

Implementing an Intergenerational Literacy Program with Authentic Literacy Activity
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Abstract

Employing a formative experiment design, this project documented the process of implementing an intergenerational literacy program, based on engaging both parents/primary caregivers and young children in authentic literacy activities with the goal of increasing the adults' literacy levels and the children's emergent literacy concepts and abilities. Within this model, low-English-literate adults read and wrote real-life texts for real-life purposes in addition to receiving targeted skill instruction. Their children (ages 3-5) engaged in developmentally appropriate activities while their teachers drew their attention to how print and texts mediated these activities. Analysis of the data revealed implementation challenges that reflected both previously documented challenges of adult students with busy lives and challenges related to language and cultural differences among immigrant and refugee adults and their teachers. In addition, we also dealt with issues of teacher training and qualifications related to both the authentic literacy instruction model and the teaching of basic literacy skills to unschooled students. In spite of these challenges, the students registered significant growth in literacy levels for the adults, as compared to norm-reference scales. The young children also grew significantly in their emergent literacy knowledge as compared to the norm. The multi-method analysis, incorporating both quantitative and qualitative data analysis contributes to a deeper understanding of the issues facing program leaders and teachers of intergenerational literacy programs as well as to the possibilities inherent in the incorporation of real-life reading and writing in literacy programs for both parents and their young children.

Purpose and Rationale of the Research

The purpose of this study was document the implementation of an intergenerational literacy program that incorporated authentic literacy activity with the goal of raising low-English literacy levels of the parent and the English emergent literacy levels of their non-English speaking young children. The link between adult low literacy and children's success in school is clear. There is strong, converging evidence that the children who are most at-risk come from homes where adults lack many basic literacy skills (D'Angiulli, Siegel & Hertzman, 2004; Purcell-Gates, 1995). This cycle of low-literacy has fueled the formation of family literacy programs, particularly throughout Canada, the U.S., and the U.K. (e.g., In Canada, PALS (Parents as Literacy Supporters, Anderson & Morrison, 2000; In the U.S., Evenstart, St. Pierre, et al, 1995; In the U.K., Basic Skills Agency Family Literacy Program, Brooks, et al., 1996.)

Family literacy programs. Family literacy programs tend to focus on two primary goals: increasing the amount and types of literacy interactions in the home among parents and children and preparing the young children of these parents for school success. The family literacy program models fall into three typical patterns: (a) Children and adults are taught separately; (b) Children and adults are taught separately and a parent/child together element is added; (c) Only parents are taught and are expected to carry the benefits home to their children (Purcell-Gates, 2000). Within these program types, parents are expected to learn how to help their children

succeed in school, and children are expected to learn skills and strategies that will increase school achievement.

Within family literacy programs, there is most often a focus on the early literacy learning that research shows is accomplished by children in high literacy use homes where reading and writing for different purposes occur daily *before* they begin formal instruction at the kindergarten or grade one level. The positive influence of parent/child interactions around print is well supported by the early, or emergent, literacy research: The more interactions around print in the home, the more young children come to school with critical early literacy knowledge and are deemed 'ready to learn' literacy at school (Phillips, Norris, & Mason, 1996; Purcell-Gates, 1986, 1988, 1996, 2000).

Family literacy programs all aim to increase the frequency of parent/child interactions around reading and writing in the home. More often than not, this translates into programming that centers around teaching, or demonstrating to, parents the ways that they can interact with their children at home around literacy, e.g. reading to young children, using environmental print to teach beginning literacy skills such as letter recognition, word reading, games to play with household objects that draw attention to print and print skills, and so on (Morrow, 1997; Wasik, 2004). Thus, in the majority of family literacy programs, the focus is on early literacy learning by young children and on parent education on ways to bring this about in the context of the family. However, few family literacy programs address issues of adult low literacy directly in pursuing this goal. Rather, they tend to address it obliquely through such activities as common reading of parenting texts, and learning to read stories to their children (Darling & Hayes, 1996; Phillips, Hayden, & Norris, 2007). This ignores the fact that if parents don't read or write at all or very little, they cannot engage (or can engage only to a limited extent) in these activities with their children. This project sought to address the link between adult literacy ability, literacy use in the home, and early literacy learning by incorporating a clear adult literacy education component in the family literacy program, as well as an early childhood program. Because of this, and to distinguish our program from the more typical *family literacy* programs, we will describe the program described here as an *intergenerational* literacy program.

Need for programs and research with immigrant and refugee families. The intergenerational literacy program presented here targeted low-literate adults with young (ages 3-5). In fact, all of the students who responded to our recruitment efforts were from immigrant and refugee communities which provided us the opportunity to contribute to the scant literacy research on these groups in Canada. The immigrant and refugee population is increasing greatly in Canada as well as in other countries. These individuals are usually funneled into existing adult second language programs. At this time, however, there has been little research done on the ways that experiences specific to immigrants and refugees transact with program content or delivery. Further, Purcell-Gates (2000) concluded a review of the literature on family literacy programs with the finding that, given the research that documents differences among cultures of beliefs about how children learn and the role(s) that parents should play in this learning, "virtually unexplored by research is the issue of compatibility among the cultures of schools, homes, and family literacy programs" (pg. 866). This study with families from different cultures, language groups, and background experiences addresses these needs.

Need for program impact evidence. Despite the great amount of funds expended on family literacy programs by governments and private foundations, there is relatively little

evidence that documents the effectiveness of family literacy programs (Purcell-Gates, V., 2000; Senechal, 2008). This is especially so with intergenerational programs, such as the one in the current study, that are designed to improve the literacy abilities of *both adults and children*. There are several explanations for this lack of data. First, people who run family literacy programs are often primarily focused on providing a service and expend enormous efforts toward gaining funding for start up and maintenance. Research and program assessment are low on the priority list due to scarcity of time and resources. Second, many family literacy program directors lack the research background and knowledge to collect and analyze appropriate data to show program impact. Finally, measuring outcomes of family literacy programs is extremely difficult to do. Many variables contribute to parents' abilities and motivations to engage with their children in the home around reading and writing. Controlling for these variables to assess program impact is difficult, if not nearly impossible. Due to the relative lack of research-based evidence of the effectiveness of family literacy programs, some funders are beginning to rethink their commitment to programs. In response to these needs, the purpose of this project was to study the ways in which a model for intergenerational literacy programs (a model that is suggested by research but not yet studied) is most effectively implemented to achieve change in adult literacy ability and practice of literacy. Another purpose was to address the early literacy needs of the young children of low-literate and low-English literate adults through: (a) increasing the literacy abilities of parents and, by implication, through increasing the degree to which the young children are exposed to English literacy practice in their homes; and (b) providing them with a print-focused early childhood program in which real-life literacy events were embedded within typical early childhood activities. Finally, we wished to explore ways to document the impact of this instructional model on the English literacy abilities of the adult participants in the program and on the emergent English literacy knowledge of their young children. The participants, while cognizant of the importance of maintaining their own language and literacy, were highly desirous of learning English, the dominant language in the part of Canada to which they had migrated. Indeed, they seemed to see English as the 'power code' (Delpit, 1995).

Theoretical Framework

Vygotskian theories of learning within contexts of social interaction, and the role of activity in learning (Vygotsky, 1978; Wertsch, 1981, 1998) frame our interest in intergenerational literacy programming. These theories support the focus on family as centers of meaningful activity and on the ways that literacy knowledge is supported by parents in social interaction with their children. Within this frame, language and literacy are seen as social and situated, reflecting the post-structuralist lens that asserts that language (including written language) never occurs outside of the context of use by real people (Bahktin, 1981, 1986). Language is seen as essentially dialogic and communicative, serving real purposes and mediating human activity (Bakhtin, 1996; Kress, 1976). Studying literacy in use allows us to see the multiplicity of literacy practice (Street, 1984) as opposed to a single 'correct' form and as contextualized by social and cultural forces within systems of power.

This study is also situated within a socio-cognitive developmental theory that views literacy development as cyclical in that emergent literacy knowledge develops within homes and families in contexts of use; this knowledge is significantly related to success at learning literacy in school; the literacy learned in school is enhanced by the practice of literacy in use (authentic literacy activity) during the school learning process; and as learners mature and have families,

they provide the literacy practice context for their children within which their children will begin to develop literacy ability (Purcell-Gates, 1995, 1996, 2006). The nature of these literacy contexts are influenced by the levels of success achieved in school. This cycle of literacy is portrayed in Figure 1.

Review of Relevant Research

Adult literacy instruction. The intergenerational literacy program described here builds on strong correlational research regarding effective adult literacy instruction and on emergent literacy research that documents the nature and types of interactions around print in the home that significantly relate to high levels of emergent literacy knowledge. Research into adult literacy instruction (Purcell-Gates, Degener, Jacobson, and Soler (2002), documented that instruction that involves the students more in reading and writing real-life texts for real-life purposes (referred to as *authentic literacy*) is significantly related to student reports of reading and writing more often in their lives and in students reading and writing more complex texts. Participants in that study included 77 teachers/classes for adult basic education in 22 states and 159 students within those classes. The classes were rated on a scale of authentic literacy activity based on: (a) classroom observation; (b) teacher responses to a questionnaire; and (c) student responses to a structured interview protocol. Volunteer students in each class participated in a series of lengthy interview in their homes regarding the types and frequencies of their reading and writing practices. These data were analyzed using Item Response Theory and Hierarchical Linear Modeling to account for nesting effects of class and location. Other control variables included literacy level at time of entry into class, ESOL status, attendance, and gender.

The results of the study showed two independent effects on the students' reported frequencies of out- of- school reading and writing and on the complexity of the different texts they were reading or writing. The first was the degree of authentic literacy activity they had engaged with in their adult literacy classes. The second was their engagement in basic skill instruction. We applied these two factors to the intergenerational model design for the current project.

Changing the frequency and type of adult literacy practice is seen as highly relevant to considerations of early literacy learning for young children. This is so because emergent literacy research specifically highlights these two factors in the home literacy environment as significantly related to levels of assessed early literacy knowledge in the homes of low-SES children. Purcell-Gates (1996) put researchers matched by ethnicity into 20 low-SES homes for an aggregated week of observation with the purpose of documenting all literacy activity in the homes and relating this to the outcomes of a series of emergent literacy assessments given to the 24 young children (ages 4-6) in the homes. She found that children who lived in homes where the parents read and wrote more often and read and wrote more complex texts began school with higher levels of emergent literacy knowledge such as: knowledge about books and print, understanding that print carries meaning, and the alphabetic principle. Other studies have shown significant and enduring relationships between level of emergent literacy knowledge along these dimensions at the beginning of kindergarten and success at learning to read and write in school (Purcell-Gates & Dahl, 1991; Snow, Burns, & Griffin, 1998).

Putting together these findings regarding the relationship between frequency and type of adult literacy practice, adult literacy education that is related to developing these behaviors, and young children's early literacy knowledge, we designed an intergenerational literacy program

with the goals of (a) increasing the parents' literacy levels through the reading and writing of real-life texts for real-life purposes (assuming an increase in frequency and type of literacy practice in the home) while receiving basic skill instruction and (b) of increasing the emergent literacy knowledge of their pre-school-aged children. We made this program available to any parent with no or low literacy abilities in the areas of our two sites in metro-Vancouver, BC. Our recruiting efforts resulted, however, in classes made up entirely of immigrants or refugees. Thus, we focused our goals on increasing English literacy levels for the parents and English emergent literacy levels of their children with the employment of this model.

The Intergenerational Literacy Program: Literacy for Life

Following is a description of the program model within which the adult literacy piece was situated. The program, which we called the Literacy for Life Intergenerational Literacy Program (to reflect the focus on real-life literacy) ran for a total of 12 months, with three additional months devoted to teacher development in ways to incorporate real-life literacy activity into a literacy (adult and early literacy) program. Two classes per week, two hours per class, were offered.

Instructional Model

The Literacy for Life program was made up of three components: Adult instruction; emergent literacy instruction; and family-time-together literacy instruction, reflecting the most common model for family literacy programs (Purcell-Gates, 2000). Over the course of the 12 program months, however, we tried different ways of employing these components in response to challenges that arose with different cultural groups. We describe this below when we present the results of the formative experiment analysis. Suffice it to say that when all three components were in place, we settled on beginning each day with the family-time-together component. Following this time, the adults met with the adult literacy teacher and the children met separately with the emergent literacy teacher.

Adult literacy instruction. The adult literacy teachers focused on engaging their students in authentic literacy activity. The operational definition of *authentic literacy activity* followed that used in the research studies that found significant growth in literacy abilities related to this type of instructional activity (Purcell-Gates, et al, 2002; Purcell-Gates, Duke, & Martineau, 2007):

Authentic literacy is the reading and writing of real-life texts for real-life purposes in the literacy learning classroom. When [students] are involved in authentic literacy activity in school, they are reading or writing texts that people outside of school read and write such as recipes, greeting cards, stories, and poems. Furthermore, they are reading recipes for the purpose of preparing a food dish, writing greeting cards to send to friends or family, or reading stories to enjoy and discuss with friends.

Literacy activity within instruction that is not considered *real-life*, or *authentic*, is termed *school-only*. When [students] are involved in school-only literacy activities, they are reading and writing texts that are specifically designed to help [them] *learn* to read and write. These are texts like leveled readers, flashcards, phonics charts, spelling lists, and comprehension questions and answers. Further, students are reading or writing such texts in order to learn and develop the ability, or skills, to read and write.

The Literacy for Life adult literacy teachers focused on the goal of increasing the English literacy abilities of the students using this model. Direct teaching of skills was interwoven with

authentic reading and writing activities as deemed necessary for different students. The non-literate/non-schooled students required much more direct skill teaching than the others, although they all needed direct skill teaching of English-specific skills such as vocabulary, spelling patterns, and English textual genre features (e.g. reading the Domino's flyer to find out how to call and order a pizza).

Each day began with the parents signing in on the sign-in sheet for the purpose of documenting attendance – an authentic literacy activity. This activity served as the dominant authentic literacy activity for some time for the non-literate students, who learned to hold a pencil, make spaces between words (first and last names), and learn the names of the alphabet letters in their names and how to write them. Skill lessons for these beginning readers and writers included practicing the alphabet and learning letter sounds, using alphabet letter cards and an electronic program device, practicing writing their names, and learning to write short sentences describing their families and their countries of origin (e.g., "My name is Hassan. I come from Yemen.").

The first-language-literate students spent more time engaged in authentic English reading and writing. They read English-language newspapers to learn about the lead content of certain foods, they wrote greeting cards to each other and to children celebrating birthdays, they wrote recipes for ethnic holiday celebrations, they read directions for using the computer where they learned to 'Google' for information, they wrote immigrant stories to submit to the local newspaper which was soliciting such accounts, and so on. Direct skill teaching centered on spelling newly learned English words, word meanings, and English grammar needed for different types of written texts.

The teachers always solicited ideas for authentic reading/writing from the students, themselves, reflecting research findings that showed that instruction was much more effective if it reflected the desires and lives of the students (Reder, 1994; Sticht, 1988). For example, one woman (a refugee from the Sudan) expressed the need to learn how to read a receipt. She knew that receipts were important in Canada and that store workers would always request one if she needed to return a product. However, they were totally mysterious to her. This request resulted in the teacher bringing in several different receipts and conducting lessons on (a) the purpose(s) of receipts; and (b) how they are structured (items listed, often in abbreviations, and their prices next to them in a separate column; totals and tax listed at bottom, and so on). English words were learned along with their spellings and the students learned to make receipts functional in their lives.

Because we were working entirely with English language learners, the teachers always made oral conversation the base of the instruction. Students were never required to focus on print before developing ideas and expressing them orally in English (Purcell-Gates & Waterman, 2000).

Emergent literacy instruction. The central vision for the program for the young children was that of the high-literacy-use home within which young children learn many emergent literacy concepts – concepts that serve them well when they begin school and that are usually assumed and built upon by kindergarten and first-grade teachers (Purcell-Gates, 1995, 1996; Purcell-Gates & Dahl, 1991; Snow, Burns, & Griffin, 1998; Taylor, 1982). Eschewing the decision to teach in a didactic way important early literacy skills such as phonemic awareness, letter name knowledge and sounds, we chose to emulate the ways that children appear to learn

such concepts in high literacy use homes. Emergent literacy research that has focused on young children in their homes and with their families has documented that these early literacy concepts are acquired as children participate in the lives of their families, observing and engaging in the literacy activities that mediate those lives. So, for example, children appear to learn the most basic of emergent literacy concepts – that print *says something*, i.e. is semiotically linguistic, and is used by people who can read it, or write it, for their different life activities – by observing its use in their family activities. Signs with the word *STOP* cause Mom or Dad to stop the car; children can say 'Happy Birthday,' or 'Merry Christmas' to their grandparents (or cousins, friends, or teachers) by making a greeting card and writing a message on it; parents prepare a meal by reading the directions and following them from a cookbook or recipe card; and so on. In the process of these meaningful literacy activities in their homes, young children, *with support and direction from significant others in their lives*, learn how words can be written, letter names and letter sounds, phonemic awareness, and many concepts of print such as which direction to read, the difference between letters and words, and that people read print and not pictures. If they are read to from children's storybooks, they also learn the vocabulary, syntax, and decontextualized nature of written language (Purcell-Gates, 1988).

Building on this documented process of early literacy learning, the Literacy for Life emergent literacy instructors designed a program in which the young children engaged in typical early childhood activities such as painting, playing games, making art projects, listening to stories. Where we differed from most pre-school programs, however, was in inserting into these activities a meta-focus on print and texts. This meant that for each activity the teacher would either introduce texts that would mediate the activities or created activities that would require the reading or writing of texts. All of this was done within the construct of authentic literacy activity, adopted for this program—real-life texts for real-life purposes. So, for example, the class at Site 1 was in dire need of games for the children. This led to the teacher developing the idea with the children of making their own game, complete with game board. The writing that the teacher did with the children was 'game board text', in this case words such as 'Start', 'Stop' (on a stop sign), the children's names on individual houses that they each drew for themselves, store names on pictures of stores that the children drew, and so on.

Always, the teachers explicitly pointed to the print, read it, and explained its purpose (e.g., "This word says 'start' and it tells us where to begin with our pieces. S-t-a-r-t. 'Start'."). They always drew the children's attentions to print and texts, how it worked at the letter and word level, and how it functions in the life activities of people. The teachers also pointed out print in the environment, during outside walks or at play as well as in the classrooms. The children took environmental walks, during which their teachers pointed out the ubiquitous signs, logos, notices, and other forms of print in the neighbourhood. Menus for snack time were generated and written by the teachers to be used later by the children when they 'ordered' what they wanted to eat. With teacher support, the children made Birthday and Get Well cards for family or other class members, complete with emergent writing. Part of the construct of authentic literacy is that writing always has a real audience who will read the writing for real purposes. Thus, these greeting cards were always delivered to the person who was actually celebrating a birthday or recuperating from an illness. Grocery lists for trips to the store for snack items or craft items were generated and written by the teachers who then used the lists to purchase materials, sometimes accompanied by the children. Complaint letters were generated and written

(modeled) by the teachers and sent to site managers requesting more heat or less interruption. Children and teachers watched trucks pull up to the school and speculated together what might be in them, based on the writing on the sides. The children also heard a wide range of books representing different genres (e.g., informational books, rhymes, alphabet books, stories) read to them by the teachers. As for their parents, the sign-in sheet always began the sessions, with the children 'signing in' as best they could and with the teachers scaffolding each child in this activity according to their level of development. Such an intentionally-focused instructional program was intended to bring the young students up to the levels of English emergent literacy knowledge held by their soon-to-be school peers from high literacy use homes.

Family time together instruction. During this part of the program, parents and children met together with both the adult literacy teacher and the emergent literacy teacher. The instructors at each site collaborated on planning for, and took turns leading, these sessions. The overall purpose of these sessions was to introduce the parents to ways that they could assist their young children at home with acquisition of early literacy abilities. The activities also reflected ways that the parents and children could 'work' together, through games, on early literacy skills. Both emergent literacy teachers were experienced teachers of young children and they always had in mind what Canadian kindergarteners would be expected to know and do when they entered school. Thus, the teachers showed the parents how to help their children work with scissors, color, learn the names of the colors, count to 10, and so on. The teachers taught the parents and their children the English names for typical items of clothing like 'shirt,' 'dress,' 'shoes,' and so on. They pointed out how common household items such as cereal boxes could be used to draw their children's attention to print and letters. They demonstrated how they could help their children learn to write their names. The Family Time Together sessions presented one of our biggest challenges over the course of the project and we will discuss this further below when we present the results of our analysis.

Methodology

Research Design

This study was designed as a formative experiment (Reinking & Bradley, 2004). Formative experiments allows us to explore how educational interventions actually work in practice as they are developed, implemented, and modified in the context of different challenges and issues that arise in actual practice. According to Reinking and Bradley, formative experiments allow us to ask, "Given that intervention X (or pedagogical theory Y) shows promise to bring about a valued pedagogical goal, can it be implemented to accomplish that goal, and, if so, how?" (p. 153). Formative experiments also answer: (a) What factors enhance or inhibit an intervention's effectiveness in moving toward the pedagogical goal? How might the intervention or its implementation be modified, in light of these factors, to be more effective? It is the inclusion of these last two questions that make a formative experiment formative.

The pedagogical goal for this study was an increase in adult English literacy abilities for the adult participants and an increase in the emergent English literacy knowledge of their young children. Thus, we also analyzed data for evidence of this growth for both groups.

Research Questions

Question One: What challenges did we encounter during the implementation of this program to reach our pedagogical goal?

Question Two: What were our responses to these challenges?

Question Three: What did we learn about the implementation that we could recommend for similar future programs?

Participants and Sites

The adult participants in this study were all volunteer students who wished to improve their abilities to read and write in English. Our original goal was to recruit adults with low literacy skills in their first language and we did accomplish this goal to an extent. Forty nine percent ($N = 17$) of the students were non-literate or had low literacy skills in any language. Of these, four students had never attended school. The rest of the participants had been schooled in their countries of origin to varying degrees, with one student holding a university degree. All of the students were women with the exception of two men. They all had young children between the ages of three and five enrolled in the program.

As indicated previously, there were two sites for the program, one in a community center in an urban, low-SES area of Vancouver; the other in the central city core of a city to the south of Vancouver. We will refer to these as Site 1 and Site 2. Each site had one adult literacy instructor and one emergent literacy instructor. We limited the class size to 10 – 12 participants for each level at each site. The participants differed in many ways between the two sites. In Site 1, all of the adult students were of Chinese origin and had immigrated to the country between two and seven years before joining the program. None of the women spoke English fluently and several did not speak English at all. Of the seven participants in Year One, four had graduated from high school in China and one had not attended school at all. During Year two, three of the students at Site 1 had high school diplomas, one had gone to grade seven, and five had very limited English and we were never sure about their education levels. However, none of the women could read English-language texts. Their children began the program speaking no English and none of them could read or write in Chinese or in English. While all of the women participated in the adult portion of the program, their primary interests appeared to be in helping their children prepare for the Canadian English-speaking schools.

Site 2 presented a very different picture. It was located in a rapidly growing city south of Vancouver and was home to increasing numbers of primarily south-east Asian immigrants. Punjabi, Hindi, and Arabic were widely spoken in the community. Just prior to the start of the first year of the program, Canada began settling refugees from Africa in this area as well. In our search for sites the first year, we were drawn by school-district leaders in this community to a small, store-front social service agency run by African immigrants for newly arrived African refugees. The majority of the women were from the Sudan, with others coming from Somalia. The majority of them spoke little to no English. Most of them were unschooled and none of them could read or write English. None of the children spoke English nor could they read or write. As opposed to the participants in Site 1, the women in Site 2 all wanted to focus primarily on their own literacy, although they were thankful that they had a teacher to take care of their children. When this program ended for the year, we determined that we had outgrown the space and sought a larger space at one of the elementary schools in the district. Working with district personnel, we located our site in several portables connected to an elementary school for the following year. Although we reserved class space for our participants from the previous year, none of them enrolled, perhaps due to the fact that the new site lacked the familiarity of the storefront, cultural site of the previous year. The participants, therefore, for Year Two at Site 2 were all new students, recruited through multi-cultural workers employed by the school district.

The families were a mix of refugees and immigrants from Saudi Arabia, Ethiopia, Jordan, Afghanistan, and Syria. During the year, other families showed up from South Korea and the Sudan but they did not stay. We will discuss this under our results section. While we do not have data from which we can infer poverty level status, we do have notations that the children in Site 2 were often hungry when they arrived at the program, necessitating shifting schedules in order to feed them as soon as possible. This was not true for Site 1.

As with many family literacy and adult education programs (Comings, Parrella, & Soricone, 1999), we saw a constant fluctuation of participants over the 12 months total of the program. To assess our goal of increasing the literacy levels of the participants, we needed pre- and post-test data. At the end of the program, we had this data for 10 adults and 14 children, although we had pre-test data or post-test data alone for several more. In addition, we decided at the end to give the non-literate (at the beginning) students a more meaningful assessment, reflecting what they had actually been working on, and gave them the TERA-III, a test of emergent literacy knowledge. However, we had not done this at the beginning so their growth is not reflected in the analysis.

Data Collection

The results of the analysis for this study were based on the following data sources: (a) detailed field notes for each session written to document program implementation; (b) weekly research meeting notes and (c) Pre-post assessments of literacy ability. Information included in the field notes included (a) Time each participant began and ended participation for each class period; (b) Each activity individuals engaged in during the session; (c) Texts used and purposes set up for reading/writing them for each activity; (d) Research comments, insights, and recommendations for future instruction. These notes were written and circulated via email to the entire team within two days of each class. One of the project directors would then comment on each report in track changes, answering questions from the teacher/researcher, making suggestions for the upcoming class, and emphasizing and clarifying when a particular activity met the criteria for 'real-life'. Often other teacher/researchers would also make comments. These reports-with-comments were then recycled to the team via email for further comments if needed.

Weekly two-hour research meetings were held during Year One and bi-weekly meetings were held during Year Two. At these meetings, teachers reported on the state of their respective classes and individual students and raised issues regarding implementation of the instructional model. The team, as a whole, problem-solved these issues through discussion. The project manager always took detailed field notes, noting issues raised, and the responses to these challenges. The data from the field notes and the research meeting notes were used to answer Research Questions one and two: 1) What challenges did we face in implementing this model of intergenerational literacy program and 2) What were our responses to these challenges as we went along?

Assessments. The pre-post assessment data was used to document the degree to which we met our pedagogical goals to increase the English literacy levels of the adults and the emergent English literacy knowledge of the children. The data used for the analysis of the adults' literacy growth was collected only during Year Two of the project. This reflected the difficulty we had in locating an appropriate assessment for non- and low-English literate immigrant and refugee students – a challenge that we will discuss in our results section. Because we wanted to explore ways to show impact of the program, and because a randomized field trial design was not

possible, we needed to use a norm-referenced assessment which would allow us to use the normal curve as a comparison group. We did locate a norm-referenced assessment for Year One but it proved to be unworkable with our students in Site 2 (most of whom were unschooled), and the adults in Site 1 failed to complete the post-assessment due to scheduling difficulties. We chose a different assessment for Year Two – the Canadian Adult Achievement Test (CAAT), widely used across Canada for adult basic education students. We administered to our students the Vocabulary, Reading Comprehension, and Spelling Subtests. Kuder-Richardson Formula #20 reliabilities coefficients for each subtest for Level A were Vocabulary: $r_{tt} = .90$; Reading Comprehension: $r_{tt} = .91$; and Spelling: $r_{tt} = .93$. Reliability quotients for Level B were Vocabulary: $r_{tt} = .87$; Reading Comprehension: $r_{tt} = .94$; and Spelling: $r_{tt} = .94$. We used the Standard Scores from the CAAT for the analysis. The technical manual states that authors evaluated the content validity for the CAAT by examining the content of adult education programmes across Canada and aligning their content objectives with those of the programmes. Immigrant and English language learners were included in the norming sample.

The young children were given the norm-referenced Test of Early Reading Ability III (TERA III) to assess their growth in emergent literacy knowledge, widely used by researchers of early literacy development. This assessment has alternate forms, and for Year Two, we administered one form in the fall and the alternate form in the spring of Year Two. We did collect end-of-year data for the children for Year One, and while this data could not be used for our growth analysis, it was helpful to understand the results of the growth analysis for Site 1. The participants were basically the same for site 2 for both years, so we administered the alternate form (to the one given at the end of Year One) of the TERA III for these children at the beginning of Year Two. The TERA III has three subtests: 1) Alphabet, that measures children's alphabet and letter-sound knowledge; 2) Conventions, that measures familiarity with conventions of print such as book orientation, print orientation and directionality; and 3) meaning, that measures children's ability to comprehend written material (Reid, Hresko, & Hammill, 2001, p. 7).

The average internal consistency reliability coefficient alpha for children ages 3, 4, and 5 for the subtests are: Alphabet: Form A: .90; Form B: .90; Conventions: Form A: .85; Form B: .84; Meaning: Form A: .86; Form B: .88. Test-retest reliabilities for ages 4, 5, and 6 were: Alphabet: Form A: $r = .93$; Form B: $r = .94$; Conventions: Form A: $r = .88$; Form B: $r = .86$; Meaning: Form A: $r = .96$; Form B: $r = .97$.

Validity was determined by the following procedures, taken from the technical manual: (a) reviews of existing research, commercial and noncommercial curriculum materials; (b) (including scope-and-sequence charts and state standards), and popular tests showing that the TERA III items reflect the current state of knowledge; (c) comparison of existing lists of emergent reading behaviors....to show that (the TERA III) compares favorably to that of existing reading experts'; (d) by calculating coefficient of agreement (Alphabet: 99%; Conventions: 90%; Meaning: 98%) (e) by the results of conventional item analysis procedures and item response theory procedures used to choose items during the developmental stages of test construction; (f) by the results of differential item functioning analysis used to show the absence of bias in the test's items (p. 56).

For both adults and children, we administered the pre-test assessments on their third visit to the program (for Year Two). This was to ensure reliability of outcome by increasing their

comfort level with the teachers and the types of activities they would experience. We also believed that, with their lack of experience with Canadian schools, they would react negatively to being assessed on their first day and would likely fail to return.

Analysis

With the emphasis on measuring growth and testing for statistical significance as well as on the analysis of qualitative data to explore the implementation challenges of the intervention, this study represents an application of mixed methodology, characteristic of formative experiments (Reinking & Watkins, 2000; Tashakori & Teddlie, 1998).

Coding for fidelity to treatment. For this analysis, the class field notes, written by the respective teachers, were each coded for the degree to which the teachers involved their students in authentic literacy activity. To do this, we pulled from the teacher notes each instance of literacy activity. This literacy activity unit of analysis was defined as *any activity that includes reading, writing, listening to reading, and watching writing by the students*. The units were bounded by a focus on one text type within any given activity. Once the units of authentic literacy instruction were pulled out of the teacher notes for each session, each unit of literacy activity was coded for authenticity. This was done by breaking down each literacy activity according to *text* and *purpose* (see description of authentic literacy instruction model above with its key dimensions of *text* and *purpose*).

We determined what type of text was involved in the literacy activity and whether it was an real-life text. Texts were coded according to their specific genre (Hasan, 1989) and an authentic text was any text used by people in life, outside of a learning-to-read and –write purpose/context. The texts were then coded 1 if they were not used in real life, but were used to learn the skills of reading and writing. Text genres that were judged real-life were given a code of 2.

Once the text genre was determined for each literacy activity, the purpose of that activity was also considered. The *purpose* was conceptualized as the purpose served by the reading, writing, listening to, or observing of the associated text for each literacy activity. The purpose was authentic and coded 2, if the purpose for the literacy event was the same as the purpose for using the text outside of a learning–to-read/write purpose. If the purpose of using the text for the activity was judged *school-only* (see above), it was coded 1. The authenticity rating for each literacy activity was calculated by averaging the authenticity of both the text and purpose. Therefore, each literacy activity could be scored as 1, 1.5, or 2 for authenticity: the higher the number, the more real-life the activity.

Inter-rater reliability. Randomly selected samples of data (20%) from teacher notes were recoded by two independent raters and inter-rater reliability was calculated for two separate coding steps: Identification of unit of analysis and authenticity of literacy activities. The percent agreement between the raters' identification of the units of analysis was fairly high at 94%. There was significant inter-rater agreement on the authenticity levels according to Cohen's Kappa ($N=285$) = 0.89, $p < 0.001$.

From this analysis we created a coding manual for the rating of real-life literacy activity in classrooms. This is significant to the field in that it opens the door to *the documentation* of authentic literacy activity in classrooms with a high level of reliability. Using this coding manual, we scored all of the classroom field notes to ascertain the degree of authenticity in each class over the course of the study. The results of this analysis can be seen in Figure 2. As can be

seen, all of the adult and early literacy programs maintained fairly high levels real-life literacy activity.

Degree to which each student participated in the treatment model. Recognizing the different experiences that participants may have had in the program, we created a variable to capture their exposure to highly authentic literacy instruction over the course of their participation. We call this Exposure to Authentic Literacy Activity variable. This variable was created by extracting all of the literacy activities that were available to the students in each session as described by the teachers in their daily program session notes. The overall authenticity score for each literacy activity was determined as described earlier. Some activities were deemed highly authentic, some partially authentic, while other activities were deemed school-only. In order to determine each participant's exposure to real-life literacy activity, we counted how many highly real-life literacy activities each person was exposed to over the course of the program. We then counted how many highly real-life literacy activities were taught over the course of the program and that would have been available to each student. In order to create a variable of exposure to authentic activities, we divided the total number of authentic activities that each person participated in over the entire program by the total number of available activities over the course of the program.

Literacy Growth. The analysis for growth in English literacy abilities for the parents in the program was conducted with the non-parametric Wilcoxin Signed Ranks Test, using the pre- and post- assessment results on the CAAT for Year Two. Non-parametric analysis was required due to the small sample size and the non-normal distribution of scores.

The analysis for growth in early English literacy abilities for the children was similarly conducted with the Wilcoxin Signed Ranks Test, using the pre- and post-assessment results on the TERA III for Year Two. Again, a non-parametric test of significance was called for by the small sample size and the non-normal distribution of scores.

Establishing impact of program on growth in English literacy ability. We then used the newly created Exposure to Authentic Literacy variable to determine the relation between pre- and post- program change scores for the child and adult assessment subtests (TERA III and CAAT, respectively) and their exposure to authentic literacy instruction. The change scores were calculated by subtracting the pre-program assessment from the post-program assessment. Correlations were run for parents and children in the program for each subtest.

Challenges and responses to implementing the program. For the challenges to implementation analysis, we used the teacher notes and the research meeting notes from both years of the program. Each of the teacher notes had two separate sections: (a) descriptions of the activities and what happened for class of the day and (b) the teacher's reflections. The research meeting notes recorded our discussions which were primarily devoted to problem solving issues regarding the implementation of the program as they arose and to answering individual teachers' questions or needs as mentioned in the teacher notes in the previous week(s). These two different types of documents became the basis of our data.

Using an EXCEL spreadsheet, we identified instances in the data that reflected challenges and/or responses to challenges. We transferred these to the spreadsheet and linked the challenges with the response(s) to each challenge and organized these by dates and level of class. In the meeting notes, the responses were usually located just before and/or after the challenges, but in the teachers' notes, the responses were sometimes found in the teachers' reflections of the day or

in the responses made in track changes by the PIs or other members of the team as the files/reports were read. Coding began as we identified themes and sub-themes in the challenges and in our responses. Constant/comparative coding (Glaser & Straus, 1967) of the challenges and our responses to those challenges of implementing the Literacy for Life program to meet our pedagogical goals (raising adult and early English literacy levels) allowed us to arrive at the results of this analysis. This iterative process resulted in a final list of codes from which we began to approach the themes that we will discuss in our Findings section.

Reliability. A result of this process was a coding manual that could be used for reliably coding the entire data set. As a team, we discussed those sets of data that were questionable as to what types of challenges or responses to challenges they were and arrive at consensus regarding their coding. The protocol for the challenges/responses analysis was complex, careful, and intentionally redundant to ensure greater validity and reliability for the outcomes and we have shortened the description of it for this report. Readers who wish to learn more of the step-by-step procedures for this part of the analysis may access the final report at (BLINDED).

Results

Literacy Growth

The results of the growth analysis are presented in Table 1 for the adults and children. The overall results for the adults and children are portrayed in Figures 3 and 4. Both groups registered statistically significant growth in their English literacy and emergent literacy abilities.

The graphs above reveal a clear and consistent difference in score levels between the two sites for the adults as well as the children. The results for the parents may reflect the difference in time lived in Canada between Site 1 and Site 2. They may also reflect the fact that many of the participants in Site 1 had also participated in the Literacy for Life Program for four months during Year One while those adults in Site 2 had only participated for the nine months of programming in Year Two, the year that the pre- and post-test assessments were given. We can only speculate without additional information. For the children, the lack of growth for the Site 1 children in alphabet knowledge (see Table 1) reflects a ceiling effect. Again, this may reflect the fact that most of the children in Site 1 had participated in the program the year before. The negative growth for the Site 2 children in the Meaning subtest of the TERA III may be accounted for by the fact that new children continually entered the program at this site and by the end, when the post-assessments were done, there were a number of children who had entered after the start date and who had experienced difficulties with leaving their parents, something we discuss below as part of the results of the analysis of the challenges we faced in implementing the program.

Impact of Program on Growth

Correlations between the Exposure to Authentic Literacy Variable and the change scores of the children and their parents revealed no significant relationships. This was to be expected, given the small sample size and the accompanying lack of statistical power. However, we looked for patterns that would suggest directions of relationships with the results and give us some direction in our continuing search for valid and reliable ways to document progress in programs such as this one.

To do this, the participants were divided into three groups according to low, medium, and high levels of real-life literacy activity exposure. The mean changes for each group for pre and post program scores for each subtest were plotted. These graphs were created for both adults and

children. Figures 5 and 6 illustrate the results of this analysis for the adults and children, respectively.

It is clear from the graphs that children who were exposed to 75% or more highly authentic literacy instruction while attending the program, had as a group, a more dramatic increase in TERA III scores from the pre-test to the post-test. As can be seen in the graphs in Figure 6 this pattern held for each subtest on the TERA III: Reading conventions, Meaning, and Alphabet. Similarly, the graphs illustrate that the children who were exposed to lower amounts of authentic literacy instruction showed overall less improvement and in some cases a decline in TERA 3 scores over the length of the program. Interestingly, the graphs also highlight the fact that the children in the program who were exposed to the lowest levels of authentic literacy instruction (less than 50%) scored consistently lower on all the TERA 3 subtests on both the pre- and post-tests.

The graphs for adult CAAT (see graphs in Figure 5) scores show a different story, one that reflects, perhaps, more complex elements of their experiences in the classes. The adults who were exposed to the highest levels of authentic literacy instruction showed the smallest change in pre- and post-test scores, overall. As described above, this group of parents who were already literate in their first language, and many of whom possessed greater control of English, participated in more authentic literacy activity. Their pretest scores were higher and, while they improved, they did not improve consonant with the level of authentic literacy activity. We cannot discuss this further until we provide the description of the challenges faced by the implementation of the program (below) and the challenges faced by teachers in truly engaging these relatively high functioning students in what was originally designed as a basic literacy class for low-literate adults.

One of the goals of the study was to work out a possible way to document impact of program on literacy levels of parents and young children. The finding is the establishment of the Exposure variable and relating it to growth score proves promising for subsequent research with larger samples to more proximally measure impact of authentic literacy activity on emergent literacy and adult literacy levels.

Challenges/Responses Results

The pre- and post-test results presented previously attest to the fact that we did reach our pedagogical goal of raising the English literacy levels of the parents and the emergent literacy levels of the children. Further, the analysis of the relationship between exposure to the intervention element of this program – real-life literacy activity – and this growth suggests that the rise in literacy scores was related to exposure to the intervention, as defined by us (see previous definition of real-life *literacy activity*).

This section is devoted to the results of the analysis of the challenges and our responses to those challenges of implementing an intergenerational literacy program with the goal of raising the literacy levels of both parents and children. Reinking and Watkins (2000) explain that "formative experiments represent a synthesis and interpretation of events, which may be organized and presented in various ways." While they organized their findings regarding the implementation of multimedia book reviews in the classroom around *key events*, we organize our findings around the challenges that we faced throughout the implementation of the program and the ways in which we recognized and responded to those challenges. We feel this is appropriate to our case in that intergenerational and family literacy programs are always outside of the

formal structures of schooling and program leaders must often forge their own ways, inventing and improvising as they go along, to find ways to best serve their clients. We believe our findings, organized around the challenges we faced, will provide assistance and guidance as others attempt to implement similar programs.

We organize our findings under two types of challenges: (a) challenges that face most or all adult literacy and intergenerational literacy programs; and (b) challenges that seemed more intimately tied to our particular instantiation of an intergeneration literacy program with the emphasis on real-life literacy activity and the exclusive participation of students who were immigrants and refugees from different countries, with different languages, cultures, and expectations of the program. While all of the challenges in both groups are central concerns of adult and intergenerational program leaders, those in the first category seemed to us to be *expected* concerns, while those in the second felt more salient to our intervention and to our specific circumstances.

Common Challenges for Adult and Intergenerational programs

As stated earlier, adult literacy and intergenerational literacy programs are more often marginalized from institutions. They struggle for basic funding that is always less than that afforded the K-12 system and precarious; their availability to students and families is capricious; their ability to assess needs and progress of their students is hampered by the reduced attention given to valid and reliable assessment measures for adult learners, as compared to the K-12 arena; and they must often rely on under-trained (or untrained) teachers, many of whom are volunteers, who often come from sectors outside of education. We faced all of these challenges to the implementation of our program and its goal of increasing literacy levels.

Resources: Getting by on a shoe string

Effective implementation of a program with already existing marginalized status is extremely challenging in the area of adequate resources. We also felt this, and it played out in several areas, including locating appropriate sites, themselves. Problems with facilities were continuous throughout the two years. To begin with, we spent a great deal of time and effort locating two sites for the program at the beginning of each year. While some of the pressure to locate our classes was related to the fact that we were working with research grants with their built-in timelines, most adult programs work with grants that have similar time limits. We initially sought to embed ourselves within an existing program for families or adults to compensate for the fact that we were coming from outside with no client base. We cast a very wide net in both locations (see previous description of sites), contacting directors of programs and school districts. Our response analysis reveals that persistence does indeed pay off as this was our most successful strategy – persistence in calling, call backs, and personal visits to potential programs.

Once we were located in the two sites, we faced additional difficulties with aspects of the sites, themselves. For example, Site 1 was located for the two years within a large community center, composed of several different buildings. For the early literacy class, we were given a small room inside of the ice rink. The room was always very cold--frigid, even. In Site 2 during Year One, there was *very* little space for all of the activity going on for the African refugees who attended the center. Only a tiny room was available for the adult students and the young children had to make do with rooms that could not be redesigned and we had to choose between a community sewing room with needles and pins on the floor or a room through which people

entered the center with computers ringing the walls. Just before the program began in Year One, a car drove through the front window of this storefront establishment, leaving glass and boarded up space for a period of weeks. Our central response was to persist in trying to problem solve the site problems with the site contacts. We changed rooms until the car could be removed, the children and teacher wore heavy winter coats in the room in the ice rink, and so on. While we never reached the point in either site or year where we did not have significant challenges with the sites, we did make interim, short-term progress toward alleviating them so that we could push ahead and meet the goals of the program.

Money! More Money, Please!

Resource challenges faced us also in other ways. While we had money from a relatively small research grant to pay for the teachers, who were graduate students/research assistants, we had no other monies the first year. One financial demand on any program involving families who are marginalized in society is that of providing food and transportation to and from the site. Our families, as is typical, had several children besides those who enrolled in the early literacy classes, and no cars or money for babysitting or for transportation. The burden of dressing up all of the children for cold weather, herding them out of the door and onto a bus was tremendous. Some families walked but for most it was too far and they needed bus tickets. When they arrived at the program, the children were inevitably hungry and so too were many of the parents. Thus, food must be provided.

Further, childcare was needed at the school for the younger siblings of the early literacy children. The first year, we made childcare a condition for our presence at a site (i.e., the host institutions provided it), and we arranged to borrow money for food and bus tickets from another project, directed by one of the PIs. The second year, we again made childcare a condition of our partnership with community partners (exacerbating our problem with finding sites) and additional funding, gained through another grant, paid for the food and the bus tickets.

However, the skeleton crew that we could provide for the program-- one teacher for adults, one teacher for the young children, and one child-care provider for the other children-- was a constant source of challenges that we problem solved across the two years. In the early literacy classes, the teachers responded to these needs by usually asking for help from the parents themselves when they could no longer go it alone, e.g. during assessments. Further, we were fortunate to have a Masters' student at the university volunteer her services during the second year. She proved invaluable in flexibly assisting wherever she was needed. We faced intractable problems with locating appropriate level of childcare, though. At Site 1, we were in constant danger of losing the childcare workers, requiring at one point the need to incorporate the younger children into the adult and early literacy classes, and at Site 2, problems with childcare affected the running of the adult and early literacy classes.

During Year One at the storefront refugee center, the lack of appropriate space boundaries for the different sections of the program (i.e., adult, ECE, child-care) resulted in the toddlers wandering into the early literacy class with the expected disruptions. The childcare worker could not take infants and so the mothers, who were trying to learn to hold a pencil and form letters, would also have to hold and sooth crying babies, feed them, and change diapers.

During Year Two at Site 2, the problem centered on the childcare worker who was disliked by children and adults alike. These interpersonal conflicts seemed to be exacerbated by the fact that there was no available space for childcare other than a storage space filled with

clothing for a clothing exchange program. This resulted in mothers keeping their toddlers and babies with them during their literacy instruction or in the early literacy teachers' acceptance of young ones into her essentially pre-school-aged program. We responded to this challenge by trying to work with the childcare worker to make her space and personality more welcoming and child-centered but with little success. Without independent resources, we could not let this worker go and hire another one. Nor could we claim an appropriate location for the childcare with good, developmentally appropriate equipment and toys. Overall, our pattern of response to these challenges was to flexibly adapt and cope while keeping our eye on our goal of literacy development for adult and child.

Materials

Adult students need paper, pencils, skill materials, and notebooks, in addition to food, transportation, and childcare. Pre-school-age children need developmentally appropriate toys, art materials, games, and crafts, in addition to snacks. Site 1, for the two years, suffered from a real paucity of these materials, all brought from the home of the teacher. After affiliating with the school district at Site 2, Year two, additional materials could be bought but for the most part, the class at the community center in the ice rink room 'made do' in the best sense of the word. The same conditions existed for Site 2 for Year One in the storefront refugee center. During Year Two, as mentioned, this appeared to be solved with the commitment of the school district to fully furnish a pre-school program, with furniture, games, toys, paper, scissors, glue, pencils, markers, games, books, and so on. This was short-lived, however, when a dispute within the district led to their pulling a truck up to the door one day and loading all of the materials to take back to the distribution center. It is a tribute to the ingenuity and commitment of the teachers that the program went on, involving the children in developmentally appropriate activities with a meta-focus on how print mediates those activities.

Assessment and Evaluation of Adult Students

A very common need expressed by the adult literacy sector (Campbell, 2003) is the need for valid and reliable assessments for adult learners. This is especially true for two subgroups of adult students: (a) the very beginning literacy student; and (b) bi- or multi-lingual/cultural students learning a new language and culture of their adopted country. Because this program targeted the first of these and ended up with 100 percent participation of the second group, this was truly a major challenge for us that we worked hard to address. Our need was exacerbated, also, by our desire to document growth as a result of participation in the program, and without a control group, we needed a norm-referenced assessment. We confirmed our suspicions during our search as part of Year One that no such assessment exists: one that will document growth in literacy ability at the early stages of development and that has been normed on ESOL students from other countries.

The assessment we chose for Year One appeared promising at first in that it was designed for ESOL students (in the U.S.) by the Center for Applied Linguistic and the items were 'functional' items that asked the test takers to respond to 'real-life' literacy tasks such as locating items in a grocery aisle or navigating a map of city streets. However, our refugee students from the Sudan were far from being able to even take an exam; nor could they read the print within the items. Indeed, at the start of the program, they were learning to hold pencils and make letters. By the end of the four months, they were still unable to reliably write out their addresses on a line or to understand how to read a test item and think of what they were being asked to do and do it.

We tried test preparation instruction, but the students were too far away culturally to learn from it in time to take the assessment. Finally, even the easiest items were too difficult for the students to read and comprehend on their own. As mentioned earlier, this meant that we did not have end-of-year assessment data for Year One.

We spent the summer between Years 1 and 2 searching for another assessment. After consulting with adult literacy teachers in Canada, we chose the best one available, the CAAT. This assessment had a series of levels for adults and was normed in Canada. However, the lowest Level A was not low enough for those participants who had no or little schooling in their countries of origin. We did give the non-schooled parents an opportunity to take the test but all of them received scores of 0 (We stopped each subtest after the student had missed 5 items in a row.). We also used the Level A for what we termed as our 'low intermediate' group in this new class of middle-eastern parents – those who had some education in their countries of origin and spoke a little English. We used Level B for those with high school and university education in their countries of origin and spoke 'better' English, but not fluent.

At the end of Year Two we all agreed that we would not administer the CAAT to the beginning readers as it was meaningless and we were more interested in indications that they had learned some of the beginning skills on which they had been working. As described earlier, we then gave them the children's test of emergent literacy, the TERA-III. We deemed the scores uninterpretable, though, for a number of reasons, and so they are not reported here. As a response to these difficulties, we have begun to work with others in Canada to develop appropriate assessments for adult beginning readers for use by researchers and practitioners.

Adult Literacy Teacher Qualification

Adult Basic Education (ABE) teachers face a multitude of challenges not encountered by K-1 teachers. Primary among these is a woeful lack of professional training in the teaching of reading and writing. A large study by the National Center for the Study of Adult Learning and Literacy (NCSALL) found that ABE teachers had little to no formal preparation geared to teaching adults or to teach literacy (Smith & Hofer, 2003). What little education or training they had came from their own reading, on-the-spot experience, or advice from friends. Unsurprisingly, few of them stay in the field for long. The NCSALL study included data from paid ABE teachers. However, many, if not most, adult literacy teachers are volunteers who, while possessing a great deal of good will and motivation to help, receive even less professional development.

This challenge was clearly present in the ILP project, and we did our best to address it. The situation was confounded by our lack of access to professional adult literacy teachers due to our inability to pay the salaries they were receiving in established programs. We recruited two dedicated research assistants from (University blinded), choosing the two who had the most experience teaching adults. One of them had some experience working with groups of refugees, albeit not specifically on literacy. The other had some experience working one-on-one with immigrants from China on their English language skills. Neither of the teachers had experience teaching reading and writing nor any professional training in the teaching of literacy to adults or children.

The implementation of our program called for professional development in ways to create and deliver authentic literacy activities that were meaningful for the students. As described earlier, we did this with pre-program sessions with the teachers and with ongoing coaching

through team meetings. However, the need for professional development in how to teach someone to read and write was quickly apparent. While the two early childhood teachers possessed this knowledge as certified and experienced elementary and early literacy teachers, the two adult teachers did not. One early anticipatory response we made to this before we began implementing the program was to purchase elementary reading methods books for the two adult teachers to read through and to use as a resource once they began meeting with their students. We also spent several sessions on ways to work with both the skills of reading and writing and the application of them through authentic literacy activity.

The challenges of teaching, however, were too great. Two particular challenges interacted to create a 'perfect storm' that required expertise beyond what we had been prepared to deal with. These were (a) the challenges associated with teaching non-schooled, non- or very low-literate adults who were just learning English and (b) the challenges associated with working with a range of different English literacy levels within the same class with only one, inexperienced, teacher. This was particularly true for Site 2 but both of these challenges were present, also, in Site 1.

We met these challenges by addressing them along several fronts. First, as noted, we provided as much information about the teaching of reading and writing, in general, up front before the programs actually began. We built on this throughout the two years by on-site modeling of activities and coaching. We also, in the course of the email exchanges with the teachers after each class session, continued to suggest different teaching strategies in response to needs as they arose. Over the course of the program, we modeled such basic teacher strategies as organizing the room for instruction, creating routines, classroom management, and so on.

In response to the challenge of working with non-schooled and low-literate adults, we provided on-going information to the teachers about the emergent, or early, literacy stages of literacy development, always re-contextualizing it into the adult, immigrant, refugee contexts. For example, we taught the teachers about phases of development of alphabetic knowledge, including the very basic development of understanding that print carries meaning. We taught the teachers about how to have the students hold their pencils, how to teach word boundaries, how to move from simple letter/sound correspondences to more complex ones. We encouraged the teachers to have the students bring in objects from home that had print on them, like cereal boxes, medicines, and so forth. We taught the teachers how to elicit 'language experience' accounts from the students that could be written down while they watched and read back.

In response to the challenge of working with a class with different levels of development, we brainstormed and implemented grouping strategies that would meet all students at roughly their own levels. We arrived at a routine wherein the entire group would meet together for oral discussion around a topic of interest, followed by small-group literacy work with others at similar levels. The low-literate learners always needed individual attention and the challenge was to find productive activities for them that they could work on alone while the teachers attended to the intermediate groups. Since the low-literate learners were still working on learning the letters of the alphabet and their sounds, we purchased electronic programs that prompted and gave feedback on alphabet letters, sounds, words, and so on. These were only mildly successful but they did release the teacher to work with the students who were working on writing their immigrant stories for the newspaper or who were reading a novel for a book group discussion.

We concluded the program, and the analysis, with a clear sense of how crucial this issue of teacher preparation for adult literacy instruction is.

Challenges Specific to the Literacy for Life Program

The preceding challenges faced by our research team in implementing the Literacy for Life program reflected common challenges faced by almost all adult and intergenerational literacy programs. However, we were specifically interested in, and studying, the success of a particular type of adult and intergenerational literacy program – one that engages the students in the types of literacy activities that occur outside of a learning-to-read-and-write instructional context – real-life literacy activity. In addition, we were situating this type of literacy instruction within multi-cultural and multi-lingual contexts that are more and more common in Canada and other developed countries.

While we expected to encounter challenges in implementing the authenticity aspect of the program, our analysis revealed that we did not. The weekly research team meetings devoted to professional development in the authentic literacy activity model at the beginning of the study, plus the ongoing coaching in ways to incorporate real-life reading/writing into the specific program components were effective in meeting any challenges. The fidelity to treatment analysis, presented previously, documented this. We recommend similar professional development for practitioners interested in implementing such an instructional model. We will now present the very real challenges that did arise around issues of cultural and linguistic diversity in our implementation of the Literacy for Life program.

Challenge of Differing Cultural Perspectives

The challenge of working with different cultures was undoubtedly the biggest challenge we faced in the implementation of the program. The iterative analysis of the data revealed this underlying dimension of culture. Other categories of challenges that we first grouped as discreet (e.g., 'Failure to comply with class procedures;' 'Misunderstanding of Family Time'; and even 'Food') were at the end seen as visible dimensions of the same factor: Differing cultural perspectives. This, then, led to a deeper insight (to be developed under 'Conclusions') of the very cultural nature of the notion of intergenerational/family literacy programming, itself.

Parent/Child time together. The program component of parent/child time together is widely considered the most essential element of intergenerational/family literacy programs. It was in this part of the Literacy for Life program that we felt first, and strongest, the impact of culture clash – clash between the underlying assumptions we all held about child development, learning, parenting, and schooling. We spent the majority of our time during the weekly team meetings trying to deal with the 'problem' we saw with the parent/child time. The following research notes from the teachers regarding family/child time together give a flavor of the situation:

They were not focused on their children and a number of the children even refused to go with the parents. The parents did not seem to know what to do for the kidsThey let their children freely do what they want and did not assist them in any way. They listened intently at the story and seemed to enjoy the language. They did not see this as a modeling activity. (Site 2; Year One)

After we gave out game cards, pencils, and glue sticks for attaching the children's names, which had to be collected at each station, the parents were eager to begin

hunting. I reminded the adults to read each clue aloud for their children as they worked down the list and involve them as much as possible in the activity, e.g., let child find their name at each station, tape it on game sheet, make the check marks, point to the text of the instructions as they read it aloud. It didn't quite turn out this way. The adults became very excited about the game and seemed to spend more time interacting with each other than involving their daughters. It was a bit disappointing, given our intent. (Site 1, Year One)

Each of the mothers set about completing the task in much the same manner we have seen them work other instruction-following activities: they gathered their supplies, gave the children some paper and scissors to play with, and then set about making the planes on their own. Once the planes were finished, they gave them to the children to play with and some set about making a second plane. (Site 1, Year One)

Parent Books: Kim introduced the parent books by holding up the books and a white board that read "Activities to do at home." She explained that at the end of each of the session we would print or glue a description of the activity that we had done during that day. At the end of our time together we would have a book filled with activities that they could do at home. All of the parents looked very confused- either at the concept or why they would want such a book. (Site 1, Year Two)

Even after I started talking at Family Time, (three children) were still playing together. Their mothers had no intention of getting their boys to them, even though they should know by now that Family Time is a time for the parents and their children to do things together. I had to ask them specifically to get their children to sit by them or on their lap. It didn't take long for the boys to start wandering off. (Site 2; Year Two)

The, from our perspective, lack of understanding of the 'point' of family time played out differently in each site. In Site 1, the Chinese immigrant mothers all seemed to want to engage in the family time activities as adults, working together with each other but not with their children. The games and activities, with reading and writing playing essential roles, were completely appropriated by the adults. That this was culturally congruent for them was strongly implied by the fact that the children were so comfortable with their roles of *observing and following*, rather than *doing*. In Site 2, the parents similarly failed to cooperate with the intention of family time but in their case by almost refusing to interact with their children at all, to sit next to their children, or to direct their children to the planned activities and away from free play with friends. While this looked somewhat different from Year One to Year Two, and from African refugees to Middle Eastern immigrant/refugees, the failure to want to engage with their children in the ways we envisioned for family time were similar.

Our responses to this challenge began with attempts to be more explicit about our expectations for parent/child time. We modeled sitting with one's child and talked aloud about why our activities were important to early literacy learning in the home; we demonstrated strategies for engaging children in print-focused activities; we scaffolded parents' attempts to

follow our lead. Our data revealed a continuous back and forth approach, or problem-solving focus, between acknowledging cultural differences as regards perspectives on parenting and learning in the home and with coping strategies such as modeling and explicit explanations of what we wanted in the program.

As our insights into the profound nature of these cultural differences and their impact on 'our' program of intergenerational literacy grew, we played with the family time component, itself, and its role in the program. We shortened the time for the families at Site 2, Year One, and hypothetically considered dropping family time altogether.

By Year Two, we arrived at the point where we recognized the need to work in culturally dialogic ways with the families. We implemented a plan to learn from the families the kinds of activities that they engage in with their children, and we shared with them the types of experiences and knowledge that Canadian schools expect of their entering kindergartners (e.g., having been read to, ability to write their names, knowledge of color names and simple number concepts, and so on). We incorporated this approach into an authentic literacy activity by jointly constructing a book for new immigrants and for themselves about activities that can be implemented in the home that will help prepare their children for school in Canada and that include, and don't preclude, cultural models of different immigrant groups. These suggestions varied, of course, between sites/cultural groups. This more dialogic approach seemed to promise a solution to the cultural differences that exhibited themselves within the parent/child-time-together program component.

It is important to note that our observations of cultural difference during family time were supported by incidents that occurred outside of this time. For example, the Site 2 early literacy teacher had great difficulty processing her observation of parents throwing away their children's art projects and early literacy attempts as they exited the building. At Site 1, the early literacy teacher, reflecting her North American constructivist emergent literacy theory and training, struggled with the refusal of the mothers to allow the children to 'sign in' with emergent spelling. Rather, they insisted on accuracy and perfection, holding their children's hands and forming the letters with them, erasing and rewriting until they (the mothers) were satisfied.

Our responses to these types of incidents reflected our discussions of how parent/child models of interaction and of learning are cultural models, ones to be learned from and worked with by family literacy program providers. For the types of examples just described, we essentially took them as cultural lessons for us. The African refugees appeared to reflect the sense that children's activities were fine while they were engaged in them but did not need to be praised and displayed by the adults of the community. From this perspective, we could begin to see that tossing the art projects into the wastebasket after they were finished made sense. We made sense of the Chinese mothers' insistence on accuracy -- with heavy scaffolding -- when we considered the very different natures of the orthographies of English and Chinese writing. English writing is essentially alphabetic, with the letter symbols corresponding to phonemic units. Emergent writing reflects children's growing understanding of the underlying relationships between letters and sounds. Chinese writing is made of standardized characters that, while containing phonetic units, do not reflect underlying sound/symbol relationships in the way that alphabetic languages like English do. Reading, or decoding, of English does not require standardized spellings; one can 'figure it out' from phonetic decoding. However, a character-based written language like Chinese is profoundly dependent on accurate representation, and the

characters are read as units. One change in a stroke or placement of a piece of the unit will change the meaning. Thus, the Site 1 mothers' insistence on accuracy from the beginning of writing development makes sense. Clearly, this approach to writing development does not stand alone but is nested within an entire cultural system of values and beliefs, and we acknowledged this without deeply exploring it for the time being.

Maintaining the procedures that we had put in place for the Literacy for Life program was a constant challenge for us, and we came to understand this as part of differences in cultural perspectives on such issues as schedules and program requirements. We struggled with adjusting Western notions of 'rules and procedures' with non-Western perspectives. For example, the issue of tardiness was felt as critical to our goal of increasing adult and early literacy skills. For us, 'time on task' was a very real concept. If parents and children were going to benefit from the program, they needed to be there to experience it. We felt that two hours a week, twice a week, was minimal for learning. This actually broke down to about 45 minutes twice a week for adult literacy instruction and for early literacy instruction.

However, the families, especially during Year One often failed to arrive on time. While much of this can be seen as falling into the typical challenges of adult/family literacy programming, it can also be understood within a cultural difference frame. This was especially true for Site 2, Year One with the refugee families from Africa. Clock time simply did not hold the same importance for them as for us. They came when they could and they did not see why it should make a difference.

Another procedural issue arose around our insistence that the early literacy class could not take children younger than 3 years of age. From our perspective, the types of group and individual activities in the early literacy classes were developmentally inappropriate for toddlers, and their presence in the class disrupted learning opportunities for the older children. However, without our Western-shaped notions of child development and learning, the parents were never convinced that establishing this age cut-off was necessary; it appeared to make no sense to them. Thus, some parents pushed to include their younger two-year olds in the early literacy classes. Others failed to enforce the rules, allowing their younger children to wander into the class space if possible or to cling to their older brothers and sisters as they entered the early literacy class.

A procedural issue that predominated at Site 1 was the attempt by various parents to bring children other than their own to the program. Sometimes this was because the parent acted as a regular day care provider for the child; other times this was because a relative or close friend wanted their child to be part of the program but worked during the day and thus could not attend as a parent. This issue again took us back to considerations of the underlying cultural base of Western notions of 'family' for intergenerational/family literacy programs. We thus adjusted expectations and accommodated children and caregivers other than parents or immediate family members if the adult who brought the child spent a significant amount of time with him or her outside of the Literacy for Life program.

Related to the issue of artificial division lines among family members for programming purpose was that of parent/child separation. This was most apparent among the Middle Eastern families at Site 2, Year Two. In an intergenerational literacy program such as ours, adult literacy instruction requires that children separate from their parents into either an early-childhood focused program or, in the case of toddlers, day care (we did allow mothers to keep infants with them during the adult literacy component). While the African refugees at Site 2, Year One, and

the Chinese immigrant mothers at Site 1 had no unusual difficulties with this requirement, the Middle Eastern families did, resulting in ongoing challenges for both the parents' instruction and the early literacy instruction of the 3-5 year olds. As stated earlier, all of the challenges were inter-related and this one was influenced by resource limitations (i.e. one teacher per class; scattered classroom space, etc.) and childcare problems at Site 2, Year Two. Thus, it is hard to categorize it as cultural, although there was a definite sense that the children of these families had no experience with separating from their mothers for purposes of daycare or early childhood programming. Regardless, this was an ongoing challenge for us during Year Two of the program. The following field note excerpt from the early literacy teacher gives a sense of this challenge:

One of the children needed to go to the washroom so I gathered everyone up to take. E soon was in tears, and didn't want to go. But two had to go badly so I ended up picking him up and taking all of them with me. Unfortunately E soon grew inconsolable (I think he is afraid of the [electric]hand dryer – the other boys loved it and spent time splashing in the water and then turning on the dryer.) His crying started R (who had bumped her head and was bleeding) and S off crying as well. So we headed back to the ECE portable hoping to entice them with snack. W (a mother) was there which made the children cry even more for their moms so I asked W to watch the few kids while I took R, S and E back (to the adult literacy class). Finally I got S and R to return with me, but E's mom came along. We decided to have snack, and make pudding, which calmed everyone down. L (a mother of one of the boys) eventually left but W couldn't leave, so she asked me if she could continue staying to help me because she wanted R to learn English. I said that would be fine. We briefly cleaned up and then read part of a story. We were then interrupted by K's mom as she came early to get K. As soon as they saw the mom, they all started crying again. Good time to pack it all up and sing the goodbye song and make our way back to the adults.

Our responses to these procedural challenges reflected primarily a coping strategy. We felt we had no choice about scheduling and time or about the essence of an intergenerational literacy program for which we had received funding. So, we did our best. Analysis revealed that we continuously (a) searched for ways to make the procedures work (e.g., modeling and demonstrating desired parent/child time behavior); (b) made flexible adjustments to the procedures when possible (e.g., allowing younger children into the early literacy class if no 3-5 year olds showed up); (c) repeated explanations of what the procedures and expectations were and why they were important, from our perspective (e.g. reiterating the need for children to separate without trauma from their parents); and (d) adopted new procedures that we hoped would be accepted by the parents (e.g., allowing adults to bring children other than their own to the program if they could argue that the children spent a significant amount of time with them outside of the program).

Challenge of Program Purpose Conflicts

A mom and a child came in when I was teaching. She obtained the information about our program from another school. Her child is the right age, but she speaks fluent English and is very articulate. She said that she would like to attend a program mainly to socialize with others. I said that our program is designed for people who did not have an opportunity to learn to read and write in their first language, but that I would contact her after I speak to the directors. (Site 1, Year Two)

We faced several other challenges with the Literacy for Life program in addition to those that essentially reflected diverse cultural perspectives. One of these was delivering effective instruction to families who had purposes for attending the program that did not reflect our purposes for implementing the program. Again, we designed the Literacy for Life program for low-English literate adults, and with low-literate parents in mind, and their children (see above for theoretical and empirical basis for this). Our goal was to increase the literacy levels of the parents which we believed would increase the frequency of literacy events in the home which would provide a richer literacy environment for the young children in the home, enhancing their chances of success in school. In addition, we sought to compensate for the existing lack, or low levels, of English literacy in the homes of the young children with an early literacy class that sought to emulate high literacy-use home environments. Our classes filled, however, with families who often had purposes for attending that were in conflict with this design. These different motivations and needs of the parents complicated our ability to serve those for whom the program was designed and consumed a great deal of our time devoted to problem-solving the situation.

Recruiting. The challenges related to recruiting the targeted populations were intimately tied to this dilemma. As noted in the discussion of site challenges, we spent a great deal of time convincing existing programs to sponsor/locate us. As part of this, we explained our program and its goal of increasing the literacy levels of parents and the emergent literacy levels of their children. We were looking for low-literate parents with young pre-school-age children, we told program directors and organizations working with immigrants. Low-literate adults are always very difficult to recruit for adult literacy programs (Hayes, 1988; Purcell-Gates, 1996), but in the case of immigrants and refugees we were told that there were quite a few who had no or little schooling in their home countries.

Socializing. The participants who sought to enroll in the program, however, did not always come to increase their literacy, or English literacy, levels. They came for a variety of reasons. Some came primarily to socialize. Our data include clear statements of this purpose as well as other indirect indications. These participants were not unschooled and held intermediate levels of English literacy when they entered the program. When they sought to join the program, we explicitly explained that the program was for people who did not read or write very well and/or had not had the opportunity to go to school. We made the decision to admit them with the understanding that they would need to vacate a slot if others who fit our desired demographic, and with whom we were funded to work, appeared. Once they were in the class, we did our best to accommodate instruction to their needs (see discussion of challenge of working with students of varying levels, above). However, their primary motivation to socialize was a critical distracter for the instructor.

We sought to address this challenge through renewed efforts to engage them in the classroom activities, primarily by designing activities that would meet their goal of socializing as well as our need to improve their English literacy levels. For example, toward the end of Year Two, we used the call from the local newspaper for immigrant stories that could be published in an upcoming series as an opportunity to engage these intermediate learners in reading (existing immigrant stories) and writing (their own stories) for a real purpose. As part of this, we organized whole-class discussions of immigrant experiences and, specific to the need to socialize, small group sharing of their lives, preparatory for individual writing with group feedback. We also began a book club, with common reading of a novel on an immigrant experience (matching their countries of origin settings) and discussion. All of these attempts met with some success, although we ran out of time to continue along this line.

For the children. Another program-purpose conflict involved parents considering the program as a good pre-school, or enrichment experience, for their children. Often these parents were among those who primarily wished to socialize while they waited for their children to be 'taught.' The effect of this orientation by parents was to put a great deal of pressure on the early literacy teacher to meet their diverse notions of what the program needed and ought to do for their children. While our purpose for the children was to provide rich, contextualized experience with print use, some of the parents wanted a traditional pre-school prep program with explicit instruction on how to read and write. While this motivation is understandable for people who immigrate with a vision of greater opportunities for their children, it was not in line with our vision of this specific program, nor indeed with how young preschool children begin to acquire and develop knowledge of reading and writing in ways that are appropriate to their developmental levels.

Our response to this again alternated between repeated explanations of the early literacy class from our perspective and attempts to meet the needs of the parents when possible. For example, the early literacy teachers always included instruction on alphabet letters, color names, and name writing. For one child whose mother wanted her to learn to read, and who was close to being able to do so, the teacher found opportunities when possible to teach her basic decoding strategies and sight words. This conflict was never truly solved, but we had indications that the parents all felt extremely positive about our early literacy classes anyway, and, of course, the TERA III scores confirmed the value of our approach for us.

For the Adults. While some parents only wanted a pre-school for their children, others only wanted adult English and English literacy instruction for themselves. In order to meet the intergenerational mandate of the program, it was a requirement that parents be accompanied by at least one child between the ages of 3-5. However, those parents who wished to focus primarily on their own learning often seemed not to acknowledge or understand this aspect of the program. This challenge presented itself in different ways. Some parents would leave their children at home with little indication that they understood that the children were missing out. Other parents would try to enroll without children. Still others (and there was overlap among these types of parent challenge) complained bitterly that the three components of the program (especially the family together time) were taking valuable time from their own instruction. During Year One, particularly at Site 2, the protests took on more formal tones as the African refugees complained to directors of the refugee center that was hosting us and the directors then made their own protests to us. The unschooled, or low-literate, Middle Eastern parents at Site 2, Year Two, also

resented time spent away from their own instruction. This was time spent in some way with their children, whether during parent/child time together or while attending to their children as part of separation issues.

As for all of the challenges related to program purpose conflict, we responded with a mix of re-explaining the intergenerational nature of the program and responding to their motivations when possible. For example, at the African refugee site, Year One, we shortened the parent/child component to lengthen the time the adults had for instruction. This was also a response to the problems we were experiencing with the parent/child time together component at this site. We recognized that the parents felt that their primary need was in learning to read and write and not in sitting next to their children to focus on literacy (see previous discussion related to differing cultural perspectives).

Challenge of No Shared Language

Based on the revised text M and R produced, I made the text into a handout for everyone. We went over the text for the invitation card. The text is too difficult for the basic learners, except R, who appeared to understand the meaning with interpretation from R and M. I asked the basic learners to copy the word, 'party,' with my finger pointing to the word. But U could not understand me and copied most of the first sentence, "The Literacy for Life program invites you to join us at our farewell party"....I (said) to Z and N that the word, 'party,' is a good word for them to learn to spell. N tried, with good effort. I pointed out the -ar- sound and the combination of -p- and -ar- in 'party.' (Site 2, Year Two)

The scenario produced in the data quote above is a good representation of how issues of language facility interacted with many of our other challenges, e.g. of working with different levels and lack of resources for teacher aides and translators. In today's multicultural and multilingual classrooms, issues of no shared language are common. In our case, the teachers did not share the language of most of the students; the students within the classes came from different language groups, and these groups could not communicate with other language groups in the class. How did we handle these challenges?

Our primary response was to request translation aid whenever we could. With the African refugees, we basically had 'chain translations.' The directors of the refugee center translated between the teacher and the students who spoke the same national and tribal language. These students, in turn, did their best to translate for others who spoke related tribal languages. The few who could speak a little English also helped with those with whom they could communicate. The adults at Site 2, Year Two, spoke Arabic, Korean, and Amharic. The cultural worker in Site 2 who recruited the students spoke Arabic, and she helped with assessments and explaining policies and procedures. She was not always available, though, and on those occasions we turned to other sources of translation – the students themselves. Student-to-student translation also was required for class activities, as portrayed in the data quote above. This did not work for the Korean students (who did not stay long in the program), but luckily our volunteer aid was a native Korean speaker and she helped when she was on site. This left one of our students, 'U' (above) who was the lone speaker of Amharic in the class, and when we requested help from the immigrant/refugee center, we found that there was no Amharic translator available in the city that they knew of. On rare occasions, we were able to solicit the help of 'U's' husband who spoke Arabic, in addition to Amharic. This meant that he would first speak to one of the Arabic

speakers who spoke English and then tell 'U' what was required. He never attended class and so played no role in the actual instruction. 'U' was among our first students to enter the program that year, had had no schooling in Ethiopia, and, despite the language barriers, she persisted until the end of the year.

We brought to bear other strategies used by ESOL teachers. The teachers learned to adjust their instruction to allow space for translation activity within the classes. They also learned to demonstrate different procedures through physical modeling (e.g. picking up a crayon and demonstrate looking at the wrapping for the color word), and to use context, usually realia, for help in getting a message across (e.g., pointing to the days of a week on a calendar while asking the class to repeat the days of the week and the name of the month, etc.).

It came as no surprise that the children picked up English much faster than their parents. However, child-child or parent-to-child translations were also required, particularly when students were new to the program. Others also helped with the children such as the cultural worker (with the Arabic speakers) during assessments. We did not allow parents to translate for their own children for the assessments, although they did provide translation for other children to ensure they knew what they were being asked to do.

Authentic Literacy as Response to Challenges

As stated earlier, we did not find specific challenges related to our intervention variable – authentic literacy instruction-- due to our intense and ongoing professional development with the teachers. Our fidelity to treatment analysis confirmed that the teachers, with some variation due to site differences, maintained high levels of engagement in the class with real-life reading and writing. Our analysis of our challenges/responses, though, did highlight ways that authentic literacy instruction can help to resolve many teaching and program challenges, and so we report the results of that analysis here.

Analysis revealed that the creation of authentic literacy activity was used in response to several types of challenges that we faced in the implementation of the program. For example, when teachers struggled with getting the parents to understand our notion of 'family time', they handed out the Literacy for Life brochures that we had used in recruiting. They read aloud the purpose of the intergenerational literacy program and the activity types that would occur within the different components of the program as they related to real-life reading and writing. On another occasion, the teachers used writing and reading to help in their explanation of the procedures and purposes for parent/child time together. They posted chart paper and wrote as they spoke. They then discussed what had been written. Each of these examples involved the students in reading and writing, listening to, or following along a real-life text for real-life purposes: to understand the program component of parent/child time together and, for the writer, to explain the component.

As we worked with the different cultural groups to provide food and snacks that they would, and could, eat, the teachers wrote a grocery list or a list of ingredients for a type of dish on paper or on wall charts. The students wrote or dictated items and understood the writing within the activity of planning and shopping for food preparation.

When the early literacy teacher at Site 2, Year Two, was experiencing classroom management problems due to the different age levels and experience levels of her students, she wrote and modeled for her students the writing of a simple list of classroom behavior rules ("Don't hit"; "Share"; etc.). She then posted this list and referred to it when needed. This also

became a source of memorized language, or text, from which the child, whose mother wanted her to begin reading, could begin to move to that stage. This same teacher responded to a cultural difference in what was allowed as a food ingredient. A Muslim child reported to the teacher that her father was concerned that she was eating food with gelatin in it (which is sometimes derived from pig hooves). The teacher took the opportunity to model with the child the reading of the list of ingredients from a food package to look for the forbidden item. This became a literacy practice for the child, acquired in a real-life context with a real-life text, read for a real-life purpose.

As mentioned previously, site difficulties were a major resource problem for us, and the early literacy teachers often responded with authentic literacy activity with their children. The teacher at Site 2, Year Two arrived with her charges one morning to find that the 'snack' table had been removed from the room. The children were quite upset and wanted to know what had happened to it. The teacher responded:

Since I didn't know either, I suggested that we write a letter to Steve to find out exactly what happened. They readily agreed. I grabbed a large sheet of paper and felt pen, and started writing "Dear Steve" and then stopped. They immediately took over and I wrote down what they said.

When they had finished with their letter, they delivered it to Steve, the site manager.

At Site 1, the early literacy teacher struggled continuously with the limitations of her room in the ice rink. Because other people used the room and felt quite possessive about its space, the children could not watch their bean plants grow after planting their seeds. They needed to take them home. The teacher worked an authentic literacy practice into this problem:

(I) asked if the children would draw pictures of their plant as often as possible so that they could later show me how the plant grew. I told them this would also be a fun way to compare the different growth rates of everybody's plants.

The adult literacy teacher at Site 2, Year Two, struggled to teach her students the types of classroom behavior that are expected in North America, such as respectful turn taking, raising one's hand to contribute to a discussion, and so on. As part of this, she decided to incorporate this information into a brochure that the intermediate students were preparing for new immigrants. This brochure was to be made available at the immigrant/refugee center where the cultural workers were based.

These are but a few of the examples of how the teachers addressed real challenges related to implementing the Literacy for Life program with authentic reading and writing. This was in addition to the many other authentic literacy activities that they engaged their students in as they sought to connect their literacy instruction to the lives of the student and the literacy demands of those lives.

Conclusions and Recommendations

With the Literacy for Life program, we wished to study, with the help of a formative research design, the implementation of a specific type of literacy program—one that incorporated real-life literacy activities as much as possible. Previous research studies have used the term *authentic literacy instruction* for this type of activity (Purcell-Gates, et al., 2002; Purcell-Gates, et. al, 2007) in the context of an intergenerational literacy program. From an emergent literacy perspective, we justified the inclusion of adult literacy instruction with authentic literacy activity as a way to raise the frequency and increase the complexity of reading

and writing in the homes of our students. This was based on several previous studies. The first documented a significant relationship between frequency and type of literacy activity in the home and degree of emergent literacy knowledge held by young children in the home prior to formal instruction in literacy (Purcell-Gates, 1996). The second documented a significant relationship between adult learners' frequency and type of reading in the home and engagement in authentic reading and writing in their literacy classrooms (Purcell-Gates, et al., 2007).

With this study, we also wished to explore ways of evaluation of family literacy and intergenerational literacy programs that could be built upon by researchers and program funders. Thus, we were looking to accomplish two things: (1) an approach to evaluation of such programs; and (2) a careful documentation of 'how it went' in terms of implementing the program. Because we were not working with an experimental design, we could not look for causal relationships between the program elements and literacy growth; nor, with the small numbers of participants, could we look for correlational results. However, we could use statistical inference in appropriate ways to enquire as to indications of effectiveness of the program, and specifically the real-life literacy aspect of the program.

This study is best viewed as a case study within a formative experiment design frame. As for other formative design studies (e.g. Reinking & Watkins), the results of this study present specific factors that made our desired outcome – growth in literacy – more or less difficult and how this type of intervention can be adapted to better accomplish that goal. In this section, we present our conclusions related to this aspect of our design.

Families Bring Complexity

Families, themselves, are complex, and any instructional program that attempts to work with families as a unit will need to accept this fact and deal with it as best they can. Certainly our data demonstrate this complexity. From the beginning, we were continuously dealing with issues of family structure, family inter-relationships, family values and beliefs, family demands, and so on. Trying to fit a program that-- while not a 'one size fits all' one-- had a structure and goals of its own onto this tangle of complexities was quite challenging. This was all compounded by the additional complexities of working with immigrants and refugees who bring different languages, cultures, and histories.

None of the above, it is important to note, is peculiar to the Literacy for Life program, itself. The research literature is rife with portraits of family, intergenerational, and adult literacy programs that all reflect this complexity of real people, trying to lead real and rewarding lives, part of which includes increasing their literacy skills through some type of program. Increasingly, global migration has resulted in adult classes and programs for families that are filled with different mixes of languages and cultures at one time. This is all to say that the Literacy for Life program was typical for its type, and thus the lessons we can learn from the documentation of its implementation can be of use by others in the field.

Increasing Literacy Ability

We did reach our goal of increasing the English literacy abilities of parents and children. We can make that conclusion despite the difficulties and dissatisfactions we had with the available assessments, particularly for the adults. All of the adults who could be assessed moved significantly on the normal curve, indicating an effect of being in a program that focuses on English literacy. For those previously unschooled students who could not be assessed with any degree of reliability or validity, we were able to document a growth in very basic literacy skills:

ability to write their names; to name the letters of the English alphabet; and to write most of the letters of alphabet. This again was accomplished in spite of the many challenges related to working with multiple skill levels, lack of resources for teacher aides, and problems with teacher professional training in the teaching of literacy. However, there is obviously a need to develop an appropriate instrument for adults who are beginning to read and write to augment and support qualitative data such as we were able to collect.

Being in a program at all may very well be the key factor in these outcomes. However, as stated earlier, we wanted to begin to develop measures that could be used for future studies with designs that would allow for causal inference. We believe that the variable that we developed – Exposure to Authentic Literacy Activity – is promising for future research. Some may ask why not just rely on random assignment to condition to test program elements? The answer is that it is virtually impossible to impose on families and programs the controls that would be needed to conduct a true experimental design study. Family and intergenerational literacy programs do not sit within the highly funded structures of K-12 programs. They always depend on outside funding, and this funding comes and goes. Thus, the programs come and go. The 'students' in these programs can, and must, decide when and where to attend. They decide when to begin and when to leave. Programs and students come and go. Furthermore, as we have alluded to throughout this report, families are always confronted by the realities and challenges of daily lives. These challenges are exacerbated by the fact that many participants in programs such as Literacy for Life are recent immigrants or refugees adjusting to a new culture, learning a new language, often with minimal financial and other forms of support. Given these realities, successfully randomly assigning families to conditions and teachers to program models is highly unlikely. Further, each program is somewhat different from the others, making it difficult to attribute outcomes to programs, even if they follow the same model. As we have noted earlier, Site 1 and Site 2 presented different needs and challenges, and we believe we responded to each site in contextually appropriate and nuanced ways. By finding a way to pinpoint the element of a program model that is theoretically and empirically suggestive of leading to a desired outcome, we have opened the door, we believe, to the development of instrumentation that can be used in future large-scale studies.

Emergent Literacy Preschools

This was the first time that the real-life emergent literacy instructional model for the 3-5 year olds was implemented, and we believe that it is highly promising for those who are struggling with the increased demand to move 'early reading' instruction into the preschools and daycare settings. Up until recently, preschools were seen primarily as programs for socialization and for developmentally appropriate activities such as play, song, art, and stories. With increased information on the plasticity of the brain and thus the importance of early learning in general and early literacy learning, specifically, policies are being written that will attempt to ensure that preschool children learn the early literacy skills such as phonemic awareness, alphabet knowledge, and beginning letter/sound correspondences. Without entering into the debate between those who advocate a play-based approach for young children and those who want all young children to get started on the learning to read process before they enter kindergarten, we wish to point out that (in addition to the neurological/brain research), the push to move literacy learning into preschool programs followed the emergent literacy research that consistently documented that young children from high literacy use homes started kindergarten far ahead of

their peers in early literacy knowledge, including alphabet letter knowledge, phonemic awareness, and beginning letter/sound relationships. The exception to this, of course, are those children who, while experiencing rich exposure to literacy use in their homes, have unusual difficulty with hearing sounds in speech (phonemic awareness) and in visually and aurally processing written language.

The early literacy instruction, designed for the Literacy for Life program, took a different approach from the skills-based learning advocated by others. We attempted to recreate the types of literacy activities that occur in high literacy use homes *in the classroom* from which the children could learn early literacy concepts. We reflected the developmentally-appropriate line of thought by planning for free play, structured play, cooking, planning, and basically living the life that children might live in their homes with their parents, or caregivers, and siblings. We rejected explicit skill instruction with skill games and drills, worksheets, and so on. However, we added to this 'natural flow of activity' what we termed a 'hyper-focus' on how literacy mediates life's activities. Research has documented how many high-literacy-use parents do this, and we drew from this research and made attention to print and explanations of its function and purposes more pervasive. For example, we talked about and modeled the use of the different kinds of texts that people might engage with as they do things like play games, shop, cook, or communicate complaints. We modeled early literacy skills like concept of *word* (by pointing to words as we read them), directionality (by sweeping our fingers under lines as we read them; beginning sounds (by stretching out sounds as we wrote them); and so on.

With the results of the TERA III pre and post tests showing significant growth, and coupled with the very thorough and anecdotal evidence from the field notes, we are confident that this type of early literacy programming is a promising alternative to didactic teaching of skills to 3-5 year olds. Of course, it will take further studies in many more pre-school classrooms to test the generalizability of our findings, as well as to understand more fully the contextual factors that support or impede the successful implementation of this model in different communities.

Insights and Recommendations for Intergenerational Literacy Programs

The results of our challenge/response analysis lead us to raise several issues for the field to address and to some concrete recommendations for future programs. We know of no other family literacy or intergenerational literacy study that has documented the implementation challenges as thoroughly or analyzed them as systematically as we. Thus, we feel that we have much to offer for thought, and, perhaps, action.

Overall, our analysis revealed the complex dance required of program leaders, teachers, and students. Moves were performed in response to, and in transaction with, shifting resources, personal goals, and abilities. Keeping one's eye on the ball (increase in literacy ability) was critical, but the ability to flexibly keep moving toward that ball was key. This constantly shifting and evolving dance must be seen as 'normal' and expected, we believe. Analyzing the components of it lead us to conclude that *this is the very essence of all programs that exist outside of the structure and safety of the K-12 system*. While some programs are part of larger structures (e.g. community colleges or The National Family Literacy Program in Kentucky, U.S.A), they, too, contain all of the elements that result in the dance: families who come and go; diverse and shifting cultural groups; different language groups; constant battle for funding, undertrained teachers, different student goals, and so on. So in terms of implications for policy

makers and program providers, we believe that *adaptability* and *flexibility* must be built into programs for clients such as those that were served by this program.

We believe we were as successful as we were because we had a very clear goal: increasing the English literacy levels of the adult students and the early literacy levels of the children. We never took our eye off of this ball, even as we fretted and obsessed over those challenges that we faced along the way. Our primary response to these challenges was flexibility: finding ways to 'make it work', without losing sight of the goal. We also employed the program element that we believed would get us to that goal – authentic literacy activity – in service of addressing the challenges – double dipping in a way.

Toward the end we found our way to more effective dialoguing (Flecha, 2000; Freire, 1993) between us and the families. We found this very promising for improving the chances of reaching our goals as well as those of the families. We had only just begun this process, however, and we urge others to continue to work toward common goals through mutual teaching and learning with families in similar programs. So again in terms of implications for policy makers and program providers, a *dialogic perspective* such as the one we adapted and documented in Literacy for Life must be an inherent part of intergenerational programs.

We moved to increased dialogue particularly in relation to the issues that arose and that we dealt with during our family time together aspect of the program. In one way, this component is what makes a family literacy, or an intergenerational literacy, program what it is. Without this, we may conclude that we do not have an intergenerational literacy program at all. However, our experience with the Literacy for Life Program compels us to recommend a thorough rethinking of the very concept of 'family literacy program' and even of 'intergenerational literacy program' if it assumes a model of 'family' and parent/caregiver relationship that sees the 'parent as the child's first teacher.' Previous research (e.g., Anderson & Gundersen, 1997; Gregory, 2001; Heath, 1983; Janes & Kermani, 2001; Mui & Anderson, 2007) has clearly demonstrated that families from different cultural, linguistic and social groups have very different beliefs about how best to support young children's learning and development, who supports this learning and development, and the kinds of activities and experiences that best support them. In keeping with the dialogic orientation that we believe family/intergenerational literacy programs *must* take, it is incumbent on program developers and providers to reflect these different orientations as they conceptualize and implement the much heralded "family time". Indeed, as we point out later, the concept of family literacy time has been under theorized and woefully under-researched.

Clearly, *family* is a culturally-based concept, and children and caregivers have different types of roles to play within different culturally-defined families. For example, Roland Tharpe and Ronald Gallimore (1993), in their prize-winning book, based on a longitudinal study of learning among Hawaiian native students, point out that in native Hawaiian families, child-rearing is not the province of the mother but of the oldest sibling. Mothers only attend to new infants. In many First Nations families, depending upon tribal affiliation, children are seen as raised and taught by the community and not by individual parents – who do not exist actually as individual units. As we saw with this study, Chinese caregivers related to their children and their learning quite differently from the African and the Middle Eastern ones.

With this, as with other discussions where the construct of culture is used, we assume a specific stance. We do not view culture as static, predefined, or essentializing. This stance precludes such statements as "Mexicans do X" or "Koreans do Y." Nor do we treat culture as

“traits” of individuals. By *culture* we mean patterned ways of organizing everyday life (Pollock, 2008). The patterns are dynamic and inherent in the practices of communities, shifting over time in response to changing conditions. As adults and children grow and are exposed to different ways of being, doing, thinking, and acting, their cultural resources expand (Purcell-Gates, Melzi, Najafi, & Orellano, in press). Within this, we argue that building on the existing cultural ways of families greatly assists adults and children in their acquisition of new literacy behaviors and skills.

The question of what do we mean by *family* when we think of *family literacy* programs becomes critical. We suggest, along with Auerbach (1995), Rogers (2003), and Taylor (1997), that most family literacy programs assume a western, middle-class cultural construction of family and family learning. Further, they assume that this construction of family is the best one and that others need to learn it. The bald fact that this presupposition behind family literacy programs has failed to be realized needs to be taken seriously. We have no evidence, and a lot of counter evidence, that family literacy programs actually change family cultural models. Aside from the ethics of such a goal, we are also, thus, faced with the improbability of achieving it.

How can family literacy or intergenerational programs work, or succeed? We fall back on Paolo Freire's (1993) assertion for his work with marginalized groups around the world: Dialogue – everyone (teachers and students) is a teacher and everyone (teachers and students) is a student. Learning from each other is critical to learning. We had to learn from our students about their cultural forms of family and its inner workings; the students needed to learn from us what the Canadian context brought in terms of texts to be read and written as well as what the Canadian schools would expect of their children.

Culture and cultural differences played out in others ways as well, and we suggest that family and intergenerational literacy program providers assume this cultural frame for all of their work. As for concepts of family as they relate to the family time together component, we recommend a dialogic stance on the part of teachers. From the beginning, teachers need to learn from the students about their lives, beliefs, values, and experiences—their cultures. This is just as important as learning about their literacy abilities and needs. Further, teachers must assume that the students will benefit from the expertise and cultural knowledge that teachers bring to the table. They will need to be told, explicitly explained, about processes, procedures, and expectations that are culturally new to them.

Dialogue was not new to us, and we assumed the need for it from the beginning. The program element of authentic literacy instruction, itself, called for dialogue regarding what texts they read and wrote (if any) in their lives and which language/scripts they were written in. However, while a necessary element of real-life literacy activity planning by teachers, this scope was not nearly large enough for us. It is one thing to solicit information from students about what they do, read, write, eat, and so on, and it is another thing, altogether, to seek to see the world through another cultural lens – to try to understand how the culture(s) of one's students work, how they perceive, value, believe, raise children, and so on.

Based on our results we have several concrete recommendations to make to the field of family learning:

Resources. The instructional programs that exist outside of a K-12 system are seriously under-resourced. If governments at all levels are serious about wanting to raise the literacy and educational achievements of their citizens, then substantial and stable resources must be

allocated. Programs need permanent buildings and sites configured for their unique needs. They need high quality materials that will advance the learning of the students. They need accreditation strategies and requirements for their teachers that include substantial course work and practicum experience in literacy development and teaching and in cultural perspectives, as well as ongoing professional development to keep abreast of new knowledge and best practices. This also means reasonable salaries for the teachers as befits professionals.

Organizing for learning. We believe that classrooms that are organized by ability levels, language, and cultures are ideal for immigrants and refugees. While some may argue that this denies the students opportunities to learn about other cultures and to integrate more quickly into the multicultural and multilingual communities where they live, we believe that their own learning will proceed best if they all are at roughly the same literacy levels, and can speak the same language and share the same cultural expectations. While teachers will benefit by increased professional development in the teaching of literacy to adults and early literacy to young children, we do not feel that it is feasible (at least it has not been accomplished to date for the K-12 system) to attract and train teachers to speak all languages that could be represented in a multi-linguistic class of immigrants and refugees, many of whom have had little experience with formal education or whose experiences with schooling were negative.

Adult assessment. We reiterate that, with the increased migration of adults from countries where they had no access to schooling, the development of valid and reliable literacy assessments in the language of instruction is critical. The recent demands for accountability of programs like family/intergenerational literacy ones, are reasonable and will become more so if resources are indeed increased to meet the demands of immigrants, refugees, and native adults who never succeeded in learning to read and write. Accountability is not possible without valid evaluation and assessment tools.

Authentic literacy instruction. This study lends additional support to the movement calling for increased use of real-life literacy activity within literacy classrooms. It documents on a small scale that immigrant adults learning English and a new culture can increase their abilities to read and write English, as measured on a norm-referenced assessment. Further, the results suggest their children can learn English and early literacy skills at the same time as they engage in real-life reading and writing without didactic instruction. What the results do not show is whether or not the parents/caregivers are speaking, reading, and writing more English in their lives at home or whether this is relevant to their children's later success at school. Anecdotal evidence on some of the children who entered school after Year One with the LFL program suggests that they were doing well. However, we had no way to document that. As for all research studies, then, the results raise more research questions than they answer, and we call for more funded research to follow up on this promising line of study.

In conclusion then, in addition to documenting the possibilities offered by an intergenerational literacy program modeled on authentic literacy programs, this study also documented the complexity of working with families in diverse communities. Our experiences suggest quite strongly how adaptability, dialogue, flexibility, and reflective practice are essential if such programs to succeed.

References

- Auerbach, E. (1995). Deconstructing the discourse of strengths in family literacy. *Journal of Reading Behavior*, 27, 643-661.
- Bakhtin (1981). *Language & symbolic power*. Cambridge, MA: Harvard University Press.
- Bakhtin, M.M. (1986). *Speech genres & other late essays*. Austin: University of Texas Press.
- BEST Literacy Assessment* (2006). Washington, DC: Center for Applied Linguistics.
- Campbell, P. (2003). *Teaching reading to adults: A balanced approach*. Edmonton, AL: Grass Roots Press.
- Comings, J., Parrella, A., & Soricone, L. (December, 1999). Persistence among adult basic-education students in pre-GED classes. NCSALL Research Report No. 12. Cambridge, MA: The National Center for the Study of Adult Learning and Literacy.
- D'Angiulli, A., Siegel, L. & Hertzman, C. (2004) Schooling, socio-economic context and literacy development. *Educational Psychology*, 24, 867-883.
- Darling, S., & Hayes, A.E. (1996). *The power of family literacy*. Louisville, KY: National Center for Family Literacy.
- Delpit, L. (1995). *Other people's children: Cultural conflict in the classroom*. New York: New Press.
- Flecha, R. (2000). *Sharing words: Theory and practice of dialogic learning*. Lanham, MD: Rowman & Littlefield.
- Freire, P. (1993). *Pedagogy of the oppressed (New Revised Twentieth Anniversary Ed.)*. New York: Continuum.
- Glaser, B.G., & Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Grenier, S., Jones, S., Strucker, J., Murray, T.S., Gervais, G., & Brink, S. (2008). Stats Can Report #19. Downloaded April 12, 2008, from www.statscan.ca.
- Hasan, R. (1989). The structure of a text. In M.A.K. Halliday & R. Hasan, *Language, context, and text: Aspects of language in a social semiotic perspective*. Oxford: Oxford University Press.
- Hayes, E. (1988). A typology of low-literate adults based on perceptions of deterrents to participation in adult basic education. *Adult Education Quarterly*, 39 (1).
- Jacobson, E., Degener, S., & Purcell-Gates, V. (2003). *Creating authentic materials and activities for the adult literacy classroom*. Cambridge, MA: National Center for the Study of Adult Learning and Literacy.
- Kaestle, C.F., Damon-Moore, H., Stedman, L.C., Tinsley, K. & Trollinger, Jr., W.V. (1991). *Literacy in the United States*. New Haven, CT: Yale University Press.
- Kress, G.(Ed.) (1976). *Halliday: System and function in language*. Oxford: Oxford University Press.
- Morrow, L.M. (1997). *Literacy development in the early years*, 3rd Ed. Boston, MA: Allyn and Bacon.
- Philips. L.M., Hayden, R., & Norris, S.P. (2007). *Family literacy matters: A longitudinal parent-child intervention study*. Calgary, AB: Detselig Enterprises Ltd.
- Phillips, L.M., Norris, S.P., & Mason, J.M. (1996). Longitudinal effects of early literacy concepts on reading achievement: A kindergarten intervention and five-year-follow-up. *Journal of Literacy Research*, 28, 173-195.

- Purcell-Gates, V. (1986). Three levels of understanding about written language acquired by young children prior to formal instruction. In J. Niles & R. Lalik (Eds.), *Solving problems in literacy: Learners, teachers, and researchers* (pp. 259-265). Rochester, NY: National Reading Conference.
- Purcell-Gates, V. (1988). Lexical and syntactic knowledge of written narrative held by well-read-to kindergartners and second graders. *Research in the Teaching of English*, *22* (2), 128-160.
- Purcell-Gates, V. (2006). What does culture have to do with it? Oscar Causey Award Paper. In *55th yearbook of the National Reading Conference*. Oak Creek, WI: National Reading Conference.
- Purcell-Gates, V. & Dahl, K. (1991) Low-SES children's success and failure at early literacy learning in skills-based classrooms. *JRB: A Journal of Literacy*, *23*, 1-34.
- Purcell-Gates, V. & Waterman, R. (2000). *Now we read, we see, we speak: Portrait of Literacy Development in a Freirean-Based Adult Class*. Mahwah, NJ: Lawrence Erlbaum.
- Purcell-Gates, V. (1995). *Other people's words: The cycle of low literacy*. Cambridge, MA: Harvard University Press.
- Purcell-Gates, V. (1996). Stories, coupons, and the TV guide: Relationships between home literacy experiences and emergent literacy knowledge. *Reading Research Quarterly*, *31*, 406-428.
- Purcell-Gates, V. (2000). Family Literacy. In Kamil, M.L., Mosenthal, P.B., Pearson, P.D., & Barr, R. (Eds.), *Handbook of Reading Research, Vol. III*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Purcell-Gates, V., & Duke, N. (2007). Learning to read and write genre-specific text: The relationships of authenticity and explicit instruction. *Reading Research Quarterly*, *42*, pp. 8-45.
- Purcell-Gates, V., Degener, S.C., Jacobson, E., & Soler, M. (2002). Impact of authentic adult literacy instruction on adult literacy practices. *Reading Research Quarterly*, *37*, 70-92).
- Purcell-Gates, V., Duke, N.K., & Martineau, J. (2007). Learning to read and write genre-specific text: Roles of authentic experience and explicit teaching. *Reading Research Quarterly*, *42*, 8-45.
- Purcell-Gates, V., Melzi, G., Najafi, B., & Orellano, M.F. (in press). Building literacy instruction from children's sociocultural worlds. *Child Development Perspectives*.
- Reder, S. (1994). Practice engagement theory: A sociocultural approach to literacy across languages and cultures. In Ferdman, B.M., Weber, R., & Ramirez, A.G.. *Literacy across languages and cultures*, p.p. 33-74. Albany: State University of New York Press.
- Reid, K., Hresko, W., & Hammill, D. (2001). *Test of Early Reading Ability III*. Austin, TX: Pro-Ed.
- Reinking, D. & Watkins, J. (2000). A formative experiment investigating the use of multimedia book reviews to increase elementary students' independent reading. *Reading Research Quarterly*, *35*, pp. 384-410).
- Reinking, D., & Bradley, B.A. (2004) Connecting research and practice using formative and design experiments. In N.K. Duke, & M. Mallette (Eds.), *Literacy research methodologies* (pp. 92-113). New York: Guilford Publications.

- Rogers, R. (2003). *A critical discourse analysis of family literacy practices*. Mahway, NJ: Erlbaum.
- Senechal, M. (2008). Effects of family literacy interventions on children's acquisition of reading. Policy Paper. Downloaded February 16, 2008, from <http://nsei.cllrnet.ca>.
- Smith, C. & Hofer, J. (2003). The characteristics and concerns of adult basic education teachers. NCSALL Reports #26. Downloaded March 11, 2009 from www.ncsall.net.
- Snow, C.E., Burns, M.S., & Griffin, P., (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Sticht, T. (1988). Adult literacy education. *Review of Research in Education*, 15, 59-96.
- Street, B. (1984). *Literacy in theory and practice*. Cambridge: Cambridge University Press.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Taylor, D. (1982). *Family literacy*. Exeter, NH: Heinemann.
- Taylor, D. (Ed.). (1997). *Many families, many literacies: An international declaration of principles*. Portsmouth, NH: Heineman.
- Tharpe, R. & Gallimore, R. (1993). *Rousing minds to life: Teaching, learning, and schooling in social context*. Cambridge: Cambridge University Press.
- UNESCO. (2001). *Achieving education for all*. <http://unesdoc.unesco.org/images/0012/001234/123481e.pdf>.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Ed. M. Cole, V. John-Steiner, S. Scribner, & E. Souberman. Cambridge, MA: Harvard University Press.
- Wasik, B.H. (2004). *Handbook of family literacy*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Wertsch, J.V. (1981). *The concept of activity in Soviet psychology*. Armonk, NY: M.E. Sharpe.
- Wertsch, J.V. (1998). *Mind as action*. Oxford: Oxford University Press.

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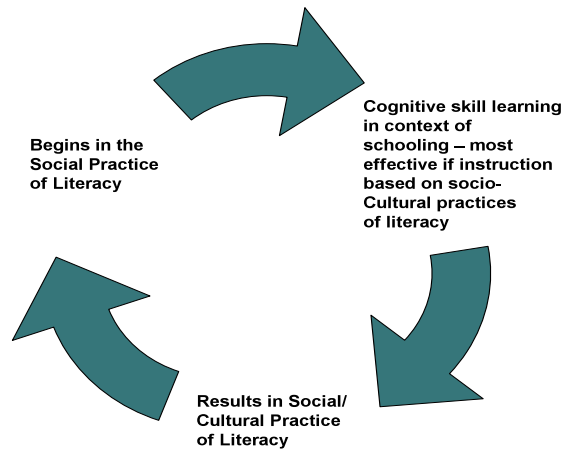
Table 1
Mean Change in Adult and Child Scores following the Literacy For Life program as indicated by the Wilcoxon Signed Ranks Test.

	Pre-Post Change
Adult-CAAT (N=10)	
Vocabulary Standard Score	2.19*
Reading Comprehension Standard Score	2.24*
Spelling Standard Score	2.24*
Child-TERA III (N=14)	
Alphabet Standard Score	1.69
Reading Conventions Standard Score	2.16*
Meaning Standard Score	0.6
Reading Quotient Score	2.17*

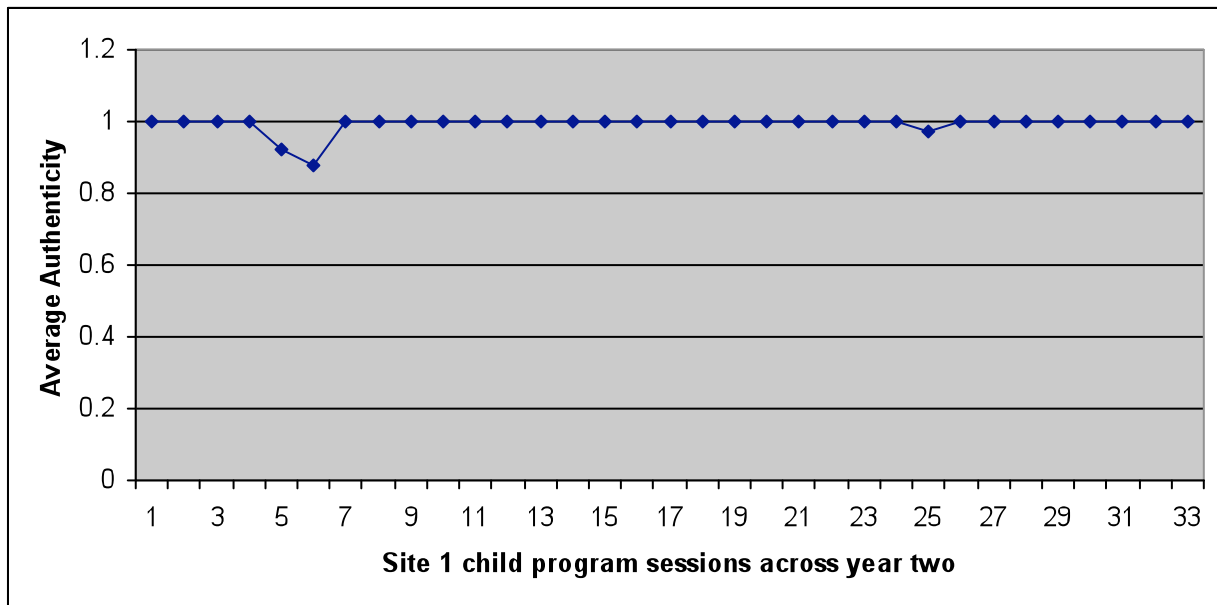
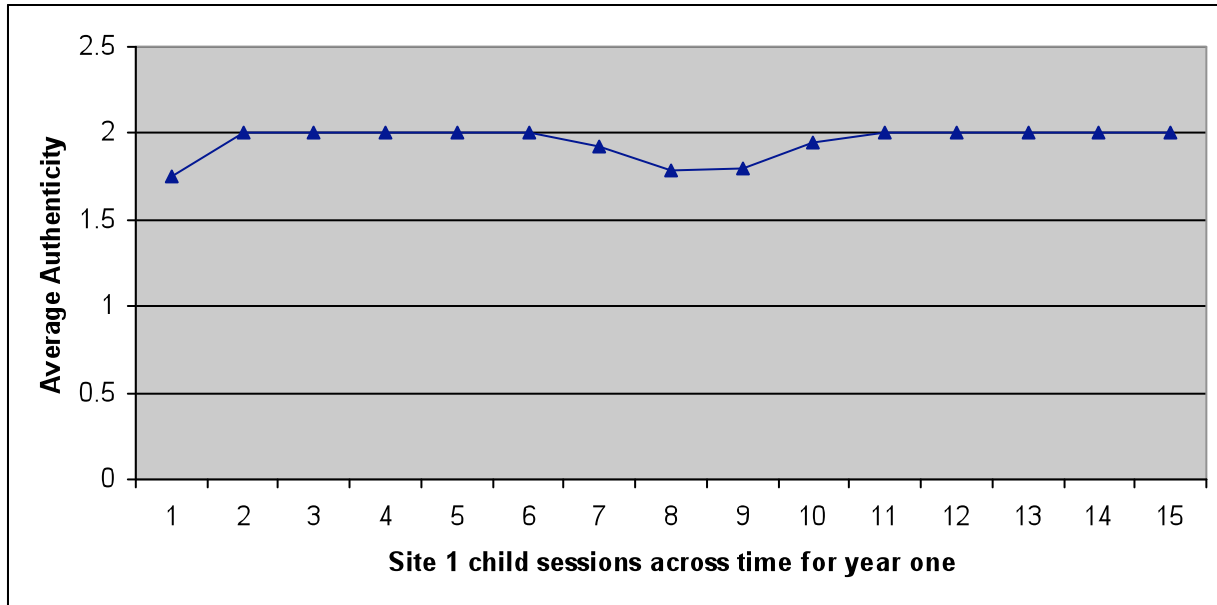
* significant at the $p < .05$ level

(Figure 1)

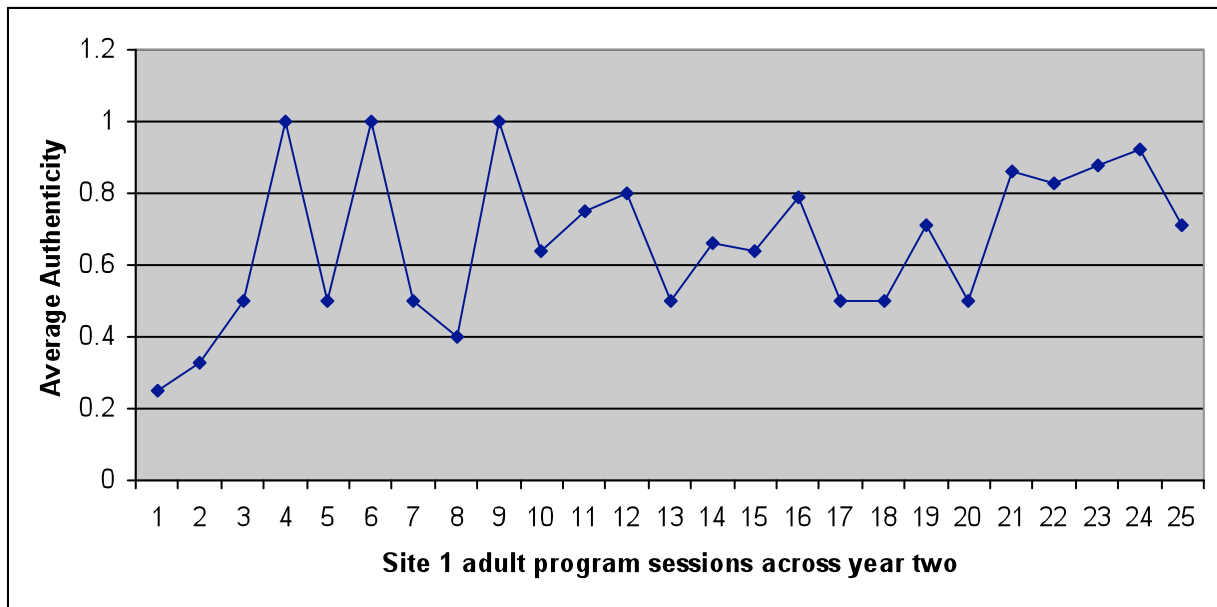
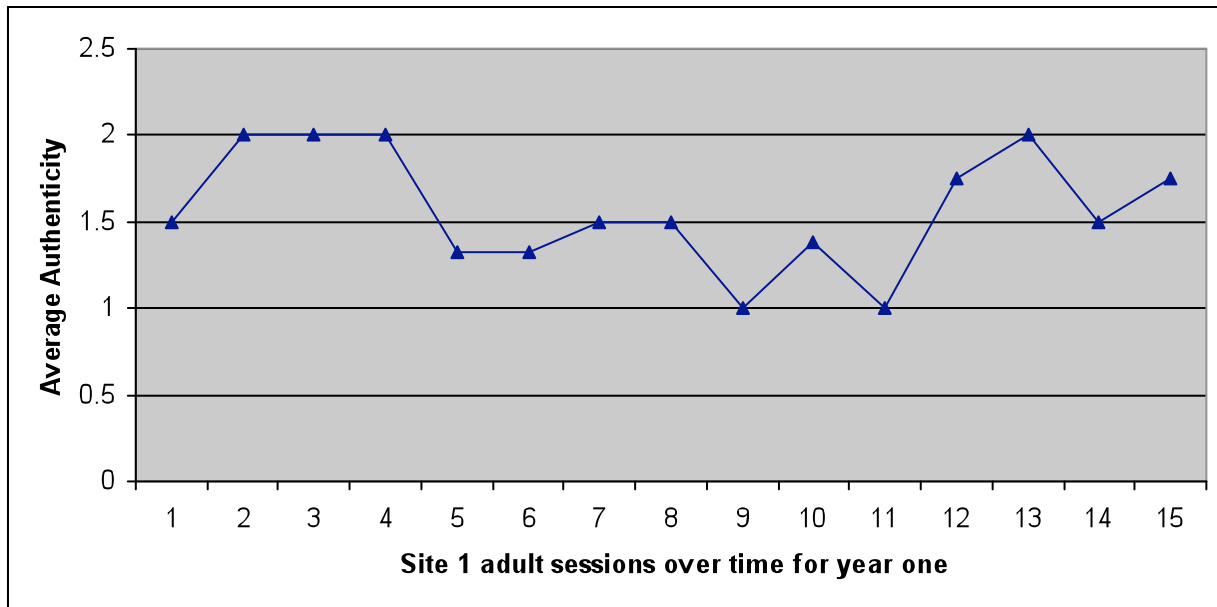
Print Literacy Development

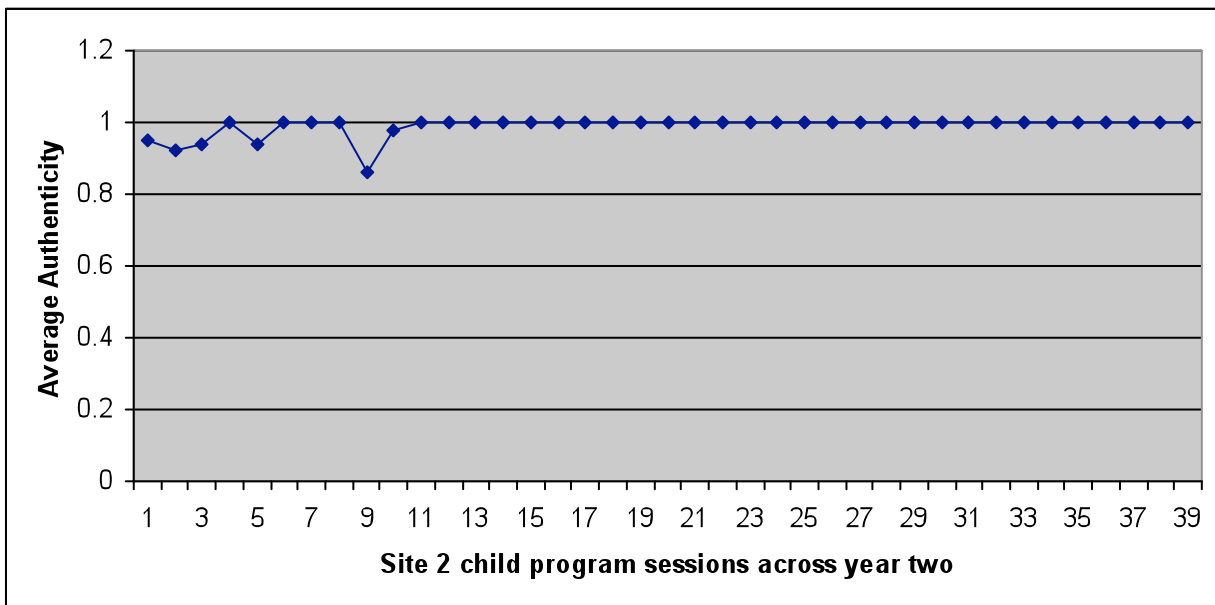
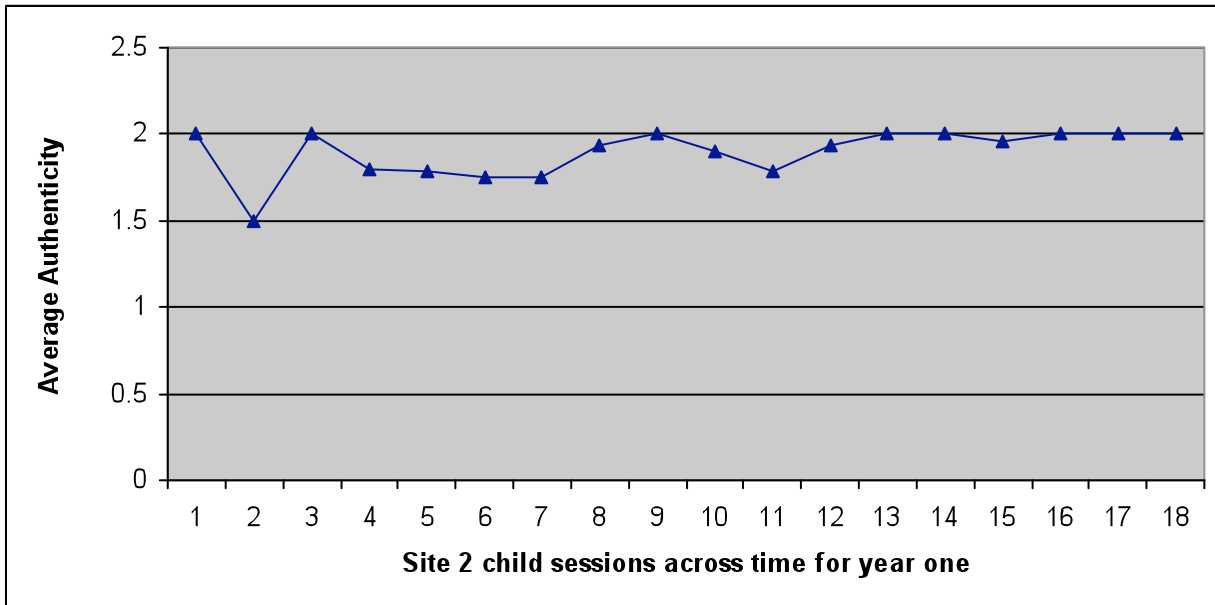


(Figure 2)

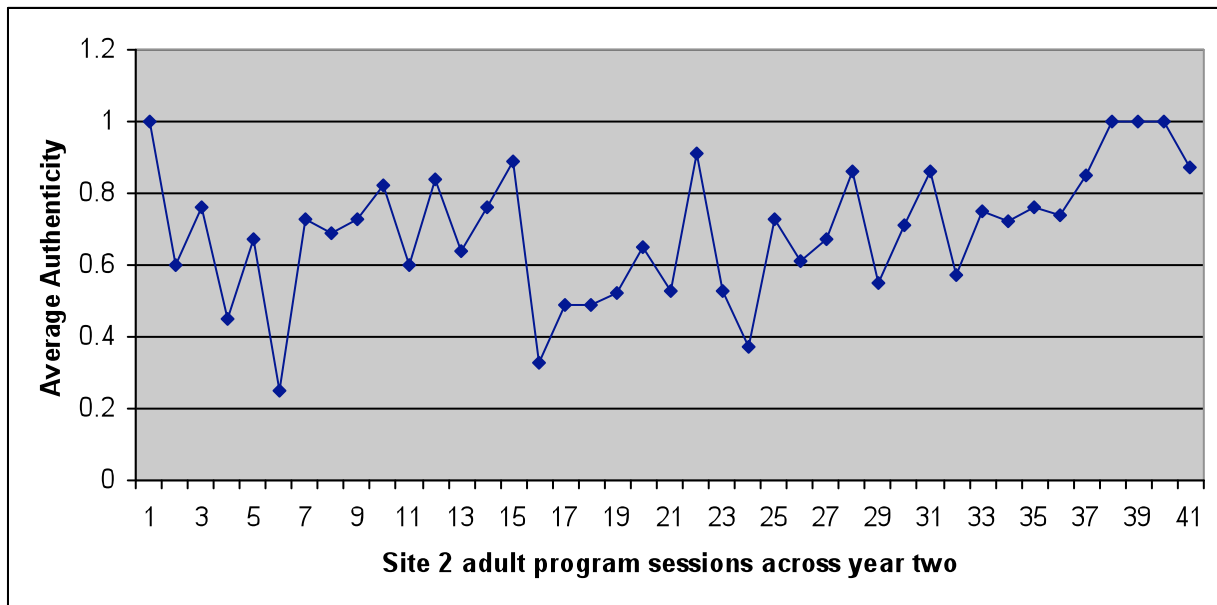
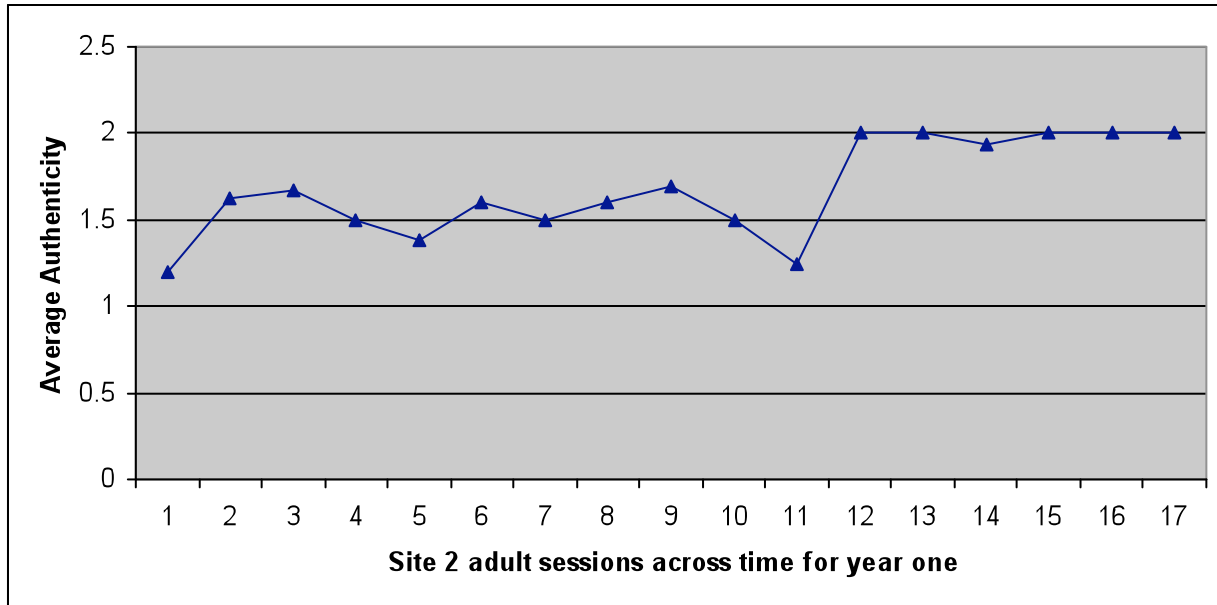


(Figure 2, cont.)



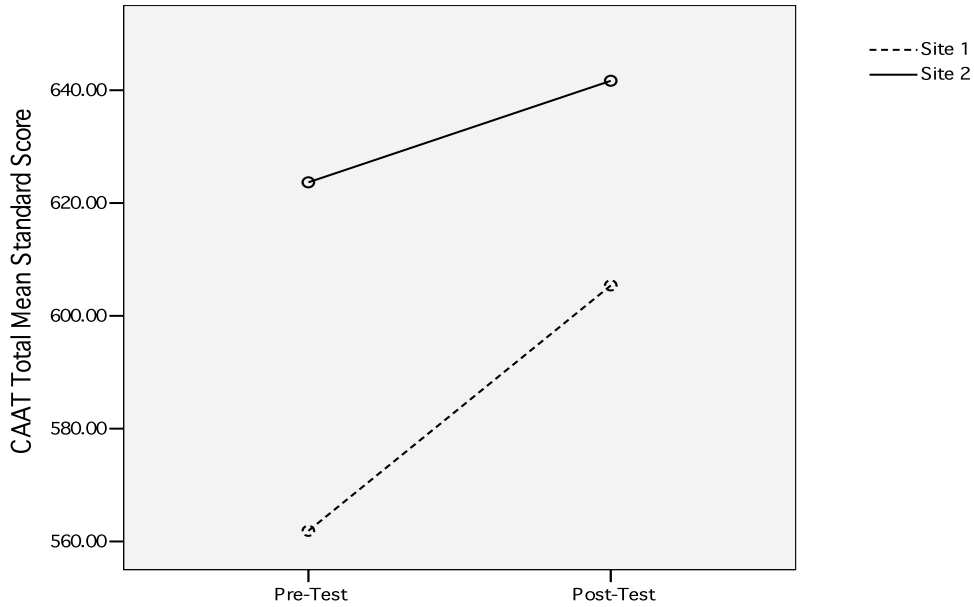


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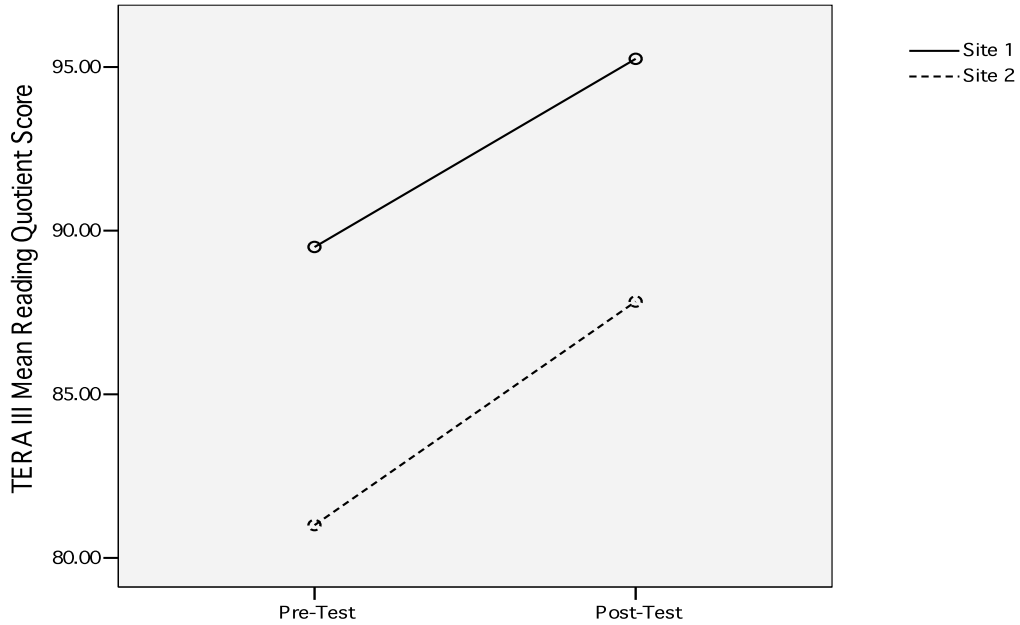
(Figure 3)

Change in CAAT Total Mean Standard Score for Adults from the Start (pre-test) to the End (post-test) of the Intergenerational Literacy Program/Literacy For Life Program across two sites.



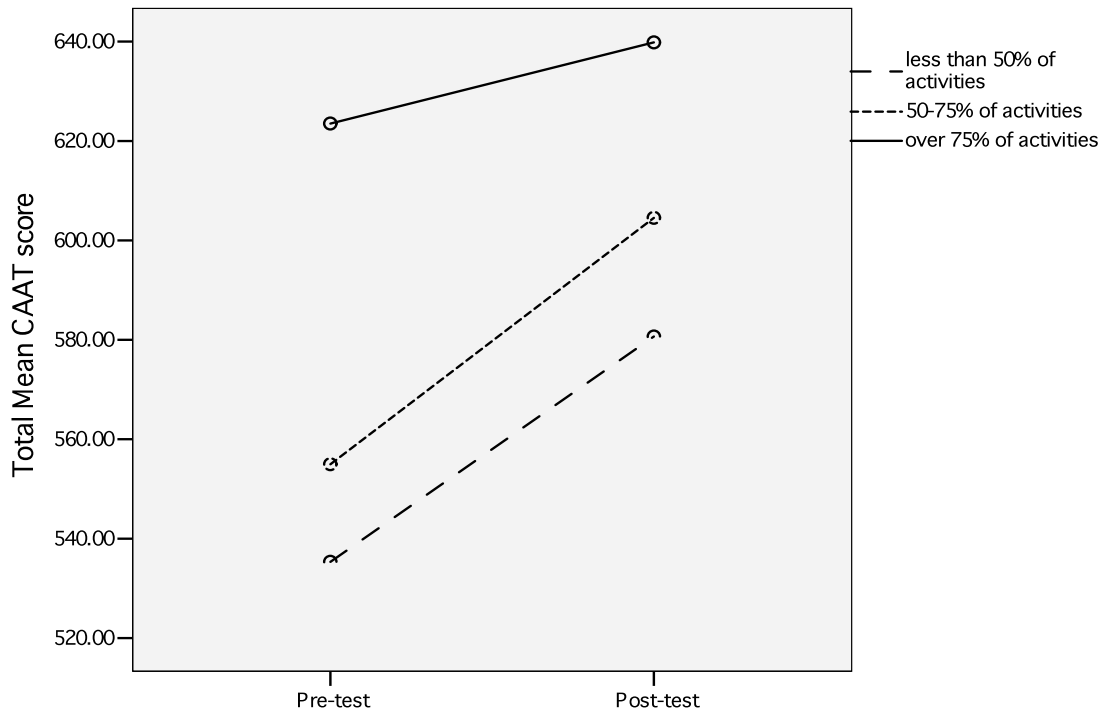
(Figure 4)

Change in TERA III Mean Reading Quotient Score for Children from the Start (pre-test) to the End (post-test) for the Intergenerational Literacy Program/Literacy For L Program Across Two Sites.



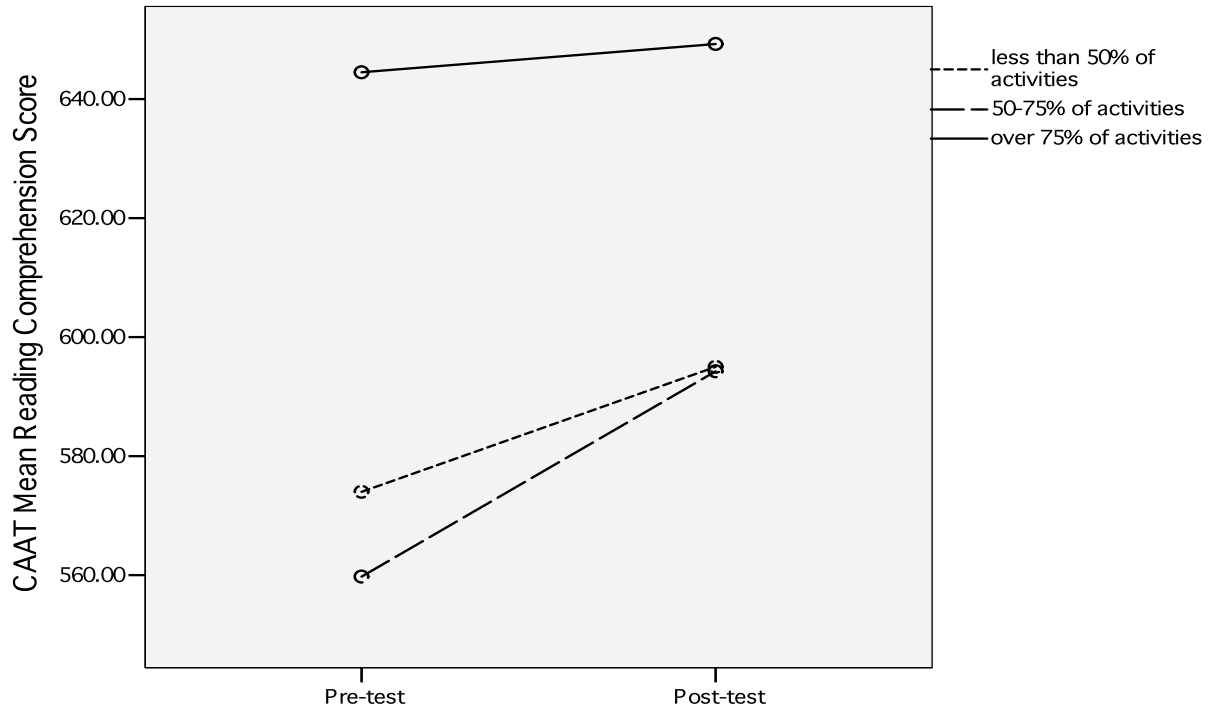
(Figure 5)

Adult Total Mean CAAT scores as a function of authentic activities participated in before and after the Literacy For Life program.



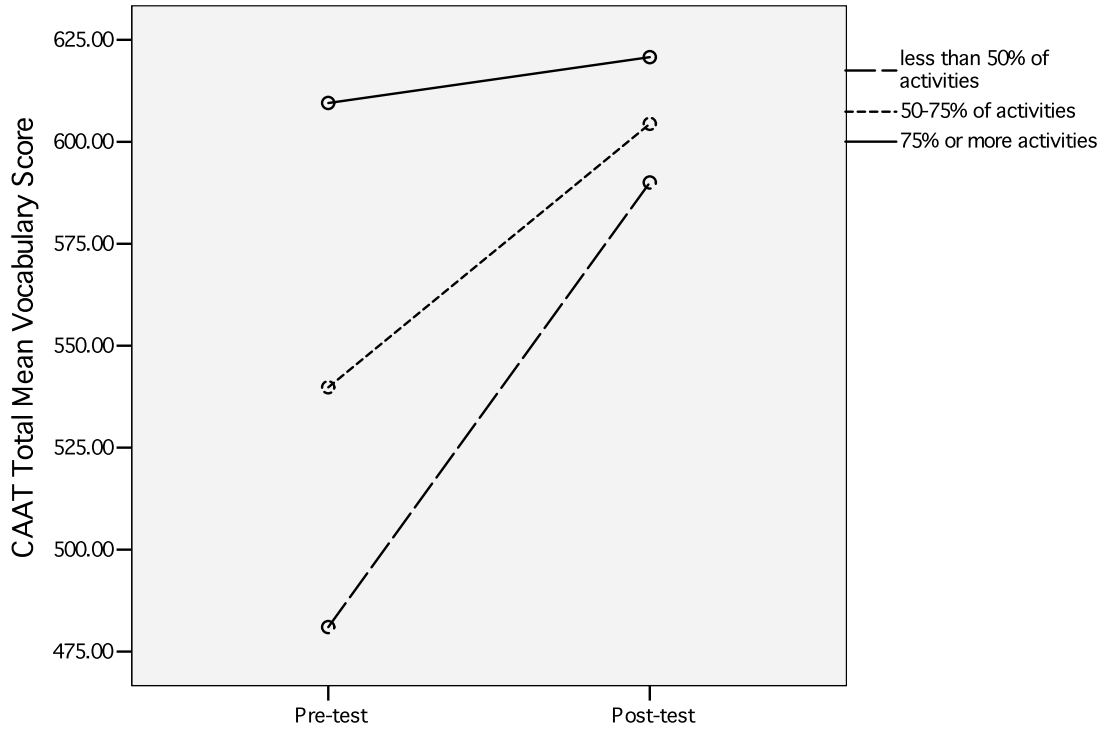
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Adult CAAT reading comprehension scores as a function of authentic literacy activities participated in before and after the Literacy For Life program.



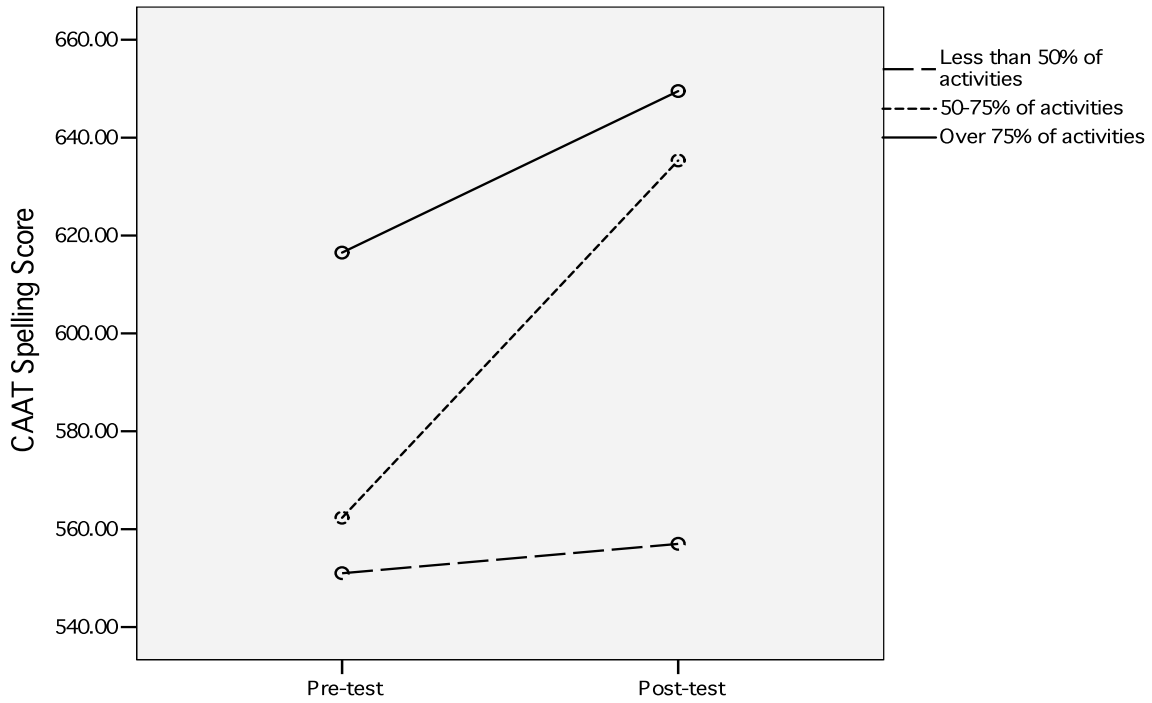
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Adult Mean Vocabulary CAAT score as a function of the amount of authentic literac activities before and after the Literacy For Life program.



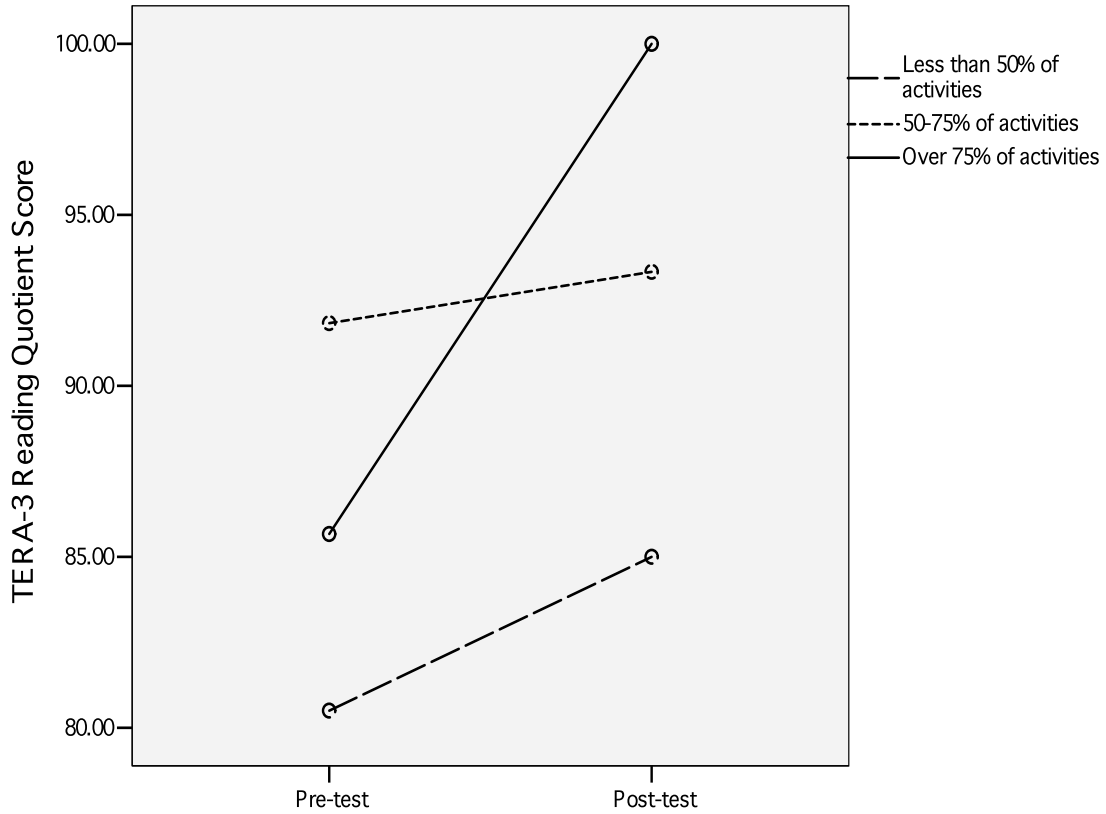
(Figure 5, cont.)

Adult CAAT Spelling score as a function of authentic activities before and after the Literacy For Life program.



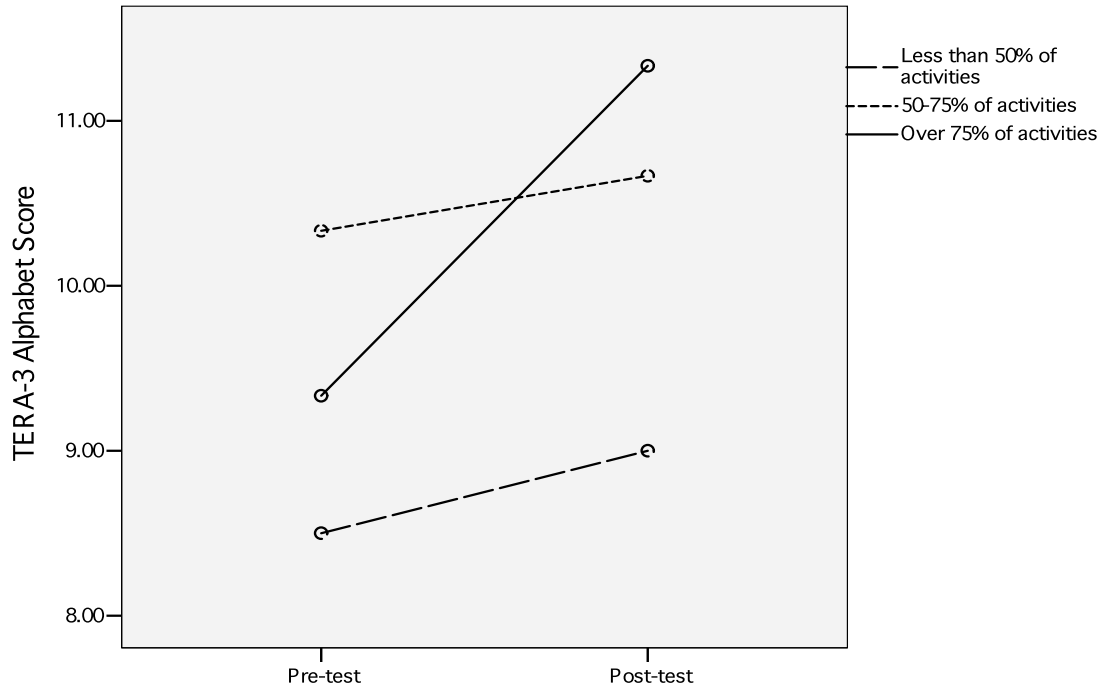
(Figure 6)

TERA-3 Reading Quotient Score as a function of the proportion of authentic literacy activities before and after the Literacy For Life program.



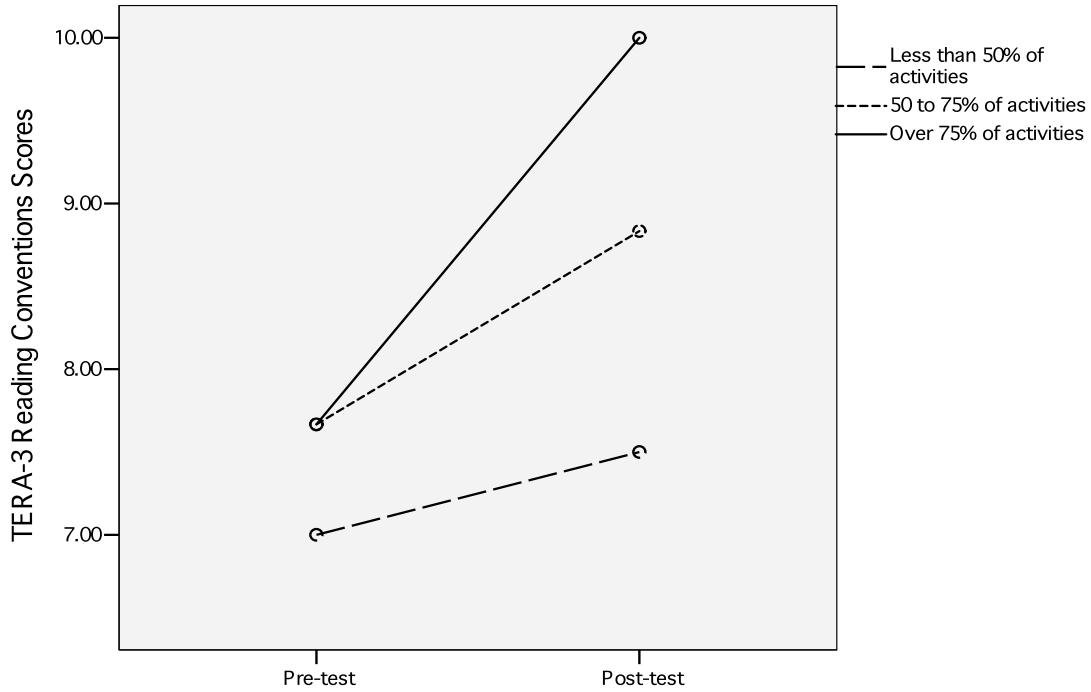
(Figure 6, cont.)

TERA-3 Alphabet Score as a function of authentic literacy activities before and after the Literacy For Life program.



(Figure 6, cont.)

TERA-3 Reading Conventions Scores as a function of authentic literacy activities before and after the Literacy For Life program.



(Figure 6, cont.)

TERA-3 Meaning Scores as a function of authentic literacy activities before and after the Literacy For Life program.

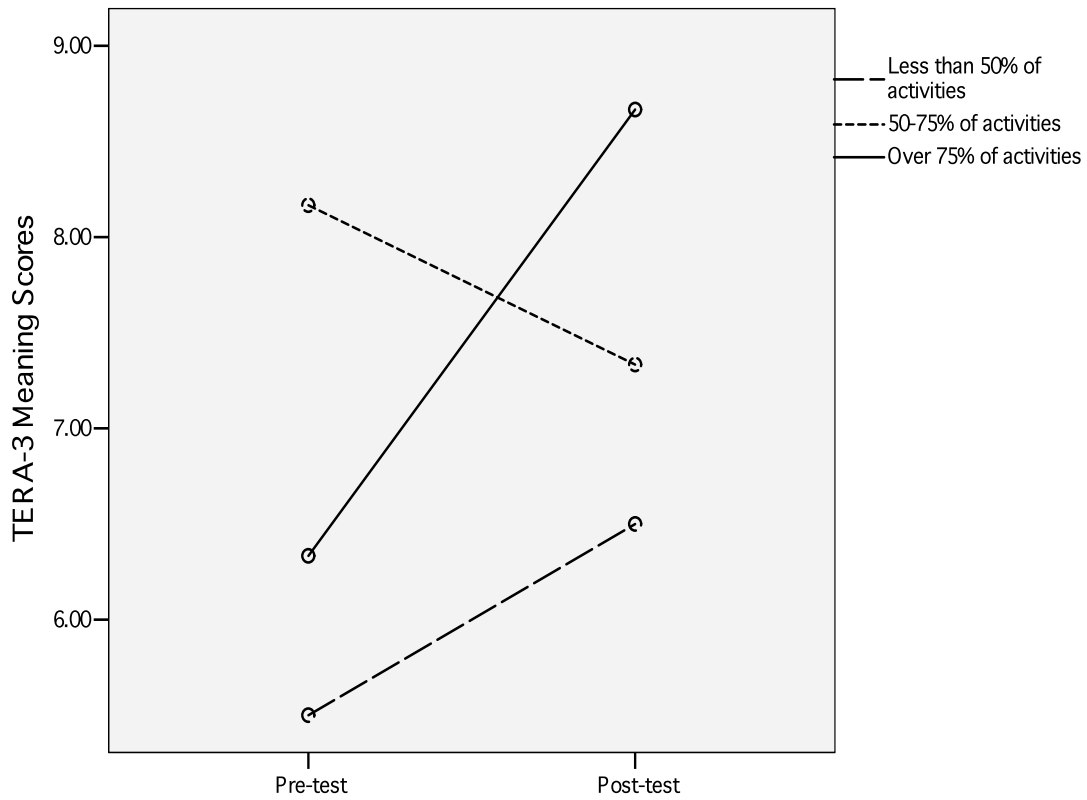


Figure Captions

Figure 1. The socio-cognitive cycle of print literacy development.

Figure 2. Levels of authentic literacy activity offered for adults and children in the Literacy for Life Program for Year One and Year Two, by site.

Figure 3. Adult English literacy growth from start to finish of the Literacy for Life Program.

Figure 4. Growth in emergent literacy knowledge for children from the start to finish of Year Two of the Literacy for Life Program.

Figure 5. Adult mean CAAT score changes as a function of degree of exposure to authentic literacy instruction in Year Two, across both sites.

Figure 6. Child TERA III mean score changes as a function of degree of exposure to highly authentic literacy instruction in Year Two, across both sites.