupted Formal Education 

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#### Abstract

This paper reports the findings of a study that used school system data and student surveys to examine risk and resilience in the educational outcomes of English learner (EL) students with limited or interrupted formal education (SLIFE) in U.S. high schools. The outcomes included scores on standardized tests of academic achievement and gains in English proficiency over a year. Indicators of limited or interrupted formal education included gaps in grade-relative schooling, low firstlanguage literacy, and low English proficiency on arrival. It found that SLIFE were common among the high school ELs and also that SLIFE were at higher risk of academic failure, but were surprisingly resilient to challenges and fared well if provided with enough support to learn the English they needed for English-only schooling.


## Introduction

Currently, in the United States, 4.5\% (3,700,000) of all high school students are English learners (EL) (National Center for Education Statistics, 2010). According to various estimates, between $14 \%$ and 20\% of those ELs are students with limited or interrupted formal education (DeCapua, Smathers, \& Tang, 2007; Fleischman \& Hopstock, 1993; Ruiz-de-Valasco \& Fix, 2000; Walsh, 1999). U.S. researchers have
begun referring to this type of student by the acronym SLIFE (DeCapua \& Marshall, 2010). Students in U.S. high schools are expected to range in age from 14 to 18 , but all people are legally entitled to a free high school education until their 22nd birthday, regardless of their ability. For this reason, many immigrants who come to the United States attend high school, even if they are over 18. This includes labor migrants, refugees, and other immigrants. Thus, these students, who may be older and may lack education and literacy in their first language, are faced with the challenge of earning high school diplomas in a learning environment created for well-schooled and literate native-speaking adolescents. They must overcome the disadvantages they arrive with if they wish to meet state graduation standards before they become 22 years old and are forced to leave the school. For example, in the state of Maryland, where this study took place, all students were required to earn passing scores on a rigorous set of English-only, state-mandated tests of academic achievement in order to graduate (Maryland State Department of Education, 2013). Can SLIFE become proficient in academic English and meet state graduation standards in the short time they are allowed to attend high school?

This article describes findings from a recently completed study that tried to understand educational resilience in SLIFE, in the hope that it may inform policies and practices to serve these students better. It examines the prevalence of SLIFE and SLIFE indicators among a sample of ELs in U.S. high schools and how the SLIFE indicators affected educational outcomes, namely English language acquisition and academic achievement measured by standardized tests. More importantly, it identifies variables related to educational resilience for the SLIFE in the study.

## Literature Review

Presently, there is a lack of research on SLIFE (DeCapua et al., 2007), but publicly released data show that SLIFE generally perform very poorly on
standardized tests of academic achievement (Office of English Language Learners, New York City Department of Education, 2009). Researchers agree, however, that SLIFE can sometimes show great educational resilience in overcoming their challenges in U.S. schools (Bartlett, 2007; Bigelow, 2007; Short, Boyson, \& Coltrane, 2003; Tellez \& Walker de Felix, 1993; Walsh, 1999). This perception is based on case studies, however. Until now, there has never been a quantitative study to understand why some SLIFE manage to succeed in school when others fail.

This study builds on previous research on educational resilience in atrisk students. Educational resilience is defined by educational psychologists in reference to educational risk factors (Perez, Espinoza, Ramos, Coronado, \& Cortes, 2009; Gordon Rouse, 2001; Gordon Rouse \& Cashin, 2000; Alva \& Padilla, 1995; Wang \& Gordon, 1994). Educational risk factors are factors that normally predict lower educational outcomes. Educational resilience is present when a student's educational outcomes are better than one might expect, considering that student's risk factors. For SLIFE, the risk factors that normally predict lower educational outcomes are limited English proficiency, gaps in their schooling relative to their grade, and low first-language (L1) literacy. In current educational research, resilience is not considered to be a character trait but a process (Gordon Rouse, 2001; Gordon Rouse \& Cashin, 2000). In the educational resilience process, a student becomes resilient through experiences and influences in his or her environment that lead to success. Success reinforces the student's goals and beliefs, leading to new experiences and influences in the process. Researchers refer to goals, beliefs, experiences, and influences that foster resilience as "protective" factors. Protective factors in education resilience can include school or out-of-school supports, such as academic or other interventions. Goals, beliefs, experiences, and influences that disable resilience are referred to as "risk" factors. Educational risk factors can include discouraging or distracting influences or experiences in or out of school, such as perceived prejudice in teachers, peers, or society at large.

My study attempts to explain the resilience process for SLIFE in U.S. high schools by identifying the protective and risk factors that influence these students' outcomes. Although such factors are reported in literature
on SLIFE (Siu, 1996; DeCapua et al., 2007; Advocates for Children of New York, 2010; Freeman, Freeman, \& Mercuri, 2002), their impacts have never been verified by quantitative research. This study intends to examine the effect of each of these factors empirically through regression analysis with quantitative data. Like with other resilience studies of at-risk students, the findings can be used to inform interventions.

## Methods

This was a quantitative study that combined existing data from the school system with student survey data in order to understand the variability in students' educational outcomes. Because the students were ELs, the student surveys were often translated into the students' first languages. Because of low education and literacy issues, surveys were written in simple language and read aloud. As needed, bilingual assistants helped administer the surveys. SPSS software was used to conduct bivariate and multivariate analyses on the whole sample of ELs and a subsample of SLIFE.

## Participants and Setting

This study took place in a suburban/semi-urban school district on the east coast of the United States, between Baltimore, Maryland, and Washington, DC. The school district is known for high-quality schools in which students from diverse ethnic and socio-economic backgrounds are generally well integrated. This is important to mention because ELs in the United States often attend under-resourced and segregated schools in which they are less likely to be given the support they need to succeed (Gandara, Rumberger, Maxwell-Jolly, \& Callahan, 2003). The ELs in this study were generally supported by well-developed English for Speakers of Other Languages (ESOL) programs as well as other supports, such as bilingual family liaisons. Thus, this study shows what support ELs could have but might not have in many parts of the United States.

The students in this study were classified as ELs on the basis of English proficiency tests that were given to them when they first arrived in the United States. Of the nearly 300 ELs in the school district, 199 consented to participate in the study. Of those 199, there were 165 cases that provided the data required for this study. As Table 1 shows, the sample was diverse in that it was not dominated by any one ethnic or language group, and it included students of many socioeconomic backgrounds: children of well-educated professionals as well as students from low socio-economic backgrounds. Of special interest were the large number of students who had arrived recently from Burma/Myanmar as refugees of a civil war and the many other students who, for one reason or another, had not received adequate schooling before emigrating to the United States. It is noteworthy that the average age for students in this sample was 17.5 years, although most were in ninth or $10^{\text {th }}$ grade. In the U.S., ninth graders are usually 15 years old.

|  | Mean or \% | Standard deviation | \% missing |
| :---: | :---: | :---: | :---: |
| Age (in years, 14-21) | 17.5 | 1.66 | 1.8\% |
| Length of residence (yrs, 0-7) | 2.34 | 1.61 | 0.0\% |
| Parental education (yrs, 0-26) | 11.71 | 5.48 | 3.0\% |
| Elementary or lower (0-5) | 15.6\% |  |  |
| Primary (6-8) | 11.8\% |  |  |
| Secondary (9-11) | 15.0\% |  |  |
| High school + (12-15) | 27.5\% |  |  |
| College (16+) | 30.0\% |  |  |
| Grade in high school (9-12) |  |  | 1.8\% |
| $9^{\text {th }}$ | 36.4\% |  |  |
| $10^{\text {th }}$ | 29.0\% |  |  |
| $11^{\text {th }}$ | 19.8\% |  |  |
| $12^{\text {th }}$ | 14.8\% |  |  |
| Country/region of origin |  |  | 0.0\% |
| Africa (not including North Africa) | 5.5\% |  |  |
| Burma/Myanmar | 23.0\% |  |  |
| Central America \& Caribbean | 18.8\% |  |  |
| Central Asia, Middle East, \& Russia | 14.9\% |  |  |
| China | 6.1\% |  |  |
| Korea | 12.1\% |  |  |
| Mexico | 7.3\% |  |  |
| Other Asian | 4.9\% |  |  |
| Other Latin | 7.9\% |  |  |

Table 1. Sample Demographics

## Variables

Dependent variables: educational outcomes. In this study, educational resilience was measured by two educational outcomes: gains in English proficiency in the 2011-2012 school year and academic achievement measured by scores on standardized tests of academic content taken in the 2011-2012 school year. Each student's gain in English was measured by subtracting his or her 2011 English as a second language proficiency test score from his or her 2012 score. Academic achievement was measured by scores on standardized tests of algebra, biology, and English language arts, which students took in 2012 (Maryland State Department of Education, 2013). I have merged standardized versions of these scores ( $z$ scores) to create a compound measure to show each student's performance on these exams in general instead of specifically in each area. This was necessary since, in the year of the study, each test was only taken by students who were taking the corresponding class that year (i.e., only students taking algebra took the algebra test), so the number of students taking each test was small-but larger numbers were necessary for robust analyses. Preliminary analyses were conducted to ensure that the associations between each test and each independent variable were not significantly different, which in turn ensured that the compound measure was reliable. Interestingly, scores on all three tests, even the algebra test, were found to be correlated with English proficiency.

Key independent variables: SLIFE and SLIFE indicators. To be consistent with descriptions of SLIFE in the literature, I have operationalized limited or interrupted formal education both in terms of time spent in school and the educational outcomes of that time (Mace-Matluck, Alexander-Kasparik, \& Queen, 1998; New York State Department of Education, 1997; Ruiz-de-Valasco \& Fix, 2000; Advocates for Children of New York, 2010). In this study, SLIFE participants were identified using three indicators: (1) schooling gaps, (2) low L1 literacy, and (3) beginner English. Each indicator was operationalized as a dichotomous variable in which scores of 0
equaled "no" and scores of 1 equaled "yes" to identify students with that particular indicator of limited or interrupted formal education. These indicators were measured on arrival, when the student first emigrated to the United States and enrolled in a U.S. school. Therefore, limited or interrupted formal education in this study describes the students' educational backgrounds on arrival, which may be different from their education at the time of the study if they had made progress since arriving. In this manner, we will be able to observe how some students may have overcome the challenge of arriving as SLIFE.

The schooling gap. This was the first indicator used to identify SLIFE in this study. It was a dichotomous variable that identified students with at least one missing year of schooling relative to what was expected for their grade placement on arrival. So, a student who completed sixth grade before immigration but who was enrolled in ninth grade instead of seventh upon arrival in the United States had a two-year gap in his or her grade-relative schooling and would have a score of 1 for the schooling gap variable. This study acquired the data for this indicator from school system records.

Low L1 literacy. This was the second indicator to identify SLIFE in this study. This study used the term "L1 literacy," but the students' first languages were not always their languages of previous literacy and schooling before coming to the United States. In many countries, students speak a different language at home than what they use for reading and writing in school or elsewhere. This study acquired the data for this indicator from the students by using two survey items in which students evaluated their L1 literacy relative to their grade level on arrival in the United States. Students were asked, "How well could you read and write in [your first language] when you came to America?" Then, using Likert-type responses with a range of 1 through 4, students agreed or disagreed with statements such as, "I could read as well in [my first language] as most American kids my age can read in English." Surveys were customized to state the students' first language in the brackets. Scores for the two items were averaged together, and students with scores of 2.5 or lower were identified as having low L1
literacy. Admittedly, it was a limitation to have to rely on self-report data for this vital indicator, but students' L1 literacy had not been tested on arrival, so these data had to be collected after the fact from a large number of students from many different language backgrounds.

Beginner English. This was the third indicator used to identify SLIFE. Proficiency in English as a second language was used as an indicator for SLIFE in this study because it is an outcome of schooling in countries in which English is taught as an academic subject and not used as a first language, and also because SLIFE tend to have lower English proficiency than other ELs (DeCapua et al., 2010). The beginner-English variable was a dichotomous variable that identified students with scores of one or two on the six-band English proficiency test taken on arrival. This study acquired the data for this indicator from school system records.

SLIFE. This was a composite dichotomous variable used to identify students for the SLIFE subgroup in this study who had at least two of the three indicators of limited or interrupted formal education. It is important to note that factor analysis of a scale comprised of the three SLIFE indicators revealed that the scale did not have a Cronbach's alpha sufficient to show adequate reliability because low L1 literacy was not correlated with schooling gaps. For this reason, this study will share findings for the individual indicators instead of relying solely on a single composite SLIFE variable. Even though low L1 literacy did not correlate with schooling gaps, I retained it as a SLIFE indicator because this characteristic is used to describe SLIFE in educational literature. Incidentally, this is not the first study to find that low L1 literacy does not correspond with missing years of schooling (Tarone, 2010). This lack of correspondence may represent a reality of education that is contrary to popular assumptions. Research shows that much of students' literacy may be acquired out of school (Schultz \& Hull, 2002), so youth attending school may sometimes be low-literate, and youth not attending school may sometimes be very literate.

Independent variables related to educational resilience. Data for variables related to educational resilience were mostly obtained through a student survey that I administered at the end of the 2011-2012 school year at roughly the same time the students were taking their English tests and tests of academic achievement. These variables included school-related protective factors and personal risk factors identified as important in other studies and literature reviews (Siu, 1996). The school-related protective factors included academic self-concept (Gordon Rouse, 2001; Gordon, Rouse, \& Cashin, 2000), perceived pedagogical caring (Wentzel, 1997), perceived positive social integration at school (Alva, 1993), the number of ESOL classes taken by each student (Callahan, Wilkinson, \& Muller, 2010; Callahan, Wilkinson, Muller, \& Frisco, 2009; Flores, Batalova, \& Fix, 2012), and extra help that students received with English and/or schoolwork outside of school (Portes \& Rumbaut, 2007). The personal risk factors included past traumatic experiences (Sankey, 2010), perceived social distance (Schumann, 1976; Alva, 1993; Portes \& Bach, 1985), exposure to non-educationally oriented peers (Ainsworth-Darnell \& Downey, 1998; Rumberger, 1995), low authoritative adult supervision (Baumrind, 1966; Dornbusch, Ritter, Leiderman, Roberts, \& Fraliegh, 1987; Perlmutter, Tauliatos, \& Holden, 1995), and employment (Singh, Chang, \& Dika, 2007; Steinberg \& Dornbusch, 1991). Except for the number of ESOL classes, all data on these factors were collected from student survey items largely modeled after items used in previous studies, and nearly all used Likert-type responses (scores: 1 = strongly disagree; 2 = disagree, 3 = agree; 4 = strongly agree). Scales used in this study were shown to have acceptable reliability in previous studies. The data in this study were based on the Cronbach's alpha of those previous studies.

## Results

## The Prevalence of SLIFE and SLIFE Indicators

Schooling gap. Table 2 indicates that, on average, students had no gaps in their grade-relative schooling on arrival, but nonetheless, there was
a notable number of students who had experienced such gaps. In fact, over one-fifth of the students were missing at least one year of schooling and, therefore, had this indicator used to identify SLIFE in this study.

| Length of schooling gap <br> (years) | Number of participants | Percent | Cumulative percent |
| :--- | :--- | :--- | :--- |
| 5 | 1 | $0.6 \%$ | $0.6 \%$ |
| 4 | 1 | $0.6 \%$ | $1.2 \%$ |
| 3 | 8 | $4.8 \%$ | $6.0 \%$ |
| 2 | 13 | $7.9 \%$ | $13.9 \%$ |
| 1 | 14 | $8.5 \%$ | $22.4 \%$ |
| 0 | 77 | $77.6 \%$ | $100.0 \%$ |
| Total | 165 | $100.0 \%$ |  |

Table 2. EL Participants with Gaps in Grade-Relative Schooling upon Arrival in the United States ( $n=165$ )

Note: Numbers in the column headed "Length of schooling gap (years)" indicate the number of years of schooling that students were missing relative to their grade placement on arrival in the United States. Greater numbers indicate greater gaps and greater risk. Scores $\geq 1$ were used to form the SLIFE indicator "schooling gap."

Nearly $14 \%$ of the students had missed two years or more, and 6\% had missed three years or more. These estimates are similar to those found in other studies and reports (DeCapua et al., 2007; Fleischman \& Hopstock, 1993; Ruiz-de-Valasco \& Fix, 2000; Walsh, 1999).

Low L1 literacy. Table 3 indicates that, on average, students reported being as literate in their first language when they arrived as their samegrade U.S. peers were in English. Low L1 literacy was uncommon. Fewer than $18 \%$ of the students in this study gave themselves any negative evaluation for L1 literacy on arrival, and many of those negative evaluations were moderate (scores of 2.5 out of 4 ). Thus, fewer than $18 \%$ had this indicator used to identify SLIFE, and only $10 \%$ gave themselves stronger negative evaluations (scores of 2 out of 4 ). These estimates are also similar to those found in other studies and reports (Fleischman \& Hopstock, 1993).

| Self-reported L1 literacy level | Number of participants | Percent | Cumulative Percent |
| :--- | :--- | :--- | :--- |
| 1 (very low / below grade-level) | 3 | $1.8 \%$ | $1.8 \%$ |
| 1.5 (very low / below grade-level) | 4 | $2.4 \%$ | $4.2 \%$ |
| 2 (very low / below grade-level) | 10 | $6.1 \%$ | $10.3 \%$ |
| 2.5 (low / below grade-level) | 12 | $7.3 \%$ | $17.6 \%$ |
| $3-4$ (on or above grade-level) | 88 | $82.4 \%$ | $100.0 \%$ |
| Total | 165 | $100.0 \%$ |  |

Table 3. L1 Literacy on Arrival in the United States among EL Participants ( $n=165$ )

Note: Numbers in the column headed "Self-reported L1 literacy" indicate students' level of L1 literacy relative to their grade placement on arrival in the United States. Lower L1 literacy scores indicate lower L1 literacy and greater risk. Scores $\leq 2.50$ were used to form the SLIFE indicator" low L1 literacy."

Beginner English. Table 4 indicates that over 60\% of the students arrived with beginner-level English proficiency (i.e., scores of 1 or 2 out of 6) and, therefore, had one of the indicators used to identify SLIFE. Over $45 \%$ arrived with scores of 1 , the absolute minimum.

| English proficiency | Number of participants | Percent | Cumulative Percent |
| :--- | :--- | :--- | :--- |
| 1 (low-beginner) | 75 | $45.5 \%$ | $45.5 \%$ |
| 2 (high-beginner) | 25 | $15.2 \%$ | $60.6 \%$ |
| 3 (low-intermediate) | 30 | $18.2 \%$ | $78.8 \%$ |
| 4 (high intermediate) | 28 | $17.0 \%$ | $95.8 \%$ |
| 5 (proficient) | 7 | $4.2 \%$ | 100.0 |
| Total | 165 | 100.0 |  |

Table 4. English Proficiency upon Arrival to the United States among EL Participants ( $n=165$ )

Note: Numbers in the column headed "English proficiency" indicate students' level of English proficiency on arrival in the United States. Lower English proficiency scores indicate lower English proficiency and greater risk. Scores $\leq 2$ were used to form the SLIFE indicator "beginner English."

SLIFE. As shown in Table 5, over 70\% of the students had at least one of the indicators. Over a quarter of the students had two or more of the indicators and were thus classified as SLIFE for the purposes of this study. Of the three indicators, beginner English was the most prevalent at $60 \%$. The second most common was schooling gap at $22 \%$, followed by low L1 literacy with less than $18 \%$.

| Number of SLIFE indicators <br> per student | Number of participants | Percent | Cumulative Percent |
| :--- | :--- | :--- | :--- |
| 3 | 5 | 3.0 | $3.0 \%$ |
| 2 | 39 | 23.6 | $26.6 \%$ |
| 1 | 72 | 43.6 | $70.3 \%$ |
| 0 | 49 | 29.7 | $100.0 \%$ |
|  | 165 | 100.0 |  |

Table 5. SLIFE Indicators Occurring among the EL Participants ( $n=165$ )
Note: Higher scores show a greater number of SLIFE indicators and greater risk. Scores $\geq 2$ were used to identify students for the SLIFE subgroup.

As shown in Table 6, among the total sample of EL participants ( $n=$ 165), the 44 participants who comprised the SLIFE sub-group typically had at least one year of missing schooling but generally did not have low L1 literacy. Nearly all SLIFE had beginner English; in fact, they typically had scores around 1 , the lowest possible. Therefore, nearly all SLIFE had beginner English and at least one other indicator.

|  | Number of <br> SLIFE <br> indicators | Missing years <br> of schooling | Schooling <br> gaps <br> $(\%)$ | L1 literacy <br> level | Low L1 <br> literacy <br> $(\%)$ | English <br> proficiency <br> level (1-6) | Beginner <br> English <br> $(\%)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Mean | 2.11 | 1.55 | $77 \%$ | 2.93 | $39 \%$ | 1.19 | $95 \%$ |
| Standard <br> deviation | 0.32 | 1.30 |  | 0.85 |  | 0.50 |  |
| Minimum | 2.00 | 1.00 | 1.00 |  | 1.00 |  |  |
| Maximum | 3.00 | 5.00 | 4.00 |  | 3.00 |  |  |

Table 6. Descriptive Statistics for SLIFE Indicators with the SLIFE Subgroup ( $n=44$ )

## The Prevalence of Protective and Risk Factors for the SLIFE Subgroup

As Table 7 shows, with the exception of their ESOL classes, SLIFE had lower levels of protective factors than non-SLIFE, but the prevalence of protective factors was generally high for most students.

|  | All ELs <br> $(\mathrm{n}=165)$ | SLIFE <br> $(\mathrm{n}=44)$ | Non-SLIFE <br> $(\mathrm{n}=121)$ | Difference for <br> SLIFE |
| :--- | :--- | :--- | :--- | :--- |
| Academic self-concept | 3.37 | 3.29 | 3.39 | $-0.11^{*}$ |
| (from 1 $=$ sd to 4 $=\mathrm{sa})$ | $(0.31)$ | $(0.05)$ | $(0.03)$ | $(0.05)$ |
| Pedagogical caring | 3.14 | 3.00 | 3.20 | $-0.20^{* *}$ |
| (from 1 = sd to 4 = sa) | $(0.43)$ | $(0.06)$ | $(0.04)$ | $(0.07)$ |
| Social integration | 2.66 | 2.52 | 2.71 | $-0.19 \dagger$ |
| (from 1 = sd to 4 = sa) | $(0.64)$ | $(0.10)$ | $(0.06)$ | $(0.11)$ |
| \# of ESOL classes 2011-12 | 2.15 | 2.86 | 1.88 | $0.98^{* * *}$ |
| (0-5) | $(1.49)$ | $(0.23)$ | $(0.13)$ | $(0.25)$ |
| Out-of-school help | 2.59 | 2.50 | -0.12 |  |
| (from 1 = sd to 4 = sa) | $(.97)$ | $(0.13)$ | $(0.09)$ | $(0.17)$ |
| \# of extra-curricular activities | 1.41 | 1.41 | 1.42 | -0.01 |
| (0-4) | $(1.20)$ | $(0.16)$ | $(0.11)$ | $(0.21)$ |

Note. Higher numbers indicate stronger protective factors assumed to facilitate resilience. $\mathrm{sd}=$ strongly disagree and $\mathrm{sa}=$ strongly agree on variables measured by Likert-type responses. Means and their standard deviations in parentheses are shown in the columns for "All ELs," "SLIFE," and "non-SLIFE." Mean differences were estimated using T tests and are listed with their standard errors in parentheses in the column for "Difference for SLIFE." Statistically significant differences are identified as follows: ${ }^{*} p \leq .05,{ }^{* *} p \leq .01,{ }^{* * *} p \leq .001$. † indicates marginal significance with $\mathrm{p} \leq .1$

Table 7. Mean Differences between SLIFE and Non-SLIFE in the Prevalence of Protective Factors ( $n=165$ )

SLIFE were significantly more likely to have lower academic selfconcepts and perceived pedagogical caring, but they were significantly more likely to be taking a greater number of ESOL classes. Despite the differences, the academic self-concepts and perceived pedagogical caring for SLIFE were positive on average.

As Table 8 shows, with the exception of employment, there were no significant differences in the prevalence of risk factors between SLIFE and non-SLIFE, and risk factors were generally low for all students. SLIFE were significantly less likely to work longer hours in employment, but the hours of employment were extremely variable for all students. Students worked 6.23 hours a week on average, but most students did not work at all. Ten percent worked as many as 20 hours or more, and six of the students worked 40 hours or more.

|  | All ELs <br> $(\mathrm{n}=165)$ | SLIFE <br> $(\mathrm{n}=44)$ | Non-SLIFE <br> $(\mathrm{n}=121)$ | Difference for <br> SLIFE |
| :--- | :--- | :--- | :--- | :--- |
| Traumatic experiences | 2.07 | 1.95 | 2.11 | -0.16 |
| (from 1 = sd to 4 = sa) | $(0.07)$ | $(0.85)$ | $(0.74)$ | $(0.14)$ |
| Separations from caretakers | 2.45 | 2.44 | 2.46 | -0.02 |
| (from 1 = sd to 4 = sa) | $(1.04)$ | $(0.99)$ | $(1.06)$ | $(0.18)$ |
| Social distance | 2.33 | 2.33 | 2.33 | -0.00 |
| (from 1 = sd to 4 = sa) | $(0.58)$ | $(0.59)$ | $(0.58)$ | $(0.10)$ |
| Non-educationally oriented peers | 1.95 | 2.02 | 1.91 | 0.11 |
| (from 1 = sd to 4 = sa) | $(0.49)$ | $(0.41)$ | $(0.52)$ | $(0.09)$ |
| Low authoritative adult supervision | 1.74 | 1.85 | 1.71 | 0.14 |
| (from 1 = sd to 4 = sa) | $(0.51)$ | $(0.45)$ | $(0.52)$ | $(0.09)$ |
| Employment | 6.23 | 3.68 | 7.33 | $-3.50^{*}$ |
| (0-48 hours) | $(10.28)$ | $(7.33)$ | $(11.06)$ | $(1.50)$ |

Note. Higher numbers indicate stronger risk factors assumed to hinder resilience. sd $=$ strongly disagree and sa $=$ strongly agree on variables measured by Likert-type responses. Means and their standard deviations in parentheses are shown in the columns for "All ELs," "SLIFE," and "non-SLIFE." Mean differences were estimated using T tests and are listed with their standard errors in parentheses in the column for "Difference for SLIFE." Statistically significant differences are identified as follows: ${ }^{*} p \leq .05,{ }^{* *} p \leq .01,{ }^{* * *} p \leq .001$. $\dagger$ indicates marginal significance with $\mathrm{p} \leq .1$

Table 8. Mean Differences between Non-SLIFE and SLIFE in the Prevalence of Risk Factors ( $n=165$ )

As Table 9 shows, there were major differences between SLIFE and non-SLIFE in terms of other factors of interest. For example, there was a marginally significant difference between SLIFE and non-SLIFE in length of residence in the United States, with SLIFE being more likely to have spent more years in the United States. As the sample only included students classified as EL at the time of the study and not students who had arrived at the same time but had met state proficiency standards and been reclassified, this finding suggests that students with longer lengths of residence had spent more time classified as EL without meeting state proficiency standards. Therefore, the longer lengths of residence for SLIFE imply that those students took longer to become proficient in English. SLIFE were also significantly more likely to have less-educated parents. For SLIFE, the most educated of their parents had about eight years of schooling on average, compared to those of non-SLIFE, who had over 11. SLIFE were also more likely to be in lower grades despite having longer lengths of residence on average. This difference implies that SLIFE were less likely to arrive with transfer credits from their homeland and/or may have had trouble completing courses to advance grades while in U.S. schools.

|  | All ELs <br> $(\mathrm{n}=165)$ | SLIFE <br> $(\mathrm{n}=44)$ | Non-SLIFE <br> $(\mathrm{n}=121)$ | Difference for <br> SLIFE |
| :--- | :--- | :--- | :--- | :--- |
| Length of residence in U.S. | 2.34 | 2.72 | 2.20 | $+0.52 \dagger$ |
| (0-7 years) | $(1.59)$ | $(1.58)$ | $(1.57)$ | $(0.28)$ |
| Parental education | 11.71 | 8.14 | 13.02 | $-4.88^{* * *}$ |
| (0-26 years) | $(5.48)$ | $(5.13)$ | $(5.02)$ | $(0.90)$ |
| Age | 17.47 | 17.32 | 17.53 | -0.21 |
| (14-21 years) | $(1.65)$ | $(1.62)$ | $(1.66)$ | $(0.29)$ |
| Grade | 10.13 | 9.84 | 10.24 | $-0.40^{*}$ |
| $(9-12)$ | $(1.07)$ | $(0.94)$ | $(1.10)$ | $(0.19)$ |

Note. Means and their standard deviations in parentheses are shown in the columns for "All ELs," "SLIFE," and "non-SLIFE." Mean differences were estimated using T tests and are listed with their standard errors in parentheses in the column for "Difference for SLIFE." Statistically significant differences are identified as follows: ${ }^{*} p \leq .05, * * p \leq$ $.01,{ }^{* * *} p \leq .001 . \dagger$ indicates marginal significance with $\mathrm{p} \leq .1$

Table 9. Mean Differences between Non-SLIFE and SLIFE in the Prevalence of Other Factors of Interest $(n=165)$

## Associations between SLIFE Indicators and Educational Outcomes

Schooling gap. As shown in Table 10, bivariate analyses revealed strong and significant negative associations between schooling gaps on arrival and academic achievement measured by standardized tests. On average, students who had arrived with schooling gaps had test scores that were more than a half a standard deviation below those of the other students. Supplementary analyses not shown here revealed that larger gaps (two years or more of missing schooling) were associated with even stronger and more significant decreases in scores. In contrast, there were no significant associations between schooling gaps on arrival and gains in English proficiency during the study year. Supplementary analyses revealed that this was true even for students with greater gaps. In other words, students with schooling gaps were not learning English more slowly than those without schooling gaps.

|  | Academic achievement <br> $(\mathrm{n}=116)$ | English gains 2011-12 <br> $(\mathrm{n}=127)$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | b | $\beta$ | b | $\beta$ |
| Schooling gap $(1=$ yes $)$ | $-0.50^{*}$ | -0.22 | -0.14 | -0.08 |
|  | $(0.20)$ |  | $(0.15)$ |  |

Note. Unstandardized coefficients are shown with their standard errors in parentheses in the columns headed "b." Standardized coefficients are shown in the columns headed " $\beta$." Statistically significant findings are identified as follows: ${ }^{*} p \leq .05,{ }^{* *} p \leq .01,{ }^{* * *} p \leq .001 . \dagger$ indicates marginal significance with $\mathrm{p} \leq .1$

Table 10. Regression Estimates for the Association between Schooling Gaps and Educational Outcomes

Low L1 literacy. Table 11 indicates that there were no significant associations between low L1 literacy on arrival and academic achievement on tests. This was also true in supplementary analyses (not shown here) with lower L1 literacy (scores of 2 or lower out of 4). Likewise, low L1 literacy on arrival was not significantly associated with gains in English. Supplementary analyses not shown here, however, revealed that students who arrived with lower L1 literacy (scores of 2 or lower out of 4) showed significantly lower gains in English proficiency than the other students. Such students' English proficiency increased nearly half a level slower per year than that of their peers. Therefore, we may conclude that the effect of low L1 literacy upon arrival on English learning depended on how low those levels were on arrival. Students with very low L1 literacy seemed to have been learning English more slowly.

|  | Academic achievement <br> $(\mathrm{n}=116)$ |  | English gains 2011-12 <br> $(\mathrm{n}=127)$ |  |
| :--- | :--- | :--- | :--- | :--- |
|  | b | $\beta$ | b | $\beta$ |
| Low L1 literacy $(1=$ yes $)$ | -0.14 | -0.06 | -0.26 | -0.14 |
|  | $(0.23)$ | $(0.17)$ |  |  |

Note. Unstandardized coefficients are shown with their standard errors in parentheses in the columns headed "b." Standardized coefficients are shown in the columns headed " $\beta$." Statistically significant findings are identified as follows: ${ }^{*} p \leq .05,{ }^{* *} p \leq .01,{ }^{* * *} p \leq .001 . \dagger$ indicates marginal significance with $\mathrm{p} \leq .1$

Table 11. Regression Estimates for the Association between Low L1 Literacy and Educational Outcomes

Beginner English. As indicated by Table 12, beginner English on arrival showed no relationship to gains in English, even in supplementary analyses of students arriving with low beginner English (scores of 1 out of 6 ). It did, however, have a strong and significant negative relationship to academic achievement on tests. Students with beginner English on arrival were earning exam scores that were nearly a half a standard deviation lower on average than those of the other ELs.

|  | Academic achievement <br> $(\mathrm{n}=116)$ | English gains 2011-12 <br> $(\mathrm{n}=127)$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | b | $\beta$ | b | $\beta$ |
| Beginner English $(1=$ yes $)$ | -0.41 | -0.22 | -0.13 | -0.08 |
|  | $(0.18)$ |  | $(0.13)$ |  |

Note. Unstandardized coefficients are shown with their standard errors in parentheses in the columns headed "b." Standardized coefficients are shown in the columns headed " $\beta$." Statistically significant findings are identified as follows: ${ }^{*} p \leq .05,{ }^{* *} p \leq .01,{ }^{* * *} p \leq .001 . \dagger$ indicates marginal significance with $\mathrm{p} \leq .1$

Table 12. Regression Estimates for the Association between Beginner English and Educational Outcomes

SLIFE. As Table 13 shows, the SLIFE dichotomous variable used to identify students with two or more of the indicators of limited or interrupted formal education showed a strong and significant negative association with academic achievement on tests. Similarly, the SLIFE variable showed a marginally significant negative association with gains in English proficiency ( $p<0.1$ ), suggesting that the findings may have been significant given a larger sample size.

|  | Academic achievement <br> $(\mathrm{n}=116)$ | English gains 2011-12 <br> $(\mathrm{n}=127)$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | b | $\beta$ | b | $\beta$ |
| SLIFE $(1=$ yes $)$ | $-0.66^{* * *}$ | -0.31 | $-0.24 \dagger$ | -0.15 |
|  | $(0.19)$ |  | $(0.15)$ |  |

[^7]Table 13. Regression Estimates for the Association between SLIFE and Educational Outcomes

Because preliminary analyses had shown that the scores on tests of academic achievement were so strongly correlated with students' level of English proficiency at the time of the test, I determined to run multiple regression analyses to estimate associations with the SLIFE variable while controlling for differences in students’ 2012 English proficiency scores. As indicated by Model 1 on Table 14, which included only SLIFE as an independent variable, the SLIFE variable explained only $9 \%$ of the variability in the test scores (an adjusted $R^{2}$ of .09 ), but Model 2, which included English proficiency at the time of the test, explained 33\% (an adjusted $R^{2}$ of .33). Moreover, when I controlled for the effect of English
proficiency in Model 2, the association between SLIFE and the test scores was no longer statistically significant. Therefore, it can be said that much of the relationship between the SLIFE variable and academic achievement can be explained by lower English proficiency at the time of the tests.

|  | Model 1 |  | Model 2 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | b | $\beta$ | b | $\beta$ |
| SLIFE (1 = yes) | $\begin{aligned} & \hline-0.65^{* * *} \\ & (0.18) \end{aligned}$ | -0.31 | $\begin{aligned} & -0.30 \dagger \\ & (0.17) \end{aligned}$ | -0.14 |
| English proficiency at time of test (1-6) |  |  | $\begin{aligned} & 0.48^{* *} \\ & (0.07) \end{aligned}$ | 0.52 |

Table 14. Multiple Regression Estimates with SLIFE and English Proficiency on Academic Achievement ( $n=116$ )

Table 15 shows multiple regression analyses in which the association between each SLIFE indicator and academic achievement was estimated while controlling for the effect of the other two SLIFE indicators. The differences between Model 3 and Model 4 support the theory that the relationship between beginner English and academic achievement can be largely explained by limited English proficiency at the time of the test, but Model 4 shows that a negative association remained between schooling gap and academic achievement that was not explained by differences in English proficiency. Thus, we may suspect that schooling gaps continued to cause the SLIFE to have lower academic achievement, even when the study controlled for limited English proficiency.

|  | Model 3 |  | Model 4 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | b | $\beta$ | b | $\beta$ |
| Schooling gap | $-0.38 \dagger$ | -0.17 | $-0.34 \dagger$ | -0.15 |
| $(1=$ yes $)$ | $(0.21)$ | -0.10 | 0.07 |  |
| Low L1 literacy | -0.23 |  | $(0.19)$ | 0.03 |
| $(1=$ yes $)$ | $(0.22)$ | -0.20 | -0.03 | -0.02 |
| Beginner English | $-0.39^{*}$ |  | $(0.16)$ |  |
| (1 yes $)$ $(0.18)$ | $0.50^{* * *}$ | 0.55 |  |  |
| English proficiency at <br> time of test $(1-6)$ |  | $(0.08)$ |  |  |

Note. Unstandardized coefficients are shown with their standard errors in parentheses in the columns headed "b."
Standardized coefficients are shown in the columns headed " $\beta$." Statistically significant findings are identified as follows: ${ }^{*} p \leq .05,{ }^{* *} p \leq .01,{ }^{* * *} p \leq .001 . \dagger$ indicates marginal significance with $\mathrm{p} \leq .1$

Table 15. Multiple Regression Estimates with the Individual SLIFE Indicators and English Proficiency on Academic Achievement ( $n=116$ )

## Factors Involved with Educational Resilience in SLIFE

To estimate the associations between the variables in question, I conducted bivariate regression analyses on each protective or risk factor and each educational outcome on both a non-SLIFE subgroup and a SLIFE subgroup.

Table 16 shows that the protective factors generally had positive relationships to the educational outcomes, but only ESOL classes had findings that were statistically significant. ESOL classes had a strong and significant positive association with gains in English for non-SLIFE. Although the association evident in the coefficient for ESOL classes was stronger for SLIFE than it was for non-SLIFE, it was not statistically significant at an alpha of .05 , probably on account of the small sample size.

|  | Academic achievement (non-SLIFE $\mathrm{n}=83$; SLIFE $\mathrm{n}=33$ ) |  | English gains 2011-12 <br> (non-SLIFE $\mathrm{n}=88$; SLIFE $\mathrm{n}=39$ ) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | b | $\beta$ | b | $\beta$ |
| Academic self-concept (from $1=$ sd to $4=\mathrm{sa}$ ) |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & 0.12 \\ & (0.33) \end{aligned}$ | 0.04 | $\begin{aligned} & 0.19 \\ & (.26) \end{aligned}$ | 0.08 |
| SLIFE | $\begin{aligned} & 0.32 \\ & (0.49) \end{aligned}$ | 0.18 | $\begin{aligned} & 0.32 \\ & (0.37) \end{aligned}$ | 0.14 |
| Pedagogical caring (from $1=$ sd to $4=$ sa) |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & 0.13 \\ & (0.23) \end{aligned}$ | 0.06 | $\begin{aligned} & 0.10 \\ & (0.18) \end{aligned}$ | 0.06 |
| SLIFE | $\begin{aligned} & 0.09 \\ & (0.39) \end{aligned}$ | 0.04 | $\begin{aligned} & 0.39 \\ & (0.28) \end{aligned}$ | 0.22 |
| Social integration (from $1=$ sd to $4=$ sa) |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & -0.16 \\ & (0.16) \end{aligned}$ | -0.11 | $\begin{aligned} & 0.07 \\ & (0.13) \end{aligned}$ | 0.06 |
| SLIFE | $\begin{aligned} & 0.03 \\ & (0.24) \end{aligned}$ | 0.02 | $\begin{aligned} & 0.10 \\ & (0.18) \end{aligned}$ | 0.09 |
| $\begin{aligned} & \text { \# of ESOL classes 2011-12 } \\ & (0-5) \end{aligned}$ |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & -0.07 \\ & (0.10) \end{aligned}$ | -0.08 | $\begin{aligned} & 0.13^{*} \\ & (0.06) \end{aligned}$ | 0.24 |
| SLIFE | $\begin{aligned} & -0.04 \\ & (0.10) \end{aligned}$ | -0.07 | $\begin{aligned} & 0.14 \dagger \\ & (0.07) \end{aligned}$ | 0.31 |
| \# of extra-curricular activities$(0-4)$ |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & 0.03 \\ & (0.08) \end{aligned}$ | 0.04 | $\begin{aligned} & 0.06 \\ & (0.06) \end{aligned}$ | 0.11 |
| SLIFE | $\begin{aligned} & -0.12 \\ & (0.14) \end{aligned}$ | -0.15 | $\begin{aligned} & -0.14 \\ & (0.10) \end{aligned}$ | -0.21 |
| Out-of-school help <br> (from $1=$ sd to $4=$ sa) |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & -0.06 \\ & (0.10) \end{aligned}$ | -0.07 | $\begin{aligned} & -0.08 \\ & (0.08) \end{aligned}$ | -0.11 |
| SLIFE | $\begin{aligned} & 0.17 \\ & (0.18) \\ & \hline \end{aligned}$ | 0.17 | $\begin{aligned} & 0.14 \\ & (0.14) \\ & \hline \end{aligned}$ | 0.16 |

Note. Unstandardized coefficients are shown with their standard errors in parentheses in the columns headed "b." Standardized coefficients are shown in the columns headed " $\beta$." Statistically significant findings are identified as follows: ${ }^{*} p \leq .05,{ }^{* *} p \leq .01,{ }^{* * *} p \leq .001$. $\dagger$ indicates marginal significance with $p \leq .1$

Table 16: Bivariate Regression Estimates for Protective Factors and Educational Outcomes

Table 17 shows that the risk factors did not always have negative relationships to the educational outcomes and that there was a great deal of variability in outcomes, so much so that only traumatic experiences showed any statistically significant relationship. For SLIFE, but not for nonSLIFE, traumatic experiences showed a significant negative association with English gains. In other words, SLIFE who had experienced traumatic events learned English more slowly than SLIFE who had not.

|  | Academic achievement (non-SLIFE $\mathrm{n}=83$; SLIFE $\mathrm{n}=33$ ) |  | English gains 2011-12 (non-SLIFE $\mathrm{n}=88$; SLIFE $\mathrm{n}=39$ ) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | b | $\beta$ | b | $\beta$ |
| Traumatic experiences (from $1=$ sd to $4=\mathrm{sa}$ ) |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & -0.07 \\ & (0.14) \end{aligned}$ | -0.06 | $\begin{aligned} & -0.02 \\ & (0.11) \end{aligned}$ | -0.02 |
| SLIFE | $\begin{aligned} & 0.21 \\ & (0.18) \end{aligned}$ | 0.20 | $\begin{aligned} & -0.30^{*} \\ & (0.13) \end{aligned}$ | -0.37 |
| Separations from caretakers (from $1=$ sd to $4=\mathrm{sa}$ ) |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & 0.08 \\ & (0.10) \end{aligned}$ | 0.09 | $\begin{aligned} & 0.05 \\ & (0.08) \end{aligned}$ | 0.07 |
| SLIFE | $\begin{aligned} & 0.07 \\ & (0.16) \end{aligned}$ | 0.08 | $\begin{aligned} & 0.12 \\ & (0.12) \end{aligned}$ | 0.17 |
| Social distance (from $1=$ sd to $4=\mathrm{sa}$ ) |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & 0.01 \\ & (0.19) \end{aligned}$ | 0.01 | $\begin{aligned} & 0.00 \\ & (0.14) \end{aligned}$ | 0.00 |
| SLIFE | $\begin{aligned} & -0.37 \\ & (0.24) \end{aligned}$ | -0.27 | $\begin{aligned} & 0.18 \\ & (0.19) \end{aligned}$ | 0.15 |
| Non-educationally oriented peers (from $1=$ sd to $4=\mathrm{sa}$ ) |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & -0.08 \\ & (0.18) \end{aligned}$ | 0.05 | $\begin{aligned} & -0.12 \\ & (0.15) \end{aligned}$ | -0.09 |
| SLIFE | $\begin{aligned} & 0.06 \\ & (0.35) \end{aligned}$ | 0.03 | $\begin{aligned} & -0.18 \\ & (0.28) \end{aligned}$ | -0.10 |
| Low authoritative adult supervision (from $1=$ sd to $4=$ sa) |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & -0.08 \\ & (0.19) \end{aligned}$ | -0.05 | $\begin{aligned} & -0.08 \\ & (0.19) \end{aligned}$ | -0.05 |
| SLIFE | $\begin{aligned} & -0.33 \\ & (0.34) \end{aligned}$ | -0.18 | $\begin{aligned} & -0.33 \\ & (0.33) \end{aligned}$ | -0.18 |
| Employment (0-48 hours) |  |  |  |  |
| Non-SLIFE | $\begin{aligned} & -0.01 \\ & (0.01) \end{aligned}$ | -0.11 | $\begin{aligned} & 0.01 \\ & (0.01) \end{aligned}$ | 0.09 |
| SLIFE | $\begin{aligned} & -0.01 \\ & (0.02) \\ & \hline \end{aligned}$ | -0.06 | $\begin{aligned} & 0.02 \\ & (0.02) \end{aligned}$ | 0.21 |

Note. Unstandardized coefficients are shown with their standard errors in parentheses in the columns headed "b." Standardized coefficients are shown in the columns headed " $\beta$." Statistically significant findings are identified as follows: ${ }^{*} p \leq .05,{ }^{* *} p \leq .01,{ }^{* * *} p \leq .001 . \dagger$ indicates marginal significance with $\mathrm{p} \leq .1$

Table 17. Bivariate Regression Estimates for Risk Factors and Educational Outcomes

## Discussion

This study supports claims that many of the ELs in U.S. high schools are SLIFE (DeCapua et al., 2007; Fleischman \& Hopstock, 1993; Ruiz-de-Valasco \& Fix, 2000; Walsh, 1999; Advocates for Children of New York, 2010). Indicators of limited or interrupted formal schooling, such as gaps in grade-relative schooling or low L1 literacy on arrival, were common in the ELs in this study ( $17.6 \%$ and $22.4 \%$, respectively). Incidentally, students who arrived with gaps in their schooling tended also to arrive with beginner English proficiency, but students with schooling gaps or beginner English proficiency were not more likely to have low L1 literacy.

This study also supports claims that SLIFE are at greater risk for lower academic achievement (Office of English Language Learners, New York City Department of Education, 2009; Advocates for Children of New York, 2010). SLIFE in this study were significantly more likely than other ELs to have much lower academic achievement measured by standardized tests, especially when they had gaps in their schooling. Much of this disadvantage was due to their having lower English proficiency, which was due to their arriving with lower proficiency and learning English more slowly.

Most importantly, however, this study offers empirical support for claims that SLIFE can be educationally resilient (Bartlett, 2007; Bigelow, 2007; Short et al., 2003; Tellez \& Walker de Felix, 1993; Walsh, 1999). This study found that there was no statistically significant difference in the academic achievement of SLIFE and non-SLIFE in analyses when English proficiency was held constant, which suggests that SLIFE could succeed in school if they became proficient in English. Lower academic achievement for SLIFE was largely due to their having lower English proficiency at the time of the tests. If they could attain higher proficiency by the time they were required to take the test, then they would not be at any significantly greater risk, except for a marginally significant risk associated with arriving with missing years of schooling.

Fortunately, SLIFE were not significantly more likely to learn English more slowly unless they arrived with very low L1 literacy and had experienced traumatic events such as witnessing violence. Thus, resilience in SLIFE depended largely on L1 literacy, since L1 literacy influenced their rate of English learning and since English proficiency is crucial for success in English-only schools. It is important to note that ELs with schooling gaps were not any more likely to have low L1 literacy. Some SLIFE did not have low L1 literacy, and some nonSLIFE had low L1 literacy.

In conclusion, this study had three findings that, when considered together, have important implications for educational policy. The first is that the SLIFE in the study could be academically successful in high school given enough English proficiency. The second is that SLIFE could learn English at a rate that is not significantly different from that of non-SLIFE. The third was that SLIFE who took more ESOL classes tended to learn English faster. These three findings together demonstrate that money spent supporting the education of SLIFE is money well spent.

## References

Advocates for Children of New York. (2010). Students with interrupted formal education: A challenge for the New York City public schools. Retrieved July 20, 2014, from http://www.advocatesforchildren. org/SIFE\%20Paper\%20final.pdf?pt=1
Ainsworth-Darnell, J. W., \& Downey, D. B. (1998). Assessing the oppositional culture explanation for racial/ethnic differences in school performance. American Sociological Review, 63(4), 536-554.
Alva, S. A. (1993). Differential patterns of achievement among AsianAmerican Adolescents. Journal of Youth and Adolescence, 22(4), 407-423.
Alva, S. A., \& Padilla, A. M. (1995). Academic invulnerability among Mexican Americans: A conceptual framework. The Journal of Education Issue of Language Minority Students, 15(Winter), 1-14.
Bartlett, L. (2007). Bilingual literacies, social identification, and educational trajectories. Linguistics and Education, 18(3-4), 215-231.
Baumrind, D. (1966). Effects of authoritative parental control on child behavior. Child Development, 37(4), 887-907.
Bigelow, M. (2007). Social and cultural capital at school: The case of a Somali teenage girl with limited formal schooling. In N. Faux (Ed.). Proceedings from Low Educated Adult Second Language Literacy Acquisition Symposium (pp. 7-22). Richmond, VA: Literacy Institute at Virginia Commonwealth University.
Callahan, R., Wilkinson, L., Muller, C., \& Frisco, M. (2009). ESL placement and schools: Effects on immigrant achievement. Educational Policy, 23(2), 355-384.
Callahan, R., Wilkinson, L., \& Muller, C. (2010). Academic achievement and course taking among language minority youth in U.S. schools: Effects of ESL placement. Education Evaluation and Policy Analysis, 32(1), 84-117.

DeCapua, A., Smathers, W., \& Tang, L. (2007). Schooling, interrupted. Educational Leadership, 64(6), 40-46.
DeCapua, A., \& Marshall, H. (2010). Students with limited or interrupted formal education in US classrooms. Urban Review, 42, 159-173.
DeCapua, A., Smathers, W., \& Tang, L. (2010). Meeting the needs of students with limited or interrupted schooling. Ann Arbor: The University of Michigan Press.
Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., Roberts, D. F., \& Fraliegh, M. J. (1987). The relation of parenting style to adolescent school performance. Child Development, 58(5), 1,244-1,257.
Fleischman, H., \& Hopstock, P. (1993). Descriptive study of services to limited English proficient students (Vol. 1). Washington, DC: U.S. Department of Education.
Flores, S. M., Batalova, J., \& Fix, M. (2012). The educational trajectories of English language learners in Texas. Washington, DC: Migration Policy Institute. Retrieved July 20, 2014, from http://www.migrationpolicy.org/research/ educational-trajectories-english-language-learners-texas
Freeman, Y., Freeman, D., \& Mercuri, S. (2002). Closing the achievement gap: How to reach limited-formal-schooling and long-term English learners. Portsmouth, NH: Heinemann.
Gandara, P., Rumberger, R., Maxwell-Jolly, J., \& Callahan, R. (2003). English learners in California schools: Unequal resources, unequal outcomes. Education Policy Analysis Archives, 11(36), 1-54.
Gordon Rouse, K. A., \& Cashin, S. E. (2000). Assessment of academic self-concept and motivation: Results from three ethnic groups. Measurement and Evaluation in Counseling and Development, 33, 91-102.
Gordon Rouse, K. A. (2001). Resilient students' goals and motivation. Journal of Adolescence, 24(4), 461-472.
Mace-Matluck, B., Alexander-Kasparik, R., \& Queen, R. (1998). Through the golden door: Educational approaches for immigrant
children with limited formal schooling. Washington, DC: Center for Applied Linguistics and Delta Systems, Inc.
Maryland State Department of Education. (2013). HSA: High school assessment program. Retrieved July 25, 2013, from School Improvement in Maryland, http://mdk12.org/assessments/ high_school/index.html
National Center for Education Statistics. (2010). Status and trends in the education of racial and ethnic minorities. Washington, DC: Institute of Education Sciences, U.S. Department of Education. NCES 2010015.
New York State Department of Education. (1997). Teaching language arts to limited English proficient/English language learners: A resource guide for all teachers. New York: New York State Department of Education. Retrieved July 20, 2014, from http://www.p12.nysed. gov/biling/resource/CH00INTR.PDF
Office of English Language Learners, New York City Department of Education. (2009). Diverse learners on the road to success. New York: New York City Department of Education. Retrieved July 20, 2014, from http://schools.nyc.gov/NR/rdonlyres/3B377E6B-5E22-4E63-A4DA-2B7FD14E5D62/57000/ ELLPerformanceReport2009.pdf
Perez, W., Espinoza, R., Ramos, K., Coronado, H. M., \& Cortes, R. (2009). Academic resilience among undocumented Latino students. Hispanic Journal of Behavioral Science, 20(10), 1-33.
Perlmutter, B. F., Tauliatos, J., \& Holden, G. W. (1995). Handbook of family measurement techniques (Vol. 3). Thousand Oaks, CA: Sage.
Portes, A., \& Rumbaut, R. G. (2007). Children of immigrants longitudinal study (CILS), 1991-2006. Ann Arbor: Inter-university Consortium for Political and Social Research.
Portes, A., \& Bach, R. L. (1985). Latin journey: Cuban and Mexican immigrants in the United States. Berkeley: University of California Press.

Ruiz-de-Valasco, J., \& Fix, M. (2000). Overlooked and underserved: Immigrant students in U.S. secondary schools. Washington, DC: Urban Institute.
Rumberger, R. W. (1995). Dropping out of middle school: A multilevel analysis of students and schools. American Educational Research Journal, 32(3), 583-625.
Sankey, S. M. (2010). An examination of the relationship between acculturation level and PTSD among Central American immigrants in the United States (Doctoral dissertation). Retrieved from ProQuest, UMI dissertations publishing. (3413066)
Schultz, K., \& Hull, G. (2002). Locating literacy theory in out-ofschool contexts. In K. Schultz \& G. Hull (Eds.), School's out: Bridging out-of-school literacies with classroom practice (pp. 11-31). New York: Teachers College Press.
Schumann, J. H. (1976). Social distance as a factor in second language acquisition. Language Learning, 26(1), 135-143.
Short, D., Boyson, B., \& Coltrane, B. (2003). Final project report: First national conference for educators of newwomer students and pilot study on newcomer program literacy and assessment practices. Office of English Language Acquisition, Language Enhancement, and Academic Achievement for Limited English Proficient Students, United States Department of Education. Washington, DC: Center for Applied Linguistics.
Singh, K., Chang, M., \& Dika, S. (2007). Effects of part-time work on school achievement during high school. The Journal of Educational Research, 101(1), 12-22.
Siu, S. (1996). Asian American students at risk: Report no. 8. Washington, DC: Center for Research on the Education of Students Placed at Risk (CRESPAR).
Steinberg, L., \& Dornbusch, S. (1991). Negative correlates of part-time employment during adolescence: Replication and elaboration. Developmental Psychology, 27(2), 304-313.
Tarone, E. (2010). Second language acquisition by low-literate learners: An under-studied population. Language Teaching, 43(1), 75-83.

Tellez, K., \& Walker de Felix, J. (April 1993). Are dropouts really dropouts? An analysis of preliterate Latino adolescents. Paper presented at the annual meeting of the American Educational Research Association. Atlanta, GA. ERIC 367730. Retrieved July 20, 2014, from http://files.eric.ed.gov/fulltext/ED367730. pdf
Walsh, C. (1999). Enabling academic success for secondary students with limited formal schooling: A study of the Haitian literacy program at Hyde Park High School in Boston. Providence, RI: Brown University.
Wang, M. C., \& Gordon, E. W. (1994). Educational resilience in innercity America. Hillsdale, NJ: Lawrence Erlbaum Associates.
Wentzel, K. (1997). Student motivation in middle school: The role of perceived pedagogical caring. Journal of Educational Psychology, 89(3), 411-419.

# English Language Learners with Low Native Language Literacy: A Profile and an Intervention in New York City 

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#### Abstract

Students with Interrupted Formal Education (SIFE) are a growing population nationwide, and they have, according to some sources (e.g., DeCapua, Smathers, \& Tang, 2010; Advocates for Children of New York, 2010), a higher dropout rate than mainstream English Language Learners (ELL), thereby constituting one of the most at-risk student groups in the nation. Yet few studies so far have investigated the educational needs of SIFE. This paper reports on two SIFE studies commissioned by the New York City Department of Education (NYC DOE). The first sought to characterize the typical SIFE by investigating in detail the native language and literacy abilities of 98 Spanishspeaking SIFE in five New York City schools. It was found that SIFE have typically developing oral and aural language abilities, but show serious lacunae in academic reading and vocabulary skills in the native language. Based on this profile, we recommended an additional school year and a specialized curriculum for SIFE upon entering high school. The second study describes this specialized program, named Bridges for Academic Success, specifically designed for SIFE and implemented in three high schools across New York City.


## Introduction

This paper reports on a subgroup of English language learners (ELLs) in the New York City public school system, commonly known as SIFE (Students with Interrupted Formal Education). Today, SIFE are defined by the New York State Education Department (NYSED) as newcomer students

- whose home language is not English,
- who did not attend school in their home country for at least two years prior to coming to the United States,
- who are at least two years below expected grade level in reading and math (in English); and
- who show very limited literacy in their home language.

Part of this definition comes from a study we originally conducted for the New York City (NYC) Office of English Language Learners (OELL) between 2004 and 2008, as part of an ongoing research effort to identify and develop best practices for this group of students (Klein \& Martohardjono, 2009). From an educational perspective, SIFE constitute the most challenging subgroup of ELLs. Even when given similar curricular instruction, SIFE typically lag far behind other ELLs in content-area knowledge and L2 English language development and are considered one of the most at-risk populations in the public school system (Advocates for Children of New York, 2010). While SIFE come into NYC schools at all grade levels, by far the most critical age group are the 14- to 20 -year-olds, whose placement in high school is based on age rather than academic ability. While mainstream ELLs comprise one-quarter of high school dropouts across the United States, the SIFE dropout rate is anecdotally even higher (DeCapua et al., 2010).

Prior to recommendations made by Klein and Martohardjono (2009), incoming ELL students were classified as SIFE only via informal methods. This typically consisted of a form filled out by the parent/ guardian of the student upon entry to the school, containing questions
about home language and educational history (informally known as the Home Language Questionnaire) and, in some cases, requiring an ad hoc writing sample in the home language, also taken upon entry. While this rudimentary method was sufficient to indicate whether a student had writing problems in the native language, it was far from adequate as a diagnostic tool to pinpoint students' level of acquired literacy or to inform instructional decisions. We know that foundational skills built up in the native language are a significant predictor of academic success in any subsequently learned language (e.g., Cummins, 1981). Thus, our primary objectives were as follows:
a) to identify which, if any, language and academic skills were lacking in SIFE in the native language, since such lacunae are likely to contribute to the low levels of literacy attained in the second language, English; and
b) to develop an intervention program that would bolster SIFE chances of academic success.

This paper reports on both these objectives and is organized as follows: In Part I, we describe the original research leading to a profile of SIFE, the identification of SIFE academic strengths and weaknesses in the native language, and the recommendations made to accelerate SIFE academic development. In Part II, we describe the development and implementation of a curricular high school program, Bridges to Academic Success, designed to meet the specific needs of SIFE.

## Part I: SIFE Identification Research

Between 2006 and 2008, the Research Institute for the Study of Language in Urban Society (RISLUS) at the Graduate Center of the City University of New York (CUNY) extended an earlier pilot study of 12 SIFE learners (Klein \& Martohardjono, 2006) by conducting a large-scale longitudinal study on Spanish-speaking newcomer students classified by the NYC DOE as SIFE. This longitudinal study consisted
of various sub-studies, and here we report the first set of data collected on the native language and literacy abilities of 98 students in five public high schools in New York City. The students had been placed in the ninth or $10^{\text {th }}$ grade, as determined by their ages, but had been identified as lacking appropriate literacy skills in the native language based on the Home Language Questionnaire administered by the schools. Our recommendation to the DOE was to collect much more detailed measures of native language abilities as a first and necessary step toward understanding and fostering the development of SIFE literacy in the second language, English. Thus, we began with an investigation of various aspects of SIFE language and literacy skills in the native language, Spanish. Such in-depth studies on native language skills in immigrant students had, to our knowledge, never been conducted before, as researchers studying literacy skills in schools typically focus on students' L2 English language abilities. Thus, the sub-study we report here constitutes a first of its kind. The study did not allow for a random selection of SIFE. Rather, selection of the five participating schools was made by the NYC DOE. The schools were located in four New York boroughs: Bronx, Brooklyn, Queens, and Manhattan. Two of the schools were specifically designed for newcomer immigrant students. In all four schools, the majority of students were Hispanic. All four schools served low-income families, as determined by the percentage of students qualifying for free lunch ( $71 \%-97 \%$ ).

Research questions. Our research questions for Part I were these:

- What native language competencies do SIFE bring when they enter U.S. schools?
- What academic language and literacy needs do SIFE have?

Our approach was to zero in on fairly recent arrivals at the most vulnerable grade level, namely ninth and $10^{\text {th }}$ grade (Advocates for Children of New York, 2010). We included only those who, at the beginning of the study, had not been in the country for more than
one year. Our focus on Spanish as the first language was driven by the fact that it is the home language of the majority of SIFE in New York City. According to the 2013-14 demographics of New York City ELLs (REF), $59 \%$ of all newcomer SIFE were native speakers of Spanish. In order to get a comprehensive SIFE profile, we needed to find out about a variety of native language and literacy abilities, including oral language and listening comprehension abilities, foundational preliteracy skills, and potential atypical language development. Another focus of the study was to see whether the gap in formal education (as indicated in the name SIFE) was indeed true of the student population we were testing. These goals required several instruments, most of which were created specifically for this study. Below, we describe the battery of instruments we administered.

1. Learner questionnaire. The purpose of this instrument was to obtain information on familial and educational background, including language and literacy practices at home. Questions included personal information about the students (e.g., age, provenance); questions about their parents/guardians (e.g., years of education, profession); whether the students had attended school primarily in an urban or rural environment; how much, if any, English they heard or spoke in the home; and what their goals and aspirations were.
2. Assessments of oral/aural language and typical development.
A. Spanish Versant. A commercially developed oral/aural proficiency test published by Pearson, The Versant is a standardized and automated test of comprehension and production. Participants are tested individually over the phone for a period of 10 minutes on sentence mastery, vocabulary, fluency, and pronunciation.
B. The RISLUS syntax test in Spanish. A listening comprehension test evaluating typical development of complex sentence structure, the syntax test, developed by RISLUS, measures typical development of syntactic comprehension and is based on sentence types that are benchmarks of normal L1 child language development. The purpose of giving this instrument in
the native language in this study, even though the participants were in their teens, was to detect potential language delays.

The test is orally presented in Spanish in a group setting. Participants hear a sentence and have to match it to one of three pictures in front of them. The sentences are syntactically complex and include coordination, subordination, and adverbial temporal clauses. Some examples are given below.

Object relative clause:
El gato empuja al oso, que carga al mono.
The cat pushes the bear that carries the monkey.

Subject relative clause:
El perro que el oso abraza, salta.
The dog that the bear hugs, jumps.

Temporal adverbial clause:
Después de nadar, el oso abraza al mono.
After swimming, the bear hugs the monkey.

## 3. The Academic Language and Literacy Diagnostic (ALLD) test

 in Spanish. This was the main instrument used to obtain a detailed profile of literacy abilities in the native language. The ALLD (Klein \& Martohardjono, 2008) consists of two parts: (1) a preliteracy test of foundational reading skills (phonological and orthographic awareness; word reading and simple sentence comprehension), and (2) a mainstream reading test measuring reading vocabulary (synonyms, multiple-meaning words, and context clues) and reading comprehension (ability to read and understand passages, assessing "basic understanding" and text-level skills such as "critical analysis," "strategies," and "interpretation"). The reading section of the ALLD contains items from grades 2-11 in increasing order of difficulty.The Spanish ALLD was expressly developed for this study and is based on the Aprenda (Harcourt, 2004), a standardized test measuring proficiency in Spanish that is used in public schools nationally. Items from the Aprenda were carefully selected for inclusion in the ALLD so as to avoid cultural bias and culturally specific background knowledge. For example, an item on interstate highways in the United States referring to them by the abbreviations I-90, I-44, and so forth was excluded.

Performance on the ALLD is automatically computed by a customized scoring program, the W-SERS (Web-based Scoring and Evaluation System) created specifically for the ALLD. W-SERS calculates the grade level attained for all subtests taken on the ALLD, as described above.

## Results

## 1. Learner Questionnaire

Background. Participants in this study were between 14 and 19 years old, with 16 as the mean age. Fifty-one percent were male, and $49 \%$ were female. The majority (77\%) had come from the Dominican Republic; 11\%, from Central America (Guatemala, Honduras, El Salvador); 8\%, from Mexico; and the rest, from Colombia, Ecuador, or Puerto Rico.

Family and home background. Eighty-six percent of the 98 participants reported living with at least one parent in the United States, and 14\% reported that they did not live with either parent, but with another relative. Sixty-two percent reported high school; 30\%, college; and $8 \%$, elementary school as the highest level of education in the household. Forty-nine percent reported having been schooled in a city; $34 \%$, in a town; and $17 \%$, in both.

Exposure to Spanish and English in NYC. For all 98 participants, Spanish was the native language and the primary language spoken at home. Sixty-nine percent reported that both Spanish and English were spoken in their neighborhoods. Seventy-eight percent reported some interaction in English with a person in their household. A great majority (95\%) also reported being exposed to some English outside of school in the form of watching television, accessing the Internet, or using other media.

Education bistory. Since our research sought to determine the extent to which SIFE indeed have gaps in schooling, we carefully devised this questionnaire section in such a way as to record the number and the duration of interruptions in schooling for every year the participants were of school age in their home countries. When asked this way, $67 \%$ reported having no gaps in their education, a result that was quite surprising given that educational gaps (as reported on the school-administered intake form, the Home Language Questionnaire) constitute a classification criterion for this group. Twenty-seven percent reported gaps of two years, and only 7\% reported gaps of more than two years.

Goals and aspirations. The majority of students, $61 \%$, aspired to a professional career (e.g., teacher, lawyer, doctor), while 33\% planned to work at jobs that did not necessarily require higher education (e.g., plumbers, electricians), and 6\% reported goals unrelated to work (e.g., travel, raise a family).

## 2. Assessments of Oral/Aural Language and Typical Development

Spanish Versant. The mean score on the Versant test was $80 \%$ correct, with a standard deviation of 16 and a range of $34 \%$ to $100 \%$. The scoring program describes $80 \%$ correct as indicating that the student has "fluent, smooth, intelligible speech; controls appropriate language structure for speaking about complex material."

Syntax test. Scores on the complex-sentence comprehension test were high, with a mean percent correct of $89 \%$, a standard deviation of 12 , and a range of $36 \%$ to $100 \%$.

Together, these two measures indicate that, on average, our participants displayed typical native language development, showing fluency in comprehension and production in the oral and aural modes.

## 3. Native Language Literacy Diagnostics: Spanish ALLD

Results on the Spanish ALLD measuring basic and academic literacy skills showed sharp differences between basic skills (preliteracy) and higher-level skills (academic reading vocabulary and reading comprehension).

Pre-literacy. In the pre-literacy section measuring phonological and orthographic awareness, word reading, and simple sentence comprehension, our participants had a mean score of $96 \%(S D=4.5)$. This suggests that there were no developmental delays in foundational reading skills, further supporting the results obtained on typical language development and also importantly suggesting absence of dyslexia.

Academic reading vocabulary and reading comprehension. Results of higher-level reading skills in the native language, by comparison, point to possible serious deficits, with academic reading vocabulary averaging at fifth grade and reading comprehension at third grade, well below the expected eighth grade level scores (recall that these students had been placed in grade nine). Figures 1 and 2 show how participants distributed across grade levels in vocabulary and reading comprehension. In vocabulary comprehension, participant placement ranges from below third grade to seventh grade, with about $40 \%$ of the group placing at sixth and seventh grade, and $30 \%$ placing at third grade and below. Scores in reading comprehension showed a narrower and lower distribution, with more than $50 \%$ of the students placing
at third grade and below. None of the participants were able to score beyond fifth grade.


Figure 1: Distribution of SIFE attainment across grade levels in native language (Spanish) reading comprehension


Figure 2: Distribution of SIFE attainment across grade levels in native language (Spanish) reading vocabulary

Reading comprehension sub-skills. We further analyzed results on the reading comprehension section by looking specifically at two subskills: basic understanding and text level skills. Answers to items assessing basic understanding are explicitly stated in the text and thus involve relatively simple retrieval of information. Text level skills are higher level comprehension skills and require the student to think critically, make connections, and use reading strategies. Such skills increase in
importance beginning in fifth grade and become critical to academic success in high school. Participants scored significantly higher on basic understanding skills than on text level skills, as shown in Table 1.

| Basic understanding | Text Level Skills | Significance |
| :--- | :--- | :--- |
| $73 \%$ | $49 \%$ | $\mathrm{t}(97)=14.07 ; \mathrm{p}<.001$ |

Table 1: Mean Percent Correct on Two Reading Comprehension Subskills ( $n=98$ )

We also separated responses to the sub-skills into two levels of difficulty: grades two and three, and grades four and five (five being the highest grade level achieved among these ninth and $10^{\text {th }}$ graders). At the lower grade level sections of the diagnostic assessment, when texts are relatively easier to read and questions are relatively simpler to answer, participants scored at nearly $80 \%$ correct on both basic understanding and text level skills. At the next level (grades four and five), both basic understanding and text-level skills show a decline, with basic understanding dropping to $65 \%$ and text-level skills to $42 \%$.

The native language assessments administered in this part of the study revealed the following profile: SIFE typically show normal, ageappropriate development in oral and aural language skills, expected levels of foundational literacy at the word level, and adequate reading abilities at the sentence level. However, SIFE also show seriously under-developed academic language and literacy abilities in their native language, indicating inadequate school preparation, even for those who had attended school continuously in their home countries. Upon entrance into the ninth grade in the United States, SIFE are at least four grades below the expected grade level in the native language. In spite of the fact that there was some variation, none of the students we tested showed reading comprehension abilities beyond the fifth grade, with the majority reaching only third grade level. Furthermore, while these adolescent readers can arrive at an answer to a comprehension question if that answer is explicitly stated in the text and if the text is short and relatively simple (basic understanding), they falter when the answer
requires text-level skills, such as inferencing and critical thinking, even for items at the elementary grade levels.

## Conclusions and Recommendations

The language and literacy measures described above were taken at the beginning of our longitudinal study (Klein \& Martohardjono, 2009). Given the serious lacunae in native language literacy, we predicted even more serious difficulty for the attainment of L2 English literacy. Indeed, at the end of the longitudinal study, we found that after one and a half years of English instruction, this same group was not able to go beyond third grade in English reading comprehension. By this time, they were already halfway through grade 10 and had less than two years to catch up to literacy levels minimally required for high school graduation. This was clearly an impossible feat. We therefore made several recommendations to the NYC DOE. The most important one was that adolescent SIFE be allowed at least one additional year of schooling prior to entry into "regular" high school. This additional year should offer an accelerated curriculum that includes native language support. We further recommended that this program should consist of "sheltered" classes with a focus on academic language and literacy skills, with particular emphasis on critical thinking skills and other higher-level literacy skills that were found lacking in the native language. Finally, given that we found many SIFE without actual gaps in schooling, we suggested that the $I$ in SIFE stand for "insufficient" rather than "interrupted." ${ }^{8}$ We also recommended that the main criterion in the initial identification of SIFE not be gaps in schooling, but objective measures of literacy skills in the native language. The Spanish ALLD was subsequently adopted by the NYC DOE as the main tool in identifying newcomer students as SIFE, at least those whose home language is Spanish. A new diagnostic tool, the LENS, has since been developed in our lab and is currently available to NYC schools in all the major SIFE languages: Spanish, Haitian, Chinese, Arabic, Bangla, and Urdu. Finally, a specialized

[^8]program was also developed to provide SIFE with the academic language and literacy skills they lack. Part II of this paper gives a full description of this program, which is named Bridges.

## Part II: Bridges to Academic Success-Intervention for SIFE

Partially based on our study of the SIFE population described in Part I and our concluding recommendations, along with the increasing research on SIFE (e.g., Cloud, Genesee, \& Hamayan, 2010; DeCapua et al., 2009; Garrison-Fletcher, 2009; Klein \& Martohardjono, 2009; Short \& Fitzsimmons, 2007; Tarone, Bigelow, \& Hansen, 2009), we developed and implemented an intervention for SIFE in greatest need of additional services, particularly those with very limited academic background and English skills upon entry to school. The program, called "Bridges to Academic Success" (which, from here forward, is referred to simply as "Bridges"), drew upon the following observations among this student group to determine the strategies that Bridges would address.

Observation 1.: For many SIFE, native language literacy is underdeveloped. The students with the greatest challenges are those whose home language literacy is severely limited.

Bridges strategy 1. (a) Assess the literacy skills of SIFE in their native languages; (b) select those with the lowest home literacy for participation in the program; (c) focus on "learning to read" in every subject or content area (i.e., science, social studies, math, English language arts) for those SIFE with severely limited reading skills, and focus on "reading to learn" for students who are ready to develop text level literacy.

[^9]Observation 2. SIFE native oral language skills are "typically developed."
Bridges strategy 2. Use native oral language skills to build academic language in the second language (L2), English.

Observation 3. L2 English is generally very limited for SIFE.

Bridges strategy 3. Focus on the learning of English language and literacy skills in all content areas through the use of native language support and specialized, differentiated instruction geared to the needs of a diverse student group.

Observation 4. School experience and academic/background knowledge and skills are severely limited for these students.

Bridges strategy 4. Develop and implement a specialized Bridges curriculum and instructional framework to build academic and literacy skills and background knowledge and also accelerate the learning needed for upper level school readiness; include in this framework a focus on critical thinking skills and the development of good academic and social habits to help in school and with cultural adjustment.

Observation 5. Distinct from other ELLs, SIFE have to do "triple the work" needed for academic success (Short \& Fitzsimmons [2007] have noted that ELLs have "double the work"). Unlike other ELLs, SIFE (a) would benefit from furthering their native language literacy skills to help develop L2 literacy and (b) need to develop the background knowledge prerequisites for learning grade level academic content. Like other ELLs, they must acquire L2 English language and literacy.

Bridges strategy 5. Provide an additional year of schooling, prior to secondary school, to "frontload" skills and knowledge in preparation for entrance into mainstream secondary school classes.

The Bridges Program. Bridges was developed as a pilot program in 2011 in New York City. It encompasses an additional/ transitional year for a designated group of newly arrived SIFE who are preparing to enter secondary school. SIFE are selected for the Bridges Program because of their limited school experiences and home language literacy skills. The highly structured program involves a specialized, interdisciplinary Bridges curriculum and targeted instruction, integrating language, literacy, and academic content into subject-area courses (e.g., social studies, science). The Bridges class is sheltered, with students staying together the whole day in a positive, respectful classroom community, which is needed for optimal academic development. The class is taught by an interdisciplinary team of teachers, who meet and plan together and are specifically trained to deliver the Bridges curriculum and its instructional framework. We report here on the second year of the Bridges program in NYC (2012-13) ${ }^{10}$ as delivered to students who were preparing to enter their first year of high school.
I. Goals. There are two major goals for the Bridges Program. The first goal is to prepare selected SIFE for achievement in secondary school. The second goal is to prepare teachers to teach Bridges students through the Bridges curriculum.
II. Program structure. The Bridges program was initiated in schools serving large numbers of low-literacy newcomers. To develop the program, the school administration selected a team of teachers to attend a special training program (see "V. Teacher support," below) to address the needs of these students in each of four subject areas (English, science, social studies, and math) through the Bridges curriculum (see "IV. The curriculum and instruction," below). There was one Bridges class within a school; students in this sheltered class studied different subjects together over the course of one school year, in preparation for mainstream (i.e., non-sheltered) classes that they would begin taking with the general school population following the Bridges year. In this way,

[^10]the Bridges program provides a transitional year in which instruction is targeted to meet students' needs but accelerated to prepare them for the rigors of academic work. In addition, students develop appropriate academic behaviors in a safe environment where students with limited academic backgrounds work together to learn.

## III. Participants.

The schools. In our pilot year, the New York City Department of Education selected four urban public high schools (grades 9-12) for the Bridges Program, three of which remained for the second year. ${ }^{11}$ These schools are located in sections of NYC with large numbers of linguistic minority students, many of whom had been identified as SIFE. Two of the schools (so-called international schools) that participated in year two serve solely students who recently arrived in the United States each have a school population of about 300 students mainly from the Dominican Republic, Central America, Yemen, and regions of west Africa. The third school, with a school population of over a thousand students, has two bilingual programs, one in Spanish/English and the other in Bangla/English; Bridges students in this school were part of these bilingual programs, with most students from the Dominican Republic, Central America, and Bangladesh. (The rest of the student body within this school is linguistically mixed and includes monolingual English students.) The schools are located in three (out of five) of NYC's most diverse boroughs: Manhattan, Queens, and the Bronx.

The students. Fifty-eight students, ages 13-18 ( $m=15.14$ ), participated in the Bridges program across the three schools. All had recently arrived in the United States (< 1.5 years) and were entering ninth grade. All students were assessed in reading in their home (i.e., native) language and evidenced $\leq$ fifth-grade literacy. Twelve of the 46 students who participated in the native language reading diagnostic tests had no native language literacy skills, thereby distinguishing

11 One of the schools dropped out during the second year, citing administrative reasons, but it renewed its participation in the third year (2013-2014).
them from the SIFE in the study reported in Part I, where no students evidenced a total absence of L1 experience with print materials; 25 had fourth-grade or lower reading ability; 10 had the equivalent of a fifth-grade reading ability in their native language; and none had higher-which are all in line with the SIFE characteristics reported in the study above. Bridges students therefore had native language reading abilities that were four or more grades below grade level (ninth). Math skills in the native language, also assessed, were even weaker-six or more grades below grade level.

As suggested above by each school's demographics, the students came from 12 different home countries, with the highest percentage from the Dominican Republic (32.7\%). Others were from Bangladesh (15.5\%), Gambia (5.1\%), or the Ivory Coast (3.4\%). The students spoke nine different home languages, with the highest percentage speaking Spanish (53.4\%). Some others spoke Bangla (15.5\%), Arabic (6.8\%), or Fulani (1.7\%).

The teachers. There were 13 teachers participating in the Bridges Program across the three schools. Four to five teachers from the following subject areas were on a Bridges team in each of our participating schools: English, social studies, science, and math. Two school teams included a native language arts or literacy teacher. Each teacher met with the Bridges class once a day for at least a 45-minute period; in all schools, the English class was at least an hour long. Teachers also met as a team once a week to plan their lessons together and discuss their common students; this meeting was led by a team leader, who also served as the liaison with researchers. Bridges teachers, on average, had at least four years of teaching experience; most of them had a minimum of three years working with ELLs and specifically SIFE.
IV. The curriculum and instruction. The goal of the Bridges curriculum is to prepare students for higher-level academic work and integration
into mainstream classes; in this sense, it is a preparatory curriculum rather than a guide to specified grade-level content and skills. The content developed for the Bridges curriculum consists of (a) carefully selected academic topics that provide background knowledge and concepts to help students access the academic material they will encounter when they enter more-advanced classes and (b) language and literacy materials and instruction to help them develop the requisite skills for academic learning.

The Bridges curriculum is interdisciplinary: It provides themes that are repeated in each of the academic subject areas, and it spans four units that integrate language, literacy, and content. Thus, some of the same vocabulary and language structures, for example, are repeated across several disciplines within a given unit, with thematic units intentionally chosen to target universal, high-interest ideas (e.g., survival, journeys, adaptation). At the same time, the Bridges curriculum's units are aligned to and informed by city, state, and national Learning Standards, as well as by the students themselves. This was possible because development of the curriculum was led by a very experienced SIFE teacher who incorporated students' preferences for subject matter and types of materials. During our pilot year, teachers filled out weekly online logs indicating students' responses, and the curriculum was revised accordingly.

All Bridges units incorporate subject area content, and language and literacy activities, with the joint goals of developing academic knowledge and the language and literacy skills needed to further acquire academic information and develop critical-thinking skills. The curriculum and instruction also includes a focus on the development of good academic and social habits to help in the acculturation and school adjustment process.

In order to accelerate learning, Bridges instruction is heavily focused on providing (a) students with the background knowledge and skills necessary to eventually access grade-level materials, and (b) teachers with scaffolding techniques for making difficult oral language and texts accessible for student learning. In addition, Bridges' core
instructional elements represent the major pedagogical principles that guide the Bridges curriculum and inform the critical instructional practices used in its delivery. These core instructional elements are integrated into the structure and methods that shape the units and lessons in the curriculum. These core elements include (a) the classroom environment as a resource for learning; (b) a focus on oral academic language, in both the home language and English, as a precursor and aid to literacy development; (c) a focus on foundational literacy instruction (learning to read) for those students who need these skills, along with text level literacy instruction (reading to learn) as students increasingly gain academic language; (d) the use of students' home languages as a critical resource for gaining literacy skills; (e) the integration of language, literacy, and subject-area content into all classes; (f) emphasis on activities that promote the development of critical-thinking skills; and (g) the use of multimedia resources and materials to deliver instruction, which includes the development of digital literacy as an important goal. These core elements reflect the current theories of and research on this student population (August \& Shanahan, 2006; Bigelow \& King, 2014; Bigelow \& Vinogradov, 2011; Cloud et al., 2010; DeCapua \& Marshall, 2011; Klein \& Martohardjono, 2006, 2009; Klein, Short, Curinga, McNamara, \& Smith, 2014; Tarone et al., 2009; Walqui \& vanLier, 2010).
V. Teacher support. Teacher support involved three types of professional development (PD): a series of full- or half-day group PD sessions; on-site curriculum coaching of individual teachers at their schools; and twice-a-year observations and feedback by an external evaluator.

Group PD sessions: A series of group PD sessions was offered to Bridges teachers throughout the school year, facilitated by the Bridges instructional staff. The sessions focused on the theories, principles, and practices on which Bridges instruction is based. Activities emphasized the use of the core instructional elements to deliver the Bridges curriculum, with materials supporting the learning of content,
language, and literacy across the curriculum. Importantly, teachers of academic subjects like science and social studies were introduced to second-language and literacy-acquisition principles and practices, with the goal of understanding how to develop and implement lessons that integrate academic content with language and literacy activities that further the academic readiness of their students.

Curriculum coaching sessions. PD sessions were supplemented by onsite curriculum coaching of Bridges teachers throughout the year. A curriculum coach helped teachers plan lessons, observed the execution of these lessons, and gave feedback to teachers to help further their expertise in delivering Bridges instruction.

Observations and feedback. An outside evaluator developed a teacherobservation protocol for use in observing Bridges teachers twice in the academic year, once in fall and once in spring. From this protocol, teachers received feedback on their skills and worked with the curriculum coach to continue improving their instruction.
VI. Student academic and language progress. As will be shown in the results below, during their year of instruction, Bridges students made notable progress in their language, literacy, and content development. According to teachers and principals, they were also more motivated and more engaged in Bridges classes than were similar students typically in prior years.

Pre- and post assessment measures. The students participated in preand postassessments of early literacy (similar to the preliteracy assessment described in Part 1) in English, English writing, and mathematics. As shown in Tables 2-4, the Bridges students exhibited statistically significant growth $(p<.001)$ in all these areas. In early English literacy development (Table 2), improvements in
student performance were significant on specific subsections of the English assessment ${ }^{12}$ as well as on the test overall.

|  | Pre Mean <br> $\%$ correct | Post Mean <br> $\%$ correct | t | Sig. |
| :--- | :---: | :---: | :---: | :---: |
| LENS Total <br> Scores | 65.3 <br> s.d. $=15.3$ | .$=7.8$ | 5.01 | .00 |

Table 2: 2012-2013 Summary of Literacy Evaluation for Newcomer SIFE (LENS) before and after Student Assessment Results ( $n=43$ )

The students were also administered an English writing assessment in the fall and again in the spring. The total possible score was 42 , with Table 3 showing that Bridges students exhibited statistically significant growth ( $p<.001$ ) in writing during the year.

|  | Pre <br> mean raw score | Post <br> mean raw score | t | Sig. |
| :--- | :---: | :---: | :---: | :---: |
| Total Scores | 8.8 | 14.9 | 8.20 | .00 |
|  | s.d. $=4.9$ | s.d. $=5.7$ |  |  |

Table 3: 2012-2013 Summary of Results in English Writing before and after Student Assessment Results ( $n=33$ )

Table 4 presents pre- and post-test math data. The total possible score was 71 , with the results showing statistically significant growth ( $p<.001$ ) for the Bridges students.

|  | Pre <br> mean raw score | Post <br> mean raw score | t | Sig. |
| :--- | :---: | :---: | :---: | :---: |
| Math Total | 28.7 | 36.0 | 4.41 | .00 |
| Scores | s.d. $=15.1$ | s.d. $=10.2$ |  |  |

Table 4: 2012-2013 Summary of Results in Math before and after Student Assessment Results ( $n=44$ )

[^11]We also assessed students in English reading comprehension using the LENS. Although students were not pre-tested on these skills (because their entry-level skills in English were too low for evaluation), the results of 46 students who participated in an assessment at the end of the year showed that more than half of them $(n=29)$ reached a reading level of grade two or higher, a presumed gain in reading comprehension of at least two years.

## Some Teacher Reflections

As noted above, Bridges teachers kept online logs of their experiences with the Bridges class. They were also interviewed at the end of the school year. The teachers, in general, overwhelmingly supported the Bridges program, indicating heightened student interest and motivation, improved attendance, and better academic performance as compared with earlier years. A written report from our external evaluator indicated the following, as an example:

One teacher noted that the skills of other newcomer students [who were not in Bridges but were in the school] remained fairly static during the year while the Bridges students' skills improved. This was confirmed by a staff member teaching summer school [summer 2013] at that site who acknowledged the Bridges students in the literacy classes were more advanced than non-Bridges students in areas such as spelling patterns, sentence structure, and phonics.

Here are a few teacher quotations that are representative of the very positive responses we received:
" $[C]$ reating this environment in which they feel they can succeed has been the greatest benefit to our Bridges students." (English teacher)
"Bridges students are showing increased engagement, a more positive attitude towards school because they are spending more of their time in class working on activities that are accessible to them and appropriate for their level." (Math teacher)
"Teachers said ... they never saw [one particular student] smile the way she smiles in the Bridges class. This is because we presented her with material that she could work with." (Science teacher)
"In past years the lowest SIFE group has been really overwhelmed and made little to no progress ... Everyone in this [Bridges] class has made huge gains." (Science teacher)
"[S]tudents in the Bridges class will ... come into ninth grade with the requisite knowledge and skills to give them a much better opportunity to be proficient or even high performing in all outcomes. This will also set them up for much more success in later grades. ... In years past it would be very common for SIFE students to lose interest in school because they were not able to meet basic expectations. ... Having all of these students in one class makes it a safer space to make mistakes and learn together." (Math teacher)

## Principals' Reactions to Bridges

Interviews with the three Bridges principals were conducted by our external evaluator at the end of the school year. Her report indicated that all the principals expressed positive views of the Bridges program and planned to continue to offer Bridges in the following year. In addition, all reported that Bridges techniques and strategies had spread to other classes and that the Bridges program added value to non-Bridges
students, as teachers employed the techniques in an increasing number of the school's mainstream classes.

## Summary and Conclusions

The study conducted in Part I described the characteristics of SIFE in an urban high school setting, which led to recommendations indicating that their unique needs required additional schooling geared to the development of academic language and literacy skills. Bridges to Academic Success, described in the second half of this paper, offers an accelerated, specialized program, a teacher-training component, and a curriculum to such students, particularly those with very low native language literacy skills. After one year of instruction, with native language support, Bridges students made significant gains in English foundational literacy and math, suggesting the promise of this program for increasing the academic success of SIFE in our schools. The work described here has led to the development of native language literacy diagnostics in all the major home languages of SIFE and the languages of other low-literacy adolescents in New York City, including Haitian Creole, Chinese, Arabic, Bengali, and Urdu. The Bridges program, including its curriculum, instructional methods, and related professional development, also serves as impetus to practitioners, researchers, and policy makers so that they may develop or review critical interventions to improve academic outcomes for the underserved students described in this report and others like them around the world.

## References

Advocates for Children of New York. (2010). Students with interrupted formal education: A challenge for New York City public schools. (BE024644). Retrieved from http://www.advocatesforchildren. org/SIFE\%20Paper\%20final.pdf?pt=1
August, D., \& Shanahan, T. (Eds.). (2006). Developing literacy in secondlanguage learners: Report of the national literacy panel on languageminority children and youth. Center for Applied Linguistics. Mahwah, NJ: L. Erlbaum Associates.
Bigelow, M., \& Vinogradov, P. (2011). Teaching adult second language learners who are emergent readers. Annual Review of Applied Linguistics, 31, 120-136.
Bigelow, M., \& King, K. (2014). Somali immigrant youths and the power of print literacy. Writing Systems Research, 6(2), 1-16.
Cloud, N., Genesee, F., \& Hamayan, E. (2010). Literacy instruction for English language learners: A Teacher's guide to research-based practices. Chicago: Heinemann.
Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In California State Department of Education (Ed.), Schooling and language minority students: A theoretical framerwork. (pp. 3-49). Los Angeles: National Dissemination and Assessment Center.
DeCapua, A., Smathers, W., \& Tang, L. F. (2010). Meeting the needs of students with limited or interrupted schooling: A guide for educators. Ann Arbor: University of Michigan Press.
DeCapua, A., \& Marshall, H. W. (2011). Breaking new ground: Teaching English learners with limited or interrupted formal education in U.S. secondary schools. Ann Arbor: University of Michigan Press.
Garrison-Fletcher, L. (2009). Understanding the role of L1 reading comprehension in L2 reading comprehension: A study of adolescents with low L1 literacy. In X. Chen and E. Geva (Eds.). Proceedings from Language and Reading Comprehension
for Immigrant Cbildren (LARCIC) Conference. Toronto: Ontario Institute for Studies in Education, University of Toronto.
Harcourt Educational Measurement. (2004). Stanford achievement test series, $10^{\text {th }}$ edition - Aprenda (3 ${ }^{\text {rd }}$ ed.). San Antonio, TX: Harcourt Educational Measurement.
Klein, E. C., \& Martohardjono, G. (May 23, 2006). Understanding the student with interrupted formal education (SIFE), Phase I: A preliminary assessment of SIFE skills and needs. Report to the New York City Department of Education. Retrieved from rislus. gc.cuny.edu/files/2012/04/SIFE-Report-2006.pdf
Klein, E. C., and Martohardjono, G. (2008). Academic Language and Literacy Diagnostic (ALLD). New York: Pearson.
Klein, E. C., \& Martohardjono, G. (July 27, 2009). Understanding the student with interrupted formal education (SIFE), phase II: A study of SIFE skills, needs and achievement. Report to the New York City Department of Education.
Klein, E. C., Short, D., Curinga, R., McNamara, S., \& Smith, A. (2014). Proceedings from Colloquium: Building Bridges for Emergent Bilinguals: A Pre-Ninth Grade Intervention for Low Literacy Nerwcomers. American Association for Applied Linguistics (March 22, 2014). Portland, OR.
Research Institute for the Study of Language in Urban Society (RISLUS). (2014). The literacy evaluation for newcomer SIFE (LENS). New York: New York City Department of Education. Retrieved from http://lens.gc.cuny.edu
Short, D., \& Fitzsimmons, S. (2007). Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners-A report to Carnegie Corporation of New York. Washington, DC: Alliance for Excellent Education.
Tarone, E., Bigelow, M., \& Hansen, K. (2009). Literacy and second language oracy. Oxford: Oxford University Press.
Walqui, A., \& van Lier, L. (2010). Scaffolding the academic success of adolescent English language learners: A pedagogy of promise. San Francisco: WestEd.

# The Importance of First-Language Reading Skills in English Reading Comprehension for Adolescent Newcomers 

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#### Abstract

This paper presents results from two studies, each looking at the development of reading comprehension in English as a second language (L2). The studies include a population of learners who have not often been included in L2 reading research, namely Spanish-speaking adolescent newcomers to New York City. Many of these students received limited or inconsistent education in their home countries before entering the U.S. school system in the upper grades. Thus, adolescent newcomers have a range of academic skills in their first languages (L1) upon entry to U.S. schools, and little is known about their development of L2 reading. The studies reported here address important questions about the role played by the L1 and include participants with low levels of L1 reading in order to get a comprehensive view of the development of L 2 reading among adolescent emergent bilinguals. Study 1 looks at the relative contribution of L1 reading comprehension and L2 linguistic knowledge to $L 2$ reading comprehension. Study 2 does a more in-depth analysis of the role of L 1 in L 2 reading by exploring the contribution of L1 morphological awareness to L2 reading. Study 2 considers mediating variables such as L 1 and L 2 reading vocabulary and L 2 morphological awareness in L2 reading comprehension. Together, the studies find


that L1 reading comprehension and L1 morphological awareness do play crucial roles in the development of L2 reading among adolescent newcomers, above and beyond that of L2 vocabulary alone.

## Introduction

In a paper summarizing the avenues for future research in second language literacy acquisition, Snow noted that "practitioners are desperate for information about how best to serve older immigrant students" (2006, p. 642). Newcomer adolescents have less time to develop second language (L2) academic skills than young children because they enter the school system in the later grades and must learn English while also acquiring the academic content needed to graduate from high school (Short \& Fitzsimmons, 2007). Graduation rates for emergent bilinguals in U.S. schools are very low; about $23 \%$ of emergent bilinguals ages 16-24 are either not enrolled in school or do not have a high school diploma or the equivalent (Morse, 2005). Furthermore, many adolescent emergent bilinguals enter U.S. schools with limited literacy skills in their first languages (L1), and are underserved by secondary schools where most teachers are not equipped to teach foundational literacy skills, which are usually relegated to elementary school instruction (Short \& Boyson, 2012).

Reading comprehension is a critical academic skill and one with which L2 learners have considerable difficulty. Studies that focus on a comparison of L2 learners and their monolingual peers show that both groups behave similarly in word-level skills (e.g., word reading and spelling). The difference is seen in higher-level skills such as reading comprehension (Lesaux, Koda, Siegel, \& Shanahan, 2006). On the 2009 National Assessment for Educational Progress, 74\% of emergent bilinguals enrolled in the eighth grade scored below the basic level on the reading portion, while only $3 \%$ reached proficiency and none scored at the advanced level (Short \& Boyson, 2012). It is clear that these students struggle to acquire high levels of L2 academic literacy in U.S. schools, and research is needed to provide information on their
development of L2 reading (Francis, Rivera, Lesaux, Kieffer, \& Rivera, 2006; Freeman \& Freeman, 2002; Short \& Fitzsimmons, 2007).

In the limited research on L 2 reading comprehension among adolescent emergent bilinguals, the focus has been on students with age-appropriate L1 academic skills rather than those with low levels of L1 literacy. This paper reports on two studies which address some of the gaps in previous research by looking at the role of the L1 in the development of L 2 reading comprehension for adolescent newcomers who exemplify the full spectrum of L1 reading proficiency, from very limited to advanced.

It is critical to study the role of L1 in the development of L2 academic skills. Many researchers have shown that L1 academic skills transfer to the L2 and may contribute to higher L2 reading proficiency (Bernhardt \& Kamil, 1995; Cummins, 2000; Dressler \& Kamil, 2006; Koda, 2008; van Gelderen, Schoonen, Stoel, De Glopper, \& Hulstijn, 2007), yet we still know little about which skills transfer and whether skills transfer for learners with lower academic and literacy proficiency in the L1. Therefore, including students with both low and high levels of L1 academic skills is essential. Studying the two groups can provide educators with important information on how to help address the needs of their students, both those with well-developed academic skills in the L1 and those who come to the task of L2 (English) learning with limited L1 academic skills. Both of these studies compare students with a wide variety of L1 literacy levels, ranging from second- to $11^{\text {th }}$-grade proficiency in L1 (Spanish) reading comprehension.

While previous research has looked at the role of a student's L1 reading in the development of $L 2$ reading, the focus has been more on the importance of $L 2$ language proficiency in $L 2$ reading. This is due to the findings that L 2 linguistic skills play a stronger role in L 2 reading development than L1 reading proficiency (e.g., Bernhardt \& Kamil, 1995; Brisbois, 1995; Lee \& Schallert, 1997); hence, many educators emphasize the importance of L2 vocabulary (for a review, see Graves, August, \& Mancilla-Martinez, 2013). Because the majority of previous research has included only students with age-appropriate L1 reading, we
believe the role of the L 1 in L 2 reading needs to be further addressed to get a comprehensive view of the development of L 2 reading among adolescent newcomers with a range of L1 proficiencies. The first study (Study 1) looks at the relative importance of L1 reading comprehension and $L 2$ linguistic skills to the development of $L 2$ reading comprehension. The second study (Study 2) further investigates the role of L1 reading skills by looking specifically at the contribution of L1 morphological awareness to L 2 reading comprehension. This research provides insight into the value of L1 Spanish reading skills while acquiring L2 English language and literacy in a high school context.

## Methodology

The two studies reported on in this paper are part of a larger study that measured many different linguistic and reading variables in the L1 and L2. We include one section on methodology to describe only the procedures and materials used for these two studies.

## Participants

The participants were adolescent newcomers all attending the same New York City public high school. A total of 72 students were tested. The majority of them were ninth graders who had been in U.S._schools for two months or less ( $60 \%$ ); the remainder were 10th graders who had been in the United States no longer than 14 months (39\%). Their ages ranged from 15 to 20 years ( $M=17.4, S D=1.2$ ); 40 were males, and 32 were females. All were native Spanish speakers, mostly from the Dominican Republic (86\%); the others were from Honduras, Ecuador, Mexico, and Colombia. Participants' L1 Spanish reading comprehension range was from second to 11th grade; this is indicative of the diversity that many teachers of emergent bilinguals face in their classrooms.

## Measurements and Testing Procedures

Data collection took place in two sessions; the first session involved all L1 measures, and the second included the L2 measures. All assessments are described below.

Reading comprehension measures (L1 and L2). The Academic Language and Literacy Diagnostic (ALLD) was used to assess both Spanish and English reading comprehension. The test, designed for high school immigrant students in NYC, is a cumulative assessment that includes passages and test items from the second through the $11^{\text {th }}$ grade. The test format follows that of typical academic standardized reading comprehension tasks, with passages followed by multiplechoice questions. The passages are either informational or functional; informational passages are nonfiction (e.g., a story on mosquitoes), and functional passages convey information encountered in everyday life (e.g., a newspaper ad for employment). The questions assess basic understanding and higher-level thinking skills such as critical analysis, strategies, and interpretation.

Vocabulary measures (L1 and L2). The vocabulary assessment was taken from the ALLD and includes items from third through $11^{\text {th }}$ grade. This assessment is multiple-choice and is composed of three sections: synonyms, multiple-meaning words, and context clues.

Measure of syntactic processing (L1 and L2). The assessment of syntactic processing was developed by the Research Institute for the Study of Language in Urban Society (RISLUS). It tests the comprehension of complex syntactic structures through listening comprehension. The assessment has an English version and a Spanish version. This assessment of syntactic processing is designed to evaluate acquisition of sentence structure independently from vocabulary, and thus uses simple vocabulary. The student sees three pictures for each item. The test administrator says a sentence for each item and repeats the sentence once. The student is
then asked to choose the picture that corresponds to the sentence. The structures tested are coordination, relative (or adjective) clauses, temporal adverbial clauses, and subjectless subordinate clauses.

## Assessments of morphological awareness (L1 and L2).

Word study. This morpho-semantic assessment is a subsection of the ALLD which contains items that measure awareness of compound words and the ability to assign meaning to word parts, i.e., root, prefix, and suffix morphemes. All word-study items are on the third-grade level. An example measures ability to generalize the meaning of the agentive -er suffix in teacher to (a) helper, (b) faster, (c) bigger.

Morphological relatedness task. In this task, originally developed by Derwing (1976) and later adapted by Mahony (1994) and Mahony, Singson, and Mann (2000), participants were given two words and asked if the second word "comes from" the first word, or if the two are related in meaning. Participants circled "yes" for morphologically related items (e.g., bappy and bappiness) and "no" for nonrelated words (cat and category).

Test of morphological structure. In this morpho-syntactic assessment, participants were given a word and then asked to change the word to best fit the given sentence. Some sentences required the participant to produce a morphologically complex word from a base word (e.g., success: The woman's career was very [successful]), and others required the participant to break down a morphologically complex word into its base form (e.g., originality: That painting is the [original]). This English task was adapted from Carlisle (2000) and, in Spanish, from Ramírez (2009).

Syntactic categories. In this task, participants were given a sentence with a word missing and were given four word choices to fill in the blank in the sentence. The test was made up of morphologically complex realword items in addition to nonsense word items constructed by adding
a real morphological affix to a nonsense stem (e.g., Every living thing has its own $\qquad$ . [a] torbature [b] torbativize [c] torbatable [d] torbatify). The items in the present study were adapted from two previous ones that used similar measures in English and Spanish (Mahony, 1994; and Ramírez, 2009; respectively).

## Study 1

Study 1 asks whether a stronger role is played by existing reading skills in the L1 (Spanish) or L2 linguistic knowledge in the development of L2 (English) reading comprehension. As we mentioned before, previous research has found that L2 linguistic knowledge is a stronger predictor of L2 reading than of L1 reading. Study 1 revisits this question within a group of learners who have a wide range of L1 literacy - a population not included in previous studies. The dependent variable in the study is L 2 reading comprehension. The independent, or predictor, variables are L1 reading comprehension, L2 vocabulary, and L2 syntactic processing.

A secondary purpose of Study 1 is to compare the predictors of L2 reading in good L1 readers and poor L1 readers, as no study has directly compared these two groups. We look separately at students with low versus high levels of L1 reading comprehension in order to see if the L2 linguistic skills of vocabulary and syntactic processing play the same role in L2 reading among these students. This information will have important implications for the education of emergent bilinguals.

## Results

Table 1 shows the results from all assessments administered for the study. Of the 72 students tested as part of the larger study, 62 completed all relevant assessments for Study 1.

|  | Spanish <br> Reading <br> Comprehension <br> $(A L L D)$ | Spanish <br> Syntactic <br> Processing | English <br> Reading <br> Comprehensio <br> $\mathrm{n}(A L L D)$ | English <br> Vocabulary <br> $(A L L D)$ | English <br> Syntactic <br> Processing |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mean | $52 \%$ | $90 \%$ | $35 \%$ | $38 \%$ | $77 \%$ |
| (SD) | $(15 \%)$ | $(6 \%)$ | $(12 \%)$ | $(16 \%)$ | $(15 \%)$ |
| Grade |  |  |  | 3.1 | 4 |
| Level | 5.8 | -- | $(1.9)$ | $(2.2)$ | -- |
| (SD) | $(2.5)$ |  |  |  |  |

Table 1: Mean percent (SD) and grade level (SD) for all assessments ( $n=62$ )

Recall that the ALLD in both Spanish and English is a cumulative assessment that includes test items from the second-grade level (in the case of reading comprehension) or the third-grade level (in the case of vocabulary) up to the $11^{\text {th }}$-grade level. Thus, the results from the ALLD are reported not only as mean percent correct, but also as average grade level. Note that the standard deviations for all variables except Spanish syntactic processing range from $12 \%$ to $16 \%$, indicating that the population tested here does have a range of skills in both their L1 and L2. However, the individual scores are clustered near the low end of L1 reading ability; on average, the students are scoring between the fifth and sixth grade-three to five grade levels below the expected grade level of ninth or $10^{\text {th }}$. The results from the test of Spanish syntactic processing indicate that these students have typical L1 development and suggest that these students are not poor readers because of a language deficit.

Table 2 shows the correlations between the variables, all of which are significant. We expect to see a relationship between all of the variables, as the same skills are being assessed in two languages, all related to reading.

|  | 1. | 2. | 3. | 4. |
| :--- | :---: | :---: | :---: | :---: |
| 1. English Reading <br> Comprehension (ALLD) | -- |  |  |  |
| 2. Spanish Reading <br> Comprehension (ALLD) | $.571^{* * *}$ | -- |  |  |
| 3. English Vocabulary (ALLD) | $.435^{* * *}$ | $.370^{* *}$ | -- |  |
| 4. English Syntax | $.397^{* *}$ | $.414^{* *}$ | $.386^{* *}$ | -- |

*** $\mathrm{p}<.001$; ** $\mathrm{p}<.01 ;$ * $\mathrm{p}<.05$
Table 2: Correlation matrix for model variables ( $n=62$ )

The main research question in Study 1 is whether reading skills in the L 1 or language skills in the L 2 are the more important predictors of L2 reading comprehension. In order to address this question, we did a hierarchical multiple regression analysis in which L 2 academic reading comprehension was the dependent variable and the predictor variables included L1 reading comprehension, L2 vocabulary, and L2 syntax. ${ }^{13}$ See Table 3 for the results from the regression analysis.

|  | B | SE B | $\beta$ |
| :--- | :---: | :---: | :---: |
| Step 1 |  |  |  |$|$|  |  |  |  |
| :--- | :---: | :---: | :---: |
| L1 Academic Reading Comprehension |  |  |  |
|  |  |  |  |
| Step 2 |  |  |  |
| L1 Academic Reading Comprehension |  |  |  |
| L2 Reading Vocabulary |  |  |  |
| Step 3 |  |  |  |
| L1 Academic Reading Comprehension |  |  |  |
| L2 Reading Vocabulary |  |  |  |
| L2 Syntax |  |  |  |

Note: $\mathrm{R}^{2}=.33$ for Step $1, \Delta \mathrm{R}^{2}=.06(\mathrm{p}<.05)$ for Step $2, \Delta \mathrm{R}^{2}=.01(\mathrm{~ns} ; \mathrm{p}=.26)$ for Step 3 *** $\mathrm{p}<.001$; ; $\mathrm{p}<.05$

Table 3: Regression Analysis with L2 Reading Comprehension as Dependent Variable, Including Predictor Variables of L1 Reading Comprehension, L1 Vocabulary, L2 Syntax ( $n=62$ )
${ }^{13}$ In reporting the results from the regression analyses, we include only significant results in the tables.

From these results, it appears that L 1 reading comprehension is the stronger contributor to L 2 reading comprehension, above that of L 2 vocabulary, although L 2 vocabulary is also a significant contributor to L 2 reading comprehension. L2 syntax did not play a significant role, likely due to the small sample size. L1 reading and L2 vocabulary together accounted for $39 \%$ of the variance in L 2 reading. The unique contribution of these two variables to L2 reading was also calculated; L1 reading comprehension accounted for $20 \%$ of the variance in L 2 academic reading comprehension, and L2 vocabulary accounted for $6 \%$ of the variance.

The students were split based on their level of L 1 reading comprehension into a low-performing group $(N=18)$ and a high-performing group ( $N$ $=22$ ). ${ }^{14}$ Because this was the variable used to split the group, only L2 vocabulary and syntactic processing were included as predictor variables in this subanalysis. The low-performing group scored at or below the fourthgrade level in Spanish reading comprehension, and the high-performing group scored at or above the seventh-grade level. Two stepwise regression analyses were done in order to determine if the L2 linguistic skills of vocabulary and syntactic processing played similar roles in L2 reading comprehension among both strong and weak L1 readers.

Based on the regressions, among the good L 1 readers, L 2 vocabulary was the only significant predictor of L 2 reading comprehension $(\beta=.50$, $t(20)=2.60, p<.05$ ), accounting for about $25 \%$ of the variance $\left(R^{2}\right.$ $=.25, F(1,20)=6.75, p<.05)$. This matches the previous research that has found L 2 vocabulary to be the strongest predictor of L 2 reading comprehension among good L1 readers.

The poor L 1 readers evidenced L 2 syntax as being the only significant factor in the development of L 2 reading comprehension $(\beta=.48, t(16)=$ $2.20, p<.05$ ), accounting for about $22 \%$ of the variance ( $R^{2}=.22, F(1$, 16) $=4.82, p<.05)$. This is an interesting finding that matches research

[^12]on the importance of syntactic processing in the development of reading comprehension, and coincides with the notion that until processing becomes automatic, a student will not be able to be a successful reader. The students likely did not have enough L2 vocabulary to aid in L 2 reading without the help of syntactic processing. The low group scored, on average, at the third-grade level on English vocabulary, which was the lowest level tested. Furthermore, the students with poor L1 reading comprehension had significantly lower scores on L 2 syntactic processing than did the students with good L1 reading comprehension ( $t[27.32]=2.14, p<.05$ ).

## Discussion

Study 1 aimed to address the question of whether existing reading skills in the L1 or linguistic knowledge of the L2 played the most important role in L 2 reading comprehension among a population of newcomer adolescent emergent bilinguals who speak Spanish as their native language and have a range of academic skills in their L1. It appears that when we have participants with a true range of L1 reading ability, we see that existing reading ability is a stronger contributor to L 2 reading comprehension than is L2 vocabulary or syntax. Previous research may have found a stronger role for L2 vocabulary because the participants had age-appropriate levels of L1 reading comprehension. However, based on the results reported here, we have evidence that, in fact, L1 reading ability is a stronger contributor to L 2 reading comprehension than is L 2 proficiency. The results from Study 1 support the notion that a learner's L 1 reading ability transfers to the L 2 and that the reading skills developed in the L1 are available to the learner even when he or she is at the beginning stages of learning to read in a second language.

From Study 1, we also have evidence that the development of L2 reading comprehension may proceed differently for students with low versus high levels of L1 reading ability. In the group of students with higher levels of L1 reading, L2 vocabulary played a significant role in L2 reading, but in the group of students with lower levels of L1
reading, L 2 syntactic processing played a significant role in L 2 reading. Thus, we must exercise caution in applying principles of L2 reading development to all adolescent emergent bilinguals without considering the L1 academic skills these students bring with them.

## Study 2

Studies in L1 and a growing number in L2 have shown that morphological awareness (i.e., the conscious ability to break down words into smaller parts so as to assign meaning to the whole) correlates independently with many different components of reading, especially vocabulary (Anglin, Miller, \& Wakefield, 1993; Carlisle, 2000; Nagy, Berninger, \& Abbott, 2006; Wysocki \& Jenkins, 1987) and reading comprehension (Carlisle, 2000; Goodwin, Huggins, Carlo, August, \& Calderon, 2012; Katz, 2004; Kieffer \& Lesaux, 2008; Ku \& Anderson, 2003; Nagy, Berninger, Abbott, Vaugh, \& Vermeulen, 2003; Nagy et al., 2006; Tighe \& Binder, 2013). Only one study has considered the cross-linguistic relationship of L1 Spanish morphological awareness to L2 English reading comprehension (Ramírez, Chen, \& Pasquarella, 2013), and none have considered these variables with adolescent emergent bilinguals.

The research question of Study 2 was to find whether L1 morphology significantly predicts L 2 reading comprehension through a path analysis considering the mediating variables of L1 reading comprehension and L1 and L2 reading vocabulary. A sub-question was to highlight any differences between low and higher L1 proficiency readers. A subset of 60 participants completed the necessary assessments to conduct this analysis.

## Results

Descriptive results of the dependent (morphological awareness) and independent (reading) variables for L1 Spanish and L2 English are shown in Table 4.
\(\left.$$
\begin{array}{l|l|l|l|l}\hline & \begin{array}{l}\text { L1 Spanish } \\
\text { Mean \% } \\
\text { Correct } \\
\text { Assessments }\end{array} & \begin{array}{l}\text { L1 Spanish } \\
\text { Grade Level } \\
\text { (SD) }\end{array} & \begin{array}{l}\text { L2 English } \\
\text { Mean \% } \\
\text { Correct } \\
\text { (SD) }\end{array} & \begin{array}{l}\text { L2 English } \\
\text { Grade Level } \\
\text { (SD) }\end{array} \\
\hline \begin{array}{l}\text { Morphological } \\
\text { Awareness }\end{array}
$$ \& 79.2 \& NA \& 53.1 \& NA <br>

\hline ALLD Reading \& (10.6) \& 62.6 \& 7.6 \& 37.4\end{array}\right]\)| $(16.6)$ |
| :--- |

Table 4: Descriptive Results for L1 Spanish and L2 English Morphological Awareness and Reading Variables ( $n=60$ )

As expected, Table 4 indicates that the mean scores for L1 Spanish were higher than the mean scores for L2 English on all morphological awareness and reading measures. For example, the mean grade level for Spanish reading comprehension was $5.8(S D=2.7)$, and the mean grade level in English was almost three grades below that of those students' L1 Spanish at grade three $(S D=1.8)$. Their mean vocabulary grade level ( $M$ $=7.6, S D=2.7$ ) in Spanish was also more than three grades above their mean grade level in English ( $M=4.0, S D=2.2$ ); and the morphological awareness mean percent correct in the L1 Spanish ( $M=79.2, S D=10.6$ ) was also higher than that of L2 English $(M=53.1, S D=14.1)$.

Table 5 provides the results for the correlations between the L1 and L2 morphological awareness and reading measures. All of the variables are significantly correlated, which is to be expected because of the interrelatedness of the components of reading. Table 5 indicates that the strongest correlations are between L1 Spanish morphological awareness and L1 Spanish reading vocabulary ( $r=.700, p<.01$ ) and between L2 English morphological awareness and L2 English reading vocabulary ( $r=.650, p<.01$ ).

[^13]|  | 1. | 2. | 3. | 4. | 5. | 6. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.L1 Morphology | -- |  |  |  |  |  |
| 2.ALLD L1 Reading <br> Vocabulary | $.700^{* *}$ | -- |  |  |  |  |
| 3.ALLD L1 Reading <br> Comprehension | $.627^{* *}$ | $.475^{* *}$ | -- |  |  |  |
| 4.L2 Morphology | $.611^{* *}$ | $.602^{* *}$ | $.535^{* *}$ | -- |  |  |
| 5.ALLD L2 Reading <br> Vocabulary | $.389^{* *}$ | $.447^{* *}$ | $.349^{* *}$ | $.650^{* *}$ | -- |  |
| 6.ALLD L2 Reading <br> Comprehension | $.421^{* *}$ | $.302^{*}$ | $.457^{* *}$ | $.531 * *$ | $.423^{* *}$ | -- |
| $* * * \mathrm{p}<.001 ; * * \mathrm{p}<.01 ; * \mathrm{p}<.05$ |  |  |  |  |  |  |

Table 5: Correlation Matrix for L1 Spanish and L2 English Morphological Awareness and Reading Variables ( $n=60$ )

In order to consider each path, L2 reading comprehension was regressed on each variable so that the direct, indirect, and total effects could be calculated for each. The results are shown in Table 6, and standardized regression coefficients are diagrammed in Figure 1.

| VARIABLE | DIRECT EFFECT | InDIRECT EFFECT | TOTAL EFFECT |
| :--- | :--- | :--- | :--- |
| L1 Morphological | .139 | .282 | $.421^{* * *}$ |
| Awareness <br> L1 Reading | .218 | .100 | $.318^{*}$ |
| Comprehension <br> L2 Morphological | $.331 \sim$ | .094 | $.425^{* *}$ |
| $* * \mathrm{p}<.001 ;{ }^{* *} \mathrm{p}<.01 ;{ }^{*} \mathrm{p}<.05 ; \sim \mathrm{p}<.1$ |  |  |  |

Table 6: Standardized Direct, Indirect, and Total Effects of Cross-Language Reading Variables on L2 English Reading Comprehension ( $n=60$ )


Figure 1: Cross-Linguistic Path Results for L1 Morphological Awareness to L2 Reading Comprehension

Table 6 indicates that while there were no significant direct or indirect effects in the cross-linguistic model, there were a number of variables that had a significant total effect on L2 English reading comprehension. The path model for the whole group suggests that there are some strong cross-linguistic predictors of L2 English reading comprehension, namely L1 Spanish morphology ( $\beta=.421, p<.001$ ) and L1 Spanish reading comprehension ( $\beta=.318, p<.05$ ). Although L1 morphology has only a small and insignificant direct effect on L2 reading comprehension, the total effect is strong, as other variables in the indirect path (i.e., L1 reading vocabulary and L1 reading comprehension) facilitate the relationship. As expected, L1 reading comprehension makes a significant contribution to the total effect on L 2 reading comprehension, although it, too, shows no significant direct effect in this analysis. L2 morphology also has a strong total effect on L 2 reading comprehension ( $\beta=.425, p<.01$ ); this is not surprising, given the strong correlation between L 1 and L 2 morphology ( $r$ $=.611, p<.01)$. Moreover, in Figure 1 above, the indirect paths are more visibly identified. That is, the two strongest indirect paths emerge from (1) L1 Spanish morphology to L2 English reading comprehension through facilitation of L1 Spanish reading comprehension ( $\beta=.126$ ) and (2) L1 Spanish morphology to L2 English reading comprehension facilitated through L2 English morphology ( $\beta=.079$ ).

In this cross-linguistic solved path model, it is also clear that morphology in both L1 and L2 does have a strong effect on reading vocabulary (. 700 and .619 , respectively). Therefore, it is apparent that the total effect of L1 morphological awareness on L2 reading comprehension is complex, with interaction between numerous variables.

Out of the 60 participants who completed all of the tasks for crosslinguistic comparison, 18 were in the low group and 22 were in the high group. Participants in the low group were reading between a second- and fourth-grade level in L1, with a mean grade level of 2.8 ( $S D=.94$ ). The high group participants were reading between seventh and $11^{\text {th }}$-grade level in L 1 , with a mean grade level of $8.7(S D=1.55)$.

Separate multiple regression models were analyzed for the low group and high group on the cross-linguistic predictors of L2 reading
comprehension. The regression model was not significant at any step for the low group. This reiterates the fact that, because of the low proficiency in English, there are no significant morphological or vocabulary predictors in either L1 Spanish or L2 English for English reading comprehension. Note that in this model, L1 reading comprehension was not considered because it was used as the determination variable for the proficiency group, low or high. Table 7 shows the direct, indirect, and total effects of L1 and L2 morphological awareness on L2 English reading comprehension for the high L 1 reading proficiency group only.

| VARIABLE | DIRECT EFFECT | INDIRECT <br> EFFECT | TOTAL <br> EFFECT |
| :--- | :--- | :--- | :--- |
| L1 Morphological | $.591 \sim$ | -.151 | $.440^{*}$ |
| Awareness | .216 | .383 | $.599^{*}$ |
| L2 Morphological |  |  |  |
| Awareness |  |  |  |

Table 7: Standardized Direct, Indirect, and Total Effects of CrossLanguage Reading Variables on L2 English Reading Comprehension for the high group L1 Grade Level Proficiency 7th-11th ( $n=22$ )

For the high group, both L1 morphological awareness and L2 morphological awareness had significant total effects on L2 English reading comprehension. There was no significant contribution of L1 or L2 reading vocabulary to L 2 reading comprehension for this high group.

## Discussion

The goal of Study 2 was to investigate the effect of morphological awareness on reading comprehension across languages from Spanish to English. We chose to present the results in a path analysis so that we could note how the independent variables (i.e., morphological awareness and reading vocabulary) worked together to contribute to reading comprehension. Previous research has suggested that morphological awareness may contribute to reading comprehension indirectly through
reading vocabulary for lower proficiency readers, and then directly as reading proficiency is strengthened (see, for example, Kieffer \& Lesaux, 2008, for L2 English, and Nagy et al., 2006, for native English speakers).

We had expected that multiple variables on the path would help strengthen the total contribution of Spanish morphology to English reading comprehension, and this expectation was confirmed in the results, which showed a significant total effect of L1 morphological awareness on L 2 reading comprehension. An unexpected result was that L1 morphological awareness had a stronger total effect on L 2 reading comprehension than did L1 vocabulary and L1 reading comprehension alone. Previous research has pointed to the fact that L1 reading comprehension predicts L 2 reading comprehension ability. These results suggest that subskills of reading, such as morphological awareness, may be stronger contributors than L1 reading comprehension alone and provide incentive to further investigate how other subskills of L1 reading might interact to foster L2 reading development.

Finally, we looked at the difference in the cross-linguistic relationship between L1 morphology and L2 reading comprehension in the low- and high-proficiency groups. Only for the high group of readers did L1 morphological awareness make any significant contribution to reading comprehension in English. For the low group, there were no significant predictors, likely due to the fact that the English reading comprehension proficiency was too low (the mean was just over second-grade level) for either morphological awareness or vocabulary to have any significant effect. These data can be explained by the fact that the high group was reading at a mean grade level below fourth grade in English; therefore, they relied on basic morphological skills to comprehend what they were reading in English, and they did this mostly at the word level. There is a strong correlation between their performance on the L1 morphological awareness and L2 morphological awareness tasks ( $r=.636, p<.001$ ), which seems to be what is making the total effect of both morphological awareness measures so strong on L 2 reading comprehension.

## Implications

The research reported here has important implications for successful educational practices for newcomer adolescents. Study 1 found that L1 reading comprehension was the stronger contributor to the development of L 2 reading comprehension, meaning that students with the highest levels of Spanish reading ability were most successful in English reading comprehension. This suggests that providing students, especially those with low levels of L1 literacy, with L1 literacy instruction can aid in the development of their L2 academic skills and reading proficiency. Study 2 further supports the implication that providing specific instruction to increase awareness of morphological structures in the L1 can simultaneously boost L 1 and L 2 reading proficiency.

Both studies looked at the difference between low and high L1 readers. Based on the results, we believe that low L 1 readers need more exposure to academic language in order to develop advanced syntactic structures and morphology, ideally in the L1. Academic language in the L1 can be transferred to the L2. Because the high L1 readers had more academic language proficiency, they were able to develop more vocabulary and use their morphological awareness. In order to learn vocabulary and develop morphological awareness, students need more complex language so that they can use clues in the language structure to learn new meanings. Furthermore, both studies point to the importance of assessing the L1 literacy skills of newcomer students in order to design appropriate instruction. The needs of students with high versus low levels of L1 literacy differ, and an understanding of the skills in the L1 that can transfer to the L2 would be indispensable for educators. There is no need to teach low-level reading skills to students who have developed these in the first language; however, if students do not have the skills in any language, they will need instruction in order to develop the skills.

## Conclusion

The research presented here found that L1 academic skills play a critical role in the development of L2 reading comprehension, especially when considering a population of students with a range of L 1 academic skills. It is important to look at the development of L2 academic skills among students with both low and high L1 academic skills. Emergent bilinguals are a diverse population, and previous research focusing on students with high L1 literacy is not applicable to all students. The characteristics of the population are important to consider when interpreting the results from the study. The students had been in the United States for a maximum of 14 months at the time of the study, so all were at the beginning stages of English acquisition. They were all native Spanish speakers and had a range of L1 reading ability, with many scoring well below expected grade level. These students have not been included in the research program on L2 reading, and they differ in important ways from other populations. Therefore, the findings reported here are relevant for better understanding the development of L 2 reading among newcomer adolescents in U.S. high schools. However, more research is needed to understand the complexities of cross-linguistic predictors among L2 learners whose native languages have different phonological, morphological, and syntactic structures. It is also important to look at students with a range of L1 literacy who are more advanced L2 learners, rather than emergent bilinguals. Furthermore, longitudinal studies that look at the development of L2 reading over time are very important to having a clearer picture of L 2 reading acquisition.

Both studies reported here have furthered our understanding of how L1 reading comprehension contributes to L2 reading comprehension. Study 1 indicted that the role of L1 reading comprehension is extremely important in the development of L2 reading comprehension. Study 2 further indicated that morphological awareness in the L1 contributes to both L1 reading comprehension and L2 morphological awareness, which both help to facilitate the effect of L1 morphological awareness on L 2 reading comprehension. The fact that L 1 morphological awareness
was only significant for the high group is likely due to the fact that the lower-level readers still need development in their L1 skills so that they can transfer them to L2 English.

Finally, these two studies have confirmed that adolescent emergent bilinguals bring many skills, including morphological awareness, with them from their L1 Spanish, which significantly impacts their development of English language and reading comprehension. These L1 skills are valuable tools for their progress and success in U.S. academic environments.

## References

Anglin, J. M., Miller, G. A., \& Wakefield, P. C. (1993). Vocabulary development: A morphological analysis. Monographs of the Society for Research in Child Development, 58(10).
Bernhardt, E., \& Kamil, M. (1995). Interpreting relationships between L1 and L2 literacy: Some complicating factors. TESOL Quarterly, 16, 15-34.
Brisbois, J. E. (1995). Connections between first- and second-language reading. Journal of Reading Behavior, 17, 565-84.
Carlisle, J. (2000). Awareness of the structure and meaning of morphologically complex words: Impact on reading. Reading and Writing: An Interdisciplinary Journal, 12, 169-190.
Cummins, J. (2000). The threshold and interdependence hypotheses revisited. In J. Cummins, Language, power, and pedagogy: Bilingual children in the crossfire (pp. 173-200). Bristol: Multilingual Matters.
Derwing, B. L. (1976). Morpheme recognition and the learning of rules for derivational morphology. Canadian Journal of Linguistics, 21, 38-66.
Dressler, C., \& Kamil, M. (2006). First- and second-language literacy. In D. August \& T. Shanahan (Eds.), Developing literacy in second-language learners: Report of the national literacy panel on language-minority children and youth (pp. 197-238). Mahwah, NJ: Lawrence Erlbaum Associates.
Francis, D. J., Rivera, M., Lesaux, N., Kieffer, M., \& Rivera, H. (2006). Practical guidelines for the education of English language learners: Research-based recommendations for serving adolescent newcomers. Portsmouth, NH: RMC Research Corporation, Center on Instruction. Retrieved from http://www.centeroninstruction. org/files/ELL2-Newcomers.pdf

Freeman, Y. S., \& Freeman, D. E. (2002). Closing the achievement gap: How to reach limited-formal-schooling and long-term English learners. Portsmouth, NH: Heinemann.
Goodwin, A. P., Huggins, A. C., Carlo, M. S., August, D., \& Calderon, M. (2013). Minding morphology: How morphological awareness relates to reading for English language learners. Reading and Writing: An International Journal, 26, 1,387-1,415. doi: 10.1007/ s11145-012-9412-5
Graves, M. F., August, D., \& Mancilla-Martinez, J. (2013). Teaching vocabulary to English language learners. New York: Teachers College Press.
Katz, L. (2004). An investigation of the relationship of morphological awareness to reading comprehension in fourth and sixth grades (Unpublished doctoral dissertation). University of Michigan, Ann Arbor, MI.
Kieffer, M. J., \& Lesaux, N. K. (2008). The role of derivational morphology in the reading comprehension of Spanishspeaking English language learners. Reading and Writing: An Interdisciplinary Journal, 21(8), 783-804.
Koda, K. (2008). Impacts of prior literacy experience on second language learning to read. In K. Koda \& A. M. Zehler (Eds.), Learning to read across languages (pp. 68-96). New York: Routledge.
Ku, Y., \& Anderson, R. (2003). Development of morphological awareness in Chinese and English. Reading and Writing: An Interdisciplinary Journal, 16, 399-422.
Lee, J. W., \& Schallert, D. (1997). The relative contribution of L2 language proficiency and L 1 reading ability to L 2 reading performance: A test of the threshold hypothesis in an EFL context. TESOL Quarterly, 31, 713-739.
Lesaux, N. K., Koda, K., Siegel, L. S., \& Shanahan, T. (2006). Development of literacy. In D. August \& T. Shanahan (Eds.), Developing literacy in second-language learners: Report of the national literacy panel on language-minority children and youth (pp. 75-122). Mahwah, NJ: Lawrence Erlbaum Associates.

Mahony, D. (1994). Using sensitivity to word structure to explain variance in high school and college level reading ability. Reading and Writing: An Interdisciplinary Journal, 6, 19-44.
Mahony, D., Singson, M., \& Mann, V. (2000). Reading ability and sensitivity to morphological relations. Reading and Writing: An Interdisciplinary Journal, 12, 191-218.
Morse, A. (2005). A look at immigrant youth: Prospects and promising practices. Washington, DC: National Conference of State Legislatures/Children's Policy Initiative.
Nagy, W., Berninger, V., \& Abbott, R. (2006). Contributions of morphology beyond phonology to literacy outcomes of upper elementary and middle school students. Journal of Educational Psychology, 98, 134-147.
Nagy, W., Berninger, V., Abbott, R., Vaughn, K., \& Vermeulen, K. (2003). Relationship of morphology and other language skills to literacy in at-risk second-grade readers and at-risk fourth-grade writers. Journal of Educational Psychology, 95(4), 730-742.
Ramírez, G. (2009). The role of morphologicalawareness in bilingualchildren's first and second language vocabulary and reading (Unpublished doctoral dissertation). Ontario Institute for Studies in Education of the University of Toronto, Toronto, ON.
Ramírez, G., Chen, X., \& Pasquarella, A. (2013). Cross-linguistic transfer of morphological awareness in Spanish-speaking English language learners: The facilitating effect of cognate knowledge. Topics in Language Disorders, 33(1), 73-92.
Short, D. J., \& Fitzsimmons, S. (2007). Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners-A report to Carnegie Corporation of New York. Washington, DC: Alliance for Excellent Education.
Short, D. J., \& Boyson, B. A. (2012). Helping newcomer students succeed in secondary schools and beyond. Washington, DC: Center for Applied Linguistics.
Snow, C. (2006). Cross-cutting themes and future directions. In D. August \& T. Shanahan (Eds.), Developing literacy in
second-language learners: Report of the national literacy panel on language-minority children and youth (pp. 631-651). Mahwah, NJ: Lawrence Erlbaum Associates.
Tighe, E., \& Binder, K. (2013). An investigation of morphological awareness and processing in adults with low literacy. Applied Psycholinguistics, available on CJO2013. doi: 10.1017/ S0142716413000222
van Gelderen, A., Schoonen, R., Stoel, R. D., De Glopper, K., \& Hulstijn, J. (2007). Development of adolescent reading comprehension in language 1 and language 2: A longitudinal analysis of constituent components. Journal of Educational Psychology, 99, 477-491.
Wysocki, K., \& Jenkins, J. R. (1987). Deriving word meanings through morphological generalization. Reading Research Quarterly, 22, 66-81.

# No Verbs, No Syntax: The Development and Use of Verbs in Non-Literate Learners' Spoken Finnish 

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#### Abstract

There are many published studies describing the learning of Finnish as an additional language (L2) by educated adult learners, but hardly any research is available on how low-educated adults learn Finnish. This article presents findings on the development and use of verbs in four non-literate learners' spoken language. The focus is on verbs because of their essential role both in spoken and written utterances. The data were collected in a classroom context during a literacy training of 10 months, and the data collection method was participant-observation supported by note taking and audiotaping. The general premise of the study is a combination of sociocultural and usage-based theories of language learning. The findings show that the participants used verbs rather infrequently: only $22.7 \%$ of all the utterances included at least one verb, although individual differences were found both in the number of verbs and the use of the verbs. The main reason for the low use of verbs seems to be the absence of the subjects' explicit teaching. In Finnish, the learning of verbs just by picking them out from spoken language without the support of literacy skills and especially without explicit teaching is challenging because of the complex verb conjugation system.


## Introduction

In Finland, people have taken reading and writing skills for granted since the $17^{\text {th }}$ century, when the Lutheran Church began teaching these skills to all people. At that time, literacy skills were even a prerequisite for getting married. However, in the last few decades, the number of non-literate and low-educated adults and adolescents has increased due to immigration from countries with low literacy rates. For example, the estimated literacy rate in Afghanistan was approximately 28.1\% (Central Intelligence Agency, 2013), and at the end of 2013, there were 3,704 people born in Afghanistan living in Finland (Statistics Finland, 2014). When compared with most Western countries, the numbers are still small, but they are likely to increase. The latest statistic for participants in adult language and literacy training is from 2013, when the total number was 1,234 (Ministry of Employment and the Economy, forthcoming).

The relationship between additional language (L2) learning and literacy skills in a learner's native language (L1) is scarcely known, because, to date, most of the L2 acquisition knowledge has been based on research describing the learning processes of educated language learners (see also Tarone, Bigelow, \& Hansen, 2009). Because Finnish has a transparent orthography with a complex inflectional system, it provides a unique perspective for adding theoretical and empirical knowledge to this field. Additionally, this study aims to add practical knowledge for the integration training of immigrants.

The general premise of this study ${ }^{15}$ is the usage-based theory of additional language learning (e.g., Bybee, 2008). According to this and other construction-based views, languages are initially learned in interactional situations by way of natural affordances (e.g., Bybee, 2008; Ellis, 2002), with imitation and memorizing constructions as unanalyzed chunks both playing an essential role (e.g., Myles, Mitchell, \& Hooper,

[^14]1999; Ellis, 1996; Suni, 2008). Usage-based theories emphasize the importance of interaction between usage and cognitive development. However, the learners cannot benefit from affordances before having the ability to discriminate and recognize words and constructions from a stream of $L 2$ speech. The learners of this study seem to be able to pick out some words from spoken Finnish, but they have not completely reached the stage of imitation and chunk memorization.

To learn a language involves learning verbs. Without verbs, language learning cannot proceed further than the word level because the verb is the most essential part of the spoken utterance and of the written sentence (see, e.g., Aitchison, 2012). This article focuses on three research questions: How much do the participants use verbs in their spoken language in an L2 Finnish classroom context? Which verbs are used and when? How does the use of verbs develop during the data collection period? Following a brief literature review related to the study of verbs in language acquisition, the present study and its main findings are described, followed by a discussion of the findings and implications for practice and future research.

## Background

The development of verbs in L2 learning. The noun-verb distinction can probably be found in all languages (Baker, 2003). According to Aitchison (2012), it seems to be more difficult to learn verbs than nouns because verbs are connected to syntax in a complex way. In their seminal work, Klein and Perdue (1992) suggest that at the beginning of the additional language learning process, utterances are very simple, mainly comprised of disjointed nouns, adverbs, and particles, but not yet verbs. This is especially typical for Finnish, as the use of verbs requires some mastery of inflection (see also Puro, 2002). After this initial stage, learners begin to use verbs that, at this point, are usually not inflected for person or other grammatical categories.

Viberg (1993) suggests that concrete nouns are cognitively easier to process than verbs, which are therefore learned later, and argues that the relative increase in the number of verbs in learner language corresponds with the general development of the language skills, while the increase in the number of nouns does not. This is because there is a relationship between the increase in the number of verbs and the learning of syntax. Additionally, Niiranen (2008) points out that, among adolescent learners of L2 Finnish, "the number of verb lexemes is related not only to syntactic knowledge but also to inflectional knowledge" (p. 53). She concludes that "the size of verb vocabulary and language proficiency certainly must correlate in some way" (p. 53).

In light of the studies mentioned above, verbs arguably are essential to the linguistic structure in all languages because syntax does not exist without them. Pajunen (2001) divides verbs into primary and secondary classes on the basis of their relationship to the language-external reality. These semantic classes (used later in the analysis of the present study) form a universal structure, which may help L2 learners in learning verbs. All languages contain verbs referring to, e.g., speaking or moving. In Puro's (2002) study, L2 Finnish learners used mostly primary verbs, such as verbs of speaking and verbs of cognition, in the early stages of language learning. This suggests that at least some verbs in these semantic classes are relatively easy to learn.

When language learners are non-literate, they lack the ability to study verbs from books, so they must pick them up from the spoken language. This is challenging, given the abstract and complex nature of verbs. In Finnish, the relevance of verbs is even higher, as the subject can be incorporated into the verb and therefore the verb alone can comprise a whole sentence. Without verbs, there is no syntax, a fact often forgotten by literacy teachers, who often tend to concentrate on easily taught concrete nouns.

Verb conjugation in Finnish. Finnish verbs are inflected for person, number, time, mode, and voice. The personal pronoun is necessary only in the third person, both singular and plural. The Finnish negation
construction consists of the auxiliary $e i$, inflected in person and number, and the bare stem of the lexical verb (see Table 1). There is also the particle $e i$, which is used as the opposite of kyllä̈ ("yes"), and it looks and sounds exactly the same as the negation verb in the third person singular. (For further details, see Karlsson, 2008.) These ei particles are not included in this study, but this detail in the grammar may mislead the emergent learners to assume that the Finnish negation word is always $e$.

| Person | Affirmative | Negative |
| :--- | :--- | :--- |
| 1. singular | (minä) asun | (minä) en asu |
| 2. singular | (sinä) asut | (sinä) et asu |
| 3. singular | hän asuu | hän ei asu |
| 1. plural | (me) asumme | (me) emme asu |
| 2. plural | (te) asutte | (te) ette asu |
| 3. plural | he asuvat | he eivät asu |

Table 1. Conjugation of the verb asua 'to live' in affirmative and negative forms (present tense, the indicative mood)

Below, some sentence patterns are presented to help the reader to understand the examples later in this study.

In wh-questions, the word order after the question word is usually straight and the conjugated verb follows the subject (e.g., Missä Maija asuu? "Where does Maija live?"), while in yes/no questions, the word order is reversed. In yes/no questions, the question suffix ko/kö is added to the end of the conjugated verb (e.g., Asuuko Maija Oulussa? "Does Maija live in Oulu?"). In negative yes/no questions, the question suffix is added to the conjugated ei (e.g., Eikö Maija asu enää Oulussa? "Doesn't Maija live in Oulu anymore?"). Usually, the negative response to both affirmative and negative yes/no questions contains conjugated ei either with or without the bare stem of the lexical verb (e.g., Asuuko Maija Oulussa? Ei [asu]. "Does Maija live in Oulu? No [she doesn't]").

## The Present Study

Participants. All of the participants (their names are pseudonyms) in this study were women attending their first Finnish L2 language and literacy course. Their Finnish oral skills at the beginning of the data collecting period were rather low: Amina and Asra could talk a little about topics related to their everyday life, but Husna and Rana could only say a few phrases, such as huomenta ("[good] morning") or kiitos ("thank you"). As shown in Table 2, none of them reported having completed prior schooling or acquired literacy skills in any language; however, all of them knew some of the Roman alphabet. The average age of the four participants was 35.5 years (range $=24-45$ ), while the mean length of residence was 15.25 months (range $=12-18$ months).

| Adult <br> education <br> center | Name | Age* | Country <br> of origin | Native <br> language | Other <br> languages | Length of <br> residence in <br> months* | Earlier <br> education |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Town A | Asra | 24 | Afghanist <br> an | Dari | Farsi | 18 | none |
| Town B | Amin | 45 | Afghanist <br> a | Dari | Russian | 15 | none |
| Town B | Husna | 45 | Afghanist <br> an | Dari | - | 16 | none |
| Town B | Rana | 28 | Iran | Kurdish <br> (Sorani) | Farsi | 12 | none |

Note: * in August 2010, at the start of data collection
Table 2. Summary of study participants
Three of the four participants, however, had previous experience in oral L2 acquisition in either Farsi or Russian.

Learning context. The women attended language and literacy training classes provided by adult education centers in two towns, A and B. These workforce entry-level classes are free, but participation is required for receiving an integration allowance. In Finland, the adult education centers provide only the training, not, for example, child care or any other services. In both towns, the total number of lessons per week was 35. The length of each school day was approximately five lessons of 45
minutes each. Additionally, the students were expected to study at home two hours per day. The class size was 15 students.

In town A, the teaching seemed to primarily function in orientation with an array of learning activities (e.g., learning by doing), and the main goal of the course was to learn vocabulary and oral skills for everyday life. Literacy skills were taught along with the vocabulary. In town B, the teaching was mainly reading-oriented, following the reader Aasta se alkaa (It Begins with A) (Laine, Uimonen, \& Lahti, 2006). The main goal of the course was to develop reading skills; vocabulary was not explicitly focused on.

In both classrooms, the lessons consisted mainly of teacher talk, but initiation-response-feedback (IRF) cycles led by the teacher (see, e.g., Tainio, 2007) were also common. However, the participants also engaged in some small talk in Finnish (e.g., asking questions) occasionally with their teachers, the researcher, and the other students. They also used their native language quite often during the lessons. Most of the participants had few meaningful situations wherein to use Finnish outside the classroom because their family members or friends commonly acted as their interpreters.

Particularly in adult education center B, the teacher's ungrammatical omissions of the copula were common, e.g., Mikä nimi? ("What name?"; meaning, "What is this?") and Tämä hyvä ("This good"). This practice likely reduced the opportunities for learners to hear and learn the standard Finnish forms, especially as Finnish differs from Dari and Sorani Kurdish in the use of the copula. In general, there seemed to be very little explicit teaching of verbs in either Finnish class.

## Data and Method

The data for this study were collected longitudinally in the classrooms by participant observation, supported by note taking and audio recording of the lessons. Classroom-based data collection was important given that, for the learners in this study, the classroom often was the only context
of everyday interactional situations for the participants, due to their lack of contact with native speakers of Finnish and few opportunities to practice the language outside the classroom (e.g., Norton Peirce, 1993; Elmeroth, 2003).

The data collection period extended from August 2010 to May 2011. In town A, data collection consisted of six days during the autumn and four days during the spring (five lesson hours per each day), and in town B, the number of days was eight and 13 . The observation sessions were arranged as frequently as possible. Over these sessions, all of the Finnish utterances produced by the participants were documented. During the observation period, the instructors taught their usual curriculum, the only abnormality being the sporadic presence of the researcher. All the students in the classrooms regarded her as an assistant teacher, and natural interaction with the participants and other students occurred.

The analysis began with counting the number of words and utterances produced by each participant and encoding the utterances that included one or more verbs. Utterances associated with episodes when learners were reading or repeating after the teacher were omitted, as they were not originally produced by the participants. The two main categories used here are declarative and interrogative utterances divided into two subcategories, affirmative and negative. Additionally, some of the interrogative utterances are disjunctive, consisting of both an affirmative and a negative verb. These utterances have been separated from other types of interrogatives because of their more complex nature. The verbs have also been sorted into groups based on Pajunen's (2001) semantic classification. The utterance contexts (e.g., IRF cycle, interaction between students) are not discussed in this article, but some examples of them are visible in the utterance samples presented in the analysis.

The analysis is both quantitative and qualitative: the analysis consists of frequency counts of the utterances supported by samples of utterances produced by the participants.

As can be seen in Table 3, only $22.7 \%$ of all the participants' utterances included at least one verb; in other words, approximately one out of every five utterances utilized a verb. The participant who used the
most verbs with the greatest variety was Asra, with 19 different verbs and approximately $30 \%$ of utterances including a verb. There was a clear distinction in verb use between Asra and Husna, the latter of whom used the least number of verbs and had the narrowest verb repertoire. She was also the only monolingual participant, but it is not possible to say whether her difficulties in picking up verbs were related to her being relatively less experienced in language learning.

| The data | Amina | Asra | Husna | Rana | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of words | 669 | 512 | 387 | 635 | 2203 |
| Number of utterances | 264 | 241 | 179 | 270 | 954 |
| Declarative utterances with verb(s) | 44 | 50 | 13 | 58 | 165 |
| Interrogative utterances with verb(s) | 13 | 23 | 8 | 8 | 52 |
| Percentage of utterances with verb(s) | 21.6 | 29.9 | 11.7 | 24.4 | 22.7 |
| Number of different verbs used | 15 | 19 | 12 | 14 | 31 |

Table 3. Utterances including verb(s) in the data

In the next section, the use and development of verbs in the sample of learners is described in more detail. The verbs are presented in the semantic groups. Only the verbs ei and olla ("to be") are presented separately, because of their special nature. In the examples, a question mark refers to rising intonation; an ellipsis, to lengthy pauses.

## Findings

Lexical verbs. According to Pajunen (2001), verbs of speaking refer to verbal communication, either oral or written. In the data, the verbs in this semantic class were common, especially in interrogative utterances. Table 4 shows that these verbs were used in the data altogether 42 times, mostly by Amina and Asra. Their frequent use of kirjoittaa ("to write") may have some connection to their relatively faster development of literacy skills. Rana and particularly Husna were relatively slower in learning to read (see Tammelin-Laine \& Martin, 2014).

| Finnish verb usage | Amina | Asra | Husna | Rana | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| kirjoittaa 'to write' | 17 | 12 | 1 | - | 30 |
| puhua 'to talk, to speak' | 1 | 3 | 2 | 1 | 7 |
| lukea 'to read' | 3 | - | 1 | - | 4 |
| sanoa 'to say' | - | 1 | - | - | 1 |
| Total | 21 | 16 | 4 | 1 | 42 |

Table 4. Verbs of speaking and their occurrence in the data

Amina and Asra used kirjoittaa in affirmative declaratives and interrogatives but also in disjunctive interrogatives, as can be seen in examples 1 and 2. These kinds of utterances were used when confirmation of instructions given by the teacher was needed. The marker of disjunctive utterance was either $j a$ ("and") or a short pause ${ }^{16}$ between the alternatives.

Kirjoitta suu ja ei? (target: Kirjoitanko suu vai en?) (Asra, March)
Write+SG3 mouth and no+SG3? "Shall I write mouth or not?"
(2)

Lukee ... ei kirjoita. (target: Luenko vain, en kirjoita?) (Amina, April)
Read+SG3 no+SG3 write+NEG? "Shall I just read this, not write?"

All of the participants conjugated verbs of speaking in the third person singular, regardless of the person in question. Additionally, in August, Asra twice used the form pubu, the imperative form (the second person singular) of pubua. Pubua occurred at least once in the data of

[^15]every participant. On the other hand, sanoa was used only once, by Asra. This observation suggests that Asra had noticed the small semantic difference between these two verbs and brought them both into her own verb repertoire.

The next group is verbs of space, which express the position of a person or an animate subject. These involve verbs referring to lying, sitting, standing, and living somewhere (Pajunen, 2001). As can be seen in Table 5, all of the participants used nukkua, but the use of other verbs varied according to the participant. These verbs were used mostly in affirmative declaratives.

| Finnish verb with a | Amina | Asra | Husna | Rana | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| translation |  |  |  |  |  |

Table 5. Verbs of space and their occurrence in the data
The most complex use of nukkua by Rana (example 3) suggests that at the end of the data collection period, she had noticed the idea of verb conjugation, albeit she still used a lot of variation and incorrect personal endings.

Menen kotona nukkuu. (target: Menen kotona nukkumaan.) (Rana, May)
Go+SG1 at home sleep+SG3. "At home, I go to sleep."
The question in example 4 is typically asked by the teachers in beginners' language education. Asra did not generally inflect verbs or nouns in her spoken language in August, so it serves as an example of chunk learning by imitation (see also Myles et al., 1999; Bybee, 2008).
(4)

Opettaja missä sinä asut? (Asra, August)
Teacher, where you live+SG2? "Teacher, where do you live?"

It is interesting that only Asra was able to incorporate a question frequently asked of her into her own production for purposes of genuine interaction. One potential reason for this may be in the instructor's functional language teaching, in which the focus was on oral everyday language skills and interaction.

According to Pajunen (2001), intransitive verbs of motion are used in expressing movement from one place to another. Transitive verbs of motion refer, for example, to using the hands to move something (e.g., panna, "to put"), or in giving, taking, paying for, or buying something. The verbs in this class are presented in Table 6. It is worth noting that all the participants except Husna used more than one verb of motion.

| Finnish verb with a <br> translation | Amina | Asra | Husna | Rana | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| mennä 'to go' | 1 | 3 | 3 | 4 | 11 |
| kävellä 'to walk' | 2 | 1 | - | 1 | 4 |
| tulla 'to come' | - | 2 | - | 1 | 3 |
| antaa 'to give' | - | - | - | 1 | 1 |
| maksaa 'to cost' | - | 1 | - | - | 1 |
| panna 'to put' | 1 | - | - | - | 1 |
| Total | 4 | 7 | 3 | 7 | 21 |

Table 6. Verbs of motion and their occurrence in the data
In this study, verbs of motion were used mostly in affirmative declaratives. However, Asra and Husna used them in their interrogative utterances. Husna's spoken language seemed to involve only the form mene.

Example 5 is from a classroom situation in which the teacher was teaching the verbs ottaa ("to take") and panna. Amina showed that she understood the difference by putting her textbook on the table
and saying the utterance aloud. Otherwise, in April, she did not use inflection either in nouns or verbs.

Panen pöydälle. (Amina, April)
Put+SG1 table+ALL. "I put on the table."
Asra's question in example 6 was expressed the day after the class visited the market square, a task for which the class had studied some important phrases, such as one asking the price of an object.
(6)

Paljonko maksaa? (Asra, April)
How much cost+SG3? "How much does it cost?"

Based on Amina's and Asra's language skills in general and also on the broader classroom context, it seems that the utterances in examples 5 and 6 were plausible examples of language that the learners had learned as chunks.

Pajunen (2001) suggests that verbs of events express a process or a change that has come about by physical causation in, for example, the human body or nature. The participants of this study used the verbs in this semantic class rather infrequently, mostly in affirmative declarative utterances. In the data, there are some examples of the use of the verbs itkeä ("to cry") (Rana, four times; Husna, once), loppua ("to end") (Rana, twice), nauraa (Husna, once), paistaa ("to shine") (Amina, once), sataa ("to rain") (Rana, once), sopia ("to be okay") (Amina, once), and särkeä ("to ache") (Asra, once).

In this study, verbs of action express action in a general meaning (tehdä, "to do" or "to make"), action in the manipulation of something (silittä̈, "to iron"; pestä, "to wash"), and physiological action (syödä, "to eat") (see Pajunen, 2001). Syödä was used by all the participants (once by Amina, Asra, and Husna, and three times by Rana), silittää and tebdä both twice by Asra, and pestä once by Rana. The verbs were mostly used
in affirmative declarative utterances. Additionally, Asra used silittää and Rana syödü, each twice in interrogative utterances.

Verbs of perception express, for example, seeing and hearing (Pajunen, 2001). In this study, both Amina and Asra used the concrete seeing verb katsoa ("to look") three times. Additionally, Asra used the verb kuulua ("be heard") in its abstract meaning (example 7). She was the only participant who exhibited learning of this question typical of social interaction.

```
Mitä kuuluu? (Asra, March)
"What is heard?" "How are you [doing]?"
```

In this data, verbs of cognition were used only by Asra. The verbs in this class express, for example, thinking, the state of knowing, and desire (Pajunen, 2001). Asra used the verb tietää ("to know") twice in negative declarative utterances (see example 11, later), and baluta ("to want") once in an affirmative declarative utterance.

Olla. In Finnish, the verb olla refers both to being and having, but the meanings are distinguished by the syntactic construction. This can be seen in Table 7.

| Person | Be | Have |
| :--- | :--- | :--- |
| 1. singular | (minä) olen | minulla on |
| 2. singular | (sinä) olet | sinulla on |
| 3. singular | hän on | hänellä on |
| 1. plural | (me) olemme | meillä on |
| 2. plural | (te) olette | teillä on |
| 3. plural | he ovat | heillä on |

Table 7. Overview of "being" and "having" in Finnish, in present tense and the affirmative

The frequent affordances of both the copula and the "to have" construction are very typical of beginners' language education where the learners are taught to describe, e.g., their nationality and family.

Educated beginners also use olla very frequently in their spoken Finnish (see Puro, 2002). In this data, the use of olla was rather infrequent, which is shown in Table 8.

| Finnish verb with a <br> translation | Amina | Asra | Husna | Rana | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| olla 'to be' | 3 | 1 | 2 | 3 | 9 |
| olla 'to have' | 6 | - | 2 | 1 | 9 |
| Total | 9 | 1 | 4 | 4 | 18 |

Table 8. The copula verb olla ('to be') and its occurrence in the data
The participants used olla mostly in unanalyzed chunks, such as in examples 8 and 9 . However, in the participants' spoken Finnish, olla was lacking in most of the utterances that normally contain this verb.

Mikä tämä on? (Amina, November)
What this be+SG3? "What is this?"

Minulla on kaksi lasta. (Husna, March)
I + ADE be+SG3 two children. "I have got two children."
In the instruction, the use of the copula was mentioned, but this practice did not seem to lead to internalization. One potential reason for the infrequent use of the copula is transfer from the native language, because, in Dari and Kurdish, the copula in certain contexts consists of enclitics, not independent verbs (Learn Dari, n.d.; Thackston, 2006). The rather complex nature of the "to have" construction may be the reason why Amina, Husna, and Rana used it when the class was practicing it, but not in other contexts. On the days of observation at adult education center A where Asra was studying, the class was not focused on the "to have" construction, which may help to explain why this feature did not appear in Asra's language at all.

Ei. Table 9 shows that in the data, ei occurs mostly independently, followed by no lexical verb. Only Amina, Asra, and Rana occasionally used lexical verbs in declarative negative utterances. Additionally, there were some examples of lexical verbs in negative and disjunctive interrogatives in Amina's and Asra's data, which were presented in the section about lexical verbs. Potential reasons for this pattern among the participants are the rather low use of verbs in general and their seeing $e i$ as a negation word instead of as a verb with conjugation. The simple negative verb stem $e i$ is also sufficient for getting the message across. Ei was included in this study because it is a conjugable verb in Finnish, even though the participants did not conjugate it correctly.

| Negative utterances | Amina | Asra | Husna | Rana | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Declarative with lexical verb(s) | 6 | 3 | 0 | 3 | 12 |
| Declarative with no lexical | 15 | 38 | 4 | 34 | 91 |
| verb(s) | 2 | 3 | 0 | 0 | 5 |
| Interrogative with lexical verb(s) | 4 | 1 | 0 | 4 | 9 |
| Interrogative with no lexical | 21 | 41 | 4 | 37 | 103 |
| verb(s) | 6 | 4 | 0 | 4 | 14 |
| Total of declaratives |  |  |  |  |  |
| Total of interrogatives |  |  |  |  |  |

Table 9. Negative utterances in the data

It is worth noting that Husna used negative utterances considerably less than the other participants. Additionally, all of her negative utterances were from the last three months of the data collection period, and these were expressed without lexical verbs (e.g., Tämä ei tyttö tämä poika ["This no girl this boy"]). This was exceptional when compared to the other participants, who used negative utterances from October onward, occasionally including a lexical verb. Again, this may reflect Husna's relative lack of experience with learning additional languages.

In the data, the negation verb was used in the form ei only. It can be followed by the lexical verb in its default form (third person singular), as in example 10, or by the grammatically correct stem of the lexical verb (example 11). Amina and Asra used both of these negative utterance types, but Rana used only the first of them.
(Oletko sinä jo väsynyt? Haluatko nukkumaan?)
Ei nukkuu. (target: En halua nukkumaan.) (Rana, May) No+SG3 sleep+SG3.
("Are you tired? Do you want to go to sleep?") Rana: "I don't want to go to sleep."

Minä ei tiedä. (target: Minä en tiedä.) (Asra, March) I no+SG3 know+NEG. "I don't know."

Rana was the only participant who used negation more than once in the same utterance (example 12). This may be interpreted as her desire to emphasize her message.

Ei opettaja ei kotona ei hyvä. (target: Opettaja, ei ole hyvä olla kotona.) (Rana, May)
"No teacher no at home no good." ("Teacher, it is not good to stay at home.")

As a whole, it was typical for Rana to use utterances including ei byvä, but it was not typical of the other participants. This pattern reflects Rana's enthusiasm for expressing her opinions of and dissatisfaction with a large variety of issues, but also the need of learning how to use the copula in Finnish.

The development of the use of verbs. During the 10 -month period of language education, the participants seemed to learn to use verbs gradually, beginning with simple affirmative utterances. The use and number of different verbs increased in time in every participant's language, even if they seemed to be at different stages in the development of their use of verbs. For instance, Husna began to use verbs after approximately eight months, while the other participants did so much
earlier, after the first month of education (Amina and Asra) or after the fourth (Rana).

Individual differences between the participants in both verb repertoire and frequency were rather clear, because the participants using verbs more frequently and with larger variety in general also used verbs in more complex utterances, such as in disjunctive interrogatives. The number and frequency of verbs also seemed to be in line with the reading development, for Amina and Asra were the fastest learners of the decoding skills, while Husna was the slowest (more details in Tammelin-Laine \& Martin, 2014).

A feature in the development of verb use that all the participants shared seems to be that they hardly conjugated the verbs they used in other persons but the third person singular (the default form). Additionally, the unconjugated use of ei was typical for all of them. However, the participants who used verbs more frequently and had a wider verb repertoire seemed to use the lexical verb with $e i$ more frequently.

## Discussion and Conclusions

The data for this study were collected longitudinally in two classrooms, and they include, altogether, 266 tokens of 31 different verbs. The participants used verbs in the classroom context rather infrequently in general: only $22.7 \%$ of all utterances included at least one verb. Individual differences among the four participants were found both in the number of verbs used and the way of using the verbs. A different data collection method (e.g., controlled interview or oral language testing) could have led to different results. However, participants' meaningful situations of language usage took place mainly in the classroom context, so the classroom was an obvious choice for collecting naturally occurring spoken language data.

Of all the participants, Asra's verb repertoire was the widest. She also used verbs most frequently. Most of the verbs occurred in interrogative utterances, but some also occurred in negative and disjunctive questions.

Asra was the first one to start using verbs. The development of the use of verbs showed in her more complex structures and her increase of verb use over time. In her data, the two most common verbs were $e i$ followed by no lexical verb ( 39 instances) and kirjoittaa ( 12 instances).

Amina had the second largest variety of verbs and the second highest percentage of verb use. She used verbs mostly in affirmative declarative utterances, but also in negative and disjunctive interrogatives. Amina seemed to start using verbs actively from March, although there were some examples of verb use from October onward in her data. Also in Amina's data, the two most common verbs were ei followed by no lexical verb (19 instances) and kirjoittaa (17 instances).

Most of Rana's verbs occurred in affirmative declarative utterances, but also in interrogative and negative utterances. Rana started using ei followed by no lexical verb before affirmative verbs, which occurred in her data from December onward. The most frequent verbs in her data were ei followed by no lexical verb (38 instances) and nukkua (10 instances).

Husna seemed to have the narrowest verb repertoire and the lowest percentage of verb use. This may result from her not having learnt other languages previously. She also had the most consistent frequencies in the verbs she used, the most frequent verbs being $e i$ followed by no lexical verb (four instances) and mennä̈ (three instances). Most of the verbs occurred in affirmative declaratives from January onward, but she did not start using verbs until the last month of data collection.

According to Voionmaa (1993), in the European Science Foundation (ESF) project on additional language learning by adult immigrants, "The number and variation of verbs acquired correlated with general increase of lexical richness and variation" (p. 2). This result is in line with the findings of this study and the study of Tammelin-Laine and Martin (2014) on non-literate adult learners.

Approximately $32 \%$ of the verb tokens in the data belong to three semantic groups: verbs of speaking ( 42 instances), verbs of space ( 22 instances), and verbs of motion (21 instances). It is worth noting that, for example, modal verbs such as voida ("may," "can") and pitää ("must") are not used at all. Therefore, strings of verbs are also lacking in the data.

In general, the participants used olla much less than expected. Sentences with the copula are essential in social interaction, as in introducing oneself and describing one's family and country of origin. Given that utterances that omit the copula, while they may be functional, label even an otherwise advanced speaker as clearly clumsy and foreign, this issue should receive more explicit attention in teaching.

At the same time, ei was very common in participants' spoken language. However, none of them began to conjugate it in person and number during the data collection period. This pattern leads to the conclusion that the participants may assume that the Finnish negation word is always $e i$.

Language development is often assumed to start with unanalyzed chunks (e.g., Myles et al., 1999) learned by imitation. This study suggests that at the beginning of the language learning process, non-literate learners may not use or benefit from imitation as much as educated learners do. Therefore, they also seem not to learn phrases or constructions easily from the stream of spoken language without explicit instruction (see also Tarone et al., 2009). This can be partly explained by the fact that non-literate learners tend "to focus on the semantic elements of the communication, rather than the morphosyntax of the language" (Tarone et al., 2009, p. 110). On the other hand, the studies of Reis and CastroCaldas (1997) and Bigelow, Delmas, Hansen, and Tarone (2006) show that L1 literacy skills have a positive influence on the development of L2 oral skills in general. Additionally, the alphabetic literacy level of L1 is shown to affect, for example, the phonological skills and verbal memory of adults (Dellatolas et al., 2003). Both of these are needed for processing and storing chunks into memory for later use. Thus, Tarone et al. (2009) "are certain that older language learners who lack alphabetic print literacy are using the linguistic input they receive orally in different ways from those who are alphabetically literate" (p. 116).

Verbs form the basis of Finnish syntax, and therefore the learning of syntax fails to progress without learning verbs. For many of the participants in this study, interactive language-use situations in their L2 occur mainly in the classroom context. Because of this limitation,
literacy instruction should give them both affordances and scaffolding for learning a new language, and especially for learning verbs. Both a large variety and the frequent use of verbs helps in getting one's message across from the beginning of the language learning process. Additionally, vocabulary in general should be increased before starting to learn how to read so as to secure a meaningful and motivating learning process, which often requires a lot of effort when starting to learn an additional language as an adult.

In this article, some of the first steps toward understanding the development and use of verbs by non-literate learners in an L2 Finnish classroom context are explored. Further research is required, for example, to examine more specifically how the context affects the learners' spoken language development. In addition to larger samples, research on the potential relationship between the richness of verb vocabulary and the development of reading skills would add knowledge valuable for both researchers and practitioners.

## References

Aitchison, J. (2012). Words in the mind. An introduction to the mental lexicon (2nd ed.). Oxford: Blackwell.
Baker, M. C. (2003). Lexical categories: Verbs, nouns, and adjectives. Cambridge: Cambridge University Press.
Bigelow, M., Delmas, R., Hansen, K., \& Tarone, E. (2006). Literacy and the processing of oral recasts in SLA. TESOL Quarterly, 40(4), 665-689.
Bybee, J. (2008). Usage-based grammar and second language acquisition. In R. Robinson \& N. C. Ellis (Eds.), Handbook of cognitive linguistics and second language acquisition (pp. 216-236). New York: Routledge.
Central Intelligence Agency (2013). Afghanistan. In The world factbook. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/index.html
Dellatolas, G., Braga, L. W., 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), 771-782.
Ellis, N. C. (1996). Sequencing in SLA. Phonological memory, chunking, and points of order. Studies in Second Language Acquisition, 18(1), 91-126.
Ellis, N. C. (2002). Frequency effects in language processing. A review with implications for theories of implicit and explicit language acquisition. Studies in Second Language Acquisition, 24(1), 143-188.

Elmeroth, E. (2003). From refugee camp to solitary confinement: Illiterate adults learn Swedish as a second language. Scandinavian Journal of Educational Research, 47(4), 431-449.
Karlsson, F. (2008). Finnish: An essential grammar (2nd ed.). New York: Routledge.

Klein, W., \& Perdue, C. (1992). Utterance structure. Developing grammars again. Amsterdam: John Benjamins Publishing Company.
Laine, R., Uimonen, E., \& Lahti, Y. (2006). Aasta se alkaa. Helsinki: Opetushallitus.
Learn Dari. (n.d.). Retrieved July 27, 2014, from Learn Languages. http://mylanguages.org/dari_phrases.php
Ministry of Employment and the Economy (forthcoming). Foreign jobseekers at employment and economic development offices in 2013. Helsinki: Ministry of Employment and the Economy.
Myles, F., Mitchell, R., \& Hooper, J. (1999). Interrogative chunks in French L2. A basis for creative construction? Studies in Second Language Acquisition, 21(1), 49-80.
Niiranen, L. (2008). Effects of learning contexts on knowledge of verbs. Lexical and inflectional knowledge of verbs among pupils learning Finnish in northern Norway (Doctoral thesis). University of Tromsø, Norway. Retrieved July 27, 2014, from http://munin. uit.no/bitstream/handle/10037/2109/thesis.pdf?sequence=1
Norton Peirce, B. (1993). Language learning, social identity, and immigrant women. Ontario: National Library of Canada.
Pajunen, A. (2001). Argumenttirakenne. Asiaintilojen luokitus ja verbien käyttäytyminen suomenkielessä. Helsinki: Suomalaisen Kirjallisuuden Seura.
Puro, T. (2002). Suomi toisena kielenä-aikuisoppijan verbien kehittyminen alkeiskurssilla (Unpublished licentiate thesis). University of Jyväskylä.
Reis, A., \& Castro-Caldas, A. (1997). Illiteracy: A cause for biased cognitive development. Journal of the International Neuropsychological Society, 3(5), 444-450.
Statistics Finland (2014). Country of birth according to age and sex by region 1990-2013. Retrieved July 27, 2014, from http://www.stat.fi/til/ vaerak/kuv_en.html
Suni, M. (2008). Toista kieltä vuorovaikutuksessa. Kielellisten resurssien jakaminen toisen kielenomaksumisen alkuvaiheessa. Studies in Humanities, 94. Jyväskylä: University of Jyväskylä.

Thackston, W. M. (2006). Sorani Kurdish-A reference grammar with selected readings. Cambridge, MA: Harvard University. Retrieved July 27, 2014, from http://www.fas.harvard.edu/~iranian/Sorani/ sorani_1_grammar.pdf
Tainio, L. (Ed.) (2007). Vuorovaikutusta luokkabuoneessa. Näkökulmana keskustelunanalyysi. Helsinki: Gaudeamus.
Tammelin-Laine, T. (2014). "Tämä hyvä?" Kurkistus luku-ja kirjoitustaidottomien suomenoppijoiden esittämiin kysymyksiin. Puhe ja kieli, 34(2), 81-99.
Tammelin-Laine, T., \& Martin, M. (2014). The simultaneous development of receptive skills in an orthographically transparent second language. Writing Systems Research. Retrieved August 15, 2014. doi: 10.1080/17586801.2014.943148

Tarone, E., Bigelow, M., \& Hansen, K. (2009). Literacy and second language oracy ( $1^{\text {st }} \mathrm{ed}$.). Oxford: Oxford University Press.
Viberg, Å. (1993). Crosslinguistic perspectives on lexical organization and lexical progression. In K. Hyltenstam \& Å. Viberg (Eds.), Progression and regression in language. Sociocultural, neuropsychological छ linguistic perspectives (pp. 340-385). Cambridge: Cambridge University Press.
Voionmaa, K. (1993). On the semantics of adult verb acquisition. Göteborg: Kompendiet.

## Appendix

Abbreviations

## Number <br> Singular is not indicated

## Person

SG1 First person singular
SG2 Second person singular
SG3 Third person singular

Voice
Active is not indicated

## Mood

Indicative is not indicated

## Tense

Present tense is not indicated

## Negation

Negation verb of Finnish is indicated with English negation word no, followed by the personal ending.
NEG Negative form of verb in present tense is indicated with $N E G$.

## Case

Nominative is not indicated
ADE Adessive
ALL Allative

# The Impact of Literacy on Question-Oriented Usage Events in the ESL Classroom: A Case Study 

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#### Abstract

Research on English question development in second language acquisition has primarily been conducted in laboratory settings using oral tasks designed to elicit question forms, with findings often associated with the effects of corrective feedback and focus on form (Mackey, 1999; Spada \& Lightbown, 1999), task complexity (Kim, 2012), and syntactic priming (McDonough \& De Vleeschauwer, 2012). Findings from these studies are limited by the separation of the learners' question production from authentic experiences in an L2 classroom context where written input, teacher talk, and peer interactions all play various roles, and by a participant population that is largely skewed toward more educated and literate learners. To address these limitations, this longitudinal case study utilized a usage-based linguistics (UBL) framework to portray the complexity of experiences that one low-literate adult ESL learner encountered during question-based usage events. UBL focuses on the emergence of language within a locally situated experiential learning environment where learners integrate linguistic patterns into a growing mental inventory through contextualized use (Robinson \& Ellis, 2008). Analyses of the focal participant's question-oriented usage events demonstrated the impact that low literacy skills and interlocutor relationships have on opportunities for English question production and practice.


## Introduction

For beginning adult English language learners in an immersion context, there is much about the language (and often, the cultural and social norms associated with the language) that is unknown. The learner must rely on the teacher to provide the input, the modeling, and the practice opportunities with peers to make sense of and take ownership of the language and communicative situations they encounter. Asking questions serves an important role in language socialization (Li, 2008); in a basic sense, it shows language learners how speakers in a particular speech community engage with their interlocutors. Explicitly teaching question-asking through the use of question-oriented activities shows learners how to articulate their curiosity about the world through the key words of who, what, when, where, why, and how.

Second language (L2) oral development in instructed, print-rich environments is inherently tied to a spoken and written "feedback loop" (Ravid \& Tolchinsky, 2002) through which a learner's L2 comprehension and production of questions may emerge. This meaningful feedback loop may be blocked for learners who do not have the necessary educational background to meet the linguistic demands and socialized practices of the formal L2 instructed setting (Duff \& Talmy, 2011). The current study addresses this gap by taking one well-researched aspect of L2 development, the production of questions in English, and by relating this body of traditional SLA knowledge to the educational experience of one beginning level, low-literate adult ESL learner over 11 months of classroom instruction. In addition, this study is an attempt to leverage usage-based insights (Eskildsen, 2012; Robinson \& Ellis, 2008) as a theoretically interesting new perspective that can help illuminate the study of L2 development by LESLLA learners as it unfolds in classroom-based interactions. Specifically, the present research examines the complexity of factors related to one learner's experience in "usage events" (Eskildsen, 2009) that were focused on developing the ability to ask questions and to engage in question-oriented interactions.

## Literature Review

The background literature for this study is situated at the crossroads of three strands of research: the impact of low literacy on L2 development, question development as a component of classroom interaction, and usage-based linguistics, as a means of exploring and explaining the nature of how, when, with whom, and for what purposes learners explicitly encounter, practice, and produce question forms in the L2 classroom. The exploration of this intersection portrays L2 question development not as a linear sequence but rather as a fluctuating and complex system, taking place inevitably at "the level of mundane interaction" (Atkinson, 2011, p. 156).

## The Role of Literacy and Educational Background in L2 Question Development

This study focuses on one particular linguistic pattern, English questions. SLA researchers have investigated the acquisition of question structures in English, in part because it is relatively easy to elicit these during oral interaction tasks and it is difficult to acquire the structures themselves (Pienemann, Brindley, \& Johnston, 1988). The development and production of question forms in adult English language learners represents a significant area of research on the effects of interaction on SLA, with many studies using Pienemann et al.'s (1988) stages of question acquisition as a means of operationalizing and describing L2 development (Mackey, 1999; McDonough, 2005; McDonough \& Mackey, 2006; Spada \& Lightbown, 1993; Spada \& Lightbown, 1999). This research has consistently shown that these stages are predictable for all English language learners, regardless of L1 background, although learners progress through the stages at different rates. The factors impacting the duration of each stage are still being studied. However, a common finding in many SLA studies of question development is that L2 learners benefit from interactions that are manipulated in some way to provide opportunities for learning. Prior to the current study,
the impact of literacy within a print-rich instructional environment, the relationships between peers during question-oriented interactions, and the use of a case study approach to describe longitudinal experiences with question development had not been explored in the published research.

## Usage-Based Approaches to Describing L2 Development

Usage-based linguistics (UBL) is the overarching framework used here for exploring the experiences of one low-literate adult English language learner as she encountered and used questions in the ESL classroom. This approach is particularly well suited for a case study of L2 development because it accounts for four fundamental characteristics of language in use: language as emerging, language as contextualized, language as complex, and language as experiential (Ellis \& Larsen-Freeman, 2006). These characteristics are, in turn, related to the research on one aspect of conversational interaction-questions-and how literacy skills affect learners' abilities and opportunities for interacting in the L2 classroom.

Usage-based theories of language and L2 development focus on the emergence of language forms based on a learner's contextualized experiences, frequency of input, and opportunities for entrenchment (Ellis, 2008; Ellis \& Ferreira-Junior, 2009; MacWhinney, 2006). UBL situates language development as "a dynamic process in which regularities and system emerge from the interaction of people, their conscious selves, and their brains, using language in their societies, cultures, and world" (Ellis, 2007, p. 85). To reflect the complexity inherent in each learner's individual developmental trajectory, calls have been made for longitudinal corpora of language learning, as the learners encounter linguistic patterns provided by the interactional environments they experience, which in turn affect the input, practice, and opportunities for entrenchment that these patterns undergo (Eskildsen, 2012; Ortega \& Iberri-Shea, 2005; Robinson \& Ellis, 2008). The importance of language use in social interaction is foundational to UBL theories of L2
development, as it is the means through which learners encounter and derive linguistic patterns in meaningful and contextualized experiences.

The practice of asking questions seems an ideal choice for exploring how UBL frameworks can account for the effects of interaction on a learner's L2 experiences. Because conversational interaction often requires asking and answering questions, it stands to reason that investigating the experiences associated with question production and related behaviors will provide insights into L 2 development. The benefit of conducting UBL-framed SLA research within a longitudinal, classroom-based paradigm allows for the examination of the complex connections among the linguistic, social, and educational factors associated with the contextual development and use of L2 questions.

## Research Questions

This descriptive case study of one low-literate learner addresses three research questions:

- RQ1. To what extent does the L2 instructional environment provide opportunities for question-oriented usage events?
- RQ2. In what ways is a low-literate learner's participation in question-oriented usage events affected by her interactions with various interlocutors?
- RQ3. What is the impact of literacy requirements on a lowliterate learner's participation in question-oriented usage events?


## Methods

To introduce and present the methods used to address these research questions, this section describes the original data source as well as the data collection and analysis procedures.

## Data Source: The MAELC

The Multimedia Adult English Learner Corpus (MAELC) (Reder, 2005) provided the source of all data for this longitudinal case study. The MAELC contains over 4,000 hours of videotaped adult ESL instruction that took place from 2001 to 2005 in the Lab School of Portland State University, in partnership with Portland Community College (see http://www.labschool.pdx.edu/ for more information). The focus of instruction at the Lab School was oriented toward English learning for basic communication and life skills, serving adult English language learners from a variety of linguistic, cultural, and educational backgrounds.

## The Study's Focal Participant, Amina, and Her Classroom Context

To identify prospective participants for this longitudinal study, the video corpus was searched using proprietary query software to identify low-literate learners (defined as having six years or fewer of formal education) in Level A classes who attended the Lab School consistently over the course of multiple terms. The Level A class was intended for beginners who "usually can say their names and addresses, need help to conduct day to day business and usually have trouble giving or writing personal information independently" (Reder, 2005, p. 4). After observing recordings of several learners who fit these criteria, one focal participant, Amina, ${ }^{17}$ was chosen for this study. Amina, a Somali Muslim woman who appeared to be a senior citizen, attended the Lab School's Level A classes from the fall 2002 term to the spring 2004 term, for a total of five terms. Table 1 outlines the date and term of each recorded session in which Amina was a focal student, and indicates the teacher and the general topical content covered in that day's lesson. These seven data points capture and reflect Amina's on-camera participation in five consecutive 10 -week terms with two different teachers.
${ }^{17}$ All names of participants are pseudonyms.

| Session | Date | Term | Teacher | Topic of the class |
| :---: | :---: | :---: | :--- | :--- |
| 1 | $10 / 28 / 2002$ | 1 | Sally | Telling time |
| 2 | $2 / 3 / 2003$ | 2 | Sally | Daily schedules and time |
| 3 | $3 / 6 / 2003$ | 2 | Sally | "Do you like...?", shopping, vegetables |
| 4 | $4 / 21 / 2003$ | 3 | Diane | Calendars and holidays |
| 5 | $7 / 7 / 2003$ | 4 | Diane | Families and children |
| 6 | $8 / 4 / 2003$ | 4 | Diane | Health problems and remedies |
| 7 | $9 / 29 / 2003$ | 5 | Diane | Personal introductions, addresses |

Table 1. Overview of the corpus data

## Data Collection and Analyses

Data collection entailed an intensive process of observation focused on Amina's videotaped data, as well as that of her instructional environment. The observations yielded extensive field notes for each of the seven 2.5 -hour classes in the coded data that describe Amina and her interlocutors, their actions, gestures, relevant spoken/written language, and times associated with question-oriented talk and question-oriented practice activities. Amina's literacy-related practices during copy work associated with questions were noted, as well as during any pair work that required her to write down questions or her interlocutor's answers to questions. The Lab School's use of remote-controlled cameras that could zoom in on any documents that Amina read or wrote was invaluable for noting these literacy practices.

Through multiple viewings of the video data and readings of the accompanying observation notes and transcripts, a coding protocol gradually emerged that identified, categorized, and described Amina's spoken language, literacy practices, and interactional behaviors during question-oriented practice activities. (See Appendix for coding protocol.) The coding protocol was later used to identify usage events in which Amina appeared to stand at an intersection between the intended oral production in communicative activities and the literacy/schooling
practices required to effectively participate in these activities. Finally, turn-taking behaviors between Amina and her interlocutors in questionoriented interactions were identified and coded-with the expectation that greater frequency in initiating and completing a question-answer sequence results in a greater amount of practice.

## Results

For all five terms in which Amina appeared in the corpus, she remained in a Level A class for beginners. The curriculum focused on functional English related to life-skills content such as telling time, sharing personal information, describing health problems, and going shopping. These classes included students who were highly educated in their native language as well as students, like Amina, who had limited educational backgrounds.

During conversational pair activities featured in the MAELC, the data offered a glimpse of Amina's immigration and educational history. In February 2003, Amina told classmates that she arrived in the United States in 1995, but she quickly added that she had not been attending school the entire time when qualifying her response: "Not school. Not school." During a lesson on family and children in July 2003, Amina indicated that she has eight children, all living in the United States, and many grandchildren.

Amina copied almost everything written on the board into her notebook; zoomed-in camera shots show that Amina was meticulous and, for the most part, accurate in her copy work, but her efforts were slow and laborious. She was often shown to be copying something that the teacher presented on the board much earlier in the lesson, with considerable lag time. At times, she could be seen copying things that were not directly related to any classroom task-that is to say, she copied indiscriminately and often remained focused on the copy work even though the rest of the class had moved on.

In terms of her relationship to other students, the corpus data showed Amina usually sitting alone silently (often copying off of the board) during downtime while other students talked to one another. She remained at her seat during each class's 20 -minute break and was rarely engaged by other students in casual conversation. However, she participated to the best of her ability in question-oriented practice activities; she not only asked the scripted questions required by the task, but also asked her fellow classmates unscripted personal questions about their own livesindicating that she was capable of interacting and willing to interact with her classmates, given the opportunity. When she was seated next to a classmate, she asked for help and also provided help as needed. However, Amina's classmates' reactions to her during question-oriented interactions often demonstrated a lack of confidence in her abilities, illustrated by their reluctance to engage with her, their directive behaviors when negotiating tasks, and, in some instances, their appropriation of tasks that Amina was meant to do herself. These reactions often seemed to be related to the literacy demands of the task for which Amina may have been unprepared. These are discussed in depth below.

## Classroom Opportunities for Question-Oriented Usage Events

The first research question addressed the opportunities that were afforded by the L2 instructional environment for the learners to engage in question-oriented usage events. In UBL theories of L2 development, "usage events" are integral to forming the necessary associations of linguistic patterns within a specific communicative context (Eskildsen, 2009; Eskildsen, 2012). In this study, communicative practice activities, the primary purpose of which was for students to ask and answer questions, were identified and categorized as question-oriented usage events (e.g., reading question-and-answer dialogues aloud from a textbook, interviewing a partner in a pair or small-group activity, and interviewing another classmate in a whole class "mixer" activity). The interview activities were usually scaffolded by using a conversation grid
or a similar blank template that students were required to fill in with the information given to them by their interlocutor(s).

The occurrence, frequency, type, and duration of question-oriented usage events varied somewhat in Amina's experiences. Following Pienemann et al.'s (1988) question stages, the questions designated for practice by the teacher were primarily Stage 3 questions (fronting of a questioning element with, Do you like __? Is there a holiday in __?), Stage 4 questions (limited/pseudo inversion, e.g., What is your ZIP code?), and Stage 5 questions (full inversion, e.g., How many children do you have?). Although each recorded class session featured at least one questionoriented peer activity, the total amount of class time spent directly on asking and answering questions ranged from six minutes to 35 minutes during a 2.5 -hour class.

Transcripts of each recorded class session show that Amina produced 20-40 questions per 2.5 -hour class period, with the exception of the July 2003 class, in which she asked only three questions. A very small number of these questions were self-directed (no response expected), such as when she looked to enlist the teacher's help during a pair activity and said under her breath, "Teacher. Where is teacher?" During teacherfronted modeling of formulaic questions to be practiced in pair activities, Amina produced questions that echoed the teacher's example. However, the majority of Amina's questions were produced within the context of question-oriented instructional time, for which the primary purpose was to model, practice, and ask questions with peers.

## Interactions with Interlocutors during Question-Oriented Usage Events

The second research question addressed the ways that Amina's participation in question-oriented usage events was affected by her interactions with various interlocutors. The findings discussed here are examined first in terms of interactions that Amina had with her
teachers, then in terms of interactions that Amina had with her peers during question-oriented usage events.
Question-oriented interactions with teachers. The most frequent source of input for the students in this corpus was the teacher herself. The teacher's provision of modeling and scaffolding when directing and monitoring question-oriented activities set the tone for how successfully the task might progress. This input could be oral (providing models, eliciting repetitions from students, echoing or recasting what another student had said) or written (writing questions on the board, directing students' attention to writing on the board, in the textbook, or on a worksheet). The amount of "meta-talk" about questions and the students' participation in question-related activities added to this input, as well.

Although both Sally and Diane taught Level A, presumably with the same approximate proficiency levels represented in each class, they each took a different approach to how they set up, monitored, and talked about question-oriented activities. Sally's approach appeared to be minimal, avoiding meta-talk about the process or activity itselfpreferring instead to give short, direct instructions following wholeclass modeling. For example, her instructions for a "What time is it?" practice activity with toy clocks, for which one partner was to play the role of teacher and the other of student, was minimal and relied mainly on gestures.

> Excerpt 1 (2/3/03): Sally's instructions for the time activity [pointing] Practice together with your partner. [The] teacher [says]: "What time is it? What time is it?" Practice different times.

Amina completed the question-oriented tasks in Sally's classes with an expected amount of success; that is to say, she produced the target questions required by the activity and sometimes extended her question production beyond what the activity required.

Diane's approach to setting up and modeling question-oriented activities featured more speech overall, with more meta-talk about the
question activity itself. In a lesson on calendars and students' national holidays, Diane gave students a calendar template on which they were supposed to write their country's most important holidays. Students were then told to go through each month of the year with a partner, asking in regards to their home country, "Is there a holiday in [month]?" Diane set up the activity in this way:

> Excerpt 2 (4/21/03): Diane's instructions for the calendar activity

I would like you to talk to your partner, okay? You need to talk to your partner and ask- [trails off, gets sidetracked by a question from a student] ... Did everyone do this one? Did you talk to somebody? Now you go to talk to somebody. And what is the question? First question. What's the first question? What's your name? Okay. [writes down on transparency] What is your name? Okay that's the first question. What's your name? Okay, so you're going to do it together. Very good. What's your name? What's your name? And then what is the other one? What's the next one? Country. What's your country? Or where are you from? Where are you from? Okay ... Holidays in your country. And I want people to practice. [writes on board] Is there a holiday in January? For each month. You have to say all the months ... October? When? What holiday? I want you to exchange. I want you to talk to each other.

Amina had two different practice partners in this activity, both of whom seemed to follow the intended purpose of the activity by attempting to interview Amina with the target question, "Is there a holiday in [month]?" However, Amina had trouble understanding the purpose of the activity and did not use the target question to elicit responses from her partners. Instead, as excerpt 3 demonstrates, she
simply listed the months of the year for her partner to respond to. During this interaction, Diane came by to monitor Amina's interaction with her second partner, Irene. Diane directed Irene to be patient as Amina listed the months (line 4), but she did not model or insist that Amina actually practice the target question; in fact, she praised her (line 6) even though she never produced the target question.

Excerpt 3 (4/21/03): Amina's language during the calendar activity

1. Amina: Okay. March.
2. Irene: Okay, in April-
3. Amina: March.
4. Diane [to Irene]: Let her ask you. Let her say March, and then respond.
5. Amina: March.
6. Diane: Very good. [to Irene] Yes or no?
7. Irene: No, no.
8. Amina: Okay. April.
9. Irene: April. Yes.

The amount of teacher meta-talk in setting up the calendar activity (excerpt 2), coupled with the teacher's lack of direction for Amina to produce the target question (excerpt 3), likely contributed to the fact that Amina did not produce a single target question ("Is there a holiday in [month]?") during the usage events with two different partners.

Question-oriented interactions with peers. Each question-oriented usage event in the corpus was examined to see how Amina and her interlocutor approached the task. From the video corpus data, five general patterns emerged: (a) Amina initiated for the first question; (b) Amina's interlocutor initiated for the first question; (c) Amina initiated a subsequent question; (d) Amina's question was partially or completely cut off by her interlocutor; and (e) Amina's question or initiation of
communication was ignored or rejected by her interlocutor. Table 2 shows the distribution of these behaviors across the seven class periods included in the corpus.

|  | A-initiated <br> Q1 <br> (a) | O-initiated <br> Q1 <br> (b) | A-initiated <br> QX <br> (c) | A- Q cut <br> off <br> (d) | A- Q <br> rejected <br> (e) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Totals | 11 | 11 | 10 | 18 | 5 |

$A=$ Amina; $O=$ Other student
Table 2. Turn-Taking Behaviors Associated with Amina's Questions (Seven Class Periods)

Amina's attempts at asking a question were (d) partially or completely cut off in 18 instances and (e) ignored or rejected by her interlocutor in five instances. Excerpts 4 and 5 demonstrate these preemptive behaviors on the part of Amina's classmates. In excerpt 4, Amina and her classmates were surveying each other in a whole group mixer on what vegetables they liked ("Do you like [vegetable]?"). After Amina answered Nadia's Q1, she began to ask her own question. However, Nadia cut her off by providing her response before Amina completed the question.

Excerpt 4 (3/6/03): Amina's question is partially cut off by classmate Nadia

1. Nadia: Do you like mushroom?
2. Amina: Mushroom, no. Do you like-
3. Nadia: I like corn.
4. Amina: -beans? Eh, corn?

In excerpt 5, the task was to ask three questions about family members. Karen initiated the interaction and, after asking Amina the three questions, directed Amina to take her turn in asking the three questions (line 1). However, Karen seemed to grow impatient with

Amina (line 3); Karen then provided the answer to the first intended question, "How many children do you have?" (line 7) before Amina could produce the question.

Excerpt 5 (7/7/03): Amina's question is completely cut off by classmate Karen

1. Karen: Seven, yeah. Ask you-ask me. Karen.
2. Amina: Karen.
3. Karen: Yeah, Karen. Number two.
4. Amina: Number two.
5. Karen: Yeah.
6. Amina [writing]: Okay, Karen. Karen-
7. Karen: I have, I have two children. Two children.

In five other instances, Amina's initiation was rejected by her peers, who seemed to ignore the request by walking away or simply rejecting the request (by saying no) before they moved on.

## Literacy Requirements for Question-Oriented Usage Events

The third research question addressed the impact that literacy requirements have on question-oriented usage events. Although questioning activities such as those featured in this corpus are inherently designed to elicit spoken language, the literacy demands and "schooling" behaviors associated with oral communication activities cannot be ignored. Of the 14 usage events identified in the corpus, there were five activities in which Amina had to copy the questions from the board onto her own paper. In some cases, Amina copied directly into her own notebook instead of copying onto the blank template that was intended to be used. In each instance, video data showed Amina laboriously copying questions (and, in some cases, other text from the board indiscriminately) long after other students had gotten up and were moving around to participate in the question activity.

Figure 2 illustrates the indiscriminate copying that Amina often engaged in. On the board, the teacher had written a series of questions, with one question emphasized: What do people from your country do when they have a sore throat? The following directive was, Ask this question to each person in the room. The zoomed-in camera shot showed that Amina did not copy the question but the directive itself. In her subsequent interaction with a classmate, she did not attempt to produce the target question.


Figure 2. Amina's copy work: "ASK This guistion ..."
Throughout the corpus, particularly in Diane's classes, Amina's focus on copy work and writing was often prioritized at the cost of her participation in question-oriented peer practice. In their interactions with her, Sally and Diane both verbally indicated their awareness of Amina's developing literacy skills and associated struggles. During the calendar and holidays activity described above, Diane suspected that Amina didn't ask the target question ("Is there a holiday in [month]?") to her partner, Hana, and didn't write down Hana's name on the response sheet.

Excerpt 6 (4/21/2003): Amina's participation is questioned

1. Diane [to Hana]: Did she ask you? Did she ask you? Did Amina ask you? You
2. talked to Amina, right? Did Amina talk to you?
3. Amina and Hana [in unison]: Yes.
4. Diane: Did she write down your name?
5. Hana: Her name is [inc].
6. Diane: Yeah, but did she write down your name?
7. Hana: [inc]
8. Diane: No, she needs to write your name. Okay. [looks at Amina's paper] Yeah.
9. Okay, you wrote her name. Uh, don't write it for her. She needs to [this is to her]
10. practice [mimes writing in air]. Okay? Don't write it for her.

In lines 8-10, Diane seemed to be privileging Amina's literacy practice over her question-asking practice, commenting on Amina's need to write Hana's name herself, but not mentioning again the need for Amina to also ask the target question. The video corpus shows that Amina's classmates often appropriated her written work, physically taking her paper and writing questions or responses on it in Amina's place. In these instances, it seemed that Amina's classmates' perceptions of her language and literacy abilities affected their willingness to further engage with her in certain activities.

## Discussion

Usage-based theories characterize L2 learning as "a process of meaningfully revisiting the same territory again and again, although each visit begins at a different starting point" (Larsen-Freeman, 2012, p. 83), and consequently call for longitudinal data that do not separate the learner from the learning context. Although the findings highlight many issues for a low-literate learner's exposure to and opportunities to practice English question forms, three key issues are developed in this section as they relate to question-oriented usage events: the relationship between the input provided and question practice, the relationship between peer relationships and question practice, and the relationship between (limited) literacy skills and question practice.

For beginning ESL instruction, peer interaction needs to be highly structured, repetitive, and intentional. In a communicative classroom,
question activities are useful for encouraging interaction because they give learners something to ask (and respond to) multiple times in succession, when they may be otherwise unable to produce much language on their own. Each recorded class in the corpus offered Amina formal opportunities for practicing questions. All of these questions were highly scripted and dictated by the teacher for practice within a particular thematic unit.

Despite exposure to a range of question constructions across the seven recorded classes, Amina's actual production of the target questions in these usage events was limited. Many of the activities relied on interview templates or conversation grids to guide interaction as students copied questions onto their own papers and recorded classmates' responses. While the written modeling of communicative language is often seen as facilitative from a pedagogical methods perspective, it clearly hampers a low-literate student's participation in a question-oriented usage event if literacy skills lag behind oral production. Camera shots in the last three recorded sessions in the corpus show Amina copying Stage 4, 5, and 6 questions (Pienemann et al., 1988) from the board to ask a partner during a communicative activity. However, she never produced these questions orally-illustrating the need to consider the usefulness of providing written modeling of questions rather than providing the questions in a pre-written format for literacy learners.

Amina's teachers and classmates were certainly aware of her limited language and literacy skills, but that awareness did not always translate into the modeling or assistance Amina needed in order to successfully participate in and complete the question-oriented usage events.

For a low-literate learner like Amina, the connections between the requirements of [classroom] literacy practices and the development of questions cannot be ignored (Tarone, Bigelow, \& Hansen, 2009). It is reasonable to conclude that Amina's observed literacy abilities impacted how her classmates chose to approach and interact with her, ultimately impacting her accessibility to and participation in the question-oriented usage events that might otherwise have helped her L2 development.

## Recommendations for Future Research

According to UBL, meaningful encounters and repetitions of "utterance schemas" (Eskildsen, 2012), such as question constructions, eventually result in automaticity and entrenchment of formulaic sequences (tokens) as well as productivity of new language based on available slots in construction patterns (types). To conduct a richer UBLinformed analysis of how Amina's production of tokens and types may be developing her L2 question abilities, it is necessary to collect and analyze more question-oriented usage events with more unscripted/ undictated questions in the data.

Supplementing observational data with interview data would be an important step for future LESLLA classroom research. The opportunity to interview learners such as Amina would add to our understanding of the impact that motivation and interest in class may have on learners' outcomes in such usage events. For example, Amina attended Level A classes for five consecutive terms with two different teachers. The curriculum remained fundamentally the same for each class, as Amina saw former classmates disappear (perhaps to higher class levels) and new ones arrive. Interview data might identify perspectives on classroom interactions that were potentially clouded by frustration or boredom at encountering the same questions and topics.

The prioritization of copy work, often at the expense of oral interaction, illustrates the need for future research on literacy and oracy practices among LESLLA learners. Do other LESLLA learners prioritize copy work, and, if so, is this attributable to the sheer amount of written input or the expectations for using it? Might LESLLA learners use copy work to avoid oral interactions with other students or because literacy development is a priority over oral development?

To build on this descriptive research, further empirical studies are needed to address the issues related to question development that are taken for granted in highly literate instructional contexts. We need to more closely examine the ways in which low literacy skills and limited educational backgrounds may prevent the practice of oral question production in
communicative instructional contexts. What connections exist between reading or writing questions and using them both formulaically and productively? What is missing, under-emphasized, or over-emphasized in a given instructional environment to support a low-literate learner such as Amina? To reinforce and expand on Tarone and Bigelow's (2012) initial LESLLA research agenda, these relationships and their impact on L2 development bear further investigation in future research on LESLLA learners, particularly from a usage-based perspective.

## Conclusion

The current study identified one learner who was unable to fully benefit from the practice opportunities provided in the classroom for three primary reasons. First, if the questions to be asked had to be copied from the board, it took the learner a significant amount of time to do so, which resulted in less time and fewer opportunities for actually practicing the questions orally. Second, the learner's copy work was sometimes prioritized over oral practice, although no explicit literacy instruction was actually provided in the video data. Finally, the perception that many of Amina's classmates had of her relatively lower English language and literacy skills often resulted in their visible impatience and appropriation of her language production (oral and written) during their interactions with her.

By taking a closer look at LESLLA learners' interactional experiences in a print-rich environment, L2 teachers can build their awareness of these issues and reconsider the methods that they use to build oral and literacy skills in learners of varying educational levels (Bigelow \& Vinogradov, 2011). Given the findings from this study, recommendations can also be made for placing low-literate learners into separate classes with explicit literacy instruction that does not come at the expense of oral communication practice.

## References

Atkinson, D. (2011). A sociocognitive approach to second language acquisition: How mind, body, and world work together in learning additional languages. In D. Atkinson (Ed.), Alternative approaches to second language acquisition (pp.143-166). New York: Routledge.
Bigelow, M., \& Vinogradov, P. (2011). Teaching adult second language learners who are emergent readers. Annual Review of Applied Linguistics, 31, 120-136.
Duff, P., \& Talmy, S. (2011). Language socialization approaches to second language acquisition: Social, cultural, and linguistic development in additional languages. In D. Atkinson (Ed.), Alternative approaches to second language acquisition (pp. 95-116). New York: Routledge.
Ellis, N., \& Larsen-Freeman, D. (2006). Language emergence: Implications for applied linguistics-introduction to the special issue. Applied Linguistics, 27, 558-89.
Ellis, N. (2007). The associative-cognitive CREED. In B. Van Patten and J. Williams (Eds.), Theories in second language acquisition: An introduction (pp. 77-95). Mahwah, NJ: Erlbaum.
Ellis, N. (2008). The dynamics of second language emergence: Cycles of language use, language change, and language acquisition. The Modern Language Journal, 92, 232-249.
Ellis, N. C., \& Ferreira-Junior, F. (2009). Construction learning as a function of frequency, frequency distribution, and function. The Modern Language Journal, 93, 370-385.
Eskildsen, S. (2009). Constructing another language: Usage-based linguistics in second language acquisition. Applied Linguistics, 30(3), 335-357.
Eskildsen, S. (2012). L2 negation constructions at work. Language Learning, 62(2), 335-372.

Kim, Y. (2012). Task complexity, learning opportunities, and Korean EFL learners' question development. Studies in Second Language Acquisition, 34, 627-658.
Larsen-Freeman, D. (2012). Complexity theory. In S. Gass and A. Mackey (Eds.), The Routledge bandbook of second language acquisition (pp. 73-87). New York: Routledge.
Li, D. (2008). Pragmatic socialization. In P. Duff and N. Hornberger (Eds.), Encyclopedia of language and education, volume 8: Language socialization (pp. 71-83). New York: Springer.
Mackey, A. (1999). Input, interaction, and second language development: An empirical study of question formation in ESL. Studies in Second Language Acquisition, 21, 557-587.
MacWhinney, B. (2006). Emergentism: Use often and with care. Applied Linguistics, 27, 729-740.
McDonough, K. (2005). Identifying the impact of negative feedback and learners' responses on ESL question development. Studies in Second Language Acquisition, 27, 79-103.
McDonough, K., \& Mackey, A. (2006). Responses to recasts: Repetitions, primed production and linguistic development. Language Learning, 56, 693-720.
McDonough, K., \& De Vleeschauwer, J. (2012). Prompt-type frequency, auditory pattern discrimination, and EFL learners' production of wh-questions. Studies in Second Language Acquisition, 34, 355-377.
Ortega, L., \& Iberri-Shea, G. (2005). Longitudinal research in second language acquisition: Recent trends and future directions. Annual Review of Applied Linguistics, 25, 26-45.
Pienemann, M., Johnston, M., \& Brindley, G. (1988). Constructing an acquisition-based procedure for second language assessment. Studies in Second Language Acquisition, 10, 217-243.
Ravid, D., \& Tolchinsky, L. (2002). Developing linguistic literacy: A comprehensive model. Journal of Child Language, 29, 417-447.
Reder, S. (2005). The Lab School. Focus on basics 8a, 1-7. Retrieved from http://www.ncsall.net/

Robinson, P., \& Ellis, N. (2008). Conclusion: Cognitive linguistics, second language acquisition, and L2 instruction: Issues for research. In P. Robinson \& N. Ellis (Eds.), Handbook of cognitive linguistics and second language acquisition (pp. 489-545). New York: Routledge.
Spada, N., \& Lightbown, P. (1993). Instruction and the development of questions in L2 classrooms. Studies in Second Language Acquisition, 15, 205-224.
Spada, N., \& Lightbown, P. (1999). Instruction, first language influence, and developmental readiness in second language acquisition. The Modern Language Journal, 83, 1-22.
Tarone, E., \& Bigelow, M. (2012). A research agenda for second language acquisition of pre-literate and low-literate adult and adolescent learners. In P. Vinogradov and M. Bigelow (Eds.). Proceedings from the $7^{\text {th }}$ Annual LESLLA Symposium, September 2011 (pp. 5-26). Minneapolis: University of Minnesota Press.
Tarone, E., Bigelow, M., \& Hansen, K. (2009). Literacy and second language oracy. Oxford: Oxford University Press.

## Appendix: Coding Protocol for Amina's Question-Oriented Usage Events



# The Possibilities and Problematics of Research with LESLLA 

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#### Abstract

This paper will explore some of the unique methodological, theoretical, and ethical issues we have confronted when doing research on topics related to the teaching of adolescents and adult language learners with little formal schooling. By sharing narratives of our research process, we hope to demystify research with LESLLA, inspire others to learn about how research changes across contexts and populations, and inspire discussion about promising research practices. This paper is about the possibilities and problematics of the ways of knowing about LESLLA and the decisions and experiences researchers make as they carry out their work.


## Introduction

Researching LESLLA in the United States is like and unlike doing research with other immigrants or on language learning among other types of learners. The main challenge is that we do not have a deep tradition of LESLLA research, and we have even less about doing this within engaged, reciprocal, feminist, and activist frames. This paper

[^16]presents narratives from three researchers working with LESLLA. Vinogradov, Pettitt, and Bigelow explore ethical issues that arose in their research in an effort to open up dialogue about doing research with LESLLA.

Even with rigorous training in a wide range of methodologies and epistemologies, many researchers are surprised by what they learn when carrying out work with LESLLA. There is a frequent feeling of not knowing exactly how the research process will unfold, and what emotional, intellectual, and logistical skills we need in order to produce knowledge that is relevant to LESLLA learners and their teachers. While researchers want to be useful to stakeholders, they also want to contribute to academic research in teacher education, language learning pedagogy, and second-language acquisition, among other things. In addition, LESLLA researchers must take on a high degree of social and ethical responsibility in their research processes. While we all must submit to a high level of institutional scrutiny, the nature of that responsibility in LESLLA contexts is framed in many different and in-the-moment ways (Cameron, Frazer, Harvey, Rampton, \& Richardson, 1993).

## Ethics

If we begin with issues of access and ethics, then we find that LESLLA learners present unique challenges. Many LESLLA researchers worldwide have been instrumental in helping Internal Review Boards (IRBs) understand our populations of learners. A simple example is the fact that many IRBs have refined rigid practices of obtaining assent or consent to participate in research-from a signature on a consent form to confirmation in the oral modes. However, the principle of obtaining informed consent in any modality suitable to the participant does not necessarily guarantee that consent is obtained ethically. This "macroethical" principle of respect for individuals (Kubanyiova, 2008) by accounting for low print literacy does not take into account the complexities of consent with respect to the context and relationships
with the researcher. Even the most careful multilingual conversation around consent could result in coercion, because the participant doesn't want to disappoint the researcher (who likely worked very hard to negotiate access and earn trust). The research process of consent, in this example, could create or intensify an unequal relationship between researcher and participants (Cameron et al., 1993). Therefore, this scenario would call for on-the-spot research decisions about the ethics of informed consent rather than comfort in knowing that the macroethical, or overarching, principle was met. These ambiguous moments make up the microethics of our work-layers of daily decisions about how to engage with participants and others in the research context, as well as issues of representation and dissemination of findings.

What LESLLA researchers often encounter in their work, despite following macroethical principles, are what Kubanyiova (2008) calls ethically important moments in which the principles of ethical research may prove to be ambiguous or contradictory. Kubanyiova turns to ethics of care (similar to Noddings, 1996) to understand the premise that research is a relational activity demanding researcher sensitivity to, and emotional identification and solidarity with, participants (2008, p. 506). This premise can be seen in the narratives that follow.

It is essential to attend to the relational nature of research with LESLLA in order to carefully bring this unique population into what we know about language learning (Ortega, 2005; Bigelow \& Tarone, 2004), cultural adaptation, and teacher learning. To do this, however, means rethinking macroethical principles at all stages of the research process and realizing that caring for participants includes a process of backing off from certain procedures, questions, or even research methods if they seem to compromise participants' comfort, trust, or dignity.

## Advocacy and Engaged Research

Most LESLLA researchers have, or acquire, a strong advocacy component to their work. The way we have seen this in our own work
strongly aligns with the way feminist theorists (e.g., Sullivan, 1992) have pushed the boundaries of research by calling for reciprocal, collaborative, and mutually beneficial relationships among researchers and their participants (Powell \& Takayoshi, 2003). This may occur as researchers learn how LESLLA populations are often underserved and how, commonly, teachers lack the necessary training to teach them. It most likely occurs through close personal relationships, which often lead to reciprocal learning/humanizing of all involved (e.g., Bigelow, 2010; Ibrahim, 2014; Watson, 2010). In this paradigm, researchers and participants have the potential to experience empowerment, and research processes can lead to action or advocacy. Other times, advocacy informs research, turning research to new directions with new purposes. For us, research is an engaged experience, meaning that it is with and for LESLLA rather than about or on LESLLA (Ngo, Bigelow, \& Lee, 2014). This stance brings certain commitments. For example, we reject framing LESLLA learners as passive or incapable, as superheroes or naïve. We reject essentializing individuals into ethnic categories, and we reject the notion that LESLLA learners are a monolithic group with predictable goals and needs. Like Cushman (1998), we reject "missionary activism" as an often uninvited and paternalistic way of being in relationship with an individual/community. In this humanizing process, the experience of carrying out research is a constant inquiry into self and the limits of our own professional and personal assets.

## Collaborative Research with LESLLA <br> Teachers across Teaching Contexts

by Patsy Vinogradov
Who knows more about this than we do, and how could we work together? This rich question shaped a recent and unique research study of LESLLA. Driven by curiosity and a priority of collaborating throughout, four LESLLA colleagues and I engaged in this study of adult ESL teachers, which took me and four LESLLA colleagues into a new and colorful space (quite literally). After I share the premise
of the inquiry, I raise two key issues for our discussion of LESLLA problematics and possibilities: reciprocity and usefulness in teacher research, and professional development as an intellectual activity.

LESLLA learners face a double challenge: acquiring English (in the U.S. context) while learning to read an alphabetic print language for the first time. However, within our communities, right down the street from many adult ESL programs, early elementary teachers teach literacy and language to young new readers every day. Kindergarteners and first and second graders ( $\mathrm{K}-2$ ) are also discovering the alphabetic principle, acquiring the components of reading, and building their identities as readers and writers. While adult ESL and K-2 are strikingly different contexts, there is much overlap.

Could the deep scholarship and highly professionalized standards focused on initial print literacy development for children somehow inform this newer, under-developed field of LESLLA teaching and learning? Until there is a substantial body of scholarship and standards for LESLLA teaching, can teachers use their knowledge of adult language and literacy acquisition to explore classroom literacy practices from a neighboring context? These two groups of educators, LESLLA and K-2, are united by a common goal: teaching initial literacy. From a position of curiosity and collaboration, this study ventured to learn what happens when these teachers connect.

Four LESLLA teachers in Minnesota, USA, along with me as researcher and teacher educator, formed a study circle to research connections between literacy instruction in K-2 and LESLLA. Of course, LESLLA students are adult learners, a fact we held close as we observed K-2 instruction, worked individually with young learners, read research together, and engaged in discussions and reflective journaling over several weeks in fall 2012. Walking through hallways of macaroni art and finger paintings, we entered a very foreign space-one full of tiny desks and colorful carpet squares. Our stance was one of curiosity, of wanting to know what might be useful for our own LESLLA contexts. However, for me as researcher, it was also critical that the project be useful to all parties.

## Reciprocity and Usefulness

Reciprocity in research-to give back, to leave the research sites and those involved better off-was a priority in this inquiry. Fine, Weis, Weseen, and Wong (2000) assert that qualitative researchers must recognize and act on their social responsibilities; they must keep forefront in their minds for whom their research exists. Not all research is immediately and directly useful to those researched, of course. As Ortega states, "The integration of knowledge and utilization is not an impossibility. To be sure, the link between the two can be indirect and remote for some ... but it can also be intimate and natural for others" (2005, p. 430). While I entered as researcher with a disposition of usefulness, I fully recognized that this work was disruptive to my participants and their schedules. In an effort to provide some reciprocity for the work, I took a number of steps. Some of these steps were more tangible than others, as described below.

First, I was able to volunteer at Logan Elementary, the site of our $\mathrm{K}-2$ explorations, regularly during the two months of our study circle, for a total of roughly 12 hours. My duties varied, but I worked in small reading groups with learners, helped with required assessments, pinned artwork to hallway bulletin boards, fetched fallen pencils, tied a lot of shoes, and listened to students read me their writing. The two classroom teachers at Logan Elementary who opened their classrooms to us each received gift cards and handwritten notes from the four participants and me expressing our gratitude.

Second, my four LESLLA teaching participants received stipends and Continuing Education Units (for re-licensure requirements) for their time, but I wanted to do something that would more directly benefit their learners and programs that had been so generous. I used some of the grant money ${ }^{19}$ I had received for this study to purchase lowlevel reading books and other materials for their classrooms. I had the

[^17]pleasure of seeing these books in action during my final observations. Third, I used grant money to pay the LESLLA programs for substitute instructors they needed while participants attended our in-person meetings. My hope is that while it was at times inconvenient, this study was not a burden to any of the individuals and programs involved.

A fourth and final way that this study "paid forward" was in the scholarly engagement of the participants during and following the study. This study took the form of professional development. Judging from participants' reflective writing, I am assured that they learned a great deal. More tangibly, the participants and I have presented this work at local, regional, and international conferences. From briefly sharing new insights at staff meetings for one participant, to three of the participants' joining me at LESLLA 2013 in San Francisco, we have been able to re-package our learning from this experience as advice for teachers. Excitingly, this initial work in K-2 literacy and its insight for LESLLA has sparked another cross-context encounter. In 2013, one of the participants and I replicated this model of professional development by connecting LESLLA teachers to another related field for LESLLA: dyslexia education. Together, we designed a new study circle, recruited participants, and carried out a multimonth collaborative inquiry around this new context, with extraordinary implications for LESLLA teaching and learning. This follow-up project was possible because we had "taken the leap" once in asking, "Who knows more about this than we do?" and because there are, of course, multiple answers.

## Professional Development (PD) as an Intellectual Activity

The LESLLA and $\mathrm{K}-2$ study circle provided a facilitated space for observing a new context and identifying practices that may have merit for LESLLA, transforming practices for the participants' own teaching contexts, and reflecting on learning, both alone and with colleagues. This sequence of guided thinking and action to widen one's perspective and make meaningful connections to improve practice relates to
scholarship in teacher development as an intellectual activity. Roskos and Bain propose that when teacher PD is intellectually challenging, it can move teachers toward a "pedagogy of thoughtfulness," one that values inquiry and is student-centered (1998, p. 91). They write that "if instruction is to keep pace with new advances in learning theory, technology, and communications, then professional development activity must shift its emphasis from narrowly construed techniques to the expansion of teachers' thinking and intellect" (1998, p. 92). Hence, teachers are viewed as scholars, learners, and inquirers (Cochran-Smith \& Lytle, 2009). I propose that this study circle was an example of such PD. In our final written reflection, participants were asked directly if this study circle sparked their curiosity and if they felt challenged and stretched by the experience. Two excerpts are particularly revealing about the nature of intellectual activity in the study circle:

The study circle was a great way to ask questions, share issues, problems, concerns but more importantly it gave me a support system for trying out new activities in my class and gave me a way to reflect on why, how, and what I am doing to provide the most respectful learning/teaching situation. Made me take pause ... something I'm often too hurried to do. Reminded me what was important and why. Great opportunity to take teaching risks.

Absolutely! Having been in ABE [adult basic education] for 7 years I sometimes feel like there aren't new and interesting presentations for teachers at my level. This opened my eyes to a whole new world of classroom ideas to explore.

In the first excerpt, the participant mentions taking risks and taking time to reflect with others. The opportunity to investigate with colleagues is an intellectual undertaking that can lead to changes in
practice. As the second excerpt mentions, seasoned teachers who are mid-career can benefit from inquiries that open them up to new areas of knowledge. Too often, I believe, we assume that teachers don't want to work any harder than they already do, that PD should be quick and painless and not ask too much of the participants. However, I submit that if PD is well planned, embraces a "pedagogy of thoughtfulness," and treats participants as scholars and investigators, then it is more engaging and beneficial.

In addition to the intellectual activity of our work, this study circle for LESLLA PD provided a way of building adaptive expertise in LESLLA teachers. By taking part in this challenging work, participants were asked to be both innovative and efficient, which are qualities of an adaptive expert (Darling-Hammond \& Bransford, 2007). They were innovative in that they tried practices typically reserved for young people, and they were efficient in that we were crafting the practice for LESLLA for a specific program and classroom and then reflecting on its usefulness. Participants added to their teaching repertoires and deepened their understanding of their own classrooms. In fact, we noticed a fundamental shift in thinking about our LESLLA classrooms; by the end of our time together, we saw our classrooms as places where learners can be (and should be) independent problem-solvers. For example, participants began implementing independent learning during their reading and writing instruction, such as morning sign-ins and a growing repertoire of literacy learning stations.

Unlike professional development activities that are transmission in style and provide new information on policies or techniques, a study circle, like a professional learning community, moves participants to think more deeply. They are provided the space and time to engage meaningfully with colleagues around a specific content focus. This type of PD honors and relies on the previous experiences and expertise of participants as they work though an intellectually challenging, worthwhile project together.

LESLLA teaching and learning is complex and unwieldy, and researching in this context is anything but easy. However, from
challenges emerge innovation, and, as this study shows, there are gems waiting to be found for learners, teachers, and researchers. In this work, usefulness for all involved was a high priority, and collaboration was a common thread. If we hold the stance that professional development for LESLLA should be intellectually challenging, useful, and collaborative, then the possibilities for learning are boundless.

## Ethics of Representation in LESLLA Research

by Nicole Pettitt

What counts as "competency"? In what ways are we, as researchers, limited in our knowing? In this section, I share two narratives that describe "crises of representation" (Denzin \& Lincoln, 2011, p. 3) and that I experienced while carrying out case study research with "Roba," an adult English learner who attended classes at a community-based school for adult immigrants and refugees in Minneapolis, Minnesota.

The narratives focus on questions related to data analysis and researcher and participant identity while highlighting the unpredictable and complex nature of research carried out in contexts in which many methodological and ethical questions remain unprobed. They further foreground the need for "reflexivity that pushes toward [the] unfamiliar, towards the uncomfortable" (Pillow, 2003, p. 192) at all stages of the research process.

## Context

In fall 2011, I carried out a small research study of a graduate course in second language acquisition (SLA). ${ }^{20} \mathrm{~A}$ former co-worker connected me with Roba as a participant, who agreed to one-on-one reading tutoring in exchange for SLA data collection. Roba shared that he was in his late

[^18]twenties, had been in the United States for about seven years, and began English classes for the first time approximately two months prior. His school placed him in English 1 (i.e., National Reporting System level "Low Beginning ESL") due to his score on the CASAS reading test. However, his listening and speaking abilities were far higher, as he had learned a great deal of English naturalistically in community contextson the job, with friends, by watching movies, and by "listening and trying things out" (Pettitt and Tarone, 2015). He had not learned to read in any of his seven languages and had enrolled in English classes specifically to learn how to read.

Thus, Roba and I began to meet each week for an hour of reading tutoring. At the same time, I collected data for my SLA class project. Overall, our tutoring relationship lasted for nine months, six of which involved data collection.

## What Counts as "Competency"?

For the research I briefly described above, I conducted a number of traditional SLA pre- and post-tasks with Roba in November 2011 and May 2012; see Pettitt and Tarone (2015) for a full description of data collection strategies.

As I began analyzing Roba's oral language for accuracy and complexity (i.e., past-tense marking, syntactic complexity, etc.), a few dilemmas emerged. First, I encountered a disconnect between the traditional SLA analyses I was employing and my perception of Roba's communicative competence. The data indicated that Roba's spoken language was marked by low morpho-syntactic complexity and accuracy, yet I knew him to be a skilled communicator, based on our weekly tutoring sessions. He was an adept conversationalist, expressing sympathy, humor, and comments that drew on knowledge of historical figures and pop culture. For example, during a conversation about immigration in the United States, he referenced the movie Scarface, as well as historical relations between the United States and Cuba, to
discuss differences between asylee and refugee status in the United States. Our complex conversations surrounding historical, social, political, and cultural concerns were evidence of Roba's communicative competence, I thought.

Similarly, at many points in my analysis, I could not tell which of Roba's speech forms might be "errors" and which might be considered fluent, vernacular speech. For example, as reported in Pettitt and Tarone (2015), Roba asked the following questions during data collection: "So, what kinda car you drive?" "Oh, what kinda language you speak?" According to traditional conventions of English question formation, the operator do was missing from these utterances. However, as stated above, up until the two months prior to the beginning of our research relationship, Roba had learned English in community contexts, and the naturalistic nature of his initial language learning was not to be overlooked: if his questions were produced in social contexts that privilege "informal" speech, then the forms he used would be considered appropriate. Further, I did not know what Roba's target language variety might be; perhaps these question forms were "evidence of [Roba's] success in acquiring a form in the English dialect that provides the bulk of the input" (Bayley and Tarone, 2011, p. 60).

So, was I to code Roba's questions as reflective of a language learner in early developmental stages of question formation (Pienemann, Johnston, \& Brindley, 1988) or, rather, as the speech of a sociolinguistically sophisticated language user? I also wondered: if Roba had been using English since childhood, how might researchers code his questions? In other words, as Ortega (2005) stresses, the choices that SLA researchers make have ethical implications. I had the opportunity to disrupt monolingual norms (Cook, 2002), which required putting aside singular notions of "accuracy" and "complexity," and considering what CAF measures (i.e., complexity, accuracy, and fluency) communicate-and do not communicate-about linguistic and communicative competencies with different learners.

Some limits of knowing. During my tutoring with Roba, critical incidents occurred that caused me to (re)examine my knowledge, and to consider the limitations of what may be available for me to know. The following excerpt describes one of those incidents. It is drawn from a reflection written in April 2012.

> Last week, I discovered that Roba actually speaks seven languages, not six. I momentarily left the room and when I came back, he was on his cell phone, speaking a language I didn't recognize. He said it was Hararithat he spoke Harari and Oromo at home growing up, and still uses Harari with his uncle who lives in town and other family members. ... I subtly asked why he had originally told me he was Oromo. He said he identifies as Harari-Oromo ethnically, and he'd told me he was Oromo because he knew $I$ would know what that was. He said he thought that saying he was Harari to me would be like asking an African person to distinguish between Ecuador and Mexico-if they've never heard of those places, how are they going to know?

That morning, I discovered part of myself through Roba's explanation. He assessed one of my limitations correctly: I had not previously heard of the Harari language or people. I thought back to the day we met and pondered the internal decision-making Roba may have engaged in when I asked about his background, as well as how it mirrors and differs from my own self-identification(s), since, like Roba, I (re)present myself differently according to audience and circumstance. I wondered: What is gained and what is lost when Roba, I, and others identify according to how (we perceive that) an interlocutor will comprehend the identities we present? How might my answers to that question change if I faced the dilemma Roba faced when he met me and upon meeting others who are limited in the ways that I am (and was)—specifically, the dilemma that an interlocutor (or many different interlocutors over the course of
several years) had not heard of my home country, my ethnic identities, or the languages I speak? The privilege that I experience as a white, fourth-generation, middle-class woman in the United States protects and prohibits me from knowing the answers to that question.

Roba revealed his Harari identity to me over four months after our tutoring and research relationship had begun-and then perhaps only because I heard him speaking a language I did not recognize and asked about it. Was it by chance that I was allowed this window into Roba's identity? If not for the unremarkable events of that morning, I might now be representing Roba in academic journals as an English learner who ethnically identifies as Oromo (not Harari-Oromo) and speaks six (not seven) languages.

This incident underscored for me the importance of interrogating the representations I craft of myself, as well as those of my students and participants—a reminder that echoes calls for reflexivity and awareness of researcher subjectivity. However, I also wonder what is accomplished through ongoing "monitoring" of my researcher subjectivity (Peshkin, 1991, pp. 293-294), since, as Patai (1994) writes, "We do not escape our positions by writing about them endlessly" (p. 70). Pillow (2003) encourages researchers to set aside narcissistic or simplistic reflexivities and subject positions for "reflexivities of discomfort," which she describes as "practices of confounding disruptions-at times even a failure of our language and practices" (p. 192). She further cautions against uncomplicated "success-infailure" narratives: "What I am advocating is the necessity of an ongoing critique of all of our research attempts, a recognition that none of our attempts can claim the innocence of success (even in failure)" (p. 192).

With this in mind, I offer the following uncomfortable reflexive note: neither Roba nor I is a fully knowable subject. There are limitations surrounding what is available for me to know about myself: no matter how much I reflect on my subjectivity, I may never know the ways in which participants and students know me and position me, or how this affects my research and representations of it. However, this does not release me from interrogating my subjectivity and problematizing my performance as researcher. Similarly, what is available for me to know
about others is bounded; even my reports of participant age, ethnicity, country of origin, years of education, language(s) spoken, etc., are not mundane and should acknowledge the fluidity and permeability of the personal histories and identities that inform the reports.

As researchers, we must regularly decide how we will represent in print those who participate in our research and, by extension, ourselves. Dávila (2014) reminds researchers that we are limited, especially when we do not share similar histories with our students/participants. She encourages us to pursue "representations that have meaning, albeit temporary, or partial to those that use them" and to engage in "representation as an act of caring" (p.30). At this juncture in LESLLA research, that path may still be somewhat fuzzy; thus, I encourage more LESLLA researchers from a variety of research traditions to join this dialogue, shedding light on those aspects of our research that are frequently hidden so that we may constructively question ourselves and one another in our efforts to co-assemble a more robust base of LESLLA research ethics.

## Informed Consent and Data Sources in ClassroomBased Research with LESLLA

In an ethnographic study focusing on LESLLA strategies for acquiring print literacy, Kendall King, my co-researcher, and I chose data sources which are typical for classroom-based research-class observation notes, interviews, copies of student work, video, and literacy assessments. In this section, I will outline how these methods worked with LESLLA. However, I will begin with the process of gaining access, which is often a barrier to doing research in public school settings in general, and which is different when hoping to gather data from LESLLA learners. For specific examples of the results of this research, see Bigelow and King (2014) and King and Bigelow (2012).

## IRB and Access

The context for this study was two sections of a beginning reading class in an all-immigrant alternative high school in a large urban school district in Minnesota. We were granted permission early in the academic year to sit in on classes and the school's weekly Professional Learning Community (PLC) time, in which teachers work together on curriculum, instruction, and assessment data. However, obtaining permission to begin data collection took about five months because we needed to work through the district permission process, which was much more difficult than our university IRB process. The first thing the district justifiably asked us to address was how our research would advance district initiatives and benefit students. Because of the engaged nature of our study, these questions were easy to answer. Our presence would give students more help with their English language skills through one-on-one interaction during class time and after school. The teacher often said she was glad to have us in her classroom because we served as aides during instructional moments when students were working alone or in groups, or we made accommodations during a quiz. The district IRB, however, conflated the role of teacher as a mandatory reporter with our role as researchers. In other words, in our assent/consent process, we needed to promise the district that we would report anything the students told us that suggested that they may be in danger of abuse, just like any educator or counselor. This language was very difficult to navigate in the consent process because we were very concerned that this topic, framed legalistically, would needlessly worry participants. In the end, we were allowed to eliminate this topic from our consent process. The negotiation helped clarify for the district what the purpose of our study was and what our role as researchers was in the project. That said, we did end up in a situation where we needed to contact the school social worker because of what one of our participants told us about the abuse she was experiencing in her home. We did this with her permission and, therefore, behaved as mandatory reporters. This is one instance where the consent process became murky and we
needed to work very hard to represent ourselves and our roles as clearly as possible to participants but, at the same time, act in the best interests of the participants if a situation arose.

Our experiences with consent continued after finally we obtained official access and were reminded of the ongoing nature of consent. We were given the opportunity to present our project to the class with the help of educational assistants (EAs) from the school, who together spoke Swahili, Oromo, Amharic, and Somali. Because we spoke Spanish, most students in the two classes we approached had the opportunity to ask questions in their home language(s), and we could answer questions collectively and multilingually with the help of the EAs. The Laotian students seemed to understand the conversation in English, an observation we based on their non-verbal responses, questions, and subsequent willingness to participate. We used simple colloquial language to talk about consent. For example, we said things such as the following: "Remember, this is up to you, and no one will be upset with you if you don't want to do it. You can change your mind later."

Most of the students in the class were 18 or over and could give their own consent. Those who were minors needed to get permission from a parent or guardian, again with the offer of school interpreters to help with questions. There was a memorable question that one of the Somali students asked: "What will you do for us?" Clearly, she had a high level of awareness that we were asking for a favor and that she was in a position to ask for something in return. (We offered tutoring and the chance to practice English.) Not all of the students in both classes agreed to participate, and they expressed this decision explicitly or by not saying anything. We felt that the immigration/legal status of some of the participants was a factor in participation, although they didn't say so (e.g., once they found out about the video, they were unwilling to participate). Others who agreed but would not show up for scheduled interviews seemed to be implicitly telling us that they were not in the study, and we removed their data from the corpus. There were also instances when a participant would move the video recorder such that it would not focus on them that day, but on other days they verified
continued consent by participating in interviews, sharing schoolwork, etc. All of these examples are illustrations of how informed consent (as a macroethical principle) is an ongoing process that is highly relational and contextual, involving microethical decisions.

## Data Sources and Lessons Learned

Our main data source for this classroom-based research project ended up being our video recordings of normal classroom activities. We recommend using video with this age group, in this context, despite the additional hurdles necessary to obtain permission. While we anticipated some opposition to the cameras for religious reasons, we learned that the video recorders ${ }^{21}$ were unproblematic for most students, most of the time. They quickly became acclimated to the cameras-at first playing with them by filming themselves or their friends, and later just ignoring them. It was impossible to avoid capturing video recordings of some of the students who did not consent to participate because we typically set the camera in a single location through the class period and went about our business taking field notes and working with students while the camera recorded. Our solution was not to analyze recordings from students who did not agree to participate.

Being a participant-observer entails a constant negotiation of roles. This concept has been explored extensively in books about classroom research (e.g., Hammersley, 1986; Schachter \& Gass, 1996; Nunan \& Bailey, 2008). For example, researchers in our field have been concerned about the impact of our presence on the data in terms of replication of findings. We knew that participating was non-negotiable for us, given the fact that the class was large and multi-leveled, with new students arriving weekly. It was best when we were both present in the classroom, because we could the share roles of field-note gatherer and class helper.

[^19]But sometimes we were alone and had to make field notes after the class was over, or move between our computer and working with students. In this process of deciding where and how to be in the class, we found that we encountered many microethical decisions. Do we act like teachers by helping with, checking, and praising work? It was important to us to assist, and this was a way we could get physically closer to students' learning as well as give back to the students and the teacher for allowing us to do our research with them. With LESLLA populations, it seems that observing from a distance is not a luxury we have, unless we could bring more collaborators into the class to afford some the opportunity to do nothing but observe. Plus, it is important to interact with participants in order to understand what is occurring as they learn.

It is very difficult to track individual micro-level language and literacy learning over time in a classroom setting, even with numerous examples of student work and interactions with the students. Artifacts from the classroom are often produced collaboratively, and quality is often determined by the students' engagement and how much time they were allotted for the task. Classroom SLA research carried out naturalistically (without intervention) is extremely challenging.

In order to attempt to capture rough data on the participants' native language literacy, we asked them to complete the Native Language Screening Device (NYS, n.d.) in their most dominant home language as well as in English. We felt that it was essential to do these assessments with the participants in addition to talking with them about their prior schooling, because we wanted to have evidence, albeit limited, of their skills. The reality of what occurred was not so cut-and-dried. We administered these literacy assessments wherever we could, and this meant doing them in the library after school during a period of homework help. There were multiple times when a participant was working on the test and other students wandered over to see what was going on and inevitably assist. Because we were present, we could still see what the student could do in both languages, roughly. We know that learning among LESLLA is usually a collaborative and communal enterprise, and we want other researchers to consider including, in a
systematic way, assessments carried out collaboratively. The decision to permit the seeming sabotage of the validity of this instrument was another microethical decision we made. There was no point in asking a participant to struggle alone, given the very broad and still-exploratory nature of the Native Language Screening Device. In fact, we may have learned more about the literacy level of the participant in this collaborative context than if we had strictly adhered to an individual administration protocol (e.g., that the learner performed better when she understood the instructions after hearing an explanation in Somali, that the learner performed better after becoming used to seeing Somali text, that the person assisting had more skills than she showed when she did the assessment before knowing us). We recommend, however, more and different literacy instruments to learn more about what participants can do in their home language(s) and in English. We also suggest devising more and better ways to monitor literacy development among participants. Perhaps some should be completed independently and others cooperatively and multilingually.

There is much to know about doing classroom-based research with LESLLA from a methodological standpoint. It is important for LESLLA researchers to share their experiences and strategies for gathering data with LESLLA learners, regardless of context. Microethical decisions are likely only made when contextual information (including relational information) is used.

## Conclusion

We hope that these narratives are useful to other researchers as they explore their overlapping roles of researcher, teacher, and advocate. We urge researchers to be critical of research presumed ethical by IRBs without careful reflexivity on microethical decisions mediated by researchers who use a high level of reflexivity in their research process. We also welcome researchers of many different paradigms into research related to LESLLA. This is important when exploring learning and
education with individuals who have vastly different backgrounds from our own. There is not one way of knowing, and different epistemologies may help counterbalance a heavily Western way of understanding LESLLA phenomena. There is a serious need to guarantee reciprocity in the research process, because LESLLA learners need allies like us. We have entailments of LESLLA concerns ranging from the personal (e.g., "I need a ride to the doctor") to the practical (e.g., "We need ideas for how to teach our students") to the political (e.g., "Our state needs legislation so LESLLA learners don't 'age out' of high school at 21"). Finally, our research community needs to continue to increase our repertoire about how to do LESLLA research. We don't know what best practices are in many cases, and when using typical research methods such as interviews, classroom observations, focus groups, etc., it's not always obvious how they should be adjusted for LESLLA.

## References

Bayley, R., \& Tarone, E. (2011). Variationist perspectives. In S. Gass \& A. Mackey (Eds.), Handbook of second language acquisition (pp. 41-56). New York: Routledge.
Bigelow, M., \& Tarone, E. (2004). The role of literacy level in SLA: Doesn't who we study determine what we know? TESOL Quarterly, 39(1).
Bigelow, M. (2010). Mogadishu on the Mississippi: Language, racialized identity and education in a new land. New York: Wiley-Blackwell.
Bigelow, M. \& King, K. (2014). Somali immigrant youths and the power of print literacy. Writing Systems Research, 6(2), 1-16.
Cameron, D., Frazer, E., Harvey, P., Rampton, B., \& Richardson, K. (1993). Ethics, advocacy and empowerment: Issues of methods in researching language. Language and Communication, 13(2), 81-94.
Cochran-Smith, M., \& Lytle, S. L. (2009). Inquiry as stance: Practitioner research in the next generation. New York: Teachers College Press.
Cook, V. (Ed.). (2002). Portraits of the L2 user. Clevedon, England: Multilingual Matters.
Cushman, E. (1998). The struggle and the tools: Oral and literate strategies in an inner city community. Albany, NY: SUNY Press.
Darling-Hammond, L., \& Bransford, J. (2007). Preparing teachers for a changing world: What teachers should learn and be able to do. San Francisco: Jossey-Bass.
Dávila, L. Thorstensson (2014). Representing refugee youth in qualitative research: Questions of ethics, language and authenticity. Diaspora, Indigenous, and Minority Education, 8(1), 21-31.
Denzin, N. K., \& Lincoln, Y. S. (Eds.). (2011). The SAGE bandbook of qualitative research. Thousand Oaks, CA: Sage Publications.
Fine, M. W., Weis, L., Weseen, S., \& Wong, L. (2000). For whom? Qualitative research, representations, and social responsibilities. In N. Denzin \& Y. Lincoln (Eds.), The SAGE bandbook of
qualitative research (pp. 107-131). Thousand Oaks, CA: Sage Publications.
Hammersley, M. (Ed.). (1986). Controversies in classroom research. Philadelphia: Open University Press.
Ibrahim, A. (2014). Research as an act of love: Ethics, émigrés, and the praxis of becoming human. Diaspora, Indigenous, and Minority Education, 8(1), 7-20.
King, K. A., \& Bigelow, M. (2012). Acquiring English and literacy while learning to do school: Resistance and accommodation. In P. Vinogradov \& M. Bigelow (Eds.). Proceedings from Low Educated Second Language and Literacy Acquisition $7^{\text {th }}$ Symposium (pp. 157-182). Minneapolis: University of Minnesota Press.
Kubanyiova, M. (2008). Rethinking research ethics in contemporary applied linguistics: The tension between macroethical and microethical perspectives in situated research. The Modern Language Journal, 92(4), 503-518.
Native Language Screening Device (n.d.). New York: New York State Education Department.
Ngo, B., Bigelow, M., \& Lee, S. J. (2014). The ethics of engaged scholarship with immigrant communities. Diaspora, Indigenous, and Minority Education, 8, 1-6.
Noddings, N. (1996). The caring professional. In S. Gordon, P. Benner, \& N. Noddings (Eds.), Caregiving: Readings in knowledge, practice, ethics, and politics (pp. 160-172). Philadelphia: University of Pennsylvania Press.
Nunan, D., \& Bailey, K. M. (2008). Exploring second language classroom research: A comprehensive guide. Boston: Heinle ELT.
Ortega, L. (2005). For what and for whom is our research? The ethical as transformative lens in instructed SLA. The Modern Language Journal, 89, 427-443. doi: 10.1111/j.1540-4781.2005.00315.x
Patai, D. (1994). (Response.) When method becomes power. In A. Gitlen (Ed.), Power and method (pp. 61-73). New York: Routledge.
Peshkin, A. (1991). The color of strangers, the color of friends: The play of ethnicity in school and community. Chicago: University of Chicago Press.

Pettitt, N., \& Tarone, E. (2015). Following Roba: What happens when a low-educated multilingual adult learns to read. Writing Systems Research, 7(1), 20-38.
Pienemann, M., Johnston, M., \& Brindley, G. (1988). Constructing an acquisition-based procedure for second language assessment. Studies in Second Language Acquisition, 10, 217-243. doi: 10.1017/ S0272263100007324
Pillow, W. (2003). Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. International Journal of Qualitative Studies in Education, 16, 175196. doi: 10.1080/0951839032000060635

Powell, K. M., \& Takayoshi, P. (2003). Accepting roles created for us: The ethics of reciprocity. College Composition and Communication, 54(3), 394-422.
Roskos, K., \& Bain, R. (1998). Professional development as intellectual activity: Features of the learning environment and evidence of teachers' intellectual engagement. The Teacher Educator, 34(2), 89-115.
Schachter, J., \& Gass, S. (Eds.). (1996). Second language classroom research; issues and opportunities. Mahwah, NJ: Lawrence Erlbaum Associates.
Sullivan, P. (1992). Feminism and methodology in composition studies. In G. Kirsch \& P. A. Sullivan (Eds.), Methods and methodology in composition research (pp. 37-61). Carbondale: Southern Illinois University Press.
Watson, J. (2010). Interpreting across the abyss: A hermeneutic study of initial literacy development by high school English language learners with limited formal schooling (Unpublished doctoral dissertation). University of Minnesota, Minneapolis, MN.


[^0]:    1 CASAS tests are constructed from an item bank of more than 5,000 test items. Each test item has an established difficulty level based on extensive field testing and analysis. Item Response Theory (IRT) is used to establish the item's difficulty level on a common scale ranging from 150 to 260 . The functional context of CASAS test items includes applied reading, math, and listening in a variety of simulated real-life situations. CASAS tests including the reading tests used in this analysis are one of the few tests approved for use in the National Reporting System (NRS), which is used by federal and state governments in the United States.

[^1]:    ${ }^{2}$ To meet program reporting requirements, students were generally given reading tests upon program entry and then retested periodically after so many hours of instruction. So, the longer students stay in a program, the more times

[^2]:    they tend to be tested. Equivalent alternative forms of the reading test were available for use in these assessments, which were, in general, appropriately administered, so a given test form was not administered twice to a given student within a six-month period, per the test developer's recommendation. A small number of students who received a given form twice within a sixmonth period were omitted from this analysis.

[^3]:    3 Sampling weights calculated for each panel member were used to make estimates for the defined target population from the sampled panel data.
    4 Analysis of missing interviews indicates that they were missing at random (MAR) with respect to the variables examined.

[^4]:    5 The TALS document literacy scale is directly comparable to the document literacy scale used in the 1992 National Adult Literacy Survey, the 2003 National Assessment of Adult Literacy, the 1994-1998 International Adult Literacy Survey, the 2003-2008 Adult Literacy and Lifeskills Survey, the 1991 Oregon Literacy Survey, and numerous other surveys. The document and prose literacy scales used in these surveys were merged into a single literacy scale in the 2011 PIAAC Survey of Adult Skills.

[^5]:    ${ }^{6}$ See Allemano (2013) for a discussion of other issues in assessing reading abilities in LESLLA adults.

[^6]:    ${ }^{7}$ In adult education in the Netherlands, a separate literacy framework is added to the levels indicated by the Common European Framework of Reference for Languages (Stockmann \& Dalderop, 2007). This yields literacy levels A, B, and C, where C equals A1 from the CEFR (beginner level). The CEFR levels continue with A2 (elementary), B1 (intermediate), B2 (upper intermediate), C1 (advanced), and C2 (upper advanced).

[^7]:    Note. Unstandardized coefficients are shown with their standard errors in parentheses in the columns headed "b." Standardized coefficients are shown in the columns headed " $\beta$." Statistically significant findings are identified as follows: ${ }^{*} p \leq .05,^{* *} p \leq .01,{ }^{* * *} p \leq .001 . \dagger$ indicates marginal significance with $\mathrm{p} \leq .1$

[^8]:    8 At the time of writing, this recommendation has not been adopted.

[^9]:    9 We gratefully acknowledge the funders and supporters of this project: the New York Community Trust, the New York City Department of Education, the New York State Education Department, the Research Institute for the Study of Languages, and the Center for Advanced Study in Education at the CUNY Graduate Center, NYC.

[^10]:    10 Currently in the middle of its third year, Bridges has expanded to other areas in New York State.

[^11]:    ${ }^{12}$ Following our development of the ALLD, described in Part I, the LENS (Literacy Evaluation for Newcomer SIFE) was developed by the RISLUS research team for the New York City Department of Education to assess the skills of incoming SIFE.

[^12]:    ${ }^{14}$ An independent samples t-test confirmed that these two groups were significantly different from one another. The low group scored significantly lower on L1 reading comprehension than the high group $(t[38]=9.5, p<.001)$. Students who scored at the fifth- and sixth-grade levels were omitted from this analysis, as they did not score on the very low end or very high end on L1 reading comprehension.

[^13]:    ${ }^{1}$ In English, the composite morphological awareness score did not include the Test of Morphological Structure (TMS) because the majority of lower proficiency readers were not able to complete this assessment.

[^14]:    15 This work was supported by the department of languages at University of Jyväskylä, the Finnish Cultural Foundation, the Langnet doctoral program, and the Ellen and Artturi Nyyssönen Foundation.

[^15]:    ${ }^{16}$ Normally, disjunctive utterances in Finnish are expressed either with tai or vai (both meaning "or") between the alternatives. In this data, the participants use only a short pause or the word ja (more details in Tammelin-Laine, 2014).

[^16]:    18 For once, we use reverse alphabetical order to signal equal contributions from all authors and not disadvantage authors whose last names begin with letters at the end of the alphabet.

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[^18]:    20 I would like to thank Elaine Tarone, my Master of Arts co-advisor and the professor of the class in which I began research with Roba, and Martha Bigelow, my Master of Arts co-advisor and the professor for the class in which I continued that work.

[^19]:    21 We each had a small digital video camera that we set on a small tripod and moved around the classroom very easily. It held more than two hours of video and was easy to download onto our computers with the built-in USB port.

