

**Corporation for National and Community Service
Social Innovation Fund Project**

Impact Study and Final Report

of the Subgrantee

Southwest Solutions

**English Language Learners Program
(ELLP)**

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**Southwest Solutions Social Innovation Project
English Language Learners Program**

Executive Summary

Program Background. Family literacy and social innovation programs operate on the assumption that intervention at the root level creates a chain of change that carries through to the symptomatic social issue. This research provides an initial study of this phenomenon in a widely practiced family literacy program model. The challenge is to reduce the achievement gap by investing in the future success of Hispanic families in Detroit for whom English is a second language spoken by students and their families.

The English Language Learners Family Literacy Program (ELLP) begins the work of validating the social innovation theory assumption that in order to achieve high and equal education levels for all children we must begin by 1) directly engaging parents who are traditionally disconnected from the schools into schools where they can participate in two-generation programs to improve their English language skills and become prepared for further education and career opportunities, 2) creating a school-wide culturally responsive climate that endorses the positive contributions parents can make to their children's learning, 3) engaging parents in classrooms as co-learners with their children, 4) teaching parents strategies to share at home to support literacy, and 5) helping parents develop affirming perceptions and skills relative to their capacity to support their children's education. ELLP is a two-generation model of intervention that targets economically insecure Hispanic/Latino children and parents in the same household by combining parent and child interventions to disrupt the cycle of intergenerational poverty and initiate greater potential for economic security and family well-being.

The ELLP provided multiple opportunities for families to build their capacity for partnerships with schools. Over 350 hours of interactive family learning and literacy programming were provided annually. Parents and their children engaged in classroom activities, Family Service Learning projects, and interactive literacy activities in their homes. Parents learned to negotiate their multiple roles as supporters and advocates of their children, decision makers, and collaborators.

The project goal is to improve learning outcomes for elementary students in grades one through three (herein Focus students) who are Hispanic/Latino. The project builds on the education provided by public schools with high percentages of students who are Hispanic, minority, and economically challenged by strengthening their parents' support of their learning. Adult education, with an emphasis on the development of English language proficiency, was provided for the parents of students in kindergarten through third grade. Childcare was provided for young (infants through toddlers) siblings of many Focus students. The intervention treatment was provided for parents. The children (Focus students) were with their parents during Parent and Child Together(PACT) Time® in their classrooms and during their Family Service Learning project, a component of Parenting Time. The Focus students were enrolled in the same classrooms with the same teachers as their peers in the Comparison group.

The intergenerational effects on children's (Focus students) reading achievement and growth rate, school attendance, and dispositions toward learning are the study's focus. The changes sought in students are secondary to the treatment – parents' enrollment in the English Language Learners Program (ELLP) in four schools¹. Parents participated in their children's classrooms as co-learners four times per week to better understand teachers' expectations and content standards. They attended weekly parenting sessions about how children learn and what they can do at home to enhance literacy development and assist with homework. Parents and their children within the program framework planned, implemented, and reflected on Family Service Learning projects at least twice a year during program years three through five.

The project served two target neighborhoods in southwest Detroit (Springwells and Vernor/Junction) and Chadsey Condon. According to the 2010 Census, these neighborhoods have a population of approximately 71,000 residents with a Hispanic population in excess of 52% in Chadsey Condon and about 57% in Springwells and Vernor/Junction. Approximately 10% of the residents in these communities are under three years of age. Nearly half (41%) of adults over age 25 in these communities did not graduate from high school. The lack of education is in part causal for the communities' 28% employment rate. Household family size and income

¹ During the program two charter schools discontinued and were replaced. Program year 5 two Detroit Public Schools discontinued. Program year 5 one public school and one charter school participated.

reported by parents indicate that all Focus students lived at some level of poverty. School free and reduced-lunch rates per school confirm that 99% of the student bodies qualified across all participating schools over the life of the SIF project.

The report is a summative analysis of Hispanic children’s literacy and language development in six Detroit elementary schools where a family literacy program engages their parents in adult learning and English language acquisition, parenting classes, and learning alongside children in their classrooms. The analysis is grounded by the impact question, “To what extent does the ELLP increase education-related parent behaviors, improve student school actions (attendance and discipline), and increase student reading achievement?”

The question was explored through a quasi-experimental design with Comparison groups. Participating schools have a) a high Hispanic student population with low literacy achievement, b) a high Hispanic parent population that qualified for ELL support, and c) a willingness to work with partner organizations and participate in on-going reviews to continue to improve their adherence to program protocols.

The treatment plan involves preparing and engaging parents of Hispanic kindergarten through 3rd grade students in their schools to support children’s learning. The intervention is a four component (Adult Education, Parenting Classes, Parent and Child Together (PACT) Time, and Children’s Learning) family literacy and learning program. Parents also design and manage community service learning projects each semester. Their children participate in the projects.

Student achievement, attendance, and academic mindsets were analyzed with a quasi-experimental design. The program coordinator is a woman familiar with the community and fluent in Spanish. She matched (same teacher, grade, ethnicity, and gender) each child of the ELLP parent with a child (student) on the official school class roster. Parents’ active and passive consent forms were collected for all students in the classroom.

Student data collection (pre and post *Teacher Report on Student Performance -TROSP* form) includes the student’s reading level as indicated by standardized test data, *STAR Reading Assessments* or *NWEA-MAP Reading Assessments*. Sample sizes varied per year and were reported in Annual Implementation Reports (see Appendices D, F, G H). For the final impact

study the *TROSP* established baseline equivalence and then compared 271 Focus students (children of parents enrolled in the ELLP project) and 342 matched students. The evaluators randomly chose one of two matched students identified for each Focus child in kindergarten through third grade (n = 270). Daily attendance, academic task behaviors and attitudes, and reading achievement were compared.

Year One (2012-2013) was designated as a Pilot Phase of the Subgrantee Evaluation Plan (SEP). A formative evaluation period allowed for SEP and Institutional Review Board (IRB) approval. The SEP stayed on track to achieve Moderate Evidence according to U.S. Department of Education standards. The SEP was revised in 2016 (Appendix W) to accommodate the discontinuation of two schools (match funds could not be levied to sustain the program in four schools).

This study concluded, that after an examination of the data reported annually in the Implementation Study Reports, that children of parents in Hispanic families enrolled in Southwest Solutions' English Language Learners Program demonstrated positive reading achievement outcomes that exceeding those of their matched peers in terms of reading achievement and reading growth rates (kindergarten, first, and third grades). Using the matched pairs, the Focus group had a gain of 22.5% reading at or above grade level while the Comparison group had a loss of -2.0%. Differences in mean and variance were found in the growth rate of the two groups, with the Focus group having a more rapid growth rate. The Focus students have a stronger likelihood of making more appropriate progress towards grade level standards in later years than their peers in the Comparison group.

This Impact Study found that every program year and with aggregated five-year data that the Focus Students had better school attendance than Comparison students and minimal evidence of chronic absenteeism. The Comparison students with an attendance rate of 91.8% accrue 13 days or two and a half weeks of absences by the end of a school year that may create learning gaps, especially in the primary grades when instructional units are shorter. If a kindergarten child's attendance rate stays steady at 91.8%, he or she will enter 9th grade having missed around 25.1 weeks of instructional opportunities. Given a school year is 32 weeks (160 days), the chronic absenteeism reflects students missing 78% of a school year.

Differences in attendance rates were found each year, with Focus group students having significantly higher attendance than Comparison students. When examined further, those Focus group students whose parents were full participants had a higher rate of attendance than those Focus students whose parents were not full participants. The Focus group had substantially more students with a 95% attendance rate or better than the Comparison group.

When compared to the Focus group with parents in ELLP having full participation and themselves having a 95% average daily attendance rate over the same period, Focus students would have missed 8 days of school per year, or 72 days by the time they enter 9th grade. This average rate extrapolation means the Focus students would have less than half the absentee rate for the Comparison students. By the end of high school, the Comparison students would have missed 36.4 weeks of school, which adds up to one school year *plus* one month compared with the Focus students who would be absent over the Kindergarten through 12th grade time frame for just 20.8 weeks.

The Comparison group had seven students who were absent chronically (less than 70% attendance) while the Focus group had only two students with a pattern of chronic absenteeism. When one considers the average daily attendance rate and the chronic absenteeism rate, the Comparison group is at a significant disadvantage from not being present at school as much as the Focus group. There is consequence strong likelihood that the chronically absent Comparison students will not graduate high school and will perpetuate the intergenerational cycle of low education and poverty to their children.

This study also concluded that parents' participation as measured by participation hours impacted Focus students' reading achievement. The results of the ANOVA showed that there was a significant effect of the participation level of the family with the reading achievement at the $p < 0.05$ level for the three conditions. $[F(2,512) = 8.08572, p = 0.000]$. Pre and Post Family Interviews show an increase in interactive literacy behaviors for parents of Focus students. Home visit reports (by project staff) show significant improvements in the literacy environments and family literacy behaviors (ex., reading aloud at least three times a week) in the homes of Focus students.

All results indicated that there was a significant effect of parent's level of participation on the dependent variables. The children of parents who were full participants exceeded the outcomes of students in the comparison group and in many cases the outcomes achieved by children of parents with less than full participation. The data imply program staff must clarify the importance of persistence and regular attendance to parents when they enroll. Parents need to understand the benefits of full participation in terms of personal goal attainment and their children's learning outcomes. Replication of the ELLP may be framed by the tenet that rigorous two-generation program designed to advance parents' literacy, English language proficiency, work-force preparation, self-efficacy, and social capital are intensive and appropriate for families most in need of adult learning and parenting educational interventions. Intensive family literacy programs such as the ELLP are equipped to serve fewer parents with greater needs for multiple supportive services than programs designed to increase the number and type of activities parents participate in at their children's schools.

Family literacy and learning program designs function most efficiently and are sustained over time when policy makers, educators, and service providers work together. These programs provide educational and social-emotional supports that highlight pathways to exit poverty and, over time, enter a state of economic security. The ultimate goal of family literacy and learning programs is that families support learning and ensure their children's educational success so that economic security and a legacy of family well-being are passed from one generation to the next.

**English Language Learners Program
Southwest Solutions Final Report and Impact Study**

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Southwest Solutions
Social Innovation Fund: English Language Learners Program

IMPACT STUDY – FINAL REPORT

INTRODUCTION

Type of Evaluation

This document is the Impact Evaluation Final Report of the English Language Learners Program (ELLP), a Social Innovation Fund program granted to the United Way for Southeast Michigan and subgranted to Southwest Solutions in Detroit, Michigan. The English Language Learners Program (ELLP) was a two-generation intervention with a theory of change that connected changes in one generation with changes in the other. Specifically, the theory was based on the belief that educators must build adults' (parents') capabilities to support their children as learners, if they want to improve children's academic outcomes.

This study covers four of five years of program operation from 2013 – 2017. The first year of the program (2012 -2013) was designated as a Pilot Year due to the mandate that a Subgrantee Evaluation Report had to be written and approved by an external assessor prior to actual receipt of funding. Rather than deny programming at sites chosen for the project for an unknown period of time, Southwest Solutions initiated program services with its match funding. The Pilot Year was analyzed as an Implementation Study (Appendix D).

Interim Evaluation Reports were provided for project years 2, 3, and 4. The annual reports were approved by the external evaluation/assessment contractor, JBS. Data analysis for project year 5 is included in this analysis. The annual reviews affirmed evaluation findings that the Subgrantee Evaluation Plan (SEP) was followed with fidelity and on track to meet criteria for Moderate Evidence (What Works Clearinghouse). The intended audience includes Southwest Solutions (the project subgrantee), the United Way for Southeast Michigan, and the Corporation for National and Community Service Social Innovation Fund reviewers. The data presented and analyzed in this report will ground future publications with the intended audiences of educators and family service providers.

The ELLP addressed unmet educational challenges of Hispanic families as they adapt to the demands and expectations of formal education. It provided comprehensive family literacy services to low-income, monolingual Spanish speaking parents/caregivers and their children in Kindergarten through fourth grade. Some of the ELLP schools provided child-care for younger children birth to three years of age. Young children's outcomes are not addressed in this study because the sites were frequently reallocated by the principals because of overcrowding due to increasing enrollments and competing priorities for that space in the school. Additionally, minimal child-care services were available during the fifth year and at only one school.

The goal of ELLP was to expand 400 parents' English language skills, efficacy, social capital, and interactive literacy behaviors so that their 400 children (identified as Focus students) attend school regularly, develop academic/ growth mindsets, and become successful readers.

Program Background and Problem Definition

Family literacy and other social innovation programs operate on the assumption that an intervention at the root level creates a chain of change that carries through to the symptomatic social issue. The ELLP is a two-generation educational intervention that reduces the achievement gap between Hispanic students, many who are English learners, and other demographic groups. The strategy is to simultaneously promote school engagement, family literacy, and English language proficiency in Hispanic parents/caregivers and their young elementary school-age children.

Children cannot thrive and enjoy healthy wellbeing when their parents struggle economically. Poverty is often the result of an intergenerational cycle of low education for parents and limited educational success for their children. American children who live in poverty for just a single year are much more likely to grow up to be poor adults than children who never experience economic struggles (Page, 2017). Poverty and literacy, two barriers to wellbeing, are handed down generation to generation. Families with young children are much more likely to be poor than any other segment of our population. Recent economic trends raised concern for the future of young Detroit children who are raised in families for whom English is a second

language², or not spoken at all. The purpose of the ELLP was to provide a school-centered educational program designed to end the cycle of poverty and low education by strengthening literacy traits in Hispanic families living in southwest Detroit.

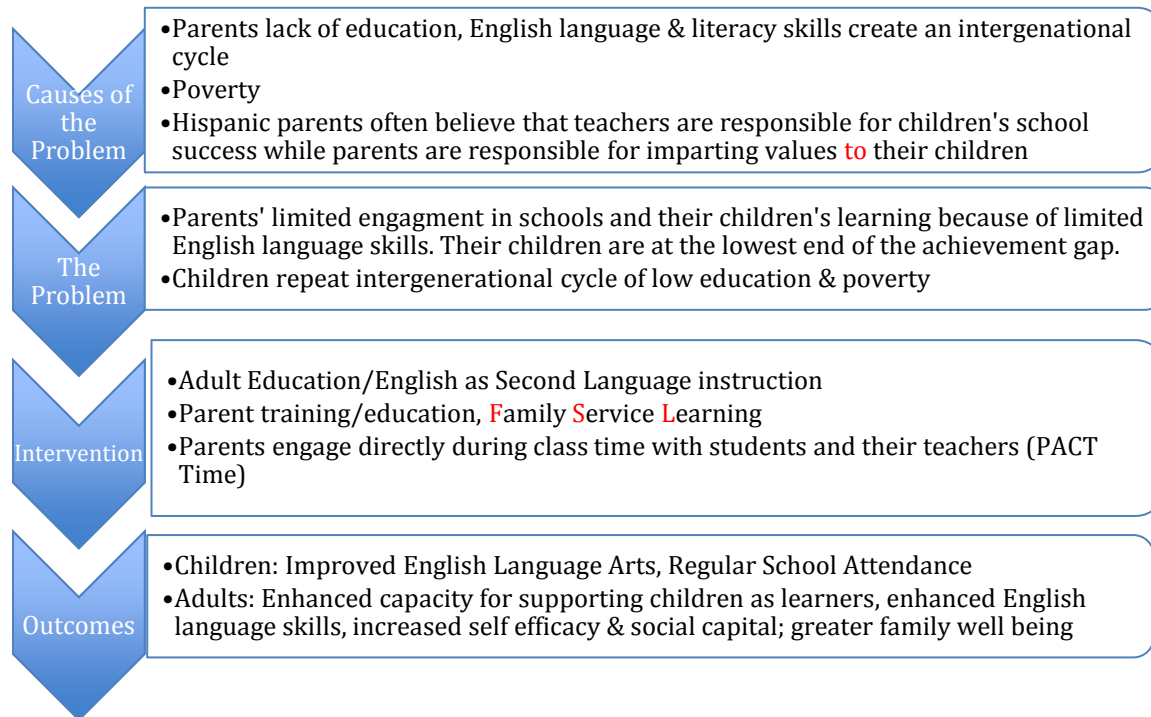
The project served two target neighborhoods in southwest Detroit, Springwells and Vernor/Junction and Chasey Condon. According to the 2010 Census, these neighborhoods have a population of approximately 71,000 residents with a Hispanic population in excess of 52% in Chadsey Condon and about 57% in Springwells and Vernor/Junction. Approximately 10% of the residents in these communities are under three years of age. Nearly half (41%) of adults over age 25 did not graduate from high school. The lack of education is evident by the communities' 28% employment rate.

Program sites (schools) were located in the target neighborhoods and were selected because each met the study criteria: a) a high Hispanic student population with low literacy achievement, b) a high Hispanic parent population that qualified for ELL support, c) commitment to collecting data within prescribed parameters, and d) a willingness to work with partner organizations and participate in on-going reviews to continue to improve their adherence to program protocols.

ELLP findings from previous program years validated the social innovation theory assumption that high education levels for English learners are achieved when the intervention 1) directly engages parents in a school-based adult learning program to improve their English language skills, 2) creates school-wide climates that endorse the positive contributions parents make to their children's learning, 3) engages parents in classrooms as co-learners with their children, 4) teaches parents strategies to support literacy at home, and 5) helps parents develop affirming perceptions and social capital relative to their role in their children's education.

² English as Second Language (ESL) and English Language Learners (ELL) are used interchangeably across research studies cited in this paper. The current term (US DED, OELA) is English learners.

Figure 1
Family Literacy as Social Innovation



Family Literacy. The goal of the English Language Learners Program (ELLP) was to improve learning outcomes of young children and their parents. ELLP was a comprehensive two-generation program that provided adult education, parenting support, and weekly opportunities for parents to join their children during lessons in elementary school classrooms. The adult education classes strengthened parents' English language skills and academic knowledge (ex., math, reading). The adults also engaged in weekly parenting classes where they learned ways to support their young children as learners and ways to be actively engaged in their school. They also planned, implemented, and reviewed family service learning projects. During Parent and Child Together (PACT) Time parents joined in their children's classrooms and participated in learning experiences. The components were integrated to strengthen parental engagement and student learning through a holistic family-centered approach.

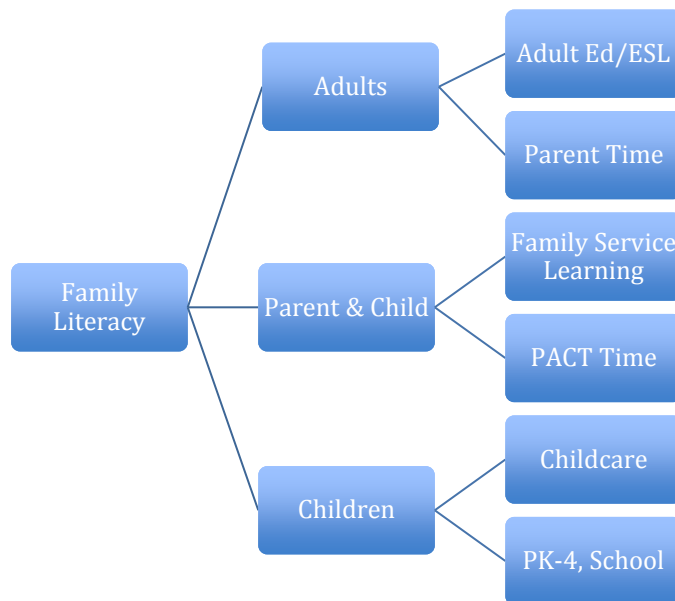
Intervention Program Model

Comprehensive two-generation learning emphasizes the provision of education, social capital, and other essential supports to create a legacy of well-being and prosperity that is handed down from one generation to the next (Ascend, 2016). The ELLP was based on a Family Literacy program model founded by the National Center for Family Literacy (Darling, 2012). ELLP is an integrated system of educational services that addresses the needs of children and their parents as a family unit with the goal of eliminating the intergenerational cycle of low education and poverty. The model includes four components; Early Childhood Education, Adult Education, Parent Time, and Parent and Child Together (PACT) Time[®]. Comprehensive two-generation learning emphasizes the provision of education, social capital, and other essential supports to create a legacy of well-being and prosperity that is handed down from one generation to the next (Ascend, 2016).

The family literacy program model matches educational services with families' needs as determined by the level of the adults' literacy and barriers to work and educational success. The model fits the families who have not completed high school or GED[®] programs, who are unemployed during the day, and able to attend full-day programs for at least a school year.

Figure 2

English Language Learners Family Literacy Program Components



Adult Education. Adults attended daily classes (Monday – Thursday) set in their children’s schools. They developed English language proficiency, language arts, mathematics, and strengthen relationships with their children’s schools.

Childhood Education. Children of participating adults in ELLP were enrolled in the target elementary schools in kindergarten through fourth grade. In the final year, when the Impact Study sought to show all students of parents reported as Focus students, two fourth graders were matched with two Comparison students. Supportive early childhood childcare was provided for younger siblings if space in the school permitted.

Parent Time. Parenting weekly sessions provided time for sharing insights and concerns about child(ren) as learners. Parents planned and implemented Family Service Learning projects. Parents also prepared for and debriefed after PACT Time to clarify their classroom experiences. Parents were introduced to bilingual interactive activities that provided developmentally-appropriate strategies to engage both generations in learning. Book handling and read aloud strategies were essential components of Parent Time and PACT Time.

Family Service Learning. Family Service Learning activities provided opportunities for families (adults and their children) to develop and practice a variety of skills: organization, research, planning, reading and writing, and technology in contextualized and project-based learning. The projects they designed and implemented benefit the community (Cramer and Toso, 2015). Family Service Learning was added in Program Year 4 and continued through Program Year 5. It was embedded into the Parent Time component and was included in the criteria for full participation.

PACT Time. PACT Time enriches parents’ clarity about how learning styles, teacher expectations, and lesson content can be supported at home. It consists of daily opportunities for parents to learn together with their children during regular lessons in the classroom. Between 2004 and 2007 NCFL surveyed parents about their perceptions of PACT Time and of the 667 respondents, 94.1% “Strongly Agreed” or “Agreed” that they were more involved in their child’s education because of these sessions (National Center for Family Literacy, 2007).

PACT Time is a school-based family literacy program component that fosters what other researchers have described as a “culture of complementary or reciprocal learning” (Capse & Lopez, 2006). It is a form of expanding social capital that involves interactions within groups through which each person learns from others. During PACT Time, parents learn how classrooms function. They learn how to meet teachers’ expectations for learning, behaviors, and attitudes in settings shared with their children. At the same time, teachers learn how parents interact with their children. They provide parents with feedback about interactions that generate positive as well as negative results.

Prior Research

This study is the analysis of a family literacy program; a two-generation intervention to promote English literacy and learning in Hispanic families. Family literacy is a social innovation that fosters meaningful connections between schools and families through intergenerational opportunities for learning. Such connections are important because parent and school relationships and community ties are essential supports for school improvement. Parents who are actively engaged in schools and support children’s learning at home are critical attributes of high quality schools (Sebring, Allensworth, Bryk, Easton, & Luppescu, 2006). However, many schools and families need intervention programs that build home-to-school capacities for meaningful engagement (Henderson, Mapp, Johnson, & Davies, 2007). Capacity building is a strength-based effort that recognizes unrealized potential in families, communities, and schools that can be leveraged in support of children’s learning.

Family literacy is a two-generation theory of change where, a) education is the core, b) economic supports are provided (ex., transportation to and from the program, child care, and free and reduced lunch), and c) social capital (i.e., peer support, *la familia*, learning communities) “create opportunities for and address the needs of both vulnerable parents and children together” (Redd, Karver, Murphey, Moore, & Knewstubb, 2011, p. 16). Family literacy services nourish opportunities for parents to share learning with their children and with other adults during and beyond PACT Time, Parent Time, and the adult ESL classes.

Parents as Learners. Family literacy plays a major role in the English language and literacy development of parents as measured by pre- to post-gains on English language assessments; 63.7% of parents in family literacy programs made at least one ESL level gain based on the National Reporting System criteria (NCFL, 2012, p. 5).

Parents' literacy and English language gains are "passed on" to their children. Parents' years of schooling are an important socioeconomic factor to take into consideration in both policy and research when looking at school-age children (Davis-Kean, 2005). Nationally, 70% of mothers on welfare have reading skills in the lowest two proficiency levels on a measure of adult literacy. This fact is alarming because a mother's literacy level is one of the most significant predictors of a child's future literacy ability (Reder, 1998).

For young children in families where parents/caregivers are English learners, their English oral language proficiency is a powerful predictor of latter growth in reading comprehension. Young language learners with high English proficiency reach reading comprehension levels of their native speaking peers (Kieffer, 2008).

Young children engaged with adults in nurturing environments where curiosity, self-confidence, and cognitive risk taking are encouraged become prepared for formal education. These environments are as simple as bedtime routines where mothers read aloud to their children. Literacy is gifted from one generation to the next. When parents model reading behaviors, their children assimilate new literacy skills. Parents' influence on children's reading achievement is powerful. A mother's reading skill is the greatest determinate of her *children's* academic success. Mothers' reading ability outweighs factors that may impede literacy development such as family income and neighborhoods (Sastry & Pebley, 2010).

Research found that during a single program year, parents participating in family literacy programs set in five cities across the country, spent an aggregated total of 37,500 hours engaged in Adult Education/ESL, Parent Time, and PACT Time (NCFL, 2012). Over half, (51.0%) of the parents gained one or two ESL levels (NCFL, 2012). As their reading improved, they became more involved in their children's schools, and engaged in multiple reading activities at home (NCFL, 2012).

Self-Efficacy. Continuous participation in family literacy programs has positively influenced parents' beliefs about their capacity to support their children as learners (NCFL, 2012). Research views self-efficacy as an essential facet of motivation and other achievement behaviors (Schunk, 1984. For example, self-efficacy assessments can reveal parents' level of confidence related to being able to learn English, to help their child(ren) with homework, and to be active in school events. Strong self-efficacy about one's ability to become a fluent speaker of English does not assure an equal measure of self-efficacy related to being a homework helper or PTO president. It is a task-specific belief. When parents' self-efficacy is high in relation to their capacity to support children's learning they are more likely to engage in their children's schools and help with homework at home.

Family literacy programs have an impact on participating parents' levels of self-efficacy and the belief that they can play a significant role in their children's education and future. Changes in behavior and attitudes can be linked to the family literacy PACT Time and Parent Time program components. For example, parent engagement increased the type of school visits and the frequency of parents attending school activities (Levesque, 2013).

Parental Support of Children's Oral Language and Literacy. Children's experiences in family settings during early childhood become the best predictors of later life. Simply growing up within a family stimulates degrees of language and cognitive development. Families orient their children to ways of knowing and ways of being as the child attempts to define his or her "self." These systems of meaning can help or hinder children as they try to make sense of the world. The conventional reading and writing skills that develop between birth and the time a child enters kindergarten have a consistently clear relationship with later conventional reading skills (NELP, 2009).

Studies of families with preschoolers found that young children from low-income families tend to have more limited vocabularies and less developed oral language than children from higher-income families (Hart & Risely, 1995). Parents who nurture their young children's oral language development and early literacy skills (ex., receptive and expressive vocabulary) simultaneously foster school success (Sticht, 2011). Strategies to support children's language and literacy are

introduced to parents during Parent Time and reinforced by numerous school activities, such as parent teacher conferences, that ELLP parents attended during the school year.

Conventional reading and writing skills that develop between birth and the time a child enters kindergarten have a consistently clear and positive relationship with later conventional reading skills (NELP, 2009). Family literacy develops parents' English language skills, expands their vocabulary, and affects home reading behaviors that support children's oral language development and literacy skills. Researchers tracked the language use of Hispanic/Latino families when they are reading. Parents in the family literacy program exhibited significant changes from pre to post survey ($p < .01$) for three of six categories of reading everyday items (NCFL, 2012). The most striking change was decreases in "do not read" ($d = .24$) and "reading in the native language only" ($d = .39$) and an increase in "reading in English only" ($d = .31$). The results suggest that participating in family literacy programs has an impact on intergenerational literacy behaviors by increasing the amount of reading on the part of the parents.

The reading achievement gap is associated with changes in children's motivation to read and the development of their cognitive and social factors. Findings about 15-year-olds by the Program for International Student Assessment (PISA) on reading, math, and science (Borgonovi & Montt, 2012) accentuate the significance of the ELLP. The PISA study found that teenage students whose parents had frequently read books with them during their first year of primary school showed markedly higher reading scores than students whose parents read to them infrequently or not at all." (PISA in Focus, 2009, p.1). A robust 83.4% of parents, interviewed after a year in a family literacy program, believed their children would earn a college degree (Levesque, 2013). Findings underscore the importance of bringing parents into their children's schools to engage in learning and witness incremental steps towards college and successful careers.

Parental Engagement in Schools. Research about children's school success points to the importance of the family in children's development and academic achievement (Weiss and Stephen, 2009, as cited in Christenson & Reschley, 2010). The evidence is clear, when parents are actively involved in their children's education, their children do better in school (Epstein, 1996; Eccles & Harold, 1996 as cited in Booth & Dunn; Epstein and Dauber, 1991). A meta-analysis of family engagement and learning outcomes concluded that the most accurate

predictors of student achievement are that parents create a supportive home learning environment, express high expectations, and are actively engaged in children's schools (Henderson and Berla, 1994). It is important to underscore that each of these three activities look very different in different cultures (Trumbull, Diaz-Meza, Hasan & Rothstein-Fisch, 2001).

Other research cites the most determinative factor in parental involvement appears to be good parenting in the home situation. These studies and others (Desforges & Abouchaar 2003; Fantuzzo, MacWayne & Perry, 2004; McWayne, Hampton, Fantuzzo, Cohen, & Sekino, 2004) support a comprehensive two-generation intervention model set in schools where parents and their children develop essential knowledge and skills associated with educational standards.

School-Age Children Learning and Behavior. Educational success, as defined by high school graduation, can be predicted by knowing someone's third grade reading skills (National Research Council, 1998). Third graders with less than moderately established reading skills are not likely to graduate from high school. The ELLP targeted families with young children so that parents helped strengthen literacy at home during these critical primary years.

Family learning program evaluation analysis in Long Beach (California) Unified School District (LBUSD) measured the progress of students enrolled in second and third grade. Students who achieved a score of "proficient" or "advanced" met their grade level standards in English language arts and mathematics. The percentage of family literacy program students who rated proficient was compared to the percentages of English language learners who were also economically disadvantaged and to the percentage of students who achieved a score of Proficient or Advanced for each level. A higher percentage (62%) of family literacy program participants in third grade achieved grade level reading benchmarks compared to the Comparison students (57%) district wide in third grade (Appel, 2012).

Academic Growth Mindsets and Deeper Learning. Academic mindset (Dweck, 2006) and deeper learning (Ark & Schneider, 2010) are important constructs related to student success. Mindsets concern learners' behaviors, habits, and attitude toward school-related tasks. Students with a growth mindset view challenging school work as opportunities to learn and grow compared with students with fixed mindsets who believe they were born with the level of intelligence they

sense when challenged (Dweck, 2010). They eschew effort because difficult tasks are simply more than their brains can handle. Their counterparts with growth mindsets think they can become more intelligent over time (Blackwell, Trzesniewski, & Dweck, 2007). The framework of deeper learning is geared toward the skills, knowledge, and attitudes academically successful students acquire to meet the challenges of a rapidly changing world.

The deeper learning framework includes working collaboratively, communicating effectively, and learning how to learn (Farrington, 2013). These components are essential attributes of Dweck's (2006) model of growth mindsets —initiating tasks, being comfortable when working in groups, and knowing when to ask the teacher for help. All of these contribute to the development of positive attitudes about learning and generate successful learning outcomes.

Social Capital. An important outcome of strong family networks is the creation of social capital (Cramer, 2016). Peer support, contact with family friends and neighbors, engagement with children's schools, community participation, involvement in faith-based social networks, and workplace contacts manifest as social capital (Ascend at the Aspen Institute, 2012). Economically disadvantaged and immigrant families with minimal English proficiency require support to build the social capital needed to navigate school systems (Gordon, Bridgall, & Meroe, 2005).

Essential supports for school improvement are less likely to develop in schools located in communities with low social capital. This is because the degree to which community members work together on community issues and belong to local organizations and religious organizations create supportive relationships to uphold individuals during difficult times (Sebring et al., 2006). This research supports Family Service Learning projects embedded in the Parenting component that requires systemic work on multiple fronts grounded by coherent thought on how the service systems operate day to day over an extended period of time.

Many school leaders employ family literacy as a school improvement strategy because they understand the concept of essentiality. This is the notion that a school “works “in terms of its solid student achievement across demographic constructs when all essential supports are coherently integrated. These leaders collaborate with adult educators, LEA teachers, and

infant/toddler and preschool educators to ensure positive school climates and optimal learning experiences for the entire family.

Parents who know what their children need in everyday life and know what it takes to be successful in school are more likely to help their children navigate successfully through their education (Jeynes, 2011). As effective parent and school interactions become embedded in the system, principals, teachers, and staff become more responsive to families' needs as well as to class and cultural differences. The positive learning environment leads to greater understanding and respect among all involved. (Ferguson, Jordan, Wood, & Rodriguez, 2006).

Project History: Participating Schools

Over the funding period, the ELLP operated in six elementary schools for varying amounts of time. Three of these (Harms, Mayberry, Munger) were in the Detroit Public Schools. Harms was in the program for five years. Mayberry and Munger discontinued after Year 4 because of funding limitations. Phoenix Elementary, a Michigan Education Achievement Authority school, participated during program years one and two. ELLP was discontinued because of low family enrollment, spotty attendance, minimal buy-in from the principal and teachers, and few measurable outcomes. Lighthouse, a charter school, joined ELLP in Year 3 for the 2014-2015 school year. It was discontinued after one year because the Adult Education classroom relocated. Escuela Avancemos, a charter school, joined ELLP for Project Year 4 and continued through the final, fifth year. All schools had extremely low achievement and were some of the lowest in the Detroit area. More information on individual schools can be found in Appendix F.

Table 1

Participating Elementary Schools By Project Years

School	Year 1 Pilot Year 2012-2013	Year 2 2013-2014	Year 3 2014-2015	Year 4 2015-2016	Year 5 2016-2017
Avancemos				√	√
Harms	√	√	√	√	√
Lighthouse			√		
Maybury	√	√	√	√	
Munger	√	√	√	√	
Phoenix	√	√			

Overview of the Impact Study

This quasi-experimental impact study examined a self-selected group of parents, who participated in ELLP program activities, and their children. Depending on the variable, adult data were examined using a single group design or a between group design formed by criterion (cutoff). Child data were examined using a between group design formed by matching. The study compares young Hispanic children whose parents are participating in the study to young Hispanic students in their class whose parents are not in the ELLP. It investigates how changes in adults impact their children.

In this aggregated study, parent and student outcomes from program years two through five were investigated. 313 parents enrolled in ELLP. 180 of them completed 150 or more hours of program activities and thus were Full participants while 133 parents completed less than 150 hours of program activities and were Partial participants. In 29 of these 313 families, the K-4 Focus child was not identified, and no student data was available. Several of these were families that moved in the beginning of the year. Of the 284 that were identified, 13 were students with no data, most of whom were preschool children. The aggregated analysis was conducted for 271 Focus children. One student did not have any Comparison children and therefore was

removed when the analysis was for matched students. The 270 matched students were selected from the 570 Comparison pool. The final matches for analysis had a Jaccard coefficient of 0.775 [$J(329)=0.775$] showing a high degree of similarity in our matches.

Figure 3
ELLP Logic Model

Situation: •Young students of Hispanic, undereducated ELL adults who like their parents have minimal academic success in schools where increasing parental engagement is a priority. •Families benefit from support that builds school-to-home learning and greater parental engagement in schools.
 •School staff support /cultivate positive environments for parents to learn how to engage in learning.

Inputs	Outputs		Outcomes -- Impact		
	Activities	Participation	Short <i>(less than 150 hrs of parent participation)</i>	Medium <i>(after 150 hrs of parent participation)</i>	Long <i>(Multi year)</i>
<ul style="list-style-type: none"> -Instructional leadership (principals) and staff buy-in -Space in schools for the adult education and parenting classes -Recruitment & enrollment of Hispanic parents committed to at least one academic year of full program participation -Hispanic parents seeking ways to reach their educational and work goals -Family literacy professional development and technical assistance for principals and teachers -SWCS program management to assure fidelity to program design and evaluation protocol 	<p>Children:</p> <ul style="list-style-type: none"> -Infants/toddlers receive developmentally appropriate care and opportunities for learning -Engage in classroom learning alongside parents (PACT Time) -Attend OST events with parents - Share literacy and learning with parents at home <p>Parents:</p> <ul style="list-style-type: none"> -Regular participation in adult education, parenting classes, PACT Ttime -Practice English skills -Engage in school activities and OST -Read aloud and model literacy to children at home. 	<p>Approximately 25 Hispanic/Latino parents of students in grades pk-3 per school (Total N=100 per year)</p>	<p>Children:</p> <ul style="list-style-type: none"> -Daily school attendance rate improves -Demonstrate appropriate school behaviors <p>Parents:</p> <ul style="list-style-type: none"> -Regular parent attendance in program components -Communicate with teachers and staff about school related matters -Report positive indices of self efficacy relative to learning, literacy, and expectations for children’s achievement 	<p>Children:</p> <ul style="list-style-type: none"> - Improved student school readiness (kindergarten) - Increased socially appropriate school behaviors - Increased daily attendance - Increased achievement in literacy and English <p>Parents:</p> <ul style="list-style-type: none"> - Increased engagement in children’s learning at school - Develop and practice strategies to help their children learn at home -Profess positive aspirations for their children’s educational outcomes 	<p>Children:</p> <ul style="list-style-type: none"> -Age appropriate reading development -Achieve at least mean national norms for grade level achievement -Prepared for college and careers <p>Parents:</p> <ul style="list-style-type: none"> -Maintain engagement in schools and support learning at home -Prepare children for subsequent educational steps <p>Community:</p> <ul style="list-style-type: none"> -Expansion of program in number/grades at school site and/or expansion to other schools based on evidence from original sites and cohorts.

Assumptions: Schools have strong infrastructures for Hispanic family engagement, and are connected with an adult education program.

External Factors: Work schedules, barriers due to poverty, such as lack of reliable transportation.

Impact Research Question and Findings

To what extent does full participation³ in the ELLP (Independent Variable) increase education-related parent behaviors (Dependent Variable), improve student school actions (Dependent Variable), and increase student attendance and achievement (Dependent Variable)?

Confirmatory

Children of parents who fully participate in the ELLP will

- exhibit strong annual attendance rate equal to or greater than the mean daily attendance rate for the matched sample group,
- exhibit appropriate school-related behavior as evidenced by equal or greater improvement in school-related behaviors (i.e., academic mindset) than the matched group based on a teacher-rated student behavior scale, and
- make greater progress towards their grade level for the end of year literacy assessment than the matched group⁴.

Parents who fully participate in the ELLP will demonstrate strong literacy-supporting parenting behaviors and engagement with their children's learning as evidenced by

- pre- to post-increases for reading/language scores on the *Basic Education Skills Test (BEST)* for English language learners in terms of performance levels set by the Adult Basic Education National Reporting System,
- pre- to post-increases in the number and frequency of school engagement behaviors,
- pre- to post-increases in the number and frequency of home and family literacy behaviors, and
- pre- to post-increases in the number and frequency of social capital and self-efficacy affirmative responses.

³ Full participation = 150 contact hours (Calculations based on 24 full weeks of instruction @ 11 hrs per week and 60% attendance).

⁴ Parent outcomes are examined in a separate report as the Focus of the UWSEM was an early childhood effort to ensure school readiness.

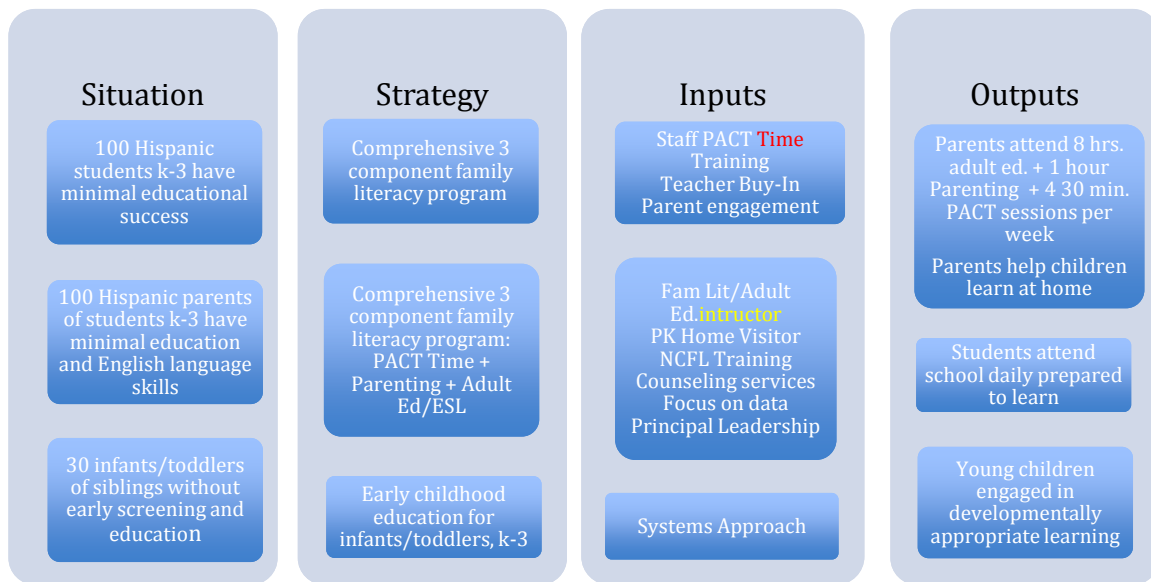
Implementation Research Question and Findings

What is the level of fidelity at which the program was implemented? If fidelity level is not high (as measured by *Benchmarks* mean scores on seven indicators of program implementation), what strategies are used to get back on track and what was the result of those strategies?

Implementation was addressed during the Pilot Project Year 1. The Implementation addressed Fidelity to Program Design whereby adult (parents/caregivers) regular daily attendance was analyzed. All adults were expected to demonstrate regular daily attendance in Adult Education, Parenting, and PACT Time. There was an expectation that the content of Parenting and lessons learned during PACT Time would be transferred to the home to enhance intergenerational learning.

Figure 4

Program Implementation Study Design



Fidelity was assessed in the following aspects

- adherence to protocols (example: all teachers trained) as outlined in the NCFL Manual,
- sufficient opportunities for parents to engage with the school, and
- appropriate environment for the activities (play area for toddlers, room for parent meeting, available technology, etc.).
- adherence to timelines, and

- complete data collection and management of data (properly stored and retrievable).

The logic model (Figure 3) is directly connected to the Implementation Study and research question.

Program Quality: The quality of the overall program during the Pilot year was measured by using the Benchmarks rubrics during site observations. The Benchmarks tool developed by NCFL was used as criteria for evaluating the family literacy components and the school climate and resources. Four Benchmarks: Adult Education, Parent Time, PACT Time, and School Climate & Facilities were discussed. These Benchmarks directly addressed the program components and settings where the program operates. They led to very specific recommendations for the ELLP sites in improving implementation at their school.

Based on these assessments, the fidelity level in January of 2013 was moderate. Since that time, the evaluators reviewed the data depository, reviewed the NCFL manual, met with each school in Detroit to discuss procedures and protocols, and provided specific recommendations for stronger adherence to the protocols. During year 2, adherence to timeline was monitored more closely. Because of multiple issues of incomplete data, uploads were reviewed regularly (years 2 through 5) to determine missing information. The district contact person was notified and responsible for finding and uploading the missing information, so that completed data was provided to the evaluators.

The Pilot Year was focused on program implementation. The student data sets collected during the Pilot Year were incomplete and some files were corrupted electronically. Subsequent Implementation Studies developed a stronger understanding of program fidelity issues, obstacles to data collection, program management, daily operational challenges, changes in the learning outcomes for students and their parents enrolled in ELLP. Strong, positive programmatic outputs and outcomes for adults/parents and outcomes for students were validated by the annual performance reports.

A complete analysis of Program Implementation and Fidelity for the four participating schools during the Pilot Year are found in Appendix D. Annual performance (implementation) reports are available in Appendices F, G and H

Contribution of the Impact Study

This study, framed by social innovation theory, reflects Stanford University's *Five Conditions for Collective Impact* (2011) that includes: a common agenda, shared measurement (across four schools), mutually reinforcing activities, continuous communication, and backbone support. It's a concerted effort at Southwest Solutions set in public schools and supported by funding and technical assistance by multiple entities (ex., CNCS (SIF), UWSEM, NCFL). This study of family literacy addresses social innovation and collective impact theories. The results of the study will be disseminated by NCFL, CNCS, and UWSEM. Findings will build awareness for educators and policy makers regarding the roles English language learner parents play in children's educational outcomes. Results will inform school administrators and staff of ways to support and cultivate culturally responsive environments that are welcoming to parents. Implications will support school leaders as they work to build relationships that increase the capacity of parents to support their children's educational needs. It also will inform adult educators about the knowledge, skills, and abilities parents need to support children's learning.

Level of Evidence. The impact analysis targeted a moderate level of evidence in exploring the research question "To what extent does full participation^[1] in the ELLP (Independent Variable) increase education-related parent behaviors (Dependent Variable), improve student school actions (Dependent Variable), and increase student attendance and achievement (Dependent Variable)?" According to the SIF guidance moderate levels of evidence require a study that has, high levels of internal validity but limited external validity achieved through the implementation of a high-quality experimental or quasi-experimental design. The analysis used an oversampled matched case control repeated-measures design with matching cases chosen randomly from a pair of potential matched controls. This reduces the chances of sample bias to a greater extent than simple matched case control designs (Rothman et al., 2008). The Jaccard Coefficient showed matches based on demographics at the 0.775 level [$J(329)=0.775$] indicating a high level of match between the Focus and Comparison groups. Further, intervention and control families were assessed at baseline on each measure to ensure statistical equivalence at baseline on all study variables. Independent samples t-tests revealed that there were no significant differences for key outcome variables between intervention and control participants.

A second factor impacting the level of evidence is the statistical power of the study. Power analyses were conducted for each impact analysis and indicated that the aggregate findings across study years had sufficient statistical power to find at least medium effects (Cohen's $d \geq .5$). In the case of the impact of full ESL participation the evaluation had sufficient statistical power to achieve a minimum detectible effect size (MDE) of $d=.21$.

The influence of differential attrition or missing data was limited and does not appear to be sufficient to have a detrimental effect on the level of evidence. Little's MCAR analyses were conducted on missing data patterns for all outcome variable and yielded non-significant chi-square statistics, thus failing to reject the null-hypothesis assumption of data missing completely at random (MCAR). This is consistent with the qualitative assessments of underlying factors related to missing data due to family transience (see discussion in Attrition and Missing Data Procedures section in the next section).

A final potential source of bias that could impact the level of evidence is the potential violation of independence due to nesting within classrooms, however, random effects models were conducted to estimate the variance associated with students being clustered within school and across all outcome variables the variance estimates were non-significant indicating that fixed effects estimates are unbiased and suitable for traditional analysis approaches.

Changes to the Subgrantee Evaluation Plan

In 2016, Southwest Solutions was granted permission to reduce the project to operate in two, not four, schools per year. A major concern was that the reduction of participants would be a threat to the moderate level of evidence established through the SEP design and prior outcomes. The evaluators worked closely with the UWSEM portfolio evaluator to explain attrition and data procedures. The Revised SEP was reviewed for CNCS by JBS, the company contracted as the national reviewer. The Revised SEP was accepted, and the reviewers determined that moderate evidence could still be obtained given that the aggregated data (program years 2 through 5) were sufficient to meet the criteria.

Attrition and Missing Data Procedures. The major factor considered for attrition in participating schools was transiency due to life circumstances. While high, it was not expected to be enough to severely limit the study. For the aggregated analysis the intervention group only needs a retention rate of 45% to achieve the minimum sample size. Only one match of the two Comparison students was needed to conduct the match with the intervention group. Two students were matched for each Focus child because it was anticipated that the intervention group having enrolled in a program might be more likely to stay than those who were not enrolled in a program. Additional ways of handling data were based on the variable and data type.

For the independent variable, missing data was not an option as the amount of time in the ELLP at the time the participant stopped participating provided the identification of the level (0= participated between 0 and 10 hours in ELLP program or Comparison child, 1=participated between 11 and 150 hours in ELLP program, and 2=participated >150 hours in ELLP program). No cases were excluded due to missing data on parent participation.

Each dependent variable was treated differently based upon the nature of the data for the variable and in order to minimize the impact of attrition on the study. (See Table 6: Coding Criteria.)

Statistical Design Summary. In addition to descriptive statistics, a T-test, and an F-Test analyses for variables each year, in the summary year, the MANOVA was used with multi-year data to determine significance of impact and power. Multivariate analysis of variance (MANOVA) is a generalization of analysis of variance that is an extension of the univariate ANOVA techniques. “The major distinction is that in ANOVA one evaluates mean differences on a single dependent variable, whereas in MANOVA one evaluates mean differences on two or more dependent criterion variables simultaneously” (Bray & Maxwell, 1985, p. 4). It helps the researcher determine whether each effect is significant for at least one of the dependent variables and is preferable to the multiple ANOVAs because it takes into account the inter-correlations among the variables (Garson, 2012).

Two major situations requiring the use of MANOVA were identified by Carey (1998) who stated, “The first is when there are several correlated dependent variables, and the researcher desires a single, overall statistical test on this set of variables instead of performing multiple individual tests. The second and, in some cases, the more important purpose is to explore how independent variables influence some patterning of response on the dependent variables” (Carey, 1998, p. 4).

The first step in the MANOVA procedure is the overall MANOVA test, which is analogous to the univariate F test in ANOVA, providing the overall test of significance. “However, in MANOVA, there is no single invariant test that is uniformly most powerful, even if all assumptions have been satisfied. For this reason, in MANOVA there are several test statistics that might be used to evaluate the overall null hypothesis. Because the various test statistics are based on different mathematical criteria, the result may vary based upon the test statistics chosen” (Bray & Maxwell, 1985). “The next step in testing the multivariate null hypothesis is to ascertain how large the eigenvalues are...[T]here are 4 ways of combining the information in the eigenvalues, and each of these ways leads to a unique test statistic....[They] are Wilks’ lambda, the Pillai-Bartlett trace, Roy’s greatest characteristic root, and the Hotelling-Lawley trace” (Bray & Maxwell, 1985, loc 253-257). If any of these tests result in significance, additional statistical procedures can be used to further probe the relationship among variables and to facilitate more complete interpretation (Bray & Maxwell, 1998, loc 387-389).

Two statistical models were used to conduct MANOVA analysis of aggregated data sets. The first analysis was conducted with data from Focus parents, Focus students, and Comparison student matches. It did not contain the education related parenting behaviors because no parent data was collected on Comparison students. (Table X: Coding Criteria -Student Data)

$$\mathbf{V}_p = \mathbf{V}_s + \mathbf{V}_b + \mathbf{V}_l + \mathbf{V}_{(s*b)} + \mathbf{V}_{(s*l)} + \mathbf{V}_{(b*l)} + \mathbf{V}_{(s*b*l)} + \mathbf{V}_e$$

p= ELLP Participation
s= student attendance
b=student actions - mindset, and behavior
l=student literacy achievement
e=error

The second analysis was conducted on data from Focus students and their parents. This analysis included education related parenting behaviors. (See Table X Coding Criteria- Focus Group.)

$$V_p = V_a + V_b + V_l + V_{(a*b)} + V_{(a*l)} + V_{(b*l)} + V_{(a*b*l)} + V_e$$

p= ELLP Participation
a=education related parenting behaviors
b=student actions - attendance, mindset, and behavior
l=student literacy achievement
e=error

Power Calculations. Power analysis for a MANOVA with three independent levels (0=participated between 0 and 1 hours in ELLP program, 1=participated between 11 and 150 hours in ELLP program, and 2=participated >150 hours in ELLP program) and three dependent variables was conducted in G-POWER to determine a sufficient sample size using an alpha of 0.05, a power of 0.80, and a small effect size ($f^2 = 0.25$) (Faul, Erdfelder, Buchner, & Lang, 2008; Dattalo, 2008). Based on the aforementioned assumptions, the desired sample size is 98. Based on this calculation, 50 students (50 whose parents participate in the ELLP program and 50 matched students whose parents are not in the ELLP program) provide an adequate sample size.

In a single year, there is little room for attrition without impacting the power of the study. In practice, this means that moderate to large effects could be identified within and between the groups with strong confidence in the results. Nevertheless, at the yearly level, we did not have strong confidence in our results for small effects.

However, our summary analysis is conducted with multi-year data. This aggregated data set provided sufficient sample size to detect all levels of significance and power. In the proposal, multiple imputation procedures were proposed. However, missing data was found to be limited and insufficient to impact level of evidence. Furthermore, our sample size was large enough to achieve the levels of significance and power projected even with the use of pairwise deletion on missing variable, but inclusion on variables for which the data was provided.

The 2016 Revised Subgrantee Evaluation Plan is found in Appendix D.

IMPACT STUDY

Approaches, Methods, and Statistical Analysis

Introduction

Theory of Change. English Language Learners Program (ELLP) was a two-generation intervention with a theory of change that connected changes in one generation with changes in the other. Specifically, the theory is based on the belief that educators must build adults' (parents) capabilities to support their children as learners, if they want to improve children's academic outcomes.

The study was designed to assess the impact of a family-based intervention on school-age children of Hispanic ELL parents. This impact was examined in terms of areas of education—related parenting behaviors, students' school actions (attendance and behaviors), and student achievement. The intervention was directed at the parent's growth. While the study investigated the primary impact on parents as the recipient of the intervention, it also examined the impact on students. The study only directly studied the outcome data for one child per family. However, if parent changes are reflected in changes for one child, the changes will be available for the other children in the family unit, thereby affecting the ability to create changes to intergenerational cycles of academic struggle.

Intervention Overview. ELLP focused on developing the capacity of parents to support family literacy. Family literacy is built on the assumption that in American society the family is the first and most important source of children's knowledge, values, social relations, and physical surroundings (Hayes, 2011). Children's entry level kindergarten skills and their family's ability to support literacy development are paramount for school success (Ramey & Ramey, 2000). See the ELLP Logic Model (Figure 3) for short, medium, and long-term outcomes of interest.

The intervention treatment was to introduce and reinforce ways for Hispanic parents to support literacy learning in their homes. Parents were immersed in an adult education program centered on building their English language proficiency – spoken and print (reading and writing) skills.

They also engaged directly with their children’s teachers and their children (Focus students) during daily lessons (generally reading or math) four days a week.

Program intervention took place Mondays through Thursdays throughout the school year. Parents in this Social Innovation Fund family literacy project received direct, explicit adult education centered on building English language proficiency. Technical assistance provided through the National Center for Families Learning advanced adult educators’ understanding of the importance of being sensitive to Hispanic cultural mores and the challenges associated with learning a new language. The study investigated how to help parents play active roles in their children’s education both in and out of school.

Impact Study Design

Impact Evaluation Design. The ELLP study addresses two levels of impact—parent (primary) and child (secondary). The study design for adult data was primarily a quasi-experimental, Single Group Design, while child data was analyzed using a quasi-experimental, Between Groups Design-Formed by Matching. An intent-to-treat model was used to minimize the impact of lost or missing data.

Intent to Treat. In this model all participants remained for inclusion in each data set. Anyone who had data for the area being analyzed was included regardless of whether that person had data for all components. Therefore, analysis was conducted on different numbers of participants depending on the area being analyzed. This methodology lessens the impact of missing data and mirrors the reality of real life. Tables 2 and 3 identify the number of participants analyzed for each area.

Table 2

Study Participant Flow – Adults

Study Timepoint	Number of People* Included	Number of People* Not Included	Notes
1- Family Enrollment in ELLP	313 families enrolled	0	All families that wanted to enroll were accepted
2-Assignment to Study Groups	180 Full participants 133 Partial participants	0	Groups were assigned after the program year ended based on amount of parent participation
3-Intervention Allocation	180 Full participants	133 Partial participants	Parents provided many personal reasons they did not complete the designated hours of attendance. *
4-Follow Up	None	Not applicable	Not applicable

Notes: * Reasons included returning to home country, pregnant, job change, illness, child care issues, and transportation issues.

Table 3

Study Participant Flow - Children

Study Timepoint	Number of People* Included	Number of People* Not Included	Notes
1- Enrollment Students whose Families are Enrolled in ELLP	284 Focus students	13 Focus students with no data points	Families represent parent/caregiver and Focus students
2-Assignment to Study Groups	284 Focus students 538 students in a pool of which 270 were randomly selected	13 Focus students and 282 Comparison students (not randomly selected)	Group assignment by parent participation level and student matching per grade level
3-Intervention Allocation	171 Focus students based on number of hours of their parents' participation in ELLP 100 Focus Group students with less than 150 hours participation 271 Comparison students (randomly selected from a matched pool)	1 Focus student had no match plus 13 Focus students with no data points	Treatment offered to all ELLP families. Students were not direct recipients of the treatment. The study looks at the secondary outcomes not the group (parents) directly treated by ELLP how the parents' changes are examined in relation to student changes in achievement, attendance, and academic mindsets. Student data were available regardless of the parents' hours of participation.
4-Follow Up	None	Not applicable	Longitudinal follow up was not conducted because public school system would not provide current data

Notes: * 29 of the adults did not identify which child was participating, nor were those children listed on attendance, achievement, or school behavior data records from the school sites.

Sites. During the impact study, six schools participated in the ELLP program for varying amounts of time (1 to 4 years) (Table 1, p.14). All sites met the study criteria for participation: a) a high Hispanic student population with low literacy achievement, b) a high Hispanic parent population that qualified for ELL support, c) commitment to collecting data within prescribed parameters, and d) willingness to work with partner organizations and participate in on-going reviews that continue to improve their adherence to program protocols.

Treatment and Comparison Groups. Every adult that enrolled in the ELLP program was included in the group results during the program year. At the end of the program year, the adult group was split into two groups based on amount of participation. The adults that participated in 150 or more hours of program activities were identified as belonging in the full participation group. The adults that did not participate in 150 hours of program activities were identified as being in the partial participation group.

During the program year, data was collected on two groups of students, children whose parents enrolled in the program and children whose families did not participate (gave passive consent) but who matched the Focus child on several demographic traits. At the end of the year, the children whose families participated in ELLP were assigned a group based on the amount of participation of their parents. Ultimately, three groups of children were compared: a) Full Focus group - students whose parents fully participated in 150 hours of ELLP activities, b) Partial Focus group - students whose parents participated less than 150 hours in ELLP activities, and c) Comparison group - a matched group of students whose parents did not participate in ELLP but were randomly chosen from a matched pool.

Sampling

Adult Sampling. Adult data were analyzed using a Pretest-Posttest Single Group Design. The ELLP enrollment cap is 25 families per school per academic year. Since this cap was not exceeded, all parents who wanted to enroll in ELLP were accepted and met the enrollment criteria. These criteria were: a) The family's ethnicity was Hispanic; b) Parents qualify as ELL based on scoring in the beginning or intermediate ESL level on *BEST Literacy*; c) Parents agreed to fully participate in the PACT Time and Parenting components of the ELLP; and d) A child attended pre-kindergarten (siblings of Focus students), kindergarten, 1st grade, 2nd grade, 3rd grade, or 4th grade (Years 4 and 5) at an ELLP site.

To examine the impact of intervention intensity, 60% (150hours) of the initial program time guidelines was used to determine full participation. After the program year was finished, the total adult group was divided into two groups: Full participation— 150 hours or more in program activities; and partial participation— less than 150 hours in program activities.

Child Sampling. Student data were analyzed using the Between Groups Design-Formed by Matching. All children of the ELLP enrolled families were included in the Focus group. For every Focus student, two other students were matched to create the Comparison pool. At the end of the year, after all data is collected, the Comparison pool for each student is numbered as C1 or C2. Using a random number generator for the numbers 1 and 2, an official Comparison student was identified for each Focus child.

Matching Groups. The matched Comparison group of two Comparison students per Focus child was selected by a parent liaison (Hispanic and proficiently bi-lingual) based on demographic data provided by the school or teacher. Comparison students were required to be Hispanic, be in the same grade, and have the same teacher to minimize differences in educational environment and instructional experiences. Beyond this requirement, students were matched on gender(female/male) and on English Language Learner proficiency (in ELL or not ELL), age (to minimize differences in comparing retained students with non-retained students), and IEP status (has an IEP or does not have an IEP). The two students with the most matched variables were selected as the matches. If more than two students had the most matched variables, names were drawn at random by the parent liaison.

Teachers knew who the Focus child was because parents came to the classroom regularly as part of PACT Time. They also knew who the Comparison children were because data was gathered on those students during the year. However, only one of the two Comparison children were used for analysis and the identity of that student was not determined until all data was collected. At the end of the year, the evaluators assigned a C1 and C2 to each Comparison child for the Focus child. Using a random number generator for 1 and 2, the evaluator identified the matched Comparison child for each Focus child.

If only one of the two matched students stayed enrolled at the school through the school year, that student became the match student for data analysis. In addition to stratified matching and the binary nature of the demographic data, the Jaccard coefficient was computed [J(329)=0.775]. It showed a high degree of similarity in the matches. Baseline equivalency was established on each variable with data in a pre-post design.

Attrition and Data Procedures. The aggregated data set provided sufficient sample size to detect all levels of significance and power. In the proposal, multiple imputation procedures were proposed to minimize the impact of missing data. Little's MCAR analyses were conducted on missing data patterns for all outcome variables and yielded non-significant chi-square statistics, thus failing to reject the null-hypothesis assumption of data missing completely at random (MCAR). It can be concluded that missing data was found to be limited and insufficient to impact level of evidence. Furthermore, our sample size was large enough to achieve the levels of significance and power projected even with the use of pairwise deletion on missing variables, but inclusion on variables for which the data was provided. (See Level of Evidence, p. 20 and Attrition, p.22.

Recruitment, Retention, and Informed Consent

Recruitment. Recruitment strategies at the schools included word-of-mouth from currently enrolled families and continued enrollment, open house in the fall, teachers' explanations of the program to eligible families, and invitations printed as flyers (in Spanish and English) that were given to parents when they dropped off and picked up their children during the first six weeks of school. The adult educator and project coordinator had face-to-face conversations with parents, teachers, and staff to generate interest and recruit families. Alternative strategies included holding an additional open house and asking enrolled families to bring friends who were eligible for the program. The recruitment and retention plans, guided by strategies long employed by programs initiated with NCFL funding, were managed by a project coordinator from SWCS. She was responsible for timely and accurate data collection and the upload of all assessments to the NCFL data system.

Retention. Retention was encouraged and rewarded with free books (in English and Spanish, three per Focus child), attendance rewards, and ongoing support such as connecting families with other community resources. The ELLP study design included two matched Comparison students for each student in the Focus intervention group. If one of the matched students left the school during the year, then then one match remained. If both matches remained through the entire year, then one of the two matched students was randomly selected (by the evaluator via a random number calculator) to be the final match for analysis. This process required that

50 students whose parents are in the program, and one matched student for each Focus child had to remain in the program, to obtain the minimum number for the power calculations. Retention rate needed to complete the study needed to be less than 50%. (See Power Calculations, p. 24.) The sample size of the study was five or more times the number needed.

Informed Consent. The *Family Consent Form* (NCFL) was distributed to all parents of children in prekindergarten through 3rd grade at the time of each family's enrollment. The tool ensured that the family understood their participation in the ELLP. A *Passive Consent* form was given to all parents of children in the Focus child's classroom. This form asked for permission to have the classroom teacher collect comparison data.

All of the research with human subjects' protocols associated with the ELLP evaluation were reviewed and approved by the Institutional Review Board of the University of Missouri-St. Louis. The Subgrantee Evaluation Plan was also shared with Southwest Solutions and the Detroit Public Schools.

Measures and Instruments

Parental engagement (school and home) instruments were developed by NCFL and have been used nationally to evaluate family literacy and learning programs with the same model (Kenan) as this study. These instruments are criterion based and have written protocols to standardize assessment. Other instruments accessed school gathered data that is reported to the state education agency. After each measure's instrument description, the variable it assessed is noted in parentheses. A Data Collection System manual was created for the project.

Benchmarks for Program Improvement (NCFL). The *Benchmarks* were used to determine program quality and improvement needs, addressed through NCFL technical assistance or program management. Program implementation and technical assistance needs were determined by the mean score for multiple indicators of seven program elements: adult education, parent time, PACT Time, Component & Program Integration, Recruitment & Retention, School Climate & Facilities, and staffing/data requirements. This was administered in the middle (winter) of the first year that a school joined the ELLP. (Fidelity)

District and School Surveys and Focus Groups. The surveys and Focus groups provided a means for gathering supplemental qualitative data to further the understanding of program implementation. These items were administered in the middle (winter) of the first year that a school joined the ELLP. (Fidelity).

Initial and Post Family Interview. A 37-item questionnaire developed by the National Center for Family Literacy (2008). Many of these items contain multiple questions and additional items that address demographic information that are not counted in the 37. The instrument collected essential demographic data, history in family literacy, employment situation, home literacy activities, perceptions about parents' ability to help their child succeed in school, and parents' beliefs about their level of responsibility in their children's education. Embedded in the Family Interviews is a section where parents complete a self-evaluation of literacy related "out-of-school" activities/actions as defined by the survey. The survey includes items related to the following

- whether families had a space in their home identified for homework, and if so where,
- the number of times on average parents helped/supervised their child with homework the previous week and the content area with which they helped,
- the number of times the parent and her/his child visited a public library in the last month,
- the number and type of educational programs on television that the parents watched with their child,
- whether children's school work was displayed in the home (i.e., on the refrigerator, on a wall in the child's bedroom),
- the degree to which a parent felt confident of her/his ability to help with homework,
- the degree to which a parent felt comfortable talking to her/his child's teacher about the child's progress, and
- the number of school activities attended.

Ethnicity and information on children's grade level in school was included on the form. (Education-related parenting behaviors; Outcomes in Logic Model – parents' components). The instrument was available in English and Spanish. (Education-related parenting behaviors; Outcomes in Logic Model – parent components).

Adult Academic Assessment Scores (Pre and Post). These scores were collected on *the Basic Essential Skills Test (BEST)* for English language learners. BEST is a print-based, combined test of reading and writing skills. The test uses authentic situations specifically geared for adult English language learners in the United States as the basis for test questions. BEST Literacy is aligned with the ESL descriptors of the National Reporting System and the Student Performance levels.

- Reading tasks included reading dates on a calendar, labels on food and clothing, bulletin announcements, and newspaper want ads.
- Writing tasks included addressing an envelope, writing a rent check, filling out a personal background form, and writing personal notes.

When adults enroll in ELLP they take a BEST pretest. After approximately 100 contact hours they are retested to ascertain the academic benefits of the program for adults. Scores are converted to National Report System (NRS) levels of adult literacy achievement. (Education-related parenting behaviors; Outcomes in Logic Model – parents components).

Home Literacy Environment Checklist. A checklist developed by Head Start for use during Home Visits. Data collected includes the types of literacy materials (children's) displayed, books, and a parent self-report of interactive literacy behaviors shared with their children. (Education-related parenting behaviors - Outcomes in Logic Model – parents components).

- *Teacher Report on Student Performance Surveys Records.* Completed by PACT Time classroom teachers on all ELLP Focus students and the previously selected matched set of Comparison students. Data collected included student gender and reading assessments (pre and post). Teachers completed a series of questions to reflect on the students' academic standing and behavior, and to rate the student's level of work quality,
 - self initiating a task,
 - ability to maintain effort to complete a task when working in a group,
 - ability to maintain effort to complete a task when working independently,
 - completion of assignments,
 - asking pertinent questions,
 - knowing when to ask for help from the teacher,
 - appropriately seeking help from peers,

- active engagement,
- talking about class activities, and
- comfort interacting with peers.

(Student achievement, attendance, behavior; Outcomes in Logic Model – children components).

District-Compiled Data Records. Student (Focus and Comparison) attendance records as reported to the state education agency, provided by the school principal to the evaluator. School-wide data are obtained from the Detroit Public Schools annual school progress reports online (Student attendance; Outcomes in Logic Model – children components).

Dynamic Indicators of Basic Early Literacy Skills (DIBELS). DIBELS measures were specifically designed to assess three of the five key constructs of early literacy: Phonological Awareness, Alphabetic Principle, and Fluency with Connected Text. The measures are linked to one another, both psychometrically and theoretically and have been found to be predictive of later reading proficiency. This tool was only used during the pilot year.

Northwest Evaluation Association: Measures of Academic Progress (NWEA: MAP) and the Northwest Evaluation Association: MAP for Primary Grades. (NWEA: MPG).

These achievement assessments are computer adaptive assessments that are given three times per year and are recognized as a screener by the National Center on Response to Intervention. They provide grade-level equivalencies and scale scores that can be used to determine reading proficiency and amount of change. NWEA have subscales that assess each subject. The MAP reading assessment is available for grades two through twelve, while grades K-2 use the MPG reading assessments. These assessments focus on the following reading areas

- word meaning and vocabulary knowledge,
- literature, understanding and integrating key ideas and details,
- literature, understanding and interpreting craft and structure,
- informational texts, understanding and integrating key ideas and details, and
- informational texts, understanding and interpreting craft and structure.

STAR: The *STAR* reading battery are computer adaptive reading assessments that are given three times per year. *STAR* is recognized as a screener by National Center on Response to Intervention. *STAR* earned the highest marks available for reliability (convincing evidence) and validity (convincing evidence). The assessment provides grade level equivalencies and scale scores that can be used to determine reading proficiency and amount of change. *STAR* has subscales that assess each subject. The *STAR* reading assessment is available for grades K through twelve, while kindergarten and first grade also use the Early Literacy assessments.

These assessments focus on the following reading areas:

- foundational skills, phonics, word recognition, and fluency;
- literature, key ideas, and details;
- literature, craft, and structure;
- literature, integration of knowledge and ideas;
- literature, range of reading, and text complexity;
- informational texts, key ideas, and details;
- informational texts, craft, and structure;
- informational texts, integration of knowledge and ideas
- informational texts, range of reading, and level of text complexity; and
- language, vocabulary acquisition and use.

Measurable Objectives

Objective 1: 80% of students whose parents are considered full participants will be rated equal to or higher than their peers on reading achievement and growth after one or more years in the program. (Outcomes in Logic Model – children components)

Measured by teacher rating scales in the *Teacher Report on Student Performance*.

Objective 2: 80% of students whose parents are considered full participants will have a daily attendance rate at or above the school mean or that of the matched sample group. (Outcomes in Logic Model – children components)

Objective 3a: 50% of kindergarten students whose parents are considered full participants will meet or exceed grade level proficiency in reading or meet or exceed the match group. (Outcomes in Logic Model – children components)

Objective 3b: 50% of first grade students whose parents are considered full participants will meet or exceed grade level proficiency in reading or meet or exceed that of the match group. (Outcomes in Logic Model – children components)

Objective 3c: 45% of second grade students whose parents are full participants will meet or exceed grade level proficiency in reading or exceed that of the match group. (Outcomes in Logic Model – children components)

Objective 3d: 50% of third grade students whose parents are full participants will make progress towards grade level proficiency in reading or exceed that of the match group. (Outcomes in Logic Model – children components)

Objective 4: Third grade students whose parents completed 150 hours in the ELLP Program will make progress toward Proficient or Advanced on the state Communication Arts assessment at a rate higher than their school mean and the mean of their matched sample. (Outcomes in Logic Model – children components). This objective was deleted. DPS would not provide data.

Beginning with the second year, information will be analyzed at both a single year of data and longitudinally for individual schools and the study population as a whole.

Data Collection Activities

Project evaluation design, data collection, strategies, analyses, and a timeline are depicted below.

Table 4
Impact Evaluation Data Collection, Analysis and Time Line

Key: QT = Quantitative Analysis QL: Qualitative BOY: Beginning of Year EOY: End of Year
Collected by (T), (S) Supervisor, (AT) Adult Teacher, (PT) PACT Teacher, School Gathered (LEA)

Design	Data Collection	Evaluation Strategy	Data Analysis	Time Line
Quasi-experimental with matched group	QT: Daily attendance rate (DAR) LEA QT: Star or NWEA (S. LEA) QT: PALS-PreK (S. LEA) QT: NCFL instruments (AT) QT: Parent hours of participation (S, AT)	Compare student attendance of Focus students with Comparison group Compare reading assessments and growth of participating students matched group Identification of type and frequency of parenting behaviors and achievement	QT: Descriptive Statistics QT: MANOVA QT: Correlation	QT: Annual end of year data school gathered QT: STAR or NWEA EOY QT: NCFL BOY, EOY QT: Hours of Participation Monthly
	QL: Family consent form, Family Interview, Home Visit (S) (AT, S) QL: Teacher report (PT)	Compare narratives, anecdotal evidence from families Observe and document home literacy environment	QL: Q sort	QL: Annual

Statistical Analysis of Impacts

The impact evaluation focused on the relationship among participation in the ELLP program and school-related parenting behaviors and indicators of student success in school (attendance, mindset, behavior, and literacy achievement).

Several types of analysis were conducted: Data sets were analyzed for missing data and nesting bias. Similarity between matches was calculated and baseline data were established by variable and group. T-Test, ANOVA, and/or were used to identify significance in relationships.

Finally, two MANOVA analysis were performed. The first analysis was conducted with Focus parents, Focus students, and Comparison matches. It did not contain the education related

parenting behaviors because no parent data was collected on Comparison students. (Table X: Coding Criteria -Student Data). Analysis were conducted using MANOVA (Garson, 2012; Tabachnick, 2012) for three independent variable levels, and three dependent variables: ELLP participation (IV), student attendance(DV), student behavior/ mindset (DV), and student literacy achievement (DV).

$$V_p = V_s + V_b + V_l + V_{(s*b)} + V_{(s*l)} + V_{(b*l)} + V_{(s*b*l)} + V_e$$

p= ELLP Participation
s= student attendance
b=student actions - mindset, and behavior
l=student literacy achievement
e=error

Raw data from instruments were coded according to the following criteria for each student, whether in the intervention or the matching group.

Table 5
Coding Criteria

Variable Name	Variable Type	Coding
ELLP Participation	Independent	0 =did not participate in ELLP program 1 =participated between 1 and 150 hours in ELLP program (Partial participant) 2 =participated >150 hours in ELLP program (Full participant)
Student Attendance	Dependent	0 =attendance was less than 90% 1 =attendance was 90% or
School action: Mindset/School behavior	Dependent	0 =no criteria for mindset/ school behavior met 1 = mindset/ school behavior score was 70% of points possible (16)
Student achievement	Dependent	0 =not proficient 1 =proficient

The second analysis was conducted on data from Focus students and their parents. This analysis included education related parenting behaviors. (See Table 7 Coding Criteria- Focus Group.) This analysis directly addressed the research question and was conducted using MANOVA (Garson,

2012; Tabachnick, 2012) for three independent variable levels, and three dependent variables: ELLP participation (IV), education-related parenting behaviors (DV), student attendance, behavior/ mindset (DV), and student literacy achievement (DV).

$$V_p = V_a + V_b + V_l + V_{(a*b)} + V_{(a*l)} + V_{(b*l)} + V_{(a*b*l)} + V_e$$

p= ELLP Participation
a=education related parenting behaviors
b=student actions - attendance, mindset, and behavior
l=student literacy achievement
e=error

For the second analysis, raw data from instruments was coded according to the following criteria for each student in the intervention (Focus) group.

Table 6
Coding Criteria

Variable Name	Variable Type	Coding
ELLP Participation	Independent	0 = did not participate in ELLP program 1 = participated between 1 and 150 hours in ELLP program 2 = participated >150 hours in ELLP program
Education-related parenting behaviors	Dependent	0 = did not meet any criteria: reading (4 times/week), efficacy (score 70% or greater), home checklist (20 or greater) 1 = met criteria in one area 2 = met criteria in two areas 3 = met criteria in three areas
Student actions	Dependent	0 = no criteria for attendance and mindset/ school behavior met 1 = 1 criteria for attendance and mindset/ school behavior met 2 = 2 criteria for attendance and mindset/ school behavior met
Student achievement	Dependent	0 = not proficient 1 = proficient

Based upon the initial results of the MANOVA, additional statistics may be conducted, the most likely being Samuel Stanley Wilks, the Pillai-M.S. Bartlett trace, the Lawley-Hotelling trace, and Roy's greatest root. Additional post hoc tests may be conducted.

Power analysis for a MANOVA with three levels and three dependent variables was conducted in G-POWER to determine a sufficient sample size using an alpha of 0.05, a power of 0.80, and a small effect size ($f^2 = 0.25$) (Faul et al., 2008; Dattalo, 2008). Based on those assumptions, the desired sample size was 98. Based on this calculation, 200 students per year (100 students in the intervention groups and 100 students in the control group) provided an adequate sample size and left room for attrition that did not impact the power of the study. In the final year of the grant, there were 100 students (50 students in the intervention group and 50 students in the control group). This change did not impact the strength of the aggregated analysis. (See previous discussion in the Power Calculation section of Sampling Plan, Attrition, and Power Calculation.)

Threats to Validity

Table 7
Internal Design Validity

Internal Threat Variable	Threat Controlled Yes or No	Explanation
Differences in results is due to Comparison groups that are initially unequal	Yes	-Baseline data is used to match groups on multiple variables -Additional analysis using growth data which controls for baseline variance -Intervention group results compared to matched group and total population
Students change over time regardless of intervention	Yes	-Use of a control (matched) group with similar starting points; second analysis with growth as the variable rather than pre- and post-intervention data points
Turbulence		-Family persistence/attendance varies, multiple imputation model to account for missing data
Children have special education needs	Yes	-Only children eligible for DIBELS/STAR/NWEA are included for reading outcomes -DPS Disciplinary Code includes policy for special education
ELL children score very low at beginning of year	Yes	-EOY measures are more challenging than BOY -Analysis of growth as well as data points

- inflated EOY scores		
Instrumentation changes and differences among observers/testers	Yes	-Instruments are ones already being used -Instruments have specific protocols upon which all observers/testers are trained -Annually provide new/reviewed training for all observers/testers
Fidelity of implementations	Yes	-NCFL provided technical assistance to Southwest staff
Repeated measures	Yes	-Most measures are criterion performance based, which are less impacted by the knowledge of what is being measured

Table 8
External Design Validity

External Threat Variable	Threat	Control Yes or No	Explanation
Population Validity	None. Children are demographically representative of Hispanic children in Detroit Public Schools	Yes	-Four sites are aggregated for data analysis.
Ecological Validity	Hawthorne Effect – students whose parents aren't in the project try to impress parents and teachers during PACT Time	No	-Interpersonal effects between teachers and students across programs cannot be controlled. The environmental learning climate at the school level varies.
Multiple-treatment Interference	It is not known if there are other parental engagement projects occurring in the schools or that some schools have after school (i.e., 21 st Century) tutorial programs.	No	-Principals have discretionary powers to initiate parental engagement (PE) strategies, and implement student support programs, Title I policies for PE are building level.

Table 9
Statistical Conclusion Validity

External Threat Variable	Threat	Control Yes or No	Explanation
Type I error	Rejects null hypothesis when it is true, i.e., a false positive	Partially	Statistical significance $\alpha=.05$
Type II error	Accepts null hypothesis when it is false, i.e., false negative	Partially	-MANOVA reduces the threat of Type II errors when it is used rather than repeated ANOVAS (MANOVA allow the Comparison of multiple factors which contribute to a single variable against other such factors or factor profiles.) -Power of .8 for this study design

Statistical Analysis

Prior to the analysis for relationship and significance, several tests were performed to explore the nature of the data set. Little's MCAR analyses were conducted on missing data patterns for all outcome variable and yielded non-significant chi-square statistics indicating that missing data was "missing at random" and did not have a detrimental effect on overall outcome. Nesting effects were explored using random effects models. The variances of all outcome variables were non-significant indicating that fixed effects estimates are unbiased and suitable for traditional analysis approaches.

After the Focus and Comparison student groups were established, a Jaccard coefficient was calculated on demographic variables to determine the level of similarity between the groups. The results [$J(329)=0.775$] indicated a strong level of similarity. Baseline equivalence was established before tests of significance were conducted. All between group analysis began with t-Test or ANOVA to establish baseline equivalence on individual variables. Pre-intervention measures were used to establish equivalence.

Adult data was analyzed in a single group pre-post test design or between groups formed by criteria. These analyses focused on English language achievement on Basic Essential Skills Test and efficacy. Tests of significance were performed for the English Language Achievement and

for efficacy. Analysis was conducted on participation hours to determine intensity of intervention. Literacy home checklist (home literacy environment), equity, and home reading related habits were combined to create the education-related parenting behaviors used in the final MANOVA analysis.

Child data was analyzed in a single group pre-post test design or between groups formed by matching. These analyses focused on attendance, reading achievement, and academic mindset. Tests of significance were performed for each of these variables. These variables were used individually in the first MANOVA analysis. In the second MANOVA analysis, which addresses the research question, attendance and mindsets were clustered.

For a fuller description of the MANOVA, see the section Statistical Analysis of Impacts, page 91.

FINDINGS, LESSONS LEARNED AND NEXT STEPS

ADULT ANALYSIS

Background: Parents are a child's first teacher. There is an abundant body of research that identifies the numerous factors that can make ESOL/ELL (English language learners) adult and family literacy programs more challenging than Adult Basic Education programs designed for an English-speaking adult population. These include the range of English proficiency levels, language teaching programs for children, and time on task (Strucker, Snow, & Pan, 2004). The goal of educating parents is to empower them with skills and resources to develop literacy and English language proficiency in the family unit while at the same time strengthening relationships between parents and the school's staff.

Adults attended daily classes in their children's schools to develop English language skills and prepare for next steps in the continuum of educational and career goals. Data for adults are analyzed primarily for intensity (amount of participation in the project activities), achievement in English language proficiency on the Basic Essential Skills Test (BEST), amount and nature of support for their children as learners, self-efficacy as it related to education and learning, and meaningful family engagement in schools.

Enrollment: Southwest Counseling Services' annual enrollment target set in the Subgrantee Evaluation Plan (SEP) was to serve 100 adults per year who are ELL and who have children enrolled in preschool through third grade. The target enrollment was 100 families per year or 400 families over the 4 years. This target was adjusted in the last year to 50 participants due to only having 2 sites (see Appendix J) resulting in a program target of 350. Between 2014 and 2017, 313 families enrolled and participated in the English Language Learners Program (ELLP). The project achieved 89.4% (313/350) of its target enrollment.

Demographics of the Focus Students' Families. Parents were interviewed (Family Interviews) upon enrollment and again in the late spring of the school year. Demographic data was collected on the Initial Family Interview during the first few weeks of the program year. Three hundred two Initial Family Interviews contained demographic data.

The demographic data identified consistency among families served at the six school sites. All families were Hispanic and 82.8% were of Mexican heritage. The vast majority of parents enrolling in ELLP had lived in the United States for more than one year (94.0%), although only 1% had lived there for their entire lives. Given that most, but not all, enrolling in the program were females (98.7%), the term parent will be used throughout this analysis.

At the time of enrollment, 66.6% of the Focus parents were married and 51% of the families included three or more children. Poverty or deep poverty were common for 74% of the families, with 88.6% of participating parents unemployed, which in part explains how they were able to work other responsibilities and time with the 11 hours per week of engagement in ELLP. In their homes, 76% of parents spoke Spanish only or more Spanish than English. Formal schooling was limited for these parents with the highest level of schooling being 9th grade (62.5%) and 32.8% ending their education in 6th grade or earlier. Only 18 parents (6%) received any education within the US. For a full analysis of participant demographics, see Appendix M.

Participant Goals. During initial enrollment, parents were asked what primary goals they expected to achieve by joining the ELLP. The scales used to ask parents to rate these items were different for the first years. The scale for these items in 2014-2015 had a 9-point scale, while the 2015-2016 year had a 6-point scale, and the 2015-2016 and 2016-2017 year used a 4-point

scale. Data were mathematically converted to the 4-point scale (3=Very Important, 2=Important, 1=Not Important, 0=Not Applicable) and aggregated to provide the multiyear analysis.

The Initial Family Interview probed the reason that families wanted to participate in ELLP. The items included the following reasons: to earn more money, to upgrade skills for current job, to get a better job, to earn a GED or diploma, to improve English skills, to prepare for U.S. citizenship test, and to be a better teacher to their children. The two reasons selected as “Very Important” most often in the 309 Initial Family Interviews were “to be a better teacher for my child” and “to improve my English skills.” One student wrote in the third person style on her final essay about her reason for enrolling:

Miss L. started coming to school because she had a hard time communicating at the doctor’s office, school administration, stores, and many other places. One day she had to rush her child to the emergency room and she couldn’t communicate to the doctors to tell them what was wrong with her son, this was a true moment of frustration but a waking to a new day. Miss L. was desperate of not been able to understand English but mostly she wasn’t able advocate for her family and this bother her a lot. She would ask people to translate for her during some of these situations but sometimes they weren’t available (program data files; quarterly reports).⁵

Table 10

Percent of Group Selecting “Very Important” for Reason to Enroll

Participant Group	Improve their Ability to Support Their Child(ren)	Increase English Language Skills
Full	64.17%	54.55%
Partial	54.55%	48.25%
All	60.71%	51.95%

Participation. Participation hours were collected to measure the intensity of the primary intervention, parent and family participation in program activities. Parents accumulated participation hours through four types of project activities; participation in adult education classes (ABE/GED/ESL), participation in parenting classes related to literacy and education

⁵ All parent comments were provided to the evaluator from the adult educator’s collection of end of the year essays. Names are changed to protect confidentiality. This excerpt was dictated to a Spanish speaking peer with stronger English writing skills in class.

(Parent Time), participation in their child’s classrooms (Parent and Child Together (PACT) Time®), and Family Service Learning, which began in 2015-2016.

To be considered a full participant, the adult must have participated during both the first and second semesters of the school year and attended for at least 150 of the program hours offered. Parents who participated for less than 150 hours were considered partial participants. Overall, 57.5% (180) of participants were classified full participants and 42.5% (133) were classified as partial participants. (See Table 11.)

Each program site provided a minimum of 320 hours from which parents were expected to attend at least 150 hours over nine months. Although the time offered varied across schools and years, all parents had more than double the amount of opportunity needed to complete the 150 hours per year at each school site. (See Table 11.) The total hours of participation were 55,142.26 hours, which averaged 176.17 hours per participant.

Table 11
Actual Number of Hours of Participation by Group

Participant Group	Number of Parents	Average Hours of Participation	Total Hours of Participation
Full	180	249.08	44,835.10
Partial	133	77.49	10,307.16
All	313	176.17	55,142.26

English Language Skills

Home Language: Educated mothers who are English language learners gift their children with bilingual legacy. Research on English language learners across racial and ethnic groups shows a link between a mother’s education level and her children’s English language skill development and school success (Gambino, Acosta & Grieco., 2012). 64.9% of the 309 adults that completed the Initial Family Interview reported that a primary (important or very important) learning goal was to improve their English language skills. One item in the Initial Interview asked about the language(s) spoken in the home.

Table 12

Language Spoken at Home

Home Language Description	Number of Parents/Families	Percentage of Parents/Families
Spanish Only	93	30.1%
English Only	1	0.3%
English and Spanish Equally	54	17.5%
More English than Spanish	17	5.5%
More Spanish than English	142	46.0%
No Response	2	0.6%
Total	309	

Basic English Skills Test: Participants are administered the *Basic English Skills Test (BEST)* after they have attended four sessions (11 contact hours). Adult education teachers compile a roster containing *BEST* pretest and posttests scores which is uploaded at the beginning and at the end of the year. *BEST* is aligned to the Adult Education National Reporting System (NRS) and is used to measure participant performance and growth in English language and literacy skills.

According to the NRS Functioning Level Table, *BEST* scores can be used to determine literacy levels and corresponding skills.

Table 13

Literacy Level determined by *BEST* Test Scores

Level	Literacy Level	<i>BEST</i> Test Score Range
1	Beginning ESL	0-7
2	Low Beginning ESL	8-35
3	High Beginning ESL	36-46
4	Low Intermediate ESL	47-53
5	High Intermediate ESL	54-65
6	Advanced	66+

Analysis: 314 participating adults completed the BEST pretest and/or posttest. Of these, 250 completed both. Analysis was conducted on these 250 participants (79.6%). Data from these participants are summarized in the tables below (Tables 14, 15) with pretest and posttest scores being presented first, followed by NRS Educational Functioning Levels.

Table 14

Descriptive Data for *BEST* Scores

	Number of Participants Tested	Range	Standard Deviation	Mean Pretest Score
Pretest	250	3-78	14.9	50.8
Posttest	250	3-78	13.9	54.7

A paired t-test of pretest and posttest scores was conducted to determine the effectiveness of the ESL component of the intervention. This test was statistically significant [$t(249) = -6.153$, $p = 0.000$; $d = 0.270$]. The effect size for this analysis ($d = 0.27$) exceeded Cohen’s convention for a small effect ($d = 0.2$) (Cohen, 1977). Comparing the means and standard deviations of the pretest ($M = 50.8$, $SD = 14.9$) with those of the posttest ($M = 54.7$, $SD = 13.9$) indicates that the posttest scores were significantly higher than the pretest scores.

In practical terms, changes in National Reporting System (NRS) for Adult Education Test Benchmarks for Educational Functioning levels were also made and these levels represent the level of functioning with English in Speaking and Listening, in Basic Reading and Writing, and in Functional and Workplace Skills. Changes occurred between pretest and posttest NRS Levels which represents different capabilities and growth in the practical realm. (See Table 15.)

Table 15

Number of Participants Scoring at NRS Educational Functioning Levels

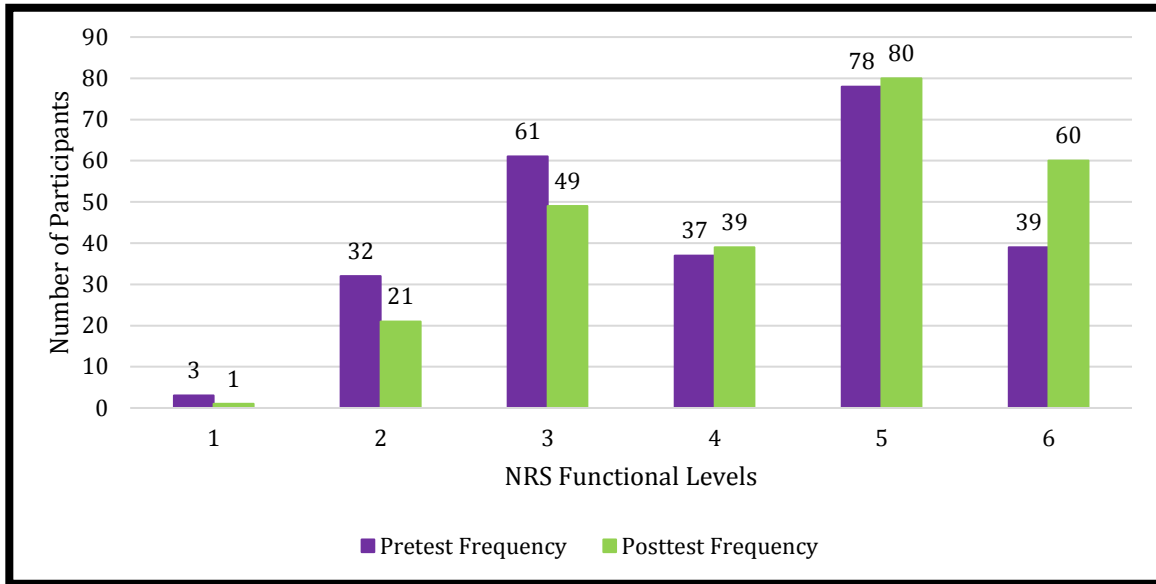
	Pretest	Posttest
Beginning ESL	3	1
Low Beginning ESL	32	21
High Beginning ESL	61	49
Low Intermediate ESL	37	39
High Intermediate ESL	78	80
Advanced	39	60

On the posttest, 56% of the adults scored at High Intermediate ESL and Advanced on the *BEST*. These levels mean that the participants were able to cope with English language well enough to communicate with their children’s teachers.

Pretest and posttest data revealed that adults spanned the continuum of levels. A fuller understanding of the impact of adult education can be obtained by comparing the group of 250 who had both pretest and posttest scores. A comparison of the pretest and posttest NRS Functioning Levels revealed a positive trend indicating that more participants were performing at the higher levels at the end of the year (Figure 5).

Figure 5

Comparison of Pretest and Posttest NRS Levels



When the bottom two levels (Beginning ESL and Low Beginning ESL) are combined and compared with the top two levels (High Intermediate ESL and Advanced ESL), a change of a 5% decrease at the bottom two levels and a 10% increase at the top two levels was found.

Further analysis was conducted by dividing the 250 participants with pretest and posttest scores into groups based upon intensity of treatment (hours of participation). Participants who attended 150 hours or more of the program were considered full participants, while those who attend less than 150 hours of program activities were considered partial participants.

Table 16

BEST Scores by Participation Level

	Number	Pretest Mean	Pretest Standard Deviation	Posttest Mean	Posttest Standard Deviation
Full	175	51.33	14.39	55.73	13.22
Partial	75	49.57	16.16	52.20	15.13
Total	250	50.80	14.93	54.67	13.88

Results indicated that, on average, the group that participated 150 hours or more had greater gains in *BEST* scores between pretest and posttest scores: Full participation gained 4.39 points; Partial participation gained 2.62 points (Table 16). Paired samples t-tests were used to investigate the differences of significance between the two groups: (a) those with at least 150 hours of participation (full participant) and (b) those with less than 150 hours (partial participant).

- (a) A two-sample assuming unequal variance t-test was conducted to establish baseline equivalence of groups. The results of this t test [$t(126)=0.814$, $p=0.417$] indicates that there was no statistical significance and the groups had equivalent performance at the beginning of the year.
- (b) A paired-samples t-test indicated that scores were significantly higher on the posttest ($M=55.73$, $SD=13.22$) than on the pretest ($M=51.33$, $SD=14.38$) for full participants, [$t(174)=-6.443$, $p=.000$, $d=0.317$].
- (c) A paired-samples t-test indicated that scores were not significantly different on the posttest ($M=52.20$, $SD=15.13$) than on the pretest ($M=49.57$, $SD=16.16$) for partial participants [$t(74)=-1.935$, $p=.057$, $d=0.168$].

Overall, these results indicate that the full participant and the partial participant groups had an equivalence of performance on the pretest at the beginning of the study. The pre-post growth was significant for the full participant group with a small effect size, while pre-post growth was not significant for the partial participant group. These results support the need for 150 hours or more of adult participation to make significant growth on the *BEST*.

Pretest means for all groups (All, Full, and Partial) were between 49 and 52 and fell within Level 4 described as Low Intermediate ESL. An ANOVA analysis of the NRS levels by group was conducted to compare pretest levels on the *BEST* for the three groups. The analysis found no significant difference among/between groups [$F(2,497)=0.1118$, $p=0.894$].

On the posttest, the group that had 150 hours or more of project activity participation changed levels, as did the group of All participants. They moved to Level 5, which is described as High Intermediate ESL (Table 17). A pre-post paired two sample t-test analysis of the full participant group [$t(174)=-4.886$, $p=0.000$, $d=0.369$] levels and the all group [$t(249)=-5.242$, $p=0.000$,

d=0.332] levels were significant at the $p < 0.05$ level. The mean for adults who participated less than 150 hours was slightly higher at the end of the year, but it remained at the Low Intermediate ESL (score 47-53) level. However, when scores were converted to the levels, the partial met the $p < 0.05$ threshold [$t(74) = -2.159$, $p = 0.034$, $d = 0.248$] and had a small effect size. The change in levels for the full participation group represents gain of functional skills.

Table 17

Mean Scores and Levels on the BEST by Group

	All	Full Participation	Partial Participation
Pretest	50.80 Low Intermediate ESL (47-53)	51.33 Low Intermediate ESL (47-53)	49.57 Low Intermediate ESL (47-53)
Posttest	54.67 High Intermediate ESL (54-65)	55.73 High Intermediate ESL (54-65)	52.20 Low Intermediate ESL (47-53)

Explanation of NRS Levels of Participants: According to the *BEST* manual and NRS guidance materials, at the Low Intermediate level of English language facility, there are common behaviors demonstrated by adults. One can expect the parents of the SWCS program to understand simple learned phrases and limited new phrases containing familiar vocabulary spoken slowly with frequent repetition. These vocabulary skills are essential for interacting with health care providers (health literacy) and securing jobs. Within this level, adults have the skills needed for routine tasks such as asking and responding to questions posed by teachers and the principal.

Program parents in the Low Intermediate ESL level can read simple material on familiar subjects and comprehend simple and compound sentences in single or linked paragraphs containing familiar vocabulary. With these skills, they can interact in English with their children's homework and read aloud children's books. These parents can write simple notes and messages on familiar situations (i.e., notes explaining a child's absence or need for an early dismissal), but these notes often lack clarity and focus. These skills were reported by parents at the end of the

year. According to post family interviews, at least 92% of the Focus children were read aloud to by a family member at least twice a week.

Adult English Language Growth and Intensity of Intervention: Parents also need to communicate efficiently and meaningfully with their children's teachers. Unfortunately, relatively few teachers are bilingual and so the ELLP parents must become bilingual. Bilingualism has positive consequences for brain development. Even if a child is just exposed to, but does not become proficient in two languages, his cognitive development is enriched (Barac, Bialystok, Castro, & Sanchez, 2014). Parents and their young children can shift from one language to the other, building children's English vocabulary before their kindergarten age.

The scores of adults who participated less than 150 hours made limited growth and remained at the Low Intermediate level. At this level, they can interpret simple directions and schedules, signs, and maps. These are survival skills for families new to the urban community. Regarding the typical school-to-home papers children stuff into their backpacks for their parents to review, these parents can fill out simple forms but need face-to-face support for some documents that are not simplified.

Parent Efficacy

NREC Result: Families are strong and supportive. Indicator: Parents are confident of their ability to support their children as learners.

Background: Self-efficacy is a by-product of a person's self-concept, self-confidence, and self-esteem. Research (Schunk, 1984) has long held that self-efficacy is an important variable to understand as a facet of motivation and other achievement behaviors. For example, assessing self-efficacy can reveal how confident a parent feels about being able to learn English, help his/her child(ren) with homework, and become active in school events. High self-efficacy in one's ability to become a fluent speaker of English does not assure an equal measure of self-efficacy related to being a homework helper or PTO president. It is a task-specific belief.

Self-efficacy influences the way people think, their motivation, emotions, and choices (Bandura,

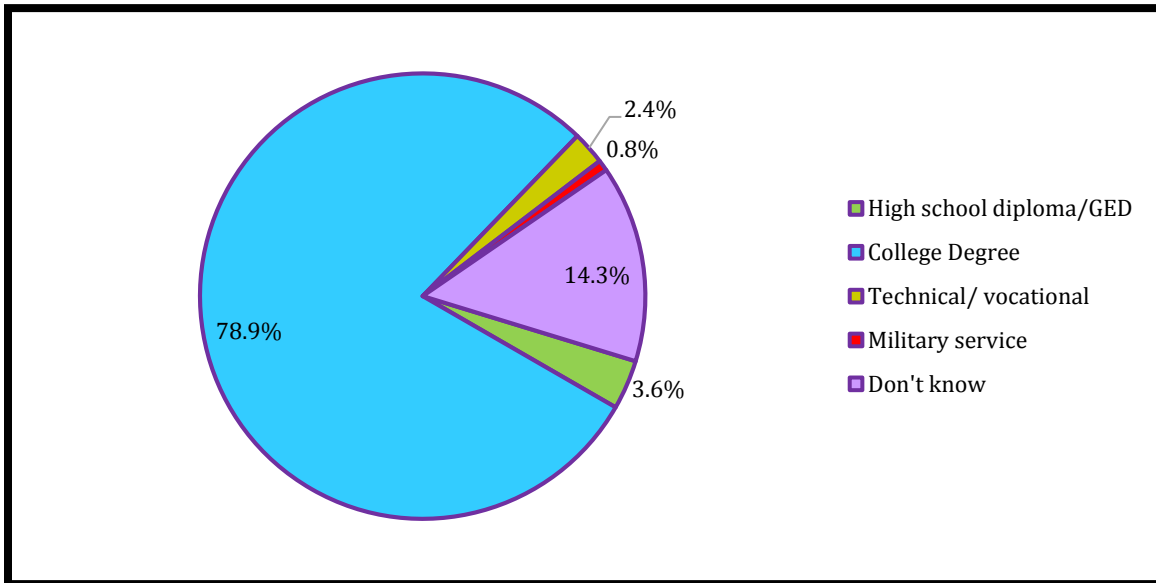
1993). The degree to which parents appreciate their capacity for thought and action is a powerful influence on their ability to predict events and control those events that affect the lives of their family. For parents, self-efficacy entails grasping the power their own education and attitudes have on their children's academic success. If a mother credits her academic progress to hard work rather than something she was born with, then her children can learn those same actions, such as paying attention in class and doing homework, are ways to "get smart." Parents positively influence their children's mindsets when they believe human brains are malleable. Like their children, parents and adults at any age "grow smarter" when provided regular opportunities to learn new things and practice skills associated with learning (Dweck, 2006).

A parent's self-efficacy, the personal judgment of whether she or he is capable of performing a particular activity successfully, plays a major role in parents' motivation to take part in a family engagement program. The family interviews probed self-efficacy with a cluster of items related to parents' relationships to their children as learners. Positive efficacy motivates behavior. . On the initial interview for the aggregate study, 91.7% of parents felt they knew how to help their child learn. The final interviews indicate that 97.7% of the parents felt they knew how to help their child, which is a gain of 6%.

Two-thirds of the parents agreed that they thought positively about their children's future. This response reflects a realistic concern for parents in a low performing school. Yet, this perception was positively echoed by other items regarding their child(ren)'s academic future. None of the parents believed their children would drop out of school, and only nine (3%) felt a high school diploma would be their child's highest level of attainment. In the Final Family Interview during May of the school year, 77.3% of the parents predicted that their elementary school-age children would eventually graduate from college.

Figure 6

Parents' Expectations for Their Child's Highest Level of Educational Attainment



Measuring Parents' Self-Efficacy: An analysis of the parent efficacy was conducted using data from a portion of the Initial and Final Family Surveys (Pre and Post). Twenty-three items comprise this portion of the interview. These questions asked the parent to respond with the words "agree" or "disagree" to a statement. For example, "I _____ with this statement: I know how to help my child do well in school." While most questions were asked in this positive manner where "agree" would be the desired answer, a few were asked in the negative and the desired answer was "disagree." For example, "I _____ with this statement: I don't know if I am getting through to my child." The initial and final interviews were done in English and Spanish as needed by the adult.

Efficacy items were added to the Family Interviews during program years 3 through 5 (2015 to 2017). 137 families completed efficacy items during the Initial Family Interview, while 105 completed the items during the Final Family Interview. 36 families completed items in both interviews. An F-test Two Sample for Variances was conducted [$F(136,104) = 5.31, p = 0.000$]. A significant difference was found between efficacy items answered on the Initial Family Interview and those answered on the Final Interview, with the Final Interview responses being more tightly clustered than those on the Initial Interviews. The t-Test, Two-Sample Assuming Unequal

Variance for unequal sample sizes was conducted. The results for a two-tailed test, $[t(136,104)=-1.743, p=0.083]$ was not significant. While the results did not result in a statistically significant difference, qualitative information supports interpretation of trends.

The end of program year responses across schools affirm parent's self-efficacy — their confidence in their own competencies — to achieve their learning goals. Another way to look at data regarding adults' confidence in their ability to set and achieve new goals, even after a personal history of academic struggles or minimum schooling, is to apply the concept of mindsets set forth by Dweck (2006). Generally speaking, school-age students acquire new skills and ensuing confidence and subsequent willingness to apply these in daily life. Adults in the family literacy program had relatively few formal academic successes to build on. However, the Initial Family Survey data implies the adults' tacit sense of understanding that they were capable of setting and achieving goals. Post data confirmed their confidence as evidenced by the consensus of responses that the adults did in fact meet their own benchmarks.

These data reflect adults' perceptions that the basic qualities associated with learning can be developed through effort — that's a growth mind set. Being "smart" isn't something carved in stone, it's the product of concerted effort and experience. People can continue to grow and learn new skills throughout their lives if they put in the effort and choose experiences that stimulate learning.

A general review of the responses to end-of-year Family Interview items imply that the adults' had self-efficacy in four areas. First, they had a sense of belonging to the learning community at their children's school. Numerous survey items reveal multiple ways parents engaged with teachers, principals, and other families at the schools.

Second, they believed in their capacity for meeting their own learning goals, as well as their children's long-term academic success. Parents expressed confidence in their use of technologies, such as computers and smart phones, as well as in increasing their English language skills and advancing their basic educational competencies.

Third, the parents demonstrated grit, a deep sense of passion and commitment to meet their personal goals and to ensure their children's academic success. The parents sensed that their abilities could grow if they exerted appropriate effort and completed learning tasks. Monthly attendance hours confirm the adults' persistence and willingness to approach increasingly complex learning tasks.

And finally, parents' believed their work towards learning goals held value for their families. The survey data implied that in their adult studies, interactions with teachers in classrooms with their children and in taking part in school-related activities, parents established meaningful connections that enabled them to process new ideas and information.

Education Related Parenting Actions

For the variable education-related parenting actions, efficacy data, reading data, and home literacy environment checklist were combined. Each of these data points was interpreted using cutoffs to create dichotomous scales.

Efficacy Data. Twenty-three items on the interviews asked about efficacy. Those who had an initial and final in one year were averaged to get a single score for the year. For those who only had efficacy data from either the Initial or the Final Family Interviews used that score. The cut score represented 69.5% of the total possible points (23). Efficacy was considered adequate if the individual score was 16 or higher. Those with scores less than 16 remained in need of support to develop greater efficacy.

Reading at Home. Three items on the interviews asked about frequency of reading to the child, reading with the child, and listening to a child read. These frequencies were averaged. Those that averaged 4 or more times per week were considered to be a strong literary environment. Those with an average of less than 4 were considered to continue to need improvement.

Home Literacy Checklist and Home Visits. The home literacy checklist was a self-report by parents. The same checklist was used in home visits by the ELLP staff. Fall and Spring reports were compared. A t-Test, Two-Sample Assuming Equal Variances was conducted. A statistically

significant difference was found [$t(80,140) = -1.988, p=0.048$]. For the variable education-related parenting actions, those who had a score of 20 or higher were considered to have an adequate home literacy environment. Those less than 20 were considered to need improvement.

Using these cutoffs a MANOVA analysis was conducted to address the research question. (See MANOVA Analysis section, page 85.)

CHILD ANALYSIS

Aggregated Analysis of Student Reading Achievement and Growth

Measuring Student Reading Achievement 2013-2017. Aggregated analysis of reading achievement was hampered by the variety of assessments given over the duration of the study and the method teachers used in recording achievement results. Schools assessed reading with STAR Early Literacy, STAR Reading Assessment, or NWEA. They reported at least one and sometimes two of the statistics, but not all – scaled score, grade equivalent, percentile, or reading level (early emergent, late emergent, transitional, or probable). At each school, the results tended to be reported consistently within a grade level, but not across grade levels and not across years. Therefore, multi-year analysis had to be confined to whether students were reading at grade level. Scale score and growth analysis could not be completed across schools.

The data from 2013-2017 was aggregated for analysis. 270 matched pairs of students and one Focus student with no Comparison match had attendance data and/or reading achievement data. All cases were used for the overall group analysis (Focus versus Comparison). This analysis was followed by an analysis of achievement with three groups: Focus students whose parents were full participants, Focus students whose parents participated <150 hours, and Comparison children. After a grade level analysis, a match pair analysis was conducted.

Analysis of Grade Level Performance. Grade level functioning is defined as whether students are at (or above) grade level expectations or below grade level. A review of each school's data and assessment guidelines produced a table of cutoffs that were used to determine specific grade

level expectations. These expectations are provided in Table 18. Phoenix had only one student pair with reading results.

Table 18

Grade Level Reading Expectations for “At Grade Level” 2013 to 2017

Grade	Fall Expectations	Spring Expectations
Avancemos and Lighthouse		
K	140 SS; 50%ile	155 SS; 50%ile
1	160 SS; 50%ile	160 SS; 50%ile
2	175 SS; 50%ile	190 SS; 50%ile
3	200 SS; 50%ile	200 SS; 50%ile
Harms		
K	400 SS; 0.1 G.E.; 50%ile	600 SS; 0.8 G.E.; 50%ile
1	700 SS; 1.1 G.E.; 50%ile	900 SS; 1.8 G.E.; 50%ile
2	205 SS; 2.1 G.E.; 50%ile	318 SS; 2.8 G.E.; 50%ile
3	340 SS; 3.1 G.E.; 50%ile	435 SS; 3.8 G.E.; 50%ile
Mayberry		
K	400 SS; 0.1 G.E.; 50%ile	600 SS; 0.8 G.E.; 50%ile
1	700 SS; 1.1 G.E.; 50%ile	900 SS; 1.8 G.E.; 50%ile
2	205 SS; 2.1 G.E.; 50%ile	350 SS; 2.8 G.E.; 50%ile
3	340 SS; 3.1 G.E.; 50%ile	435 SS; 3.8 G.E.; 50%ile
Munger		
K	360 SS; 0.1 G.E.; Early Emergent; 50%ile	500 SS; 0.8 G.E.; Late Emergent
1	555 SS; 1.1 G.E.; Transitional; 50%ile	775 SS; 1.8 G.E.; Probable
2	205 SS; 2.1 G.E.; 50%ile	350 SS; 2.8 G.E.; 50%ile
3	340 SS; 3.1 G.E.; 50%ile	435 SS; 3.8 G.E.; 50%ile

Students whose results were equal to or higher than the expectations were identified as “reading at grade level.” Students whose results were less than the expectation were identified as “reading below grade level.” “No data” results occurred when students entered the program late or moved during the program, when the student did not have enough skills to test, when they were not tested for a reason determined by the school (frequently too far below grade level to make testing valid), when they were functioning below the readiness level, or when they were in preschool. The results are provided in Table 19 below.

Table 19

Pre-Test: Students Reading at or Above Grade Level – 2013 to 2017

	Focus Students		Comparison Students	
	Number of Students	Percent of Students	Number of Students	Percent of Students
At or above grade level	70	25.8%	60	22.2%
Below grade level	144	53.1%	143	53.0%
No data provided	57	21.0%	67	24.8%

Table 20

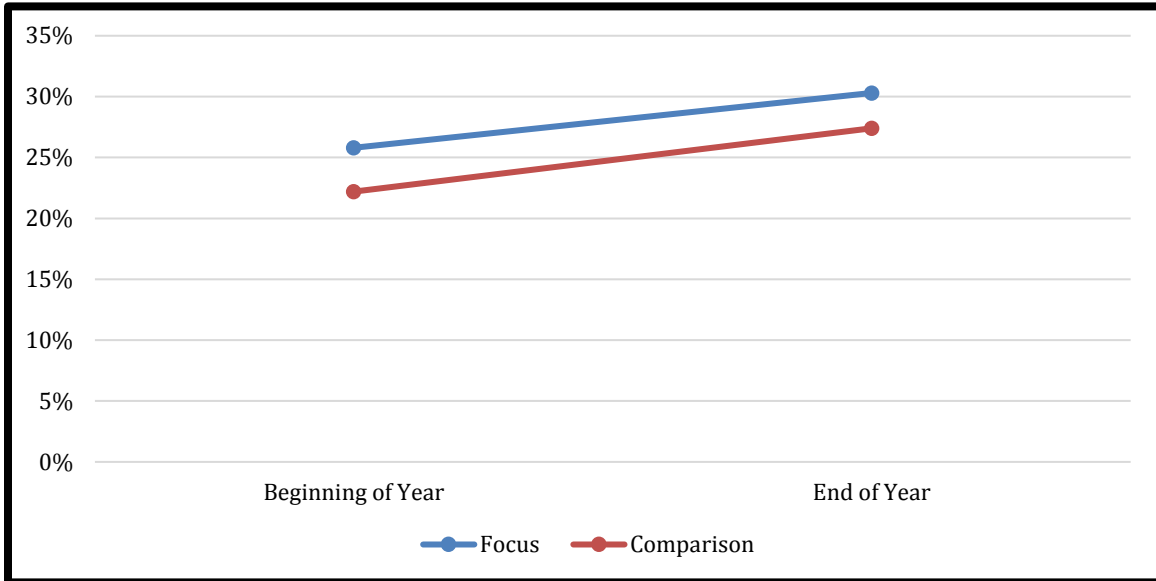
Post-Test: Students Reading at or Above Grade Level – 2013 to 2017

	Focus Students		Comparison Students	
	Number of Students	Percent of Students	Number of Students	Percent of Students
At or above grade level	82	30.3%	74	21.5%
Below grade level	137	50.6%	138	51.1%
No data provided	52	19.2%	58	27.4%

Changes in students' reading abilities were seen between the beginning of the year and end of the year assessment data. As a group, Focus students and Comparison students made gains at about the same rate. The number of Focus students identified as being at grade level increased 4.50%, and the Comparison students identified as being at grade level increased by 5.20%.

Figure 7

Percent of Students Reading at Grade Level or Above, 2013 -2017



Reading Achievement by Group and Equivalence of Groups. Pre-intervention reading achievement was reported for 417 students. One hundred forty Focus students with parents who fully participated in the program had reading achievement results, 73 students whose parents participated less than 150 hours had reading achievement results, and 203 Comparison students had reading achievement results.

Table 21

Pre-Test: Students Reading at or Above Grade Level by Group – 2013 to 2017

	Number of Students at Grade Level	Total Number of Students	Percent of Students
Focus Students of Full Family Participants	50	141	35.5%
Focus Students of Family with <150 hours of participation	20	73	27.4%
Comparison Students	60	203	29.5%

The Focus students with full family participation had the highest percentage of students reading at grade level. To ensure that the groups were equivalent, an ANOVA analysis was conducted on beginning of the year data. The results of the ANOVA showed that there was not a significant effect of family participation level with reading achievement at the $p < 0.05$ level for the three conditions. $[F(2,414) = 0.96778, p = 0.381]$

Post Intervention Reading Achievements: Post intervention reading achievement was reported for 431 students. The results were divided into three groups based upon the amount of parental participation in the ELLP program: full participation, less than 150 hours of participation, or no participation (Table 23). All groups made gains during the school year with the group of Focus children whose parents fully participate in the ELLP gaining the most and the group of Focus children whose parents participated less than 150 hours gaining the least.

Table 22

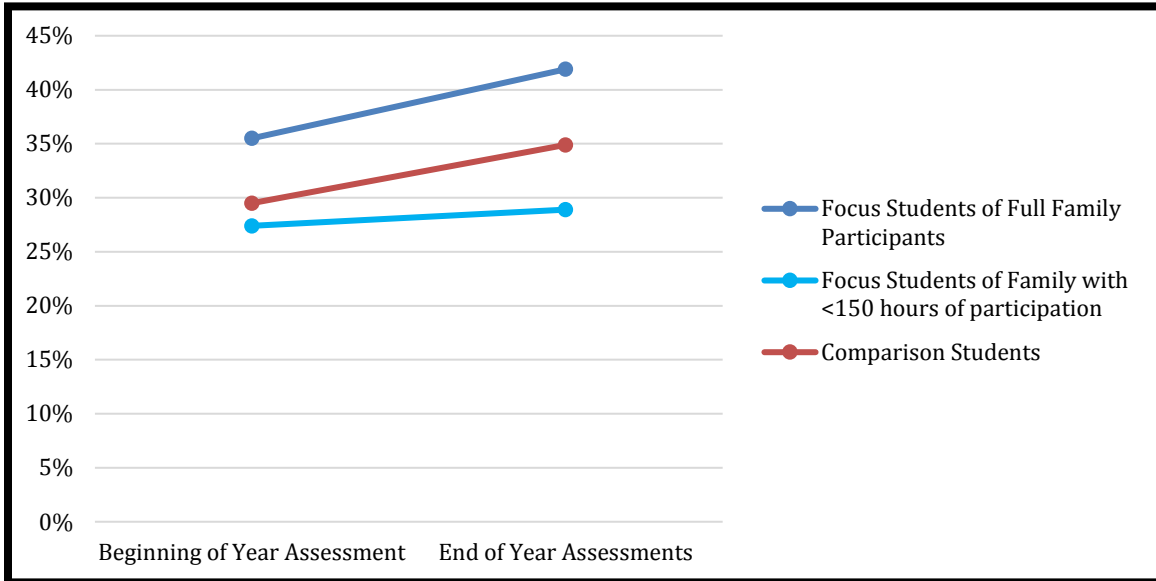
Post-Test: Students Reading at or Above Grade Level by Group 2013 to 2017

	Number of Students at Grade Level	Total Number of Students	Percent of Students	Difference Between Pre and Post % of Students
Focus Students of Full Family Participants	60	143	41.9%	+6.4%
Focus Students of Family with <150 hours of participation	22	76	28.9%	+1.5%
Comparison Students	74	212	34.9%	+5.4%

A one-way ANOVA was conducted on the end of the year data to compare the effects of a parent's level of participation in the ELLP intervention program (full participant, less than 150 hours, or no participation) on reading achievement. The results of the ANOVA showed that there was not a significant effect of family participation level with reading achievement at the $p < 0.05$ level for the three conditions. $[F(2,428) = 1.973212, p = 0.140]$.

Figure 8

Percent of Students Reading at Grade Level or Above by Group 2013 to 2017



Reading Achievement by Grade Level: A review of the results for reading achievement did not reveal any grade level trends that did not coincide with the previous results.

Table 23

Pre-Test: Students Reading at or Above Grade Level by Group 2013 to 2017

Grade	Focus Students			Comparison Students		
	At Grade Level	Total	% At Grade Level	At Grade Level	Total	% At Grade Level
K	40	63	63%	38	63	60%
1	16	61	26%	9	61	15%
2	8	60	13%	9	60	15%
3	4	41	10%	2	40	5%
Other	1	7	14%	2	7	29%

Table 24

Post-Test: Students Reading at or Above Grade Level by Grade 2013 to 2017

Grade	Focus Students			Comparison Students		
	At Grade Level	Total	% At Grade Level	At Grade Level	Total	% At Grade Level
K	44	63	70%	45	63	71%
1	19	61	31%	13	61	21%
2	10	60	17%	11	60	18%
3	8	41	20%	3	40	8%
Other	1	7	14%	2	7	29%

Reading Achievement by Paired Groups and Parental Participation. In the final analysis, each of the Focus subgroups was analyzed with its Comparison match. For this analysis, each child in the pair had to have end-of-year reading achievement scores or the pair was removed. There were 137 pairs in the analysis of Focus children with full participating families and 70 pairs of Focus children with families that participated less than 150 hours.

A paired Sample t-Test was conducted to compare reading achievement of Focus students based on level of family participation in ELLP and a matched Comparison student to analyze the datasets. No significant difference was found in either level of family participation between the reading achievement of Focus children and their Comparison match (Table 25).

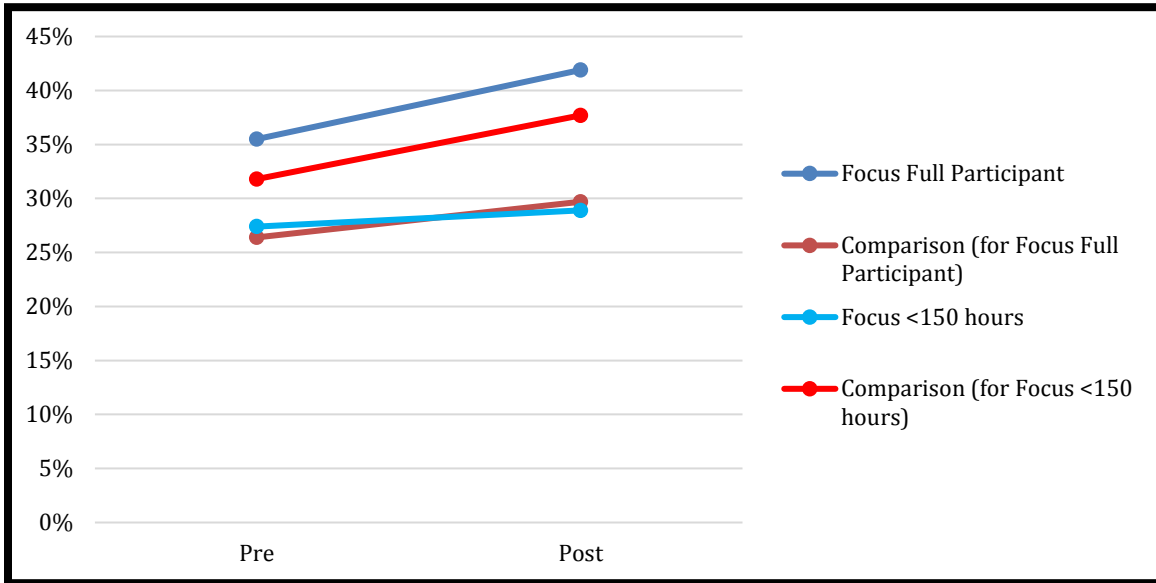
Table 25

Post-Test: Paired Comparison of Students Reading at or Above Grade Level by Family Participation Level 2013 to 2017

Mean	t-Test Paired Two Sample for Means
Full – 1.43 Comparison - 1.37	t(136)= 1.152, p=0.251
<150 Hours– 1.28 Comparison- 1.28	t(69)= 0.000, p=1.000

Figure 9

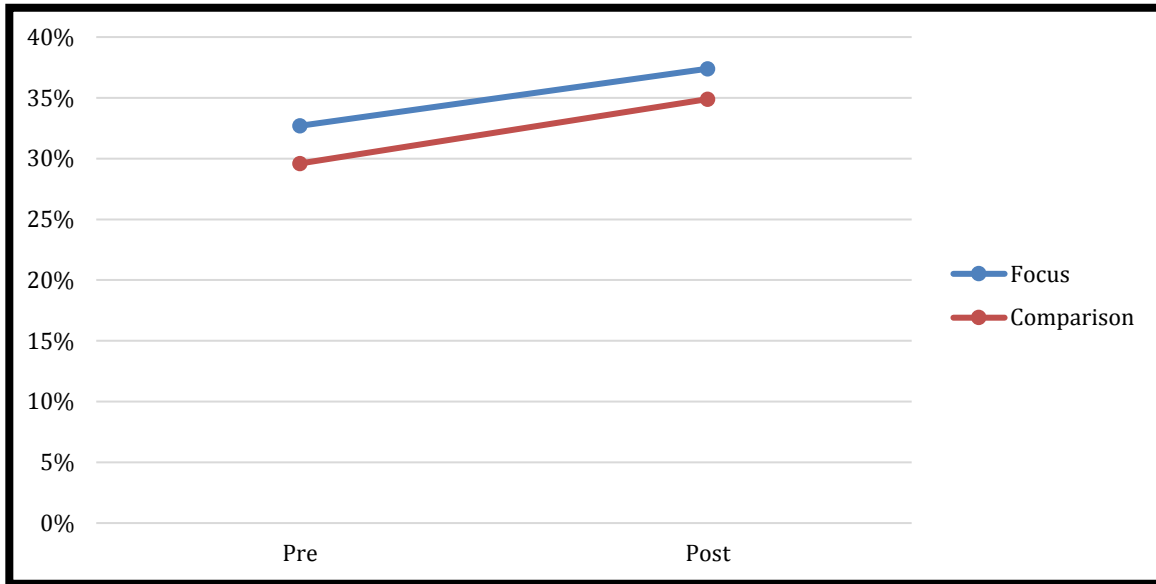
Matched Pairs: Pre-Post Reading Growth – Percent at Grade Level, 2013-2017



When we look at all Focus students and their matched Comparison pairs, the amount of growth between percent at or above grade level at the beginning of the year and the end of the year was about the same. Using these matched pairs, the Focus group had a gain of 4.7% reading at or above grade level while the Comparison group had a gain of 5.3%.

Figure 10

Matched Pairs: Pre-Post Reading Growth - Percent at Grade Level 2013-2017



Potential for a Type 2 Error

While student reading achievement and growth appeared not to have a significant difference and to favor the Focus students, there were confounding data issues that caution the potential for a Type 2 Error, which was to accept the null hypothesis (there was no difference between Focus students' and Comparison students' outcomes for achievement or growth) when there really is one. As explained in the Subgrantee Evaluation Plan (2013, revised 2016) the statistical conclusion validity for a Type 2 error was partially controlled by using a MANOVA. However, that analysis is conducted with the parents who were the direct recipients of the intervention (participating in the ELLP).

Although the study of student reading achievement and reading growth rate did not yield statistically significant results; in fact, had the scaled scores for all measures used by participating schools been available every year for every school there may have been significant results not found in the available data.

Table 26

Statistical Conclusion Validity

External Threat Variable	Threat	Control Yes or No	Explanation
Type I error	Rejects null hypothesis when it is true, i.e., a false positive	Partially	-Statistical significance $\alpha=.05$
Type II error	Accepts null hypothesis when it is false, i.e., false negative	Partially	-MANOVA reduces the threat of Type II errors when it is used rather than repeated ANOVAS (MANOVA allow the comparison of multiple factors which contribute to a single variable against other such factors or factor profiles.) -Power of .8 for this study design
Wrong Function Form	Decreases the sensitivity of the analysis by creating arbitrary cutoffs for dichotomous reporting of non-dichotomous variables	Yes	-Uses continuous data to represent variables, whenever possible

This study of student reading achievement and growth rate would be stronger if all schools used the same assessment in each year, let alone over the course of the intervention. The study would also be stronger if the single assessment had been vertically aligned across grade levels. For example, the STAR uses one set of scale scores for early literacy and a second set for later reading assessment. Students may be assessed with one measure at the beginning or middle of the year and then change to another measure. The program is without vertical alignment and the scales cannot be interpreted for growth within the group data.

Another problem realized was that the probability of a Type 2 error is increased by not being able to use scale scores and instead using a dichotomous variable such as reading grade level (reading below grade level, reading at grade level) (See Wrong Function Form – Table 27). This means there may have been significant differences between group outcomes, but the instrument scale is not sensitive enough to reveal them.

The issue of Type 2 errors was limited to this analysis within this study. It was difficult to detect growth with a dichotomous variable. For example, a third-grade student may score two grade levels below third grade ninth month at the beginning of the year (BOY) and then at grade level

at the end of the year. A second, third grade student may begin the year reading minimally below grade level and at the end of the year, like the first student, be reading at grade level. Obviously, the growth of the first student is much stronger than the second, but data using a dichotomous variable would only reveal reading below grade level (BOY) and at grade level (EOY).

Parental Support of Focus Students' Literacy Development

The validity of reading achievement and growth data was also analyzed annually relative to parents' support of their children's literacy development. This is a study of the English Language Learners Program, of a two-generation intervention with a theory of change that connects changes in one generation with changes in the other. The intervention treatment was to introduce and reinforce ways for Hispanic parents to support literacy learning in their homes. Parents were immersed in an adult education program centered on building their English language proficiency – spoken and print (reading and writing) skills. They also engaged directly with their children's teachers and their children (Focus students) during daily lessons (generally reading or math) four days a week.

Parents' were interviewed when they enrolled and at the end of each program year. Interview items (Family Interviews) probed their out-of-school literacy-related interactions with their children (the Focus students). Post Family Interview data were aggregated and analyzed for the years 2013⁶ to 2014.

Successful family and school partnerships flourish when there are common understandings about grade level expectations and shared responsibility for ensuring students meet high expectations. Parents expect teachers to view their children as unique individuals with distinct learning strengths and learners who require ongoing support with high-quality instruction. Teachers in turn expect families to support their children as learners by assuming the roles of supporters, encouragers, monitors, advocates, decision makers, and collaborators (Mapp & Kuttner, 2013).

⁶ End of year Family Interview for the 2012-2013 program year

Parents transferred lessons learned in ELLP during the school day to out-of-school interactions with their children. They practiced English by writing, reading, speaking, and listening together. Parents' responses to the end-of-year Family Interviews helped researchers to understand the extent to which the Focus students were supported as learners by their parents. First, and foremost, parents sought an educational intervention to provide a framework for helping their children succeed in school. Parents' responses to Family Interview items demonstrate their commitment and behaviors in support of their children as learners

- 81% know how to help their child at school.
- 79.5% know how to help their child make good grades.
- 91% feel successful to help their child learn.
- 93% know how to help their child learn,
- 96.6% believe they make a significant difference in their child's performance.

ELLP parents developed a collective understanding that they were valued members of the school community. These realizations contributed to positive self-efficacy. Parents stated that they should, could, and would help their children succeed as learners. Positive statements on the Family Interview were made regarding self-efficacy of parents of Focus students to their children's learning. Data describes the ways parents engage with teachers, principals, and others. Interview responses affirmed: 98.4% are involved in their child's education.

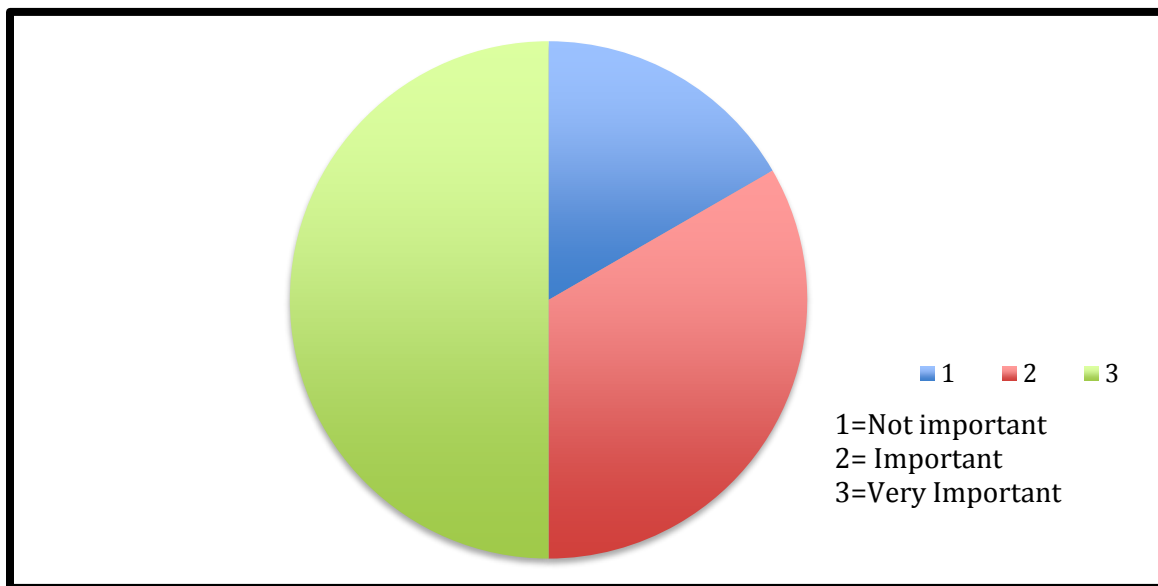
- 98.4% feel welcome at the participating school.
- 97.7% feel their guidance and support of learning is valued.
- 97.7% feel their child's teacher encourages them to ask questions about their child's work.
- 98% understand what their child's teacher expects them to learn this year.
- 95% feel comfortable to communicate effectively during parent teacher conferences
- 97% feel comfortable advocating for their child's rights with the teacher and school principal
- 70% attended five or more events (e.g., theatrical play, party, art show) outside of ELLP at their children's school during the school year.
- 65% attended from three to seven PTA/PTO or other parent meetings during the school year.

All but three parents volunteered in some capacity in the cafeteria, school office, or library. The same number volunteered in their child’s classroom one or more times. Only two parents missed volunteering in one or more special events, such as school projects or trips.

Of 249 responses, 171 parents considered “Becoming a better teacher for my child” as a very important goal that could be achieved in part by participating in ELLP.

Figure 11

Parents’ of Focus Students Ranking of the Importance of Becoming a Better Teacher for My Child



Data were collected and analyzed for several other parent-child interactions. These were further studied and reported in a separate report on the impact of the intervention on adult literacy and English language growth and parental support of children’s learning.

Conclusions About Reading Achievement and Growth Rate

Statistical treatments and data analysis reported for student reading achievement and reading growth were used to determine whether the Social Innovation strategy of a two-generation intervention successfully met performance objectives set in the Subgrantee Evaluation Plan for Hispanic/Latino students whose families were enrolled in ELLP.

The Importance of Reading Success. Reading ability is an essential foundation of all other academic skills (Snow, Burns & Griffin, 1998). The successful acquisition and application of reading skills during the primary grades have important academic implications. Students who still struggle to learn reading by the end of third grade are less likely to understand what is taught in core subjects (and reading) in later grades. The longer reading problems exist the more intractable they become and the further students fall below grade level expectations across the content areas (Schatschneider, Wagner & Crawford, 2008). Unfortunately, research is conclusive that primary grade students who fail to acquire essential literacy knowledge and skills have a greater likelihood later in life of not satisfying their basic needs for health, employment, housing, and other metrics of wellbeing (Lyon, 2002, Morgan, Farkas, Tuffs, & Sperling, 2008).

When viewed through the lens of past research, kindergarten reading outcomes for the Focus students exceeded the objective and may forecast continued success in reading development and English language proficiency. The same assumption was held for first grade students if parental support for literacy outside of school remained consistent. Overall, there is a national trend found on the National Assessment of Educational Progress (NAEP) that finds reading achievement increases on 4th grade and 8th grade scores for English Learners (U.S. Dept. Education, 2016). Those studies found that between 2000 and 2015, average reading scores for English learners in grade four increased by 22 points. In contrast, the average score for non-English learners only increased by 11 points (U.S. Dept. Education, 2016). Similarly, while between 1998 and 2015 the average 8th grade reading scores for non-English learners increased five points, while the average reading scores for English learners in 8th grade increased six points (U.S. Department of Education, 2016).

Parents' ELLP participation hours warrant further study in relation to the reading achievement and growth rate outcomes. A number of parents re-enrolled from one year to the next. Some chose the same child as the Focus student and others did not, therefore discussion and conclusions regarding long term (more than one academic year) of parental support were limited.

Whatever the extent of parental support per school per year and aggregated over the funding period, the critical importance of teacher quality cannot be discounted as a powerful and

uncontrolled independent variable. Schools must hire teachers qualified and certified to teach English learners or support unqualified staff as they work toward obtaining essential qualifications within a reasonable timeframe (OELA, 2016). A core assumption of response to instruction or intervention (RTI) models is the importance of measuring growth in achievement over time in response to *effective* instruction or intervention.

Recruiting, developing, and retaining excellent educators in Detroit is imperative to ensure all students have access to a high-quality education. Data on teacher quality is reported by the Detroit Public Schools. However, the data are aggregated and cannot be construed as a generalization of the teacher effects found in this impact study due to the small sample size of teachers. Furthermore, teacher competencies were not an aspect of this study. The evaluation could not control for highly qualified or unqualified teachers. There is ample evidence to question teacher competence found in district, and school-wide reading outcomes (see section of this report; Program Background and Problem) over the life of the grant reveal discouraging evidence of low reading performance outcomes for reading at all grade levels across ethnic groups.

Many RTI models actively monitor growth for identified individuals who need different levels of intervention. The data sets include annual pretests and posttests. The difference between tests provides teachers with more information to answer critical questions: “Who succeeded this year?” “Who’s on track with their reading growth?” And finally, “Who’s likely to do well on the state M-STEP reading assessment?”

As reported, differences in mean and variance were found in the growth rate of the two groups, with the Focus group having a more rapid growth rate. The Focus students have a stronger likelihood of making more appropriate progress towards grade level standards in later years than their peers in the Comparison group.

Achievement of Project Objectives

Objective 3a: 50% of kindergarten students whose parents are considered full participants will meet or exceed grade level proficiency in reading or meet or exceed the match group.

(Outcomes in Logic Model – children components)

Met - 75.86% of the kindergarten students whose parents are considered full participants met

or exceeded grade level proficiency in reading.

Objective 3b: 50% of first grade students whose parents are considered full participants will meet or exceed grade level proficiency in reading or meet or exceed that of the match group.

(Outcomes in Logic Model – children components)

Met - 32.20% of the first grade students whose parents are considered full participants met or exceeded grade level proficiency in reading, while only 23.64% of the match group met or exceeded grade level proficiency.

Objective 3c: 45% of second grade students whose parents are full participants will meet or exceed grade level proficiency in reading or exceed that of the match group. (Outcomes in Logic Model – children components)

Not Met - 16.95% of the second grade students whose parents are considered full participants met or exceeded grade level proficiency in reading, while 18.33% of the match group met or exceeded grade level proficiency.

Objective 3d: 50% of third grade students whose parents are full participants will make progress towards grade level proficiency in reading or exceed that of the match group. (Outcomes in Logic Model – children components)

Met - 19.51% of the third grade students whose parents are considered full participants met or exceeded grade level proficiency in reading, while 8.57% of the match group met or exceeded grade level proficiency.

Objective 4: Third grade students whose parents completed 150 hours in the ELLP Program will make progress toward Proficient or Advanced on the state Communication Arts assessment at a rate higher than their school mean and the mean of their matched sample. (Outcomes in Logic Model – children components).

This objective was deleted. DPS would not provide data.

Students' School Attendance Aggregated.

Attendance. Student attendance, the most common measure in education, is measured in two ways. First, the most traditional method of calculating attendance rate uses the formula: (time

present)/(total possible time). The second measure is used more recently in public education to identify whether schools meet the federal (No Child Left Behind and ESSA) criteria. This measure uses the percent of students achieving the 90% average attendance benchmark when the traditional calculation method is employed. Attendance in this study was analyzed by using the two strategies, attendance rate and percent attending at least 90% of the time.

Analysis: Two hundred and sixty Focus children had complete attendance data. Two hundred and fifty-five Comparison students had complete attendance data. The mean attendance was determined for the Focus group students and the Comparison group students. A Comparison of the differences between the groups shows that the Focus group attendance percentage was higher than the attendance percentage of each school. The Focus group was between 1.2% higher (Phoenix) and 4.6% higher (Maybury) than the Comparison group by school and 2.5% higher overall (Table 27).

In practical terms and using the average of 159 days of possible attendance days, students in the Focus group averaged 1.9 days more to 7.3 days more of instruction than the Comparison group. Overall, Focus students received 3.975 days more of instruction each year.

Table 27

Average Percent Attendance by School 2013-2017

	Focus Students		Comparison Students	
	Students	Average	Students	Average
Avancemos	39	90.9%	41	88.8%
Harms	89	94.3%	85	92.2%
Lighthouse	14	96.9%	13	94.1%
Maybury	50	96.1%	47	91.5%
Munger	66	94.1%	67	92.8%
Phoenix	2	99.7%	2	98.5%
Total	260	94.3%	255	91.8%

Analysis of Parents' Attendance in ELLP and Their Children's Daily Attendance. Next, average attendance of the Focus group is examined by whether the parents met the criteria (at least 150

contact hours) for full participation in ELLP over the course of a school year. This analysis indicates that the Comparison students (see Table 28) had the poorest attendance with an average rate of 91.8%. This was followed by the average attendance rate of 92.9% for students whose families participated in ELLP but did not complete 150 hours of participation. Students in the Focus group whose ELLP families completed at least 150 hours of participation had the best average attendance rate, 95.0%.

Lost learning opportunities add up over time (Ginsburg, Jordan, & Chang, 2014). The Comparison students with an attendance rate of 91.8% accrued 13 days, or two and a half weeks, of absences by the end of the school year that may create learning gaps, especially in the primary grades when instructional units are shorter. If a kindergarten child’s attendance rate stays steady at 90%, when the opening bell of the first day of high school rings he or she will enter having missed around 28.6 weeks (out of a 32 week year) of instructional opportunities.

Table 28
Average Attendance by Student Group and Parent Participation

	Average Attendance
Comparison Students	91.8%
Focus Students Whose Parents <150 hours Participation	93.0%
Focus Students Whose Parents >150 hours Participation	95.0%

A one-way ANOVA was conducted to compare the effects of a parent’s level of participation in the ELLP intervention by placing students into three attendance groups; full parent participation in ELLP, less than 150 hours in ELLP, or no participation in ELLP (Comparison students). The results of the ANOVA showed that there was a significant effect of participation level of the family with reading achievement at the $p < 0.05$ level for the three conditions. [$F(2,512) = 8.08572, p = 0.000$].

Post hoc analyses were conducted given the statistically significant results of a one-way ANOVA. Specifically, Tukey HSD tests were conducted on all possible pairwise contrasts. The following group was found to be significantly different ($p < .05$): Focus with full participation ($M=0.9499, SD=0.06$) and Comparison students ($M=0.9182, SD=0.08$). A review of the mean scores indicated

that the Focus with full participation group had significantly more attendance at school than the Comparison students. However, the Focus group with less than 150 hours of participation ($M=0.92955$, $SD=0.06$) did not significantly differ from the Focus full participation group nor from the Comparison group.

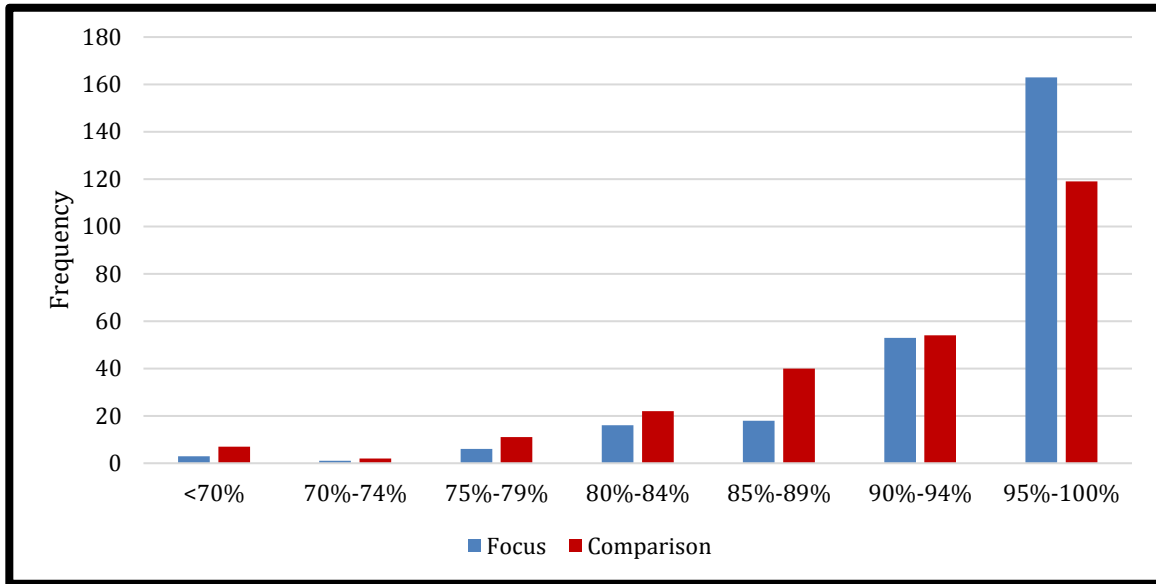
The effect size for the ANOVA analysis was calculated with G*Power 3.1.9.2. The effect size f was 0.1748092 which falls between small ($f=.10$) and medium ($f=.50$) effect size. The results of the ANOVA showed that there was a significant effect of participation level of the family with attendance at the $p<0.05$ level for the three conditions. [$F(2,512) = 8.08572$, $p = 0.000$].

Attendance greater than ninety percent. Ninety percent of students having an attendance rate of 90% or better is a goal in many states and school districts. 83.1% of students in the Focus group had an attendance rate of ninety percent or better, while 68.6% of the Comparison group had an attendance rate of ninety percent or better.

A graph (Figure 12) of the distribution of scores makes it apparent that the Focus group had substantially more students with a 95% attendance rate or better than the Comparison group. If the pattern of chronic absenteeism continues for those Comparison students, they will forfeit an entire year of learning before high school. Furthermore, the Focus group only had two students with an attendance rate below 70% (over 22 weeks or 5 months absent in that year), while the Comparison group had seven whose attendance rate was less than 70%.

Figure 12

Number of Students by Attendance Percentage 2013-2017



Next, the percentage of the students in the Focus group that met the 90% benchmark is examined by whether the parents had 150 hours of participation in ELLP (adult education/ESL instruction + Parent Time (including service learning) + PACT Time). The difference in the percentage of students meeting the 90% attendance benchmark between Focus students whose parents completed 150 hours of participation and Focus students whose parents did not complete 150 hours was 10.8%. The greater difference in the percentage of students meeting the 90% attendance benchmark between the Focus students whose parents did not complete the participation hours and the Comparison group was 7.5%.

Table 29

Percent of Students Meeting the 90% Attendance Benchmark by Student Group and Parent Participation 2013 – 2017

	Percent Meeting Benchmark
Comparison Students	68.6%
Focus Students Whose Parents <150 hours Participation	76.1%
Focus Students Whose Parents >150 hours Participation	86.9%

Attendance Discussion: Strong daily attendance, rather than finding a pattern of chronic absenteeism was an important program impact. Research found that on average, one in 10 kindergarteners and 1st grade students miss nearly a month of school every year (Attendance Works, 2017). Chronic absenteeism exacerbates student failure. Other research shows evidence that kindergarteners who miss ten percent of school days have lower academic performance when they reach first grade (2011). Chronic school absence is in part responsible for an attendance gap that disproportionately holds back primary grade students from low-income families who miss critical learning days when the reading curriculum is taught. Of most relevance to the ELLP is that the reading scores for Latino children were most seriously affected.

Chronic absenteeism is a barrier to academic success for students in the Detroit Public School District, which holds the state's lowest status for daily attendance. The importance of daily attendance was made clear to ELLP parents when they enrolled. The adult educators continued to reinforce the importance of daily attendance throughout the school year. If parents expected their children to succeed they had to instill good attendance habits and ensure their children got to school on time every day. Less than 10 Focus students approached the benchmark for chronic absenteeism. The attendance rate distinguished these Focus students from typical Detroit Public school students who were absent, on average, once a week (19.8%) (Detroit Public Schools, 2016).

Chronic absenteeism exacerbates academic achievement, especially in literacy skill development (Applied Survey Research, 2011). Less than one in three elementary students are proficient in reading (Detroit Public Schools, 2016). The link is clear. When students are disengaged, they are not learning the core curriculum. They become increasingly frustrated and less persistent to complete academic tasks. Disengagement and poor attendance contribute to a low graduation rate. Over 600 high school students out of the 2016 cohort (3,171 students) who should have graduated did not graduate in the spring of 2016 (most recent data available from the Detroit Public Schools, 2016) for a graduation rate of 78.3%.

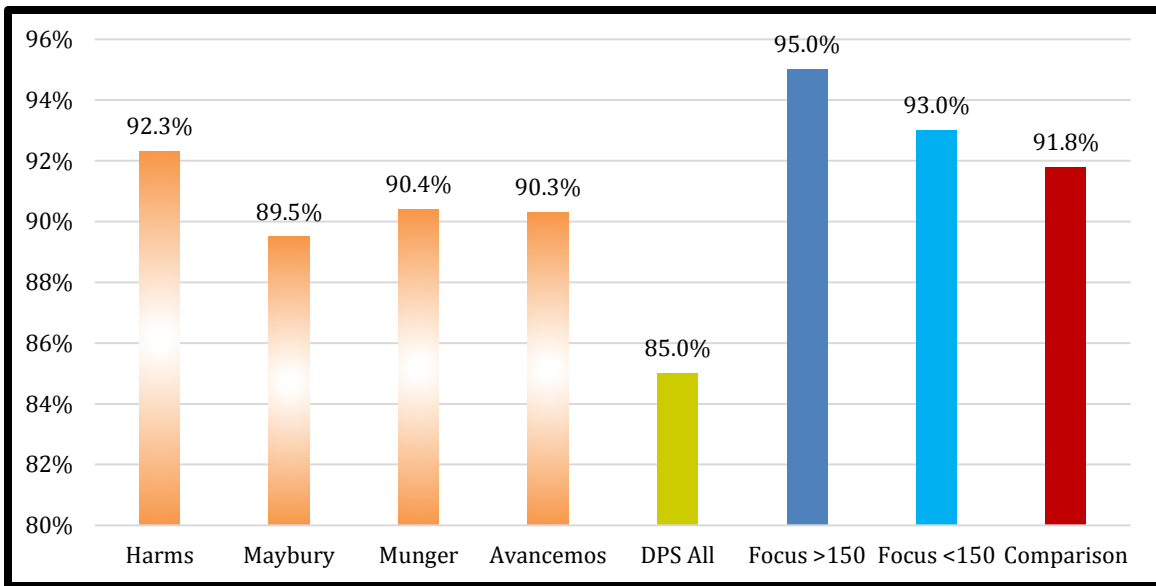
The attendance data showed that parents who attend the ELLP ensured their children attended school daily to a greater extent than the students whose parents were not engaged in the

school-based family learning program. Differences were found among groups with the Comparison children attending the least; students whose parents did not complete 150 participation hours attended more than the Comparison group, but less than the Focus group of students whose parents fully participated.

The most recent school level data available from DPS is for spring of 2016. The Average Daily Rate (85.4%) was calculated for all schools. While participating schools scored higher, the total DPS included high schools that have substantially lower percentages than the elementary schools. The Focus group and the Comparison group had higher attendance rates than the total DPS average (Figure 13).

Figure 13

Average Attendance Per School, District, and Study Group, 2016 -2017⁷



The Focus group with families that fully participated outperformed the DPS average daily (2016-2017) attendance rate of 85.0% by 10%. This difference means the Focus students benefited from 16 more days of school per year than the average student in the district. Those three weeks constitute nearly the full amount of time students spend in summer school.

⁷ Data from Michigan School Data: Student Counts

Tracking chronic absence is a strategy to promote literacy development (Annie E. Casey Foundation, 2013). The attendance data confirmed the impact research hypothesis that students of parents who fully participate in the ELLP exhibited strong annual attendance rates equal to or greater than the mean daily attendance rate for the school or the matched sample group.

This programmatic student performance outcome has national significance. The National Results & Equity Collaborative (NREC) developed an action framework to achieve results and equity for vulnerable children and youth. NREC partners identified birth to eight years of age results indicators that school and community partners have in common. These results and indicators are aligned with national efforts to achieve results and equity for vulnerable children and youth (NREC, 2014). The 4th result sought is “Children perform at grade level.” Two of the NREC indicators for this result are “Children read at grade level” and “Children attend school regularly.” The results of the ELLP attendance analysis show 37.4% of the Focus students read at grade level and 83% attended school regularly at least 90% of the time.

Summary of Historical Attendance Outcomes for Students

Differences in attendance rates were found each year, with Focus group students having significantly higher attendance than Comparison students. When examined further, those Focus students whose parents were full participants had a higher rate of attendance than those whose parents were not full participants.

Objective 2: 80% of students whose parents are considered full participants will have a daily attendance rate at or above the school mean or that of the matched sample group. (Outcomes in Logic Model – children components)

Met. Considering the average attendance rate of the school, district, Comparison students and Focus students whose parents had <150 hours, none exceeded 93%. In examining the 168 Focus students whose parents fully participated, 135 (80.3%) had average attendance rates greater than 93%.

School Behaviors Aggregated Analysis 2014-2017

Academic Mindset: The original TROSP consisted of 10 questions that were sorted into: a) an academic cluster, b) an efficacy cluster, c) a social/behavioral cluster and d) a single question on attendance. Each cluster had three questions that were rated on a Likert-like scale as poor (1), fair (2), average (3), good (4), or excellent (5) by the students' teachers. A total score of 15 (5 points x 3 items) is the highest score possible for each cluster. Teachers responded to a survey of these indicators at the beginning and at the end of the year.

Measuring Academic Mindset: The Teacher Report of Student Progress (TROSP) was revised Year 3 to provide information about appropriate on-task learning behavior demonstrated by Focus and Comparison students in their classrooms. This data replaced a single item included in the initial SEP. That item focused on discipline — defined for this study as teachers' referrals to the building principal to correct or discipline students for disruptive behavior. Teachers stated they could not share discipline data because it is a construct included in their annual performance reviews. Discipline data was modified to include positive school behaviors in a cluster called Academic Mindset, which was added to the TROSP.

The Academic Mindset cluster added 11 questions to the PreTROSP and PostTROSP. These questions ask the teacher to rate the Focus and two preselected (by the Southwest Parent Liaison) Comparison children on

- general discipline,
- work quality,
- self-initiation of a task,
- ability to complete task in a group,
- ability to complete task when working independently,
- assignment completion,
- ability to ask pertinent questions,
- ability to know when to get help from a teacher,
- ability to appropriately seek help from peers, active engagement, ability to talk about class activities, and,
- comfort interacting with peers.

Data Analysis: Analysis began by identifying students who had both a pre- and post- TROSP and by separating Focus students from the Comparison students. The pre-TROSP data analysis set contained results for 147 Focus students and 147 Comparison students. The first analysis determined whether the two groups were equivalent in their school and behavior cluster ratings at the beginning of the year. This was followed by whether they were equivalent in school and behavior cluster ratings at the end of the year.

Table 30

PreTROSP - Statistical Analysis for Groups by Academic Mindset Clusters

TROSP Cluster	Means	t-Test: Two Sample Assuming Equal Variances (Unequal Sample Size, Two-tail)
Academic Mindset	Focus – 39.455 Comparison - 38.898	t(295)= 0.445, p= 0.436 no significant difference
Academic	Focus – 10.107 Comparison - 9.579	t(295)=1.466, p= 0.144 no significant difference
Efficacy	Focus – 12.000 Comparison - 11.125	t(295)= 2.881, p= 0.004 significant difference
Attendance	Focus – 4.441 Comparison - 4.125	t(294)= 2.840, p= 0.005 significant difference
Social/Behavioral	Focus – 12.050 Comparison - 11.807	t(295)= 0.895, p= 0.372 no significant difference

*During different years, some clusters were not on the TROSP survey.

No significant differences were found in means between the Focus and Comparison groups for mindset, academic, and social/behavioral. These results indicated that at the beginning of the school year the two groups were equivalent in regard to academic mindset, academics, and social/behavioral. A significant difference between groups was found in Efficacy and Attendance indicating they were not equivalent in these two areas. In all clusters, the Focus group’s mean was larger than the mean of the Comparison group.

Table 31

PostTROSP - Statistical Analysis for Groups by Academic Mindset

TROSP Cluster	Means	t-Test: Two Sample Assuming Equal Variances (Unequal Sample Size, Two-tail)
Academic Mindset	Focus – 40.435 Comparison - 39.550	t(364)= 0.780, p= 0.436 no significant difference
Academic	Focus – 10.504 Comparison - 9.919	t(247)=1.502, p= 0.134 no significant difference
Efficacy	Focus – 12.128 Comparison - 11.444	t(247)= 2.139, p= 0.033 significant difference
Attendance	Focus – 4.432 Comparison - 4.097	t(247)= 2.686, p= 0.008 significant difference
Social/Behavioral	Focus – 9.732 Comparison - 9.398	t(364)= 0.768, p= 0.443 no significant difference

*During different years, some clusters were not on the TROSP survey.

The PostTROSP data set contained results for 183 Focus students and 183 matched Comparison students. Previous analysis had determined that these groups were equivalent in the academic mindsets, academics, and social/behavioral clusters at the beginning of the year. These results remained the same at the end of the year. No significant results were found for these clusters.

Comparison students. All clusters increased from pre- to postTROSPs except Attendance (Focus group had a loss of 0.009; Comparison group had a loss of 0.028) and Social/Behavioral (Focus group had a loss of 2.318; Comparison group had a loss of 2.409).

The group results were analyzed to determine whether they had statistically significant changes between the PreTROSP and PostTROSP for school behavior items in the academic mindset cluster. A paired two sample t-test for means was conducted to determine significance.

Table 32

Statistical Analysis by Group for Change between
PreTROSP and PostTROSP on Academic Mindset Related Items

	Mean	t-Test: Paired Two Sample for Means (Two-tail)	F-Test Two-Sample for Variances (Two-tail)
Focus	PreTROSP – 36.75 PostTROSP - 39.73	t(166)= -1.824, 0.070	F(83,83)= 1.07, 0.763
Comparison	PreTROSP –36.79 PostTROSP - 39.90	t(320)= -2.588, 0.010*	F(160,160)= 1.08, 0.635

* Significant difference

No statistically significant differences were found for the Focus group on academic mindset — t(166)= -1.824, 0.070), F(83,83)= 1.07, 0.763. However, significant differences were found for the Comparison group between preTROSP and post TROSP results for means of mindset — t(320)= -2.588, 0.010. No significant differences were found on the variances between the Comparison groups preTROSP and postTROSP results—F(160,160)= 1.08, 0.635. (See Table 33).

One caution should be kept in mind when interpreting the results of the TROSPs. Clusters can't be confirmed because of the potential bias of teachers who complete the survey and who know which families are the Focus group children because they know which parents attend PACT Time and which ones don't.

MANOVA ANALYSIS

The first MANOVA analysis probed the question, “Does family participation in ELLP significantly impact students’ attendance, academic mindsets, and reading achievement?”

A MANOVA was conducted to investigate this question. Data was available for 348 adults and 348 students. Family participation in hours was the independent variable with three groups being defined by whether parents participated in ELLP for 150 hours or more (Full Participant), participated between 0 and 150 hours (Partial Participant), or did not participate at all (parents of Comparison students). The dependent variables were attendance (M=0.769, SD=0.422),

mindsets (M=0.793, SD=0.406), and reading level (M=0.314, SD=0.465). Four statistical tests were run as part of the MANOVA analysis. All results indicated that there was a significant effect of parent’s level of participation on the dependent variables. An R² type measure was calculate from the Wilk’s Lambda and found to be 0.053 which means this model accounts for approximately 5% of the variance.

Table 33
 Statistics Showing Relationship/Effects of Parental Participation in ELLP on Students’ Attendance, Academic Mindset, and Reading Achievement

Statistic	Value	F Value	Num DF	Dem DF	p
Wilks’ Lambda*	0.947	3.151	6	684	0.005
Pillai’s Trace	0.054	3.148	6	686	0.005
Hotelling-Lawley Trace	0.055	3.153	6	682	0.005
Roy’s Greatest Root **	0.042	4.827	3	343	0.003

Notes: * F Statistic for Wilks’ Lambda is exact.
 ** F Statistic for Roy’s Greatest Root is an upper bound.

Using G*Power 3.1.92, an effect size of f=0.0276 and a power of 0.9287 was calculated for this MANOVA.

The second MANOVA analysis addressed the research question: To what extent does full participation⁸ in the ELLP (Independent Variable) increase education-related parent behaviors (Dependent Variable), improve student school actions (attendance and mindsets) (Dependent Variable), and increase student reading achievement (Dependent Variable)?

The independent variable remained the same as in the model above although some of the dependent variables were different. In this model, the first dependent variable was parents’ education related habits with their child. This variable was created from data on home reading habits with their children, efficacy, and home literacy environment surveys. The second dependent variable, student actions, combined student attendance and mindsets. Student literacy remained the final dependent variable.

⁸ Full participation = 150 contact hours (Calculations based on 24 full weeks of instruction @ 11 hrs per week and 60% attendance).

This analysis was conducted on data for 172 Focus parents and 172 Focus students. Family participation in hours was the independent variable with two groups being defined by whether parents participated in ELLP for 150 hours or more (Full Participant) or participated between 0 and 150 hours (Partial Participant). The dependent variables were education related parenting behaviors (M=2.384, SD=0.797), students' school actions - attendance and mindsets (M=1.628, SD=0.603), and reading level (M=0.308, SD=0.463).

Table 34
Demographics for Participants with >150hrs

Demographic Variable	Percent of Sample
Marital Status	
Married	80%
Not Married	13%
Other	7%
Primary Language	
Spanish	83%
English	17%
Employment Status	
Employed	3%
Unemployed	97%
Annual Household Income	
\$5,000-\$9,999	7%
\$10,000 - \$14,000	10%
\$15,000 - \$19,999	23%
\$20,000 - \$24,000	27%
\$25,000 - \$29,999	17%
\$30,000 - \$34,999	3%
>\$35,000	7%

Table 35
Descriptive Statistics for Program and Control Group Participants

Variable	BOY percentile Mean (S.D.)	MOY percentile	EOY percentile	Attendance %
Program	27.67 (18.44)	26.22 (23.08)	26.00 (23.08)	91.69 (7.7)
Comparison	22.46 (21.24)	19.93(26.74)	23.73 (26.44)	90.78(7.26)

Four statistical tests were run as part of the MANOVA analysis. All results indicated that there was a significant effect of parent’s level of participation on the dependent variables. An R^2 type measure was calculate from the Wilk’s Lambda and found to be 0.228, which means this model accounts for approximately 22.8% of the variance.

Table 36
Statistics Showing Relationship/Effects of Parental Participation in ELLP on Parent Education-Related Behaviors and Students’ School Actions, and Reading Achievement

Statistic	Value	F Value	Num DF	Dem DF	p
Wilks’ Lambda*	0.772	16.514	3	168	<0.0001
Pillai’s Trace	0.228	16.514	3	168	<0.0001
Hotelling-Lawley Trace	0.295	16.514	3	168	<0.0001
Roy’s Greatest Root **	0.295	2.658	3	168	<0.0001

Notes: * F Statistic for Wilks’ Lambda is exact.
** F Statistic for Roy’s Greatest Root is an upper bound.

Using G*Power 3.1.92, a small effect size of $f=0.1381$ and a power of 0.9997 was calculated for this MANOVA analysis.

Discriminant Function Analysis.

A discriminant function analysis was conducted to follow up the significant MANOVA in order to determine which individual dependent variables were significantly different between the comparison, partial, and full-participation participants. The results yielded a single discriminant

function (Wilks' Lambda = .769, $\chi^2(3) = 8.63$, $p = .035$). Results indicate that all three DV significantly differed between comparison, partial, and full-participation parents.

CONCLUSIONS

The level of parent participation (150 hours- equal or more than, less than) in the family learning program had a significant impact on education related parenting behaviors students' school actions - attendance and mindsets, and reading level. All results indicated that there was a significant effect of parent's level of participation on the dependent variables. The children of parents who were full participants exceeded the outcomes of students in the comparison group and in many cases the outcomes achieved by children of parents with less than full participation. The data imply program staff must clarify the importance of persistence and regular attendance to parents when they enroll. Parents need to understand the benefits of full participation in terms of personal goal attainment and their children's learning outcomes. Replication of the ELLP may be framed by the tenet that rigorous two-generation program designed to advance parents' literacy, English language proficiency, work-force preparation, self efficacy, and social capital are intensive and appropriate for families most in need of adult learning and parenting educational interventions. Intensive family literacy programs such as the ELLP are equipped to serve fewer parents with greater needs for multiple supportive services than programs designed to increase the number and type of activities parents participate in at their children's schools.

Children of parents in Hispanic families enrolled in Southwest Solutions' English Language Learners Program demonstrated positive reading achievement outcomes that exceeded their matched peers in terms of reading achievement and reading growth rates (kindergarten, first, and third grades) although not at a significant level. Focus students made incremental progress toward grade level benchmarks. The amount of growth between percent at or above grade level at the beginning of the year and the end of the year was analyzed. Using the matched pairs, the Focus group had a gain of 4.7% reading at or above grade level, while the Comparison group had a gain of 5.3%.

Focus students had better school attendance than Comparison students and minimal evidence of chronic absenteeism. Student attendance was studied because chronic attendance is linked with poor reading performance and the likelihood of not completing high school within four years. In

practical terms and using the average of 159 days of possible attendance days, students in the Focus group averaged 1.9 days more to 7.3 days more of instruction than the Comparison group. Overall, Focus students received 3.975 days more of instruction each year.

The Comparison students with an attendance rate of 91.8% accrue 13 days, or two and a half weeks, of absences by the end of the school year that may create learning gaps, especially in the primary grades when instructional units are shorter. If a kindergarten child's attendance rate stays steady at 90% (15 days absent per year), he or she will enter high school having missed around 28.6 weeks (out of a 32-week school year) of instructional opportunities.

When compared to the Focus group with parents in ELLP having full participation and themselves having a 95% average daily attendance rate over the same period, Focus group students would have missed 8 days of school per year, or 72 days by the time they enter 9th grade. This average rate extrapolation means the Focus students would have less than half the absentee rate than the Comparison students. By the end of high school, the Comparison students would have missed 36.4 weeks, which is one school year *plus* one month, compared with the Focus students who would be absent over Kindergarten through 12th grade just 20.8 weeks.

The Comparison group had seven students who were absent chronically (less than 70% attendance), while the Focus group had only two students with a pattern of chronic absenteeism. When one considers the average daily attendance rate and the chronic absenteeism rate, the Comparison group represents lost learning opportunities that compound over time, compared to the Focus group. There is a probability that the chronically absent Comparison students will not graduate high school, further perpetuating the intergenerational cycle of low education and poverty onto their children.

The Focus group had substantially more students with a 95% attendance rate or better than the Comparison group. If the pattern of chronic absenteeism continues for those Comparison students, they will forfeit an entire year of learning before high school. Furthermore, the Focus group only had two students with an attendance rate below 70% (over 2 months absent in that year), while the comparison group had seven whose attendance rate was less than 70%.

Parents' Participation as measured by participation hours impacted Focus students' reading achievement. The results of the ANOVA showed that there was a significant effect of participation level of the family with reading achievement at the $p < 0.05$ level for the three conditions. Pre- and Post-Family Interviews show an increase in interactive literacy behaviors in and out of school for parents of Focus students. Home visit reports (by project staff) show significant improvements in the literacy environments and family literacy behaviors (e.g., availability of paper and writing tools, reading aloud at least three times a week) in the homes of Focus students.

RECOMMENDATIONS

Ensure shared measures are used to measure reading across schools. The most important recommendation is to ensure for future studies that consistent, shared measures of reading are used across schools over the funding period. Although there is no exact timeline for reviewing a district's reading curricula and commercial materials, it is not uncommon for new programs to be adopted and subsequently change the assessment tools in order to align with the new reading program. This negatively impacts research studies that are dependent on the district to provide data that measures reading development over time. Linear growth can be tracked with scaled scores, thus it is imperative that they are accessible to the researcher. The only remedy for this external threat to validity is to assess students separately from the school district assessment. This is cost prohibitive for Social Innovation Fund evaluations with limited funding for subgrantee evaluations.

Conduct a study of performance outcomes for parents of the Focus students. The second recommendation is for policy makers and family literacy/learning program providers to conduct further study on the adult outcomes. It is important to determine family learning interventions in terms of the extent of need and barriers to well-being that challenge a community. The ELLP focused on the students' parents in Hispanic families who needed English language skills development as a condition for future employment and full participation in their children's education.

ELLP was a time intensive intervention for parents and program staff. It is also an expensive intervention. Each school required a half time adult educator who was funded through the Social Innovation Fund. Instructional and assessment materials were made available through the grant.

The intensity of services most benefited the Focus children whose parents' attended 150 hours or more during the school year. ELLP is an example of family literacy programming that is most intensive and expensive because relatively few families (25 or less per school) can be adequately taught and supported at one time. Parents lacking educational credentials for employment purposes may need less support academically and require less time to meet their education goals. There are also many families that benefit from family involvement programs that build parents' social capital, self-efficacy, and parenting skills that generate strong, lasting school-to-home pathways.

Childcare is a critical resource that many parents lack and therefore cannot attend out of home learning programs. Space for childcare (provided on site for younger siblings of Focus students) was particularly challenging to maintain. Space was relocated numerous times from the program to the school as additional classrooms became necessary to accommodate rising student enrollments. At the same time, when childcare became unavailable as it did at Avancemos early in the 2016 -17 school year, many parents had no alternative options for child care and had to leave the ELLP.

Address concerns with School Behaviors/Mindsets by conducting study of validity and reliability. Mindset can't be confirmed because of the potential bias of teachers who know the difference in Focus and Comparison students by who attended PACT Time and who didn't.

Conduct a study that differentiates program families by length of time in program in terms of years (1 year, 2 years, or 3 years). Explore how having families in multiple years and children of those families sometimes being chosen as Comparison students may have confounded the results.

Collective Impact is not sustained unless backbone supports of the program (subgrantee) directly address programmatic funding issues (such as being financially unable to meet the one to one-dollar financial match requirement) that are essential for program sustainment. No number of positive findings over the course of the grant impressed the school district enough to bring the administration into discussions with the SIF grantee, UWSEM, or subgrantee (Southwest Solutions), about identifying and leveraging funding to sustain the program in the school district. Lacking alternative funding, Southwest Solutions “sun-setted” the ELLP at the end of the fifth year.

Program support from the school district superintendent’s cabinet is essential for program sustainment and replication. This involves identifying and leverage district funding streams such as the *Title I Parent and Family Set-Aside*⁹. According the federal guidelines for the Every Student Succeeds Act (ESSA), districts receiving Title I¹⁰ is required to reserve at least one percent of its Title I funds to carry out parent and family engagement activities. These parent and family engagement funds must be used for at least one of the below activities:

- Supporting schools in training school staff regarding engagement strategies;
- Supporting programs that reach families at home, in the community and at school;
- Disseminating information on best practices focused on engagement, especially for increasing engagement of economically disadvantaged families;
- Subgranting to schools to collaborate with community-based organizations or businesses that have a track record of improving family engagement; or other activities that the district believes are appropriate in increasing engagement.
- Engaging in any other activities that the district believes are appropriate in increasing engagement.

Ninety (90) percent of the Title I “set-aside” funds must be distributed to schools, with priority given to “high-need” schools. The law further requires that parents and family members of low-

⁹ See Section 1116. Parent and family engagement.

¹⁰ “Title I” refers to Title I of the Every Student Succeeds Act. These funds are allocated from the federal government to the state and then to the district and school. The amount of money a district receives depends on the number and percent of students in poverty. The amount of money a school

income students must³ be included in decisions regarding how these engagement funds are spent.

Family literacy programs under ESSA policy for family engagement are eligible for Title I funding (parental engagement appropriations) and in the case of programs that serve English learners and their family, Title III funds are also available from local education agencies. The school district could also apply for ESSA Title IV funds through the Michigan Department of Education. Title IV establishes *Statewide Family Engagement Centers*¹¹. Title IV funds will be awarded to statewide organizations to establish statewide family engagement centers to:

- Assist parents in participating effectively in their children’s education and helping their children meet state academic standards;
- Develop and implement, in partnership with the state, statewide policy to provide services that will help to remove barriers for family engagement; and
- Develop and implement parental involvement policies required in the ESSA. (ESSA, 2016)

Southwest Solutions successfully secured additional funding (from outside of the state) from non-profits such as Toyota, PNC, and the Skillman and Fisher Foundations to continue family engagement programs with less intensity, but the combined funding was not large enough to sustain the ELLP. Despite positive evidence of a decrease in chronic absenteeism, stronger reading growth in the primary grades, and increments of progress towards on-grade-level reading achievement, Southwest Solutions was unable to securing adequate funding.

FINAL DISCUSSION

Detroit teachers in Southwest Detroit are encountering a diverse range of learners, including those for whom English is not the primary language spoken at home. Parents enrolled in family learning programs that embed English language communication arts and literacy are valuable partners for the local schools. Parents’ engagement with learning generates strong daily attendance and positive learning dispositions in their children. These outcomes are correlated with diminished chronic absenteeism and academic growth. Their children have many opportunities to practice English and build language proficiency with their parents outside of

¹¹ See Title IV. 21st Century Schools. This title includes a variety of programs to provide student supports, academic enrichment, extended learning and afterschool, charter and magnet schools, and family engagement programming.

school, and eventually become bilingual, which enhances cognitive development (Barac, Bialy, Castro, & Sanchez, 2014). With reduced absenteeism, stronger reading skills, and positive dispositions toward learning and literacy these students of Hispanic/Latino families have a greater likelihood of graduating high school, pursuing secondary education, and developing skills sought by employers.

Essentially, in order to break the intergenerational cycle of low education (or illiteracy) and poverty a family must establish a generational legacy of economic security and family well-being. Parents in urban schools are rarely allowed to choose the teacher who they believe will best recognize and meet their child's unique learning needs, but parents *do* have the power to make sure that their child is present for every learning opportunity offered during the school day by getting them to school on a daily basis. Parents can promote learning as a family value, support learning in their homes and engage meaningfully within the school community. These factors create more culturally responsive learning environments where families feel valued and respected. Perhaps one of the strongest beliefs that parents of the Focus students developed was that their children would not only graduate from high school, but would matriculate to college and earn a degree.

Family literacy and learning program designs function most efficiently and are sustained over time when policy makers, educators, and service providers work together. Family learning and literacy programs provide educational, social, and emotional supports that highlight pathways to exit poverty and, over time, enter a state of economic security. The ultimate goal of family literacy and learning programs is that families support learning and ensure their children's educational success so that a legacy of family well-being is passed from one generation to the next.

APPENDIX A

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Note: The original draft of the SWCS SIF SEP included a thorough review of evidence supportive and explanatory of the design and intended effects of a comprehensive family literacy program including the program's theoretical relationship to Hispanic families and parental engagement in schools. This draft is an abbreviated version of the literature review that supports the evaluation design. The Bibliography includes all citations that support the SEP.

APPENDIX B

Year 5 Participating Elementary Schools

Escuela Avancemos: Escuela Avancemos! Academy (herein Avancemos), a charter school, replaced Lighthouse (Year 3) that replaced Phoenix, an Education Achievement Authority school (Years 1 & 2). Avancemos is one of 13 public school academies in the Detroit Public Schools Community District (DPS). The curriculum focus of Avancemos is bilingual education in Spanish and English. Hispanic enrollment is 88% of the 245 students in kindergarten through fifth grade.

Academic achievement is low across grades at Avancemos. It received a rating of D by Excellent Schools Detroit (ESD) that rates all public and charter schools (<https://www.excellentschoolsdetroit.org/>). ESD produces a school rating for families to make informed choices about where their children may attend school by providing grade like report cards per school. ESD recommends parents and students select schools graded C+ or better. Avancemos earned a D for School Climate, F for Academic Status, and F for Academic Progress. Michigan Department of Education gave it a Red rating for having the lowest scores and fewest objectives met. None of the third grade students (2015) scored Proficient in Math or Reading. The Michigan Education Assessment Program (MEAP) 2016 results (most recent data published) report students have low progress with test schools than 9% of Avancemos 3rd graders scored Proficient or better on the English Language Arts or Mathematics measures. Attendance was high with only 1% of the Hispanic students absent for 15 or more days (Great Schools, 2017).

Harms Elementary: Harms' 465 students were enrolled for the 2016 school year. 85.2% (N = 396) are Hispanic Latino. There are 216 bilingual students in kindergarten through 4th grade. 69.5% of students participate in the free and reduced lunch program, a standard indicator of poverty. Harms has a school-wide attendance rate of 92.6%. NWEA percentile rankings for second (3rd percentile) and third grade (6th percentile) are extremely low for English language arts. 33.9% of Hispanics of any race scored Proficient or Advanced on the 2015-16 M-STEP (67.1%). This is a drop of 14.5% from the 2014-2015 school year. Percentile rankings on the NWEA MAP for each grade K – 3 were less than the 5th percentile.

The English language skills of Harms students who are bi-lingual and English learners are measured by *ACCESS for English Learners*. The number of students scoring Proficient fell from 29.9% in 2015-16 to 11.7% in 2016-2017 (Michigan School Data, 2017). This is a higher percentage than the Detroit composite analysis where 10.6% of students scored Proficient on the *ACCESS*. In this group of students, 0.8% were proficient in English language arts.

The *Michigan Student Test of Educational Progress (M-STEP)* is Michigan's assessment system consisting of summative assessments designed to measure student growth effectively for today's students. MDE began using the M-STEP assessment during the 2014-15 school year. Students are assessed in the spring on the current year's expectations. English language arts and mathematics are assessed in grades three through eight, science in grades four and seven, and social studies in grades five and eight. It also includes M-STEP summative assessments in science and social studies from the Michigan Merit Examination in 11th grade.

Student M-STEP data for Detroit show generally poor reading achievement in third grade across demographic groups, yet there are differences in achievement between groups. English learners have higher percentages of students (12.8%) scoring Proficient and higher percentages than African American or Black students (11.9%) scoring in the same levels. More White students (13.%) score Proficient and above than English Learners, Hispanics of Any Race, and African American or Black students (Detroit Public Schools, 2017). Detroit Public Community Schools earned 79.2% of Status Points because they did not meet the Proficiency Target or Proficiency Improvement Target (2017).

APPENDIX C

SIF 2016-17 Program Year V Quarterly Reports Southwest Solutions ELLP

July 1, 2016 through September, 2016

Population Served:

The English Language Learner Program (ELLP) serves Hispanic parents and other adult family members who live in the same household of children in grades PK thru 3rd grade at two partner schools.

Narrative description of progress for this reporting period only, July 1, 2016 through September, 2016:

Detroit Schools were not in operation during the summer months due to school closures. Program staff began to work at the end of August thru the beginning of September to clean and organize classrooms, to update required forms and databases, to begin recruitment of adult students, and to plan program curriculum. A current Adult Educator was hired to assume the role of Supervisor/Lead Adult Educator after the departure of Program Manager, Lynn McGregor. The program began at Harms Elementary on September 19th. Twenty-four adults are attending the Harms class, eight of whom are new to the program through recruitment efforts. Escuela Avancemos will begin on October 10th. We posted for a bilingual Spanish Adult Educator as one was requested by Avancemos. A tentative offer was made pending HR approval.

Narrative description of progress on Match for this Year 5 (9/01/16-9/30/16). This can include prospects, pending grant applications, cash received, committed funds, etc.:

Match to date includes: O'Brien Construction - \$18,901; UWSEM - \$25,000

Other funders are in the process of being approached at this time.

Challenges: What SIF-related challenges has your organization encountered from 7/1/16-9/30/16, and how have you dealt with them?

When Lynn McGregor left SWSOL in June, 2016, there was a loss of program history and experience. Other staff have assumed her responsibilities and are working together to assure continuity, quality, and compliance within the program. Need to hire bi-lingual-Spanish Adult Educator for Avancemos.

Loss of \$30,000 match from Avancemos right before the start of school. Its funds were redirected to an MSTEP prep class and a separate adult ESL class that is a conflict with our ELLP program.

Meeting annual match requirements continues to be very difficult. SWSOL continues to seek matching funds, but some funders have changed their strategic focus.

Securing space within school locations is difficult each year. For this year, we lost our ELLP classrooms at Maybury and Avancemos. We will use the childcare room at Avancemos for the classroom thus eliminating our ability to offer free childcare for our adult students. At least six mothers will not attend ELLP at Avancemos due to the lack of childcare.

Successes: Please describe any progress your organization has made towards SIF implementation goals from 7/1/16-9/30/16. Highlight noteworthy successes your organization achieved.

Notification of visit to Harms to observe ELLP classroom and family service learning by Mr. Jim Lentz, president and CEO, Toyota North America and Sharon Darling, founder and president of the National Center for Families Learning due to Detroit hosting the National Summit on Families Learning in October.

Harms enrollment already at 24 students, including eight who are new to the program or have returned after a year or more of non-participation. Personal recruitment efforts at school open houses are successful.

Several Harms continuing students have acquired part-time jobs in-part due to their English skills and increase in confidence/leadership qualities.

Attendance Works has nationally recognized SWSOL and the ELLP as part of the national Grade Level by Three campaign. Attendance Works is a national and state initiative that promotes awareness of the important role that school attendance plays in achieving academic success starting with school entry. The infographic designed by Center of Effort, NCFL, and UWSEM was published on the [attendanceworks.org](http://www.attendanceworks.org/boosting-literacy-attendance-sw-detroit/) web page <http://www.attendanceworks.org/boosting-literacy-attendance-sw-detroit/>

Partnership/Collaboration Development: Please describe any noteworthy activities relating to partnership development, as they relate to or were the result of SIF during this reporting period (7/1/16-9/30/16)

ELLP staff continue to seek community partnerships for funding and for classroom Parent Time presentations/resources. Networking efforts at the NCFL Summit in October will aid this effort.

Sustainability: Please describe any specific developments or steps your organization has taken to strengthen its longer-term financial stability during this reporting period (7/1/16-9/30/16).

The SIF English Language Learners Program was presented at the Solutions at Sunrise annual fundraiser on September 29, 2016, highlighting the national SIF evaluation report as well as the recognition received from Attendance Works related to the outcomes highlighted in the evaluation report.

The agency newsletter has highlighted SIF ELLP and noted the need for increased funding. This newsletter is sent to financial donors as an email blast.

The Ralph Wilson Foundation, Ford Foundation, and CFSEM Foundation were approached for funding or suggestions of possible partners interested in literacy funding.

All partner schools were notified of the need for partnership funding to sustain the program.

The local Toyota Ann Arbor employees related to charitable giving were invited to Solutions at Sunrise, and additional information regarding the need for funding at the local level will be sent to this team as a follow-up.

Scaling/Replication: Please describe any specific developments or steps your organization has taken to work towards scaling and replication during this reporting period (7/1/16-9/30/16).

A presentation of English Language Learners Program was given to Academy of America for consideration in the elementary school. The school wants to add this program and is currently seeking a funding source.

Solutions for Success was published highlighting the ELLP Program through SWSOL and specifically the classroom at Harms Elementary. This book along with the others in the series from SIF partner agencies will be sold and are available on Amazon.com as a method of fund raising.

Great Stories: Describe an interesting or inspiring story or anecdote that reflects the value of your SIF Initiative. Include references to press coverage here, with hyperlinks when possible during this reporting period (7/1/16-9/30/16).

Harms adult students and their children discuss singing English/Spanish songs in their cars and at home using a CD that was given to them to help build vocabulary through this intergenerational activity.

During the summer, several Harms ELLP students attended a session on Immigration Updates at the SWSOL Learning Lab with instructor, Susan Lowell.

See: <http://www.attendanceworks.org/boosting-literacy-attendance-sw-detroit/>

Communication: Please describe any instances of press coverage or any plans or updates for communicating any key activities and accomplishments during this reporting period (7/1/16-9/30/16).

Attendance Works nationally recognizes ELLP program outcomes produced by SWSOL and the ELLP Program.

The SWSOL newsletter has highlighted SIF ELLP and noted the need for increased funding. This letter is sent to financial doors as an email blast.

List of SIF-funded sites:

Escuela Avancemos – 3811 Cicotte, Detroit 48210

Harms Elementary – 2400 Central, Detroit 48209

(to be filled out by program leads or evaluators)

Evaluation Status: Is the evaluation on track in terms of enrollment of participants, Comparison/control group members data collection, sample retention, baseline equivalence of any Comparison/control groups, analysis, and reporting? Please provide specific numbers of each where available.

Yes. The evaluator revised the SEP to reflect changes described above that reduced the number of schools from 4 to 2. Ty Partridge reviewed and approved changes and the document was sent to CNCS for review. Minor edits and revisions involving power calculations were requested

Evaluation Timeline: Are there changes to the timeline that may affect study outcomes? Please note changes and any revised implementation and reporting dates. The final deadline for 5th year analysis was moved from January 2018 to October 31, 2017. This will not affect study outcomes. All data will be uploaded to the evaluator mid summer 2017.

Level of Evidence: Have there been any changes to the plan that will affect the level of evidence the evaluation will produce? If so, please note these changes and what effect is anticipated.

The reduction of schools and subsequent sample of children will reduce the total number projected. However, the fifth year and summative evaluation will look across the total number of students (Focus and Comparison group members) thus the power calculations and effect sizes will be in line with expectations for a moderate effect size.

Key Evaluation Findings: What are three key findings to date regarding program implementation and outcomes? These can be from the most recent evaluation report.

1. Unanticipated personnel changes at the administrative level can be accommodated when steps are taken to ensure adequate orientation for the replacement. At the same time – the burden of a 1:1 match in a grant like SIF and only one year of work to complete mean that the subgrantee must be willing to make accommodations . This includes the decision to reduce the grant size to make it possible for existing staff to take on the grant management without losing project fidelity.
2. Changes in management mean it is more difficult to negotiate with the DPS and Avancemos. While the district students and their families are primary funding recipients in terms of educational services received – the district is reluctant to make space available and continue with prior agreement as specified in the grant.
3. Data collection strategies that remain consistent year to year become easier for experienced staff. We learned how to transition from the pilot year to the first project year and those lessons learned ensure that there are clear expectations, processes, ways to resolve data dilemmas, and we are respectful of timelines. Learning to upload to Survey Gizmo takes time. But erroneous data uploads take more time to correct.

Evaluation Lessons Learned: What is one lesson you have learned and/or what promising evaluation practices have you identified? How are evaluation findings to date contributing to the mission of your broader portfolio and the mission of the SIF grant? Do the evaluation findings to date have programmatic implications?

It is critical that evaluations address not only the funder but the stakeholders as well. This means allotting time and finances to disseminate the findings in multiple ways. The evaluator designed a group of infographics targeting the school district, parents in the schools, and community members. Subgrantees and the UWSEM need to explore how media can be used to “spread the good work” of the innovation through the evaluation’s positive findings. One step is to provide other national organizations with the results, such as Attendance Works (see above).

Another lesson is the importance of contextualizing the evaluation. The evaluator just obtained attendance data from the district. It is now clear that the attendance rate for children of participants in the family literacy project exceed the district by a full 10% - they attend three weeks more a year than “typical” students in the district.

Third lesson – Intensive Two-Generation education takes time. The students whose parents spent at least 150 hours in the program came to school more often than those students in the program whose parents came less than 150 hours and more than students whose parents were not in the program. In addition to attendance Focus children have better developed academic mindsets than their peers not in the program and progress faster in reading. However – Els in both groups continue to struggle with English language arts.

October 1, 2016 through December 31, 2016

Population Served: The English Language Learner Program (ELLP) continues to serve Hispanic parents and other family members who live in the same household as children in grades PK thru 3rd grade at two partner schools. At this time, all registered participants are mothers with one grandmother.

Narrative description of progress for this reporting period only, October 1, 2016 through December 31, 2016:

Detroit Community Schools started classes on September 6th. In order to give teachers and students time to adjust to the new academic year, ELLP classes began at Harms Elementary on September 19th. Classes at Avancemos began on October 10th due to the hiring and onboarding of a bilingual Adult Educator to replace the previous one. At the end of this reporting period, we have 25 registered students at Harms and nine registered at Avancemos. We are continuing our recruitment efforts at both sites working with administration, teachers, and directly with parents.

Match: Match measurement method (such as signed promissory notes): cash
Narrative description of progress on Match for Year 5 (10/01/15-12/31/16). This can include prospects, pending grant applications, cash received, committed funds, etc.:

Challenges: What SIF-related challenges has your organization encountered from 10/1/16-12/31/16, and how have you dealt with them?

The partnership with Avancemos proved to be challenging and disappointing during this period. The impact of the unanticipated loss of the childcare room for the ELLP students resulted in six to eight of the returning students not being able to attend this year. The loss also resulted in our inability to recruit new students with children under pre-school age. Due to the last-minute notification by Avancemos of the loss of the room, we were only able to minimally refer potential students to Early Head Start and Head Start in the same building. Their classrooms were already full, for the most part, when we were notified. ELLP staff also met with Administration to offer opportunities to combine our ELLP and their ESL/MStep programs to help meet the goals of all parties, but the plan was rejected by the school.

Successes: Please describe any progress your organization has made towards SIF implementation goals from 10/1/16-12/31/16. Highlight noteworthy successes your organization achieved.

October 18th – during the NCFL Summit, Jim Lentz, Sharon Darling, and other Toyota executives visited the ELLP classroom at Harms to participate in a Parent and Children Learning (PACT Time) activity. Eight mothers and their Focus children discussed and manipulated vocabulary words related to What a Bully Would Say/ What a Friend Would Say. Mr. Lentz and Ms. Darling actively participated with the families.

Link: <http://www.freep.com/story/money/cars/2016/10/18/toyotas-move-texas-goes-far-beyond-moving-employees/92356352/>

At the NCFL Summit, six Harms mothers participated in a session and panel discussion on How Family Service Learning Projects have impacted their children and their lives. 100 people in audience.

Parent/School PACSA President – moved up to the challenge of this new role. Although dealing with a serious medical issue, this mother has a very positive attitude, confidence, and new leadership skills. Several other parents also serve on the PACSA board after developing skills through the ELLP Program.

ELLP group as part of the Service Learning component of the program planned and facilitated a fund raiser for the mother who has throat cancer surgery. Ana Perez, Christina Mireles and Director Donna Cielma participated in a local channel 7 news program: this program highlighted the ELLP Program and how the student has experienced successes in her life.

Several students found employment where they are able to use their English skills. This is a positive progression toward their personal goals. However, their job schedules compromise their ability to come to the ELLP class regularly.

Partnership/Collaboration Development: Please describe any noteworthy activities relating to partnership development, as they relate to or were the result of SIF during this reporting period (10/1/16-12/31/16)

ELLP staff continue to seek community partnerships for funding and for classroom Parent Time presentations/resources. Both Harms and Avancemos students benefitted from a six-week nutrition and health workshop presented by Michigan State University Extension Services. Students were provided with a comprehensive workbook in Spanish along with other tools including a pedometer for tracking steps.

Sustainability: Please describe any specific developments or steps your organization has taken to strengthen its longer-term financial stability during this reporting period (10/1/16-12/31/16).

Scaling/Replication: Please describe any specific developments or steps your organization has taken to work towards scaling and replication during this reporting period (10/1/16-12/31/16).

Project staff represented the SIF project and Southwest Solutions at the NCFL Summit in October at the Marriot Hotel. Our SIF project was one of six Stories of Innovation asked to attend. We represented the United Way for Southeastern Michigan Bib to Backpack Learning Series, Solutions for Success. We highlighted the ELLP through Southwest Counseling Solutions in a presentation to approximately 200 attendees at the Summit's

opening dinner. We were able to present the success of our ELLP to attendees from all over the United States.

Great Stories: (10/1/16-12/31/16).

Communication: Please describe any instances of press coverage or any plans or updates for communicating any key activities and accomplishments during this reporting period (10/1/16-12/31/16).

List of SIF-funded sites:

List here any locations where your organization has run SIF-funded programs to date. If you prefer, you may attach a spreadsheet with this information.

Escuela Avancemos – 3811 Cicotte, Detroit, MI. 48210

Harms Elementary – 2400 Central, Detroit, MI. 48209

(to be filled out by program leads or evaluators)

Evaluation Status: Is the evaluation on track in terms of enrollment of participants, Comparison/control group members data collection, sample retention, baseline equivalence of any Comparison/control groups, analysis, and reporting? Please provide specific numbers of each where available.

The Subgrantee Evaluation Plan for the ELLP was revised over the summer of 2016 and approved by UWSEM and the CNCS reviewers. The greatest threat to the program design is the problem at Avancemos. The loss of the early childhood education program severely cut into the number of adults who were able to participate. While Early Head Start and Head Start rooms are available the stringent regulations for parent engagement do not meet the needs of our parents for PACT Time or allow them to have any flexibility in attending the adult education program. A compromise is essential to program success.

Evaluation Timeline: Are there changes to the timeline that may affect study outcomes? Please note changes and any revised implementation and reporting dates. Yes. The evaluation is on schedule to complete the 2016 APR evaluation by January 30 as it has every year. However, the 2017 evaluation is due by October 30, 2017 as well. This gives very little time for EOY data to be collected, cleaned for COCI, and then analyzed for Year 5. Furthermore, we are expected to complete the summative – five year – analysis also by October 30. Because of the delayed funding start of the pilot year – the bulk of the evaluation took place the subsequent year rather than within the program year of the funding. To meet the reporting demands the Year 4 analysis is targeted at performance outcomes with minimal additional analysis as in past years. The bulk of evaluation time will focus on the 5th and summative reports.

Level of Evidence: Have there been any changes to the plan that will affect the level of evidence the evaluation will produce? If so, please note these changes and what effect is anticipated.

This cannot be fully answered until the final participation numbers at Avancemos are clarified and stabilized. The evaluator has met with Southwest staff and with Jeff Miles and Lindsey Miller at UWSEM to address the threat to validity.

Budget: Is spending on the evaluation on track? Will there be sufficient funds to complete the work? Explain.

Spending is within the budget at this time.

Key Evaluation Findings: What are three key findings to date regarding program implementation and outcomes? These can be from the most recent evaluation report.

Evaluation Lessons Learned: What is one lesson you have learned and/or what promising evaluation practices have you identified? How are evaluation findings to date contributing to the mission of your broader portfolio and the mission of the SIF grant? Do the evaluation findings to date have programmatic implications?

Measuring performance outcomes in two-generation projects required extensive data collection in adult and child settings. Coordinating multiple sites is manageable when all adhere to the same measurement tools, shared agendas, and keep communication open. This has been a difficult challenge due to changes of schools, changes in DPS reading measures, changes in leadership at Southwest, and unexpected challenges at the school level.

The lesson learned is that evaluators must ensure that the objective findings of the annual evaluations are shared with program staff and key stakeholders. This has been done every year of the project and has alleviated a number of barriers to success. The evaluation must be an organic process that engages staff and families in ongoing efforts to ensure continuous program improvement. Another key factor of evaluation is to ensure that important findings are disseminated beyond the immediate circle of partners and staff to inform the larger professional community. This is one way to ensure sustainability and replication.

January 1, 2017 through March 31, 2017

Population Served: Narrative description of progress for this reporting period only, January 1, 2017, through March 31, 2017:

The English Language Learners Program (ELLP) continues to serve Hispanic parents and other family members who live in the same household as children in grades PK thru 3rd

grade at two partner schools. At this time, all registered participants are mothers with one grandmother. During this quarter, 42 adult students participated in the program.

Match: Narrative description of progress on Match for Year 5 (10/01/15-3/31/17). This can include prospects, pending grant applications, cash received, committed funds, etc.:

- O'Brien Construction: \$17,191
- Funding from Solutions at Sunrise
- United Way SEM > \$25,000
- A percentage of a \$50,000 donation from an anonymous donor

Challenges: What SIF-related challenges has your organization encountered from 1/1/17-3/31/17, and how have you dealt with them?

- Attendance during the winter months is challenging due to a variety of reasons including extended holiday trips to Mexico, illness, bad weather, transportation issues, women securing employment, husbands being laid off from seasonal jobs and women staying home, pregnancies, and injuries. In addition, due to the current anti-immigrant political climate, some of the students are fearful of venturing out of their homes.
- The lack of childcare at Avancemos continued to decrease participant numbers at that school until a new childcare room opened up in February 2017.
- Securing match continues to be a problem.
- Harms Elementary Assistant Principal notified ELLP staff that end-of-year reading scores will not be available until sometime in May due to a delay in administration of the reading evaluations across the Detroit Public School System.

Successes: Please describe any progress your organization has made towards SIF implementation goals from 1/1/17-3/31/17. Highlight noteworthy successes your organization achieved.

- In February, Avancemos administration was able to provide a shared space so that ELLP could offer childcare to interested participants. One of the SWSOL childcare providers (SCPs) was brought over to Avancemos from Harms. An additional SCP is being paid for by the school so that there are two in the childcare room at all times. The availability of childcare no longer is a barrier to participation.
- On February 9th, participants and staff from Avancemos implemented an educational/recruitment event. The primary goal of this event was to recruit new ELLP participants now that childcare is available. A SIF technical assistance grant made this event possible. The event not only focused on demonstrating family-focused food and nutrition activities, but it also promoted the benefits of participating in ELLP. Ten additional participants were recruited into ELLP after this event.

- ELLP participants at Harms organized a four-week Adventure to Family Learning Event. The goal of the project was to help increase vocabulary through simple activities that were presented each week. Parents and children interacted during the event and were given ideas and materials to continue the learning at home.

Partnership/Collaboration Development: Please describe any noteworthy activities relating to partnership development, as they relate to or were the result of SIF during this reporting period (1/1/17-3/31/17)

- Throughout the quarter, various community organizations visited the ELLP classrooms at both Harms and Avancemos to present important information to the participants during Parent Time. These partners included Citizens Bank, CHASS/La Vida on domestic violence and financial abuse, SW Detroit Refugee and Immigrant Center on Know Your Rights, and the City of Detroit Community Planning Department seeking input from Hispanic adult students on needs within their community. Aside from gaining insight into the ELLP with each visit, each of the representatives who came was given a copy of the Solutions for Success book to further promote the impact of the program.
- Some of the curriculum developed by NCFL for the Say & Play with Words Initiative continues to be incorporated in the ELLP program to enhance parent education and parenting skills.
- NCFL representative, Andrea Brown, visited the Detroit area and both Harms and Avancemos schools on February 23rd. Andrea visited the classrooms of Focus children with the participants and observed debriefing sessions relative to the Family Service Learning projects that were recently completed at each school.

Sustainability: Please describe any specific developments or steps your organization has taken to strengthen its longer-term financial stability during this reporting period (1/1/17-3/31/17).

- SWSOL continues to seek financial support to help meet current-year match requirements.

Scaling/Replication: Please describe any specific developments or steps your organization has taken to work towards scaling and replication during this reporting period (1/1/17-3/31/17).

- The Solutions for Success book, part of a series of six stories of innovation through SIF and UWSEM, has been given to the leadership staff and board of directors of SWSOL. In addition, the books are given to representatives of community organizations and businesses.
- On February 28th, Adult Educator Susan Lowell and ECSBS Senior Director Donna Cielma, met with UWSEM/SIF Scaling and Replication Manager Shaun Taft and Publisher David Crumm, to discuss options for carrying on the impact and legacy of the SWSOL ELLP knowing that SIF funding will end after this fiscal year.

Agreed upon ideas included interviewing participants about their family traditions as they relate to food and how these family traditions can be carried-on for generations. In addition, Harms participants will participate in an exercise of developing personal histories and résumés.

Great Stories: Describe an interesting or inspiring story or anecdote that reflects the value of your SIF Initiative. Include references to press coverage here, with hyperlinks when possible during this reporting period (1/1/17-3/31/17).

Harms participant, Lourdes Valdivia, was chosen to serve on a 10-person interview panel for the purpose of selecting the new Superintendent for Detroit Public Schools. Lourdes was the only Hispanic representative. She interviewed the final two candidates by asking one of four questions she had written. Her question was “In your new position, how do you plan to involve and communicate with the diverse populations that are part of DPS?”

Communication: Please describe any instances of press coverage or any plans or updates for communicating any key activities and accomplishments during this reporting period (1/1/17-3/31/17).

For National Reading Day, TV channel 7 visited Avancemos to participate with the ELLP mothers and Thrive by Five/Head Start Children. Many of the ELLP parents at Avancemos have Focus children who are in Head Start. The following articles and video clips highlight this day.

<http://www.swsol.org/taking-action-for-detroit-thrive-by-five/>

<http://www.swsol.org/wxyz-donates-books-to-thrive-by-five/>

<http://www.wxyz.com/homepage-showcase/more-than-1900-books-funded-by-wxyz-tv-and-wmyd-tv-to-be-delivered-to-thrive-by-five-detroit-today>

<https://vimeo.com/200829483>

https://www.facebook.com/pg/southwestsolutions/photos/?tab=album&album_id=10155034148819421

http://familieslearning.org/our_solutions/resources_about/research_and_policy

List of SIF-funded sites: List here any locations where your organization has run SIF-funded programs to date. If you prefer, you may attach a spreadsheet with this information.

Harms Elementary – 2400 Central, Detroit, MI. 48209

Escuela Avancemos – 3800 Cicotte, Detroit, MI. 48210

(to be filled out by program leads or evaluators)

Evaluation Status: Is the evaluation on track in terms of enrollment of participants, Comparison/control group members data collection, sample retention, baseline equivalence of any Comparison/control groups, analysis, and reporting? Please provide specific numbers of each where available.

Yes. The 2016 APR was submitted to UWSEM in early February, passed on to Ty Partridge for review, the evaluator responded to Ty's astute suggestions for clarity of analysis, and the final revisions were returned to UWSEM and Dr. Partridge on 4/14.

Data collection for the current year is on schedule with no barriers to success other than a delay in reading scores as discussed above. This year only two schools are involved.

Evaluation Timeline: Are there changes to the timeline that may affect study outcomes? Please note changes and any revised implementation and reporting dates. The evaluator and UWSEM negotiated a timeline for the final summative report that will be inclusive of year 5 outcomes. The final product will be complete by October 31, 2017.

Level of Evidence: Have there been any changes to the plan that will affect the level of evidence the evaluation will produce? If so, please note these changes and what effect is anticipated.

No, SEP original power calculations, etc., were based on the summative report – we have worked with Ty Partidge and a Revised SEP (July 2016) to report all changes – and maintained the level of evidence. This was reported to CNCS in September 2016.

Budget: Is spending on the evaluation on track? Will there be sufficient funds to complete the work? Explain.

The current budget is nearly expended. NCFL suggests we close out this year and move into the final reporting as soon as possible – that being when the additional technical assistance dollars from UWSEM are available (approx., \$17,000). NCFL also suggests that the evaluator work directly with Southwest Solutions rather than be the subgrantee for evaluation. This is negotiable with UWSEM, NCFL, and SWS.

Key Evaluation Findings: What are three key findings to date regarding program implementation and outcomes? These can be from the most recent evaluation report.

- All schools offered over 320 hours of opportunities for participation, more than double what would be needed for full project activity completion. 100% of the adults reported that their primary learning goals were to become better teachers of their children and to improve their English language skills.
- ELLP parents had 94 elementary students (prekindergarten through third grade) identified as Focus students during the 2015-2016 school year. For the analysis reported here, of the 94 students there were 75 students (children of adult program participants) who participated all year and had attendance data. Of the total members of the Focus group, there were 22 kindergarteners, 24 first graders, 14 second graders, and 12 third graders. A group of 19 preschoolers was also assessed.
- A quasi-experimental evaluation design used the measure Teacher Report on Student Performance (TROSP) to establish baseline equivalence. **Equivalence of**

- groups was established** by analyzing four of the clusters: academics, efficacy, socio-emotional, and behavioral. For each cluster, analysis was conducted for equivalence of groups using an F-Test: Two Sample Variances, and a T-test: Two-Sample Assuming Equal Variances (Unequal sample size) 2 tailed-test. These statistical results of significance along with demographic matching establish the equivalency between the Focus and Comparison groups.
- **The Focus group had substantially more students with a 95% attendance rate or better.** This means these Focus students were absent less than two weeks during the year. The Comparison group had more students with an attendance rate of less than 90%. These students were absent more than a month of school. If the pattern of chronic absenteeism continues for those Comparison students, they will forfeit an entire year of learning before high school. When evaluated by the criteria of an attendance benchmark 90% or more of the time, the Focus group had more students (n=63) meeting the criteria than the Comparison group (n=56).
 - Mindsets concern learners' behaviors, habits, and attitude toward school-related tasks. No statistically significant differences were found between the Focus group and Comparison group on academic mindset at the beginning of the year, $t(166) = -1.824, 0.070$, $F(83,83) = 1.07, 0.763$. **Both groups fell in the average range for academic mindset. However, significant differences were found for the Comparison group between preTROSP and postTROSP results for means of mindset, $t(320) = -2.588, 0.010$.**
 - As a group, **Focus students made substantial gains, surpassing the Comparison group in the number of proficient readers** at the end of the year despite the Focus group having less students scoring at grade level, or "proficient," at the beginning of the year.
 - The Focus group began the school year with a much lower percentage of students reading at grade level. The Comparison group started the year with more students reading proficiently but did not grow over the course of the year and ended with fewer students reading on level and one student dropping into the below grade level category. By the end of the year, the Focus group had more proficient readers. **Using the matched pairs, the Focus group had a gain of 22.5% reading at or above grade level while the Comparison group had a loss of -2.0%.**
 - **Students whose parents are in the ELLP learned to read faster than their peers in the Comparison group.** Regarding reading growth rate, significant differences in mean and variance were found in the growth rate of the two groups, with the Focus group having a more rapid growth rate. The Focus students have a stronger likelihood of making more appropriate progress towards grade level reading standards in later years than their peers in the Comparison group. In practical terms, when descriptive statistics and graphs are reviewed, it becomes obvious that the reading growth rate indicates accelerated rates of learning in students whose parents signed up for the ELLP.

- **The Focus students progressed in reading development as the Comparison students regressed over the school year.** Given the minimal percent of students in any grade K – 3 scoring proficient on state assessments and on the M-STEP for second and third grades, the reading growth and number of Focus students reading proficiently are important findings.
- **Family literacy activities were abundant in the homes of ELLP families.** All of the Focus children’s parents reported that they helped with homework, read aloud, and read with their children at least three times a week. The majority (62%) of Focus children’s parents provided books, writing materials, and a quiet, organized space to study in their home. Nearly all parents (92%) valued reading as an important skill for learning new things.
- Based on the data analysis for **reading achievement, the confirmatory hypothesis that students of parents who fully participate in the ELLP will meet reading assessment benchmarks is not met, but significant progress has been made.**
- **Preschool siblings** of Focus students and pre-kindergarteners were screened for developmental skills to determine if they were **making adequate progress towards milestones.** Twenty-three of the 30 were making adequate developmental progress. Educators monitored the seven young children who exhibited delays in certain domains. **Their parents were engaged in specific strategies to address these weaker domains at home.** Additional screenings on these children were conducted.
- All but one parent had a smart phone. **91.6% of the parents used technologies (Internet, tablets, smart phones, computers) with their children. This is nearly double the percent (41.2%) of families that employed technology as a learning tool last year. Furthermore, 90% of families used technology as a resource for learning at home three or more times a week.** Parents (73%) accessed educational websites such as Wonderopolis® and Family Time Machine® and used social media like Face Book. Half of the parents accessed the school webpages for information about their child’s grades, the school calendar, and homework assignments. Fewer (20%) parents emailed their child’s teacher to ask questions, arrange meetings, or volunteer.
- The analysis of the home literacy environment affirms the research impact hypothesis that **parents who fully participate in the ELLP demonstrate strong literacy-supporting parenting behaviors evidenced by an increase in school/literacy supporting behaviors in out-of-school (e.g., home) experiences. In practical terms, the Focus children and their siblings had a significantly richer home literacy environment at the end of the year than they did at the beginning.**
- **Post standardized test analysis of adult literacy** and English language skills development presents a compelling support of full participation in English language learning classes over a school year. The mean for adults who participated less than 150 hours was barely higher at the end of the year, and it

remained at the Low Intermediate ESL level (score 47-53). Pretest means for all groups were between 52 and 53 and fell within Level 4 described as Low Intermediate ESL. **On the posttest, the group that had 150 hours or more of project activity participation changed levels. It moved to Level 5, which is described as High Intermediate ESL.**

- **Parents' self-efficacy regarding their ability to support their children as learners is strong.** ELLP parents developed a collective understanding that they were valued members of the school community. The end of program year responses across schools affirm parent's self-efficacy – —their confidence in their own competencies to achieve their learning goals. Parents stated that they should, could, and would help their children succeed as learners. Two-thirds of the parents agreed that they thought positively about their children's future. This response reflects a realistic concern for parents in a low performing school. This perception was positively echoed by other items regarding their child(ren)'s academic future.
 - **Parents all held high expectations for their children's educational success.** None of the parents believed their children would drop out of school, and only three felt a high school diploma would be their child's highest level of attainment. In May of the school year, **85.7% of the parents predicted that their children would eventually graduate from college.** Parents' optimism regarding their children's future as college graduates is up 8.5% over last year's participants.
1. **Data reflect that parents are building their capacity for strong and sustainable school engagement.** Adults perceived their self-efficacy in three areas. First, they had a sense of belonging to the learning community at their children's school where they believed in their capacity for meeting their own learning goals as well as their children's long-term academic success. Second, the parents demonstrated grit, a deep sense of passion and commitment to meet their personal goals and to ensure their children's academic success. And third, parents' believed their work towards learning goals held value for their families.

Evaluation Lessons Learned: What is one lesson you have learned and/or what promising evaluation practices have you identified? How are evaluation findings to date contributing to the mission of your broader portfolio and the mission of the SIF grant? Do the evaluation findings to date have programmatic implications?

The ELLP, a family literacy and learning program, is an effective two-generation outreach strategy for schools. Results for school age and preschool children and their parents demonstrate that the ELLP is an efficient strategy to promote meaningful home, school, and community connections.

A rigorous evaluation design was essential to documenting evidence of success. While expensive in terms of labor intensiveness – it is a worthwhile investment.

April 1, 2017 through August 31, 2017:

SIF Initiative web page (hyperlink): <http://www.swsol.org/ellp>

Population Served: Narrative description of progress for this reporting period only, April 1, 2017, through August 31, 2017:

The English Language Learners Program (ELLP) served the Hispanic population in Southwest Detroit throughout the academic 2016-2017 year at two Detroit Public Schools. The final quarter of this school year culminated with 34 full participants (150+ hours) who were all mothers with the exception of one grandmother. The majority of the adult participants were from Mexico with several originating from Central America including Honduras. Most of the program children at Escuela Avancemos Academy were in an Early Head Start or Head Start classroom. The Focus children at Harms Elementary were primarily in kindergarten, first, and second grades.

Match: Narrative description of progress on Match for Year 5 (10/01/16-8/31/17).

O'Brien Construction: \$17,191

- United Way SEM - ????
- Funding from Solutions at Sunrise - ???
- A percentage of a \$50,000 donation from an anonymous donor
- Payaso Cocorico (Clown Cocorico) - \$400
- Detroit Institute of Art - \$185
-

Challenges: What SIF-related challenges has your organization encountered from 4/1/17-8/31/17, and how have you dealt with them?

- Maintaining regular attendance by some participants was a challenge due to several pregnancies, new jobs, and transportation issues.
- Periodic standardized testing in K-3rd classrooms impacted parents' ability to participate in scheduled PACT Time in their children's classrooms.
- Securing required match and new program funding continued to be a problem.
- Timely completion and gathering of required BEST assessments, interviews, surveys, student reading scores/attendance reports and teacher evaluations of student performance can be challenging at times due to program time limitations, adult student attendance, school administration priorities, teacher responsibilities, and our effort to have the same bi-lingual staff person conduct all online Post interviews to provide consistency and validity with the questioning of participants.

Successes: Please describe any progress your organization has made towards SIF implementation goals from 4/1/17-8/31/17. Highlight noteworthy successes your organization achieved.

- [Column: Family literacy improves learning](#) – Detroit News Editorial on the effectiveness of family-learning models like English Language Learners Program. SWSOL/ELLP students highlighted.
- [ELLP parents honor teachers at Harms Elementary](#) – Special event organized by the parents and children in the ELLP Program- Personalized, framed awards were made for each teacher, aide, and administrator by the parents and children
- The ELLP at Harms Elementary maintained 21 full participant (150+ hour) students by year-end. Escuela Avancemos had 13 adult students complete the program as full-participants even with the lack of childcare for over half the year and with the ongoing changes of school administration and commitment to the ELLP Program.
- Program iPads were given to ELLP students who were full participants and their families at the graduation event on June 11th. Adult students had been using these iPads to research the Family Service Learning project.
- Teachers at Harms were quite vocal about their support for the ELLP program and the impact they have observed on Focus children in their classrooms, including 5th grade teachers. Teachers welcomed participant mothers during PACT Time and even encouraged them to stay longer than the scheduled time.
- Teachers and staff at both schools relied on ELLP parent participants as leaders and doers for school activities and input. Several mothers at Harms served on the Parent/School Association Board as president and treasurer.

Partnership/Collaboration Development: Please describe any noteworthy activities relating to partnership development, as they relate to or were the result of SIF during this reporting period (4/1/17-8/31/17)

- Parent-time, this past quarter, brought a variety of community agencies/presenters to the ELLP classroom to offer information and discussion on pertinent topics for the adult participants and their families. Topics included financial literacy (a five-week series), positive behavior modification, human sexuality within the family, Keep Growing Detroit/how to create your own home garden, knowing your local Detroit library.
- Students and staff from both schools visited the Detroit Institute of Art (DIA) with stroller children. Residents from the Detroit Tri-County area are able to attend the Museum for free. As an in-kind donation, the DIA provided in-kind bus transportation to and from the schools as well as a Spanish-speaking docent. In the ELLP classroom, students at Harms had created a group mural replicating “Los Ninos Pidiendo Posada” (The children asking for shelter) a mural of Mexican artist Diego Rivera.
- The Henry Ford/Greenfield Village donated tickets to all of our ELLP families in June. Staff coordinated the ticket requests and distribution. We were also able to provide each family with “Fun Money” that could be used at the Village that day.

- Representatives from Child Trends visited the staff of the ELLP Program on June 6th.

Sustainability: Please describe any specific developments or steps your organization has taken to strengthen its longer-term financial stability during this reporting period (4/1/17-8/31/17).

- SWSOL continues to seek financial support to help meet current-year match requirements.
- ELLP staff met with a member of the Detroit/Windsor Entrepreneurial Women's International (EWI) organization for possible future funding support. A number of the members have been supporting Harms students for many years. SWSOL staff continues to communicate with the EWI lead.

Scaling/Replication: Please describe any specific developments or steps your organization has taken to work towards scaling and replication during this reporting period (4/1/17-8/31/17).

- ELLP Supervisor Susan Lowell participated in a panel discussion at University of Michigan, Dearborn campus for a social work class that used the Solutions for Success book as one of their textbooks. Several staff from various SIF agencies participated in May and again in August.
- Publisher David Crumm and UWSEM staff member Shaun Taft met with Harms ELLP mothers to develop biographies/ résumés that can be utilized with future endeavors. Also, a group of eight Harms mothers is participating in an ongoing discussion of family traditions through food. These living histories will focus on how continuing family traditions through generations is important to preserve cultural awareness and growth within the ELLP program.

Great Stories: Describe an interesting or inspiring story or anecdote that reflects the value of your SIF Initiative. Include references to press coverage here, with hyperlinks when possible during this reporting period (4/1/17-8/31/17).

- Harms mother, Lourdes Valdivia, who has participated in ELLP for several years, was selected to serve on the committee to select the new Superintendent for the Detroit Public Schools. She was one of 11 and the only Hispanic/Spanish-speaking panelist. Lourdes was able to prepare several questions and chose to ask, "How do you plan on addressing the needs of diverse students within the Detroit Public School District?" Her participation in this panel was a great honor for Lourdes as well as the ELLP program at Harms. Lourdes has grown tremendously over the past several years having developed more self-confidence and public speaking skills. She served as the treasurer this past year of the School/Parent Association and is the incoming president for the upcoming school year. She was the lead speaker at several school assemblies and also

participated in a panel of mothers at the National Center for Families Learning Summit.

- Mothers and stroller-children from Harms and Avancemos visited the Detroit Institute of Arts with free tickets and donated transportation. We studied Diego Rivera and some of his works. We also created our own mural that showed how our individual efforts can contribute to a beautiful whole vision.
- Harms parents visited the Campbell Branch of the Detroit Public Library for a bi-lingual orientation and interactive activities for the childcare children. Parents signed up for library cards and for a pizza-party-activity-night that same week. The youth librarian is very supportive of our program.
- Harms ELLP participants and their school-age children set up for a year-end teacher appreciation event where families made personalized plaques for each teacher and prepared delicious Mexican food for lunch. Many of the teachers said they have worked for over 20 years at the school and have never been recognized so thoughtfully. The mothers could see how appreciative the teachers and staff were.

Communication: Please describe any instances of press coverage or any plans or updates for communicating any key activities and accomplishments during this reporting period (4/1/17-8/31/17).

- Please see above sections

List of SIF-funded sites:

List here any locations where your organization has run SIF-funded programs to date. If you prefer, you may attach a spreadsheet with this information.

Harms Elementary – 2400 Central, Detroit, MI. 48208

Escuela Avancemos – 3800 Cicotte, Detroit, MI. 48210

(to be filled out by program leads or evaluators)

Evaluation Status: Is the evaluation on track in terms of enrollment of participants, Comparison/control group members data collection, sample retention, baseline equivalence of any Comparison/control groups, analysis, and reporting? Please provide specific numbers of each where available.

Evaluation Timeline: Are there changes to the timeline that may affect study outcomes? Please note changes and any revised implementation and reporting dates

The evaluation for year 5 is proceeding on time. All program data for adults and children has been collected and uploaded for analysis. The summative evaluation is on hold until DPS responds to the request for student reading data.

Level of Evidence: Have there been any changes to the plan that will affect the level of evidence the evaluation will produce? If so, please note these changes and what effect is anticipated.

No changes to report since the SEP was revised in 2016.

Budget: Is spending on the evaluation on track? Will there be sufficient funds to complete the work? Explain.

Southwest and UWSEM are working on a contract to pay the evaluator for the final summative evaluation.

Key Evaluation Findings: What are three key findings to date regarding program implementation and outcomes? These can be from the most recent evaluation report.

1. Program success does not ensure sustainability. Local funding budgets are constrained. The public school system is bankrupt and not interested in funding family engagement programs at any cost regardless of the return on investment in terms of students' improved attendance and reading achievement or progress towards college and careers.
2. The quality of a local evaluation does not influence funding streams to the degree necessary to assure sustainability and replication.
3. There are robust numbers of parents at each site who remained in the program for more than one academic year and have become leaders in the schools.

Evaluation Lessons Learned: What is one lesson you have learned and/or what promising evaluation practices have you identified? How are evaluation findings to date contributing to the mission of your broader portfolio and the mission of the SIF grant? Do the evaluation findings to date have programmatic implications?

The best lesson learned is that high quality evaluation is not the norm for local not-for-profit organizations. It is essential that annual performance reports be translated into a jargon free narrative that minimally focus of detailed statistical analyses if they are to enter the mainstream of thinking regarding the program model. The evaluation process itself is important to the academic mindset that often shapes funding streams even though these mindsets have little to do with the day-to-day operations of not-for profits or people/families served. The extent to which high quality evaluation influences national policy is minimal when viewed from the deck of a sole project. The COCI work and collaboration across subgrantees offer a stronger platform to justify social change than any single program evaluation alone can generate. Politics have a stronger impact according to the party in power than reams of evaluation data that supports promising practices at the local, state, and regional levels. That lesson learned suggests that evaluators must serve two masters at once. First, the academic policy works of What Works Clearinghouse. Second, the staff and administration of the not-for-profit organizations that collectively support the program.

APPENDIX D

2012 – 2013 Pilot Study of English Language Family Literacy Program Model Implementation and Fidelity

Note: The project name was changed to the English Language Learners Program to accommodate the needs of the matched funding champions

Evaluation Questions for the ELL FamLit Program: As stated in the approved SEP, the following was the overall question of the Pilot Study of Model Implementation and Fidelity:

To what extent does an ELL FamLit program increase education-related parent behaviors, improve student school actions (attendance and discipline), and increase student achievement?

**Note: Full participation = 150 contact hours (Calculations based on 24 full weeks of instruction @ 11 hours per week and 60% attendance).*

Program Differentiation

Components of the Primary Intervention – Family Literacy Program Model: The four program components model of family literacy have distinct roles in the support of intergenerational learning and literacy. For example, the participating adults receive eight hours of instruction on English language skills and traditional curriculum (e.g., math) from a certified adult educator. On a typical day, the adult teacher may read aloud a children’s book and then conduct a dialogic reading discussion whereby the teacher and adults pose and respond to questions at literal, inferential, and critical levels of comprehension. The adult education teachers encourage parents to role play how they can share the book with their child(ren) at home. Another example is practice with English idioms and learning contractions.

Parents enrolled in the ELLP routinely practice writing in English and Spanish by keeping learning logs and PACT Time Journals in the classroom. During Parenting sessions guest presenters from community agencies engage parents in different aspects of child rearing and ways to enhance school to home relationships. For example, a SWCS Early Childhood Educator gave a presentation (in Spanish) from the High Scope program on engaging and interesting your child in language and learning.

Comparison children are members of families for whom English is a second language in the home. While it is possible that a child's parents have more proficient English language skills and engage in school activities, the parents do not participate in the ELL FamLit program. The critical difference is that the reading selections in the Adult Education program and many English language arts lessons are cued to the school curriculum and content of PACT Time in the children's classrooms. Comparison children's parents do not prepare for, attend, and debrief after daily interactions with the lessons. Another significant program differentiation is that the parents of Comparison children do not attend Parenting sessions or become part of a distinct cohort of adults whose work toward the achievement of personal learning goals and children's academic success are part of the daily school culture.

Program Quality: The quality of the overall program is measured by the Benchmarks during site observations. Results of the December site visit by the evaluator are summarized in the following tables and narratives. The Benchmarks tool developed by NCFL was used as criteria for evaluating the family literacy components and the school climate and resources. Four Benchmarks; Adult Education, Parent Time, PACT Time, and School Climate & Facilities are discussed. These Benchmarks address directly the program components and settings where the program operates.

Benchmark 1 - Adult Education: Adult Education/ESL takes into account the strengths of the adult learners and their diverse characteristics. Adult Education/ESL is driven by the

learners' goals that are identified through multiple assessments. A flexible curriculum is delivered that includes a variety of instructional strategies that help parents to speak, understand, read, and write English. The AE/ESL curriculum includes making a connection between the AE classroom and the children's curriculum needs. The scoring key for all tables is: Scoring Key:

- 4 = Distinguished/Innovative Implementation
- 3 = Fully Implemented
- 2 = Partially Implemented
- 1 = Beginning to Implement
- 0 = Not Yet Implemented

Table 1
School and Composite Ratings on Adult Education Benchmarks

ADULT EDUCATION Benchmarks	Harms	Maybury	Munger	Phoenix	Mean
Adult Education/ESL is provided at least 6 hours weekly.	4	3	3	3	3.2
Appropriate English language skills (reading, writing, speaking, and listening) are incorporated in each lesson.	4	3	3	3	3.2
Adult education teacher establishes and maintains a relaxed atmosphere in class.	4	3	3	3	3.2
Appropriate English language skills (reading, writing, speaking, and listening) are incorporated in each lesson.	4	3	3	3	3.2
Lesson plans and instruction support parent goals, academic needs, and interests, providing varied learning and teaching strategies that draw from relevant parent information.	4	3	3	3	3.2
Lesson plans and daily instruction reflect the integration of activities and skills across all four components and show evidence of collaboration with elementary classroom teachers to reflect elements from the children's curriculum.	4	3	3	3	3.2
Active learning is part of all instruction so that parents are provided with many ways to learn by doing and practicing skills in simulated or real life situations.	4	3	3	3	3.2
Instruction includes varied teaching formats.	4	3	3	3	3.2
Teachers use informal/authentic assessments and discuss the results with parents.	3	3	3	2	2.7

Teachers use formal assessments and discuss the results with parents.	3	2	2	1	2
Each parent has a portfolio with goals and samples of his/her work, documenting progress.	2	1	1	1	1.2

Evaluator's Comments:

Harms Elementary School

- The adult education teacher, Janice was on Day 2 of a lesson on story mapping. A whole class lesson took place. Lesson objectives for content were clearly identified. The language objective of the day - vocabulary was depicted on the board - a tennis racket - with instructions to spell the word and use it in a sentence. Whether the word came from a group reading or PACT Time activity was unclear. It is doubtful that a tennis racket was a high interest, culturally relevant word.
- During the lesson presentation the instructor reviewed idioms, defined for the class as groups of words that together symbolize something else. Example, "down in the dumps" means sad. This was difficult for the ELL adults to comprehend. The teacher reinforced English to Spanish translations and practiced English by having the group repeat the words.
- Next they worked on Story Programs. She instructed them to listen for a problem in the beginning - she read aloud and asked them to discuss among themselves the characters' problem. Excellent conversations across learners. Humorous exchanges were abundant as they discussed *The Cow that Laid an Egg*. The teacher encouraged collaboration and had more proficient English speakers translate for other learners so that they could express their ideas in Spanish and hear them translated to English.

Maybury Elementary School

- 14 adult learners were in class on the day of the observation. A whole class lesson on reading comprehension and new vocabulary took place. The children's book, *Coat of Many Colors* by Dolly Parton was read aloud in English at the beginning of

the lesson. The teacher introduced the book title and author - she provided information about Dolly Parton that built a connection between the learners and the author. The class is composed of many learners who have minimal English language skills. The instructor introduced the word, coat and then encouraged the learners to say aloud in English the colors on the book cover.

- The book's narrative has a rhyming pattern and is boldly illustrated. The instructor directed the class to pay special attention to the illustrations to get clues about the words they cannot decode. Students worked on "sewed" and "produce" (decoded via literal text recall and then finding the word).
- There were Adult Education Journals in a bin with easy access to the class. The journals had scant and scattered entries with no particular themes or consistent dates of entries. The teacher explained that they were more concentrated on verbal English skills than writing.
- Small groups and pairs were formed as the class worked on spelling words - stating the word first aloud and then reviewing the pattern. The long /i / phoneme was highlighted (e.g., aisle).
- The classroom had an alphabet posted, Spanish and English announcement, and "Happy Birthday, Esther" (her day).

Munger Elementary School

- 15 adult learners were present in the Adult Education class. The whole class language arts lesson Focused on 10 contractions, e.g., we'll = we will (on board). Students were having difficulty with the long /u/ phoneme. The teacher modeled different words on the board as the students followed in their notebooks. Several students struggled to translate the contractions from English to Spanish and back. The instructor was enthusiastic and encouraged individual responses as well as peer coaching.

Phoenix Elementary School

- 8 adult learners and the instructor were present. The day's agenda with time slots was posted (in English). The lesson content focused on the comprehension strategy, story mapping.
- Initial questions probed the learners' literal recall of events in the children's book *Willow* by Denise Brennan that they shared in English. The recall exercise stimulated a whole class discussion about the book that led to the vocabulary word, imagination. The teacher linked imagination to the classroom library where the group identified books as non-fiction or fiction (imagination).
- The lesson moved to story grammar as the teacher pointed to a diagram on the board with boxes for plot, setting, problem, and characters. Her first question was, "Who can tell us the problem?" The learners' comments were enthusiastic, spoken in both English and Spanish. The teacher then linked imagination to characters by asking, "Who had imagination?" "Who did not?" She instructed the learners to respond in a full sentence – she wrote responses in the story map box on the board. She expanded the problem through discussion and then directed students to complete a story map for *Willow*.
- This took more time than she intended so she told the class they would finish the work tomorrow. She continued to talk about solutions to the story problem and worked on past and present grammar. The class began preparation for PACT Time.

Benchmark 2 - Parent Time: Parent Time is designed to provide a wide range of information and activities around the goals and needs of parents in family literacy programs. Attention is given to processes that can gather this information from parents. Parent Time also can be a venue to prepare parents for PACT Time and debrief that experience with parents.

Table 2

School and Composite Ratings on Parent Time Benchmarks

PARENT TIME Benchmarks	Harms	Maybury	Munger	Phoenix	Mean
Parent Time occurs for at least one hour weekly.	3	3	3	3	3
Parent educator establishes and maintains a relaxed atmosphere in class.	N/o	3	3	N/o	3
Parent Time topics are identified through various processes.	3	3	3	3	3
Parent Time sessions are dedicated to providing information for parents about the school.	3	2	3	3	2.7
School and district staff and other designated guests lead Parent Time sessions.	N/o	3	3	N/o	3
Parent Time topics are delivered through a variety of techniques.	3	3	3	3	3

Evaluator's Comments:

Maybury Elementary School

- A complete list of Parent Time topics was shared with the evaluator.

Munger Elementary School

- 15 adults attended the Parent Time session that immediately followed the Adult Education English language arts lesson. The presenter, a SWCS counselor (Amanda) introduced a HighScope lesson in Spanish, with a Power Point presentation in Spanish. The one-hour interactive session centered on parent child engagement. Topics such as how to interest your child with closed and open questions were shared. The adults provided personal examples of each concept introduced.
- The follow-up activity was to think of one conversation with your child that will focus on the child's interests. The parents were directed to get down to the child's

level. They wrote their ideas in notebooks and were instructed to share the results of their efforts with the adult educator later.

Phoenix Elementary School

- Reference to Parent Time was made during the Adult Education class. The parents were also instructed to take certain materials home and display them on the 'fridge. They were shown an exercise where scribbles/artwork was "translated" to a description written by the parent and posted for the family to share.

Benchmark 3 - PACT Time: PACT Time is designed to demonstrate the critical role parents play in their children's education. The following indicators specify the elements of PACT Time that must be implemented in order for parents to become meaningfully connected to their children's classroom and their children's educational needs. PACT Time involves staff articulation, parent preparation, classroom experiences, debriefing time, and transfer to home activities discussion.

Table 3

PACT Time Benchmarks

PACT TIME Benchmarks	Harms	Maybury	Munger	Phoenix	Mean
PACT Time occurs for at least two hours weekly.		0	3	3	3
Staff members communicate with Pre-K-3 classroom teachers and support parents' interactions during PACT Time.		1	3	N/o	2
Children's classroom teachers provide materials and/or lesson plans to the adult education and Parent Time teachers so that they are aware of the activities parents will engage in during PACT Time.		0	N/o	3	3
Parents are prepared for PACT Time prior to the visit with a focus on what they may be observing and/or what they may be actively engaged in within their children's classrooms.		2	3	3	2.6
Classroom teachers provide a positive experience for parents coming into their children's classrooms.		3	N/o	N/o	
Literacy related activities between parent and child are part of PACT Time.		3	3	3	
Parents are made aware of the connections between PACT Time and the other components throughout the week.		3	3		
Parents debrief as soon as possible after PACT Time by sharing how they participated in PACT Time with their children using a variety of activities.		3	3		
Transfer home ideas and materials are discussed and reviewed during PACT Time debrief.		3	3		

*N/o = Not observed

Evaluator's Comments:

Harms Elementary School

- Not observed. Teacher explained that Story Maps were part of PACT Time this week.

Maybury Elementary School

- No comments. Not discussed.

Munger Elementary School

- PACT Time was not observed during the observation but was discussed with the adult educator at a later meeting.

Phoenix

- During a meeting with the Program Director and evaluator, the principal, Dr. Alexander Cintron appears to be supportive of parent engagement efforts. He directed four members of the staff (ELL, Reading/LA, IT coordinators) to attend a meeting with the evaluator and project staff. He offered to make baseline student data not collected last year available to the evaluator. He also pledged that attendance and discipline data stored on the school's Power School software would be available for Focus and Comparison students at EOY. Baseline and EOY reading data will also be shared.
- Despite these assurances, to date, school staff have provided minimal support of and engagement with the ELL FamLit project. The project cannot be viewed as a fully integrated component of the school's culture and climate.
- Continued low enrollment threatens the validity and power of the Subgrantee Evaluation Plan.

Benchmark 6 - School Climate & Facilities: Districts, schools and staff set the climate for parent involvement and engagement. Parents need to know they are valued by walking into a welcoming and supportive environment where they can gain a better understanding of their child's school.

Table 4

School and Composite Ratings of School Climate and Facilities Benchmarks

SCHOOL CLIMATE & FACILITIES	Harms	Maybury	Munger	Phoenix	Mean
Permanent and designated classroom space is available for parent classes.	3	0	2	3	2
Classroom reflects adults and children’s work that pertains to the culture of the parents and the community.	4	3	2	2	2.7
Adults and children's educational materials are available to all parents.	2	3	2	3	2.5
Parents and teachers in the classroom use up-to-date technology consistently.	2	2	2	1	1.7
All school staff are aware of the program and understand the reason for the parents’ presence in the school.	3	3	2	1	2.2
All school staff set a positive tone by welcoming parents.	4	3	2	2	2.7
Various methods, strategies, and languages are employed when communicating with parents.	3	2	3	1	2.2
Parents have access to school resources.	2	2	2	2	2
If needed, appropriate childcare space is provided, along with staff and age-appropriate activities.		2	1		1.5

Evaluator’s Comments:

Harms Elementary School

- 14 adult learners were present on a dreary winter's morning.

Maybury Elementary School

- The early childhood room had four infants/toddlers and two caregivers present. The room had few age appropriate play things and no changing station. The SWCS staff had been told the DPS would be taking the wooded kitchen toys to another location. During the meeting with the principal, she stated that all the toys would stay and the program could use them. She also stated that if enrollment spiked she would need to re-appropriate the room as a K-4 classroom.

- The learning environment does not meet minimum standards as measured by standard instruments (e.g., ELLCO). The SWCS staff plan to organize the room immediately now that the furniture/toys issues have been settled.
- The principal was welcoming and cordial. She explained that more parents could not be engaged in the school because of DPS rules about federal finger prints and TB screening that would cost each volunteer parent \$75. She also reinforced the point that her space was limited and if necessary she would have to take the space back.
- The principal felt that the most important need of parents is to have a literacy class - with an initial Focus on Spanish. She has 6 parents interested - it is not clear why these parents do not perceive the family literacy program as a good fit.

Munger Elementary School

- The classroom is shared with another resource teacher and territorial issues create a tension that diminishes the learning environment. The room was large but clearly divided as a resource center and a learning center. Large carts with books and other supplies were scattered about the back part of the room. Another resource staff member came in during the lesson and was noisy and very "busy." This was a distraction for some of the learners who were already struggling to comprehend the grammar lesson. The resource teacher left for about an hour and returned and was even more disruptive.
- Space issues should be resolved to create a learning center rather than a storage depository or vice versa. The disorder is not supportive of a culturally responsive adult learning environment.

Phoenix Elementary School

- The principal, Dr. Alexander Cintron appeared to be supportive of parent engagement efforts. He directed four members of the staff (ELL, Reading/LA, IT coordinators) to attend a meeting with the evaluator and project staff. He offered

to make baseline student data not collected last year available to the evaluator. He also pledged that attendance and discipline data stored on the school's Power School software would be available for Focus and Comparison students at EOY. Baseline and EOY reading data will also be shared.

- Despite these assurances, to date, school staff have provided minimal support of and engagement with the ELL FamLit project. The project cannot be viewed as a fully integrated component of the school's culture and climate.
- Continued low enrollment threatens the validity and power of the subgrantee evaluation plan.

The Implementation Study for the Pilot Year 1 generated many recommendations for ELLP improvements.

- Each consent form should be scanned and attached to each Initial Family Interview. Staff needs to ensure that parent names on forms are printed as well as a signature, that the Focus child is identified, that siblings are not identified as the Focus child, and that the school is on the form. Staff inadvertently used older versions of the forms. The current forms require dates.
- ELLP per school must offer sufficient opportunities for full participation (150 hours) by the adults. Participation hours must be uploaded monthly.
- In addition to the recommendations in the later section on the Family Interviews, the evaluation will include a new Likert Scale of Agree, Disagree, Don't Know. A review of protocols for Family Interviews will be provided to the adult educators who conduct the interviews. All interviews will be conducted orally. Interviewers will be asked to validate school information before analysis begins on the interviews.
- End-of-year Family Interviews need to be matched with initial Family Interviews as soon as possible to ensure that all families who have persisted through the year have both initial and end-of-year interviews.
- Align reading score data with a common element of analysis across schools.

- Provide the evaluator with the grade level proficiency charts and the individual data for the Focus and Comparison children. This data is essential for a performance outcomes evaluation.
- In order to calculate the mean rate of annual daily attendance for Focus children the total number of days possible is needed in addition to the individual percentages.
- Revise the Initial and Post Family Interviews and eliminate three of the six response choices. The three response choices will be Agree, Disagree, Don't Know.

SWCS staff reported that the Ages & Stages Questionnaire (ASQ) was administered to preschool children (siblings of the Focus children). However, these records were not provided to the evaluator. The SEP requires data collected for preschool children to be collected and therefore it was recommended that project staff administer, score, collect, and disseminate the ASQ data to the evaluator in a timely manner.

Based on the Benchmarks used to measure implementation, the fidelity level in January of 2013 was moderate. Since that time, the evaluators reviewed the data depository, reviewed the NCFL manual, met with each school in Detroit to discuss procedures and protocols, and provided specific recommendations for stronger adherence to the protocols. During year 2, adherence to timeline was monitored more closely. Because of multiple issues of incomplete data, it will be reviewed regularly (years 2 through 5) after upload to determine missing information and district contact person will be notified so that completed data can be provided.

Program Quality: The quality of the overall program was measured by the NCFL Benchmarks during site observations. Program-wide and two school-wide findings of the Pilot Year Implementation Study are identified below. Overall Program Strengths are:

- An established partnership with the evaluator.

- Skilled Adult Education (AE)/ ESL teachers willing to learn about their families and schools.
- The availability of parenting staff from Southwest Solutions and the availability of the family support workers who provide the child care at three sites.
- PACT Time was established at all sites. Parents visited classrooms and observed how their children learned.
- Schools began to allow parents use of school resources, such as the computer labs.
- Schedules were established and parents were responding to the ESL instruction.

Suggestions for Growth.

- Establish portfolios with parents. The focus could be on their own accomplishments and their children's accomplishments.
- Create written year-long recruitment and retention plans; continue to review and revise these as the year progresses.
- Establish on-going goal setting procedures; parents should create personal educational, family, and child goals. These goals should be reviewed regularly; some family literacy staff have parents create overall goals, then weekly goals related to the overall goals.
- Complete the family interviews and assessments; establish relationships with classroom teachers so they can see the value of completing the Teacher Reports.
- Establish data collection processes that allow you to determine program and family growth
- Ask teachers to follow-up on the school climate and component integration Benchmarks.
- During a staff meeting, refer back to your NCFL Foundations manual and professional development for confirmation of your program implementation.

APPENDIX E

Data Definition of Variables

Participation in ELLP: the number of total hours parents participate in ELLP (adult education, parenting classes, and PACT Time) during the school year. Family service learning hours for years 4 and 5 were included in the participation hours. This component addition generated more time for program engagement at each school.

School-related parenting behaviors and home family literacy behaviors: Initial and Post Family Interview survey of literacy and education related behaviors. Home Literacy Checklists and Home Visit reports by staff data are collected also.

Attendance rate: the percentage of time attending school divided by time scheduled to attend school.

Academic behavior: Pre and Post scores on *Teacher Report on Student Performance Surveys Records (TROSP)*.

Student Reading Achievement: Pre-test and Post-test scale scores for the end of year benchmark level for any of the standardized reading assessments and benchmarks selected by the schools and used over the course of the grant.

Adult English language skills. Scale scores on the *Basic Education Skills Test (BEST) for English Speakers of Other Languages*. These scores are used to determine Adult Education English language proficiency as leveled by the National Reporting System for Adult Education.

APPENDIX F

Participating Schools Data

Academic Progress at Participating Schools 2015-2016. Overall, Detroit Public Schools (DPS) faced a crisis that negatively impacted all students—47 of Michigan’s 124 schools that ranked among the bottom 5% are part of the DPS. Excellent Schools Detroit (<https://www.excellentschoolsdetroit.org>) reported that for the 2015-2016 school year, 75% of DPS schools performed in the bottom 20% of all Michigan schools.

The overwhelming majority of students in the participating schools struggle to learn, scoring below proficiency levels on state measures of achievement. Low performance, below grade level in English Language Arts and Mathematics is the norm at these schools. DPS uses the Northwest Evaluation Association - Measures of Academic Progress® (MAP®). The publishers state the MAP, “creates a personalized assessment experience by adapting to each student’s learning level—precisely measuring student progress and growth for each individual.” Scores are reported by DPS for its schools.

Escuela Avancemos: Escuela Avancemos! Academy (herein Avancemos), a charter school, replaced Lighthouse (Year 3) that replaced Phoenix, an Education Achievement Authority school (Years 1 & 2). Avancemos is one of 13 public school academies in the Detroit Public Schools Community District (DPS). The curriculum Focus of Avancemos is bilingual education in Spanish and English.

Academic achievement is low across grades at Avancemos. It received a rating of 1 out of 10 by Excellent Schools Detroit (ESD), which rates all public and charter schools (<https://www.excellentschoolsdetroit.org/>). ESD produces a school rating to help families make informed choices about where their children may attend school by providing grade-like report cards per school. ESD recommends parents and students select schools graded C+ or better. Avancemos earned a D for School Climate, F for Academic Status, and F for Academic Progress. Michigan Department of Education gave it a Red rating for having the lowest scores and fewest objectives met. None of the third grade students (2015) scored Proficient in Math or Reading. The Michigan Education Assessment Program (MEAP) 2013 results (most recent data published)

report that less than 5% of Avancemos 3rd graders scored Proficient or better on the English Language Arts or Mathematics measures.

Avancemos is a charter school. The daily attendance rate was not available for the evaluation during the fourth program year. DPS data was located for the 5th year.

Harms Elementary. According to the Michigan Annual Education Report (2016) the school-wide attendance rate for 396 students was 92.6%. NWEA percentile rankings for second (3rd percentile) and third grade (6th percentile) are extremely low for English Language Arts. Observed reading student growth from kindergarten through third grade was less than projected at every grade level (Fall 2013 – Spring 2014 is the most recent data available from DPS). Sixty-seven percent (67.1%) of 3rd graders did not meet state standards for English Language Arts. The mean score for 3rd grade was 1290. Percentile rankings on the NWEA MAP for each grade K – 3 were less than the 5th percentile.

Lighthouse Academy. This new charter school participated only one year (2014 -2015).

Maybury Elementary. The school-wide attendance rate for Maybury 2015-2016 was 92.6%. DPS reports that NWEA Observed Growth fell short of Projected Growth for Reading and Math. The achievement status for prekindergarten through third grade on the NWEA MAP was extremely low with only first grade at the 3rd percentile and the other grades at the 1st percentile. The M-Step results for Spring 2015 for 69 students in 3rd grade was 1,274 for the average scale score for English Language Arts. Six 3rd grade students scored Proficient or better on the M-Step, but 91.3% of the students did not meet the state standard for English Language Arts.

Munger Elementary-Middle. Munger reports an attendance rate of 90.4%. Observed Language Usage Growth was less than the projected growth for second and third grades (Spring 2015 most recent data published by DPS). The Spring 2015 data for 2nd grade are at the 5th percentile and the 3rd grade scores are at the 2nd percentile. M-Step Spring 2015 data for 90 students in 3rd grade had an average scale score of 1,284. 78.5% of the 3rd graders did not meet state standards, but 19% met the state English Language Arts state standards.

2016-2017. Harms Elementary earned a score of C from Excellent Schools Detroit. It reported data on 410 students, 86.1% who are Hispanic. The school attendance rate was 93% for the school year. Student M-STEP scores for Reading and Writing, 2-year average (2014-15, 2015-16) was 27%, weak citing low proficiency and low growth. Harms was rated well organized by students and teachers.

<http://scorecard.excellentschoolsdetroit.org/schools/2043-k8-harms-elementary-school>

2016-2017 NAEP results for 4th grade Reading show 34% of students scoring Proficient and above. 39% of 4th grade males scored Below Basic. 49% of Hispanic 4th graders scored Below Basic. Only 90 Limited English Proficient students in the district were assessed. 10.6% of students scored English proficient on the WIDA ACCESS measure that assessed 4,584 English learners. 40.7% of the English learners demonstrated below average performance on the WIDA ACCESS (Michigan School Data, 2017).

Eccuela Avancemos! earned an overall grade of D from Excellent Schools Detroit (2017). It reported that 86.9% of its 274 students were Hispanic. 71% (N=194) of all students were English learners. 92% of the students were on free and reduced lunch. The school attendance rate was 92%. Only 5% of students scored Proficient or higher on the M-STEP Reading and Writing between grades 3 and 8 over the two year period. Scores clustered heavily in Low Proficiency and Low Growth.

Program Background and Problem Definition. Family literacy and other social innovation programs operate on the assumption that an intervention at the root level creates a chain of change that carries through to the symptomatic social issue. The ELLP is a two-generation educational intervention that reduces the achievement gap between Hispanic students, many who are English learners, and other demographic groups. The strategy is to simultaneously promote school engagement, family literacy, and English language proficiency in Hispanic parents/caregivers and their young elementary school age children.

The ELLP Impact Study is contextualized by patterns and trends of student achievement in the Detroit Public Community Schools District. Student M-STEP data (Table 1) for Detroit show generally poor reading achievement in third grade across demographic groups, yet there are differences in achievement between groups. English learners have higher percentages of

students (12.8%) scoring Proficient or Advanced than African American or Black students (11.9%) scoring in the same levels. More White students (13.0%) score Advanced and Proficient than English Learners, Hispanics of Any Race, and African American or Black students (Detroit Public Schools, 2017).

Table 1

Michigan Student Test of Educational Progress (M-STEP)

2014-15 and 2015-16 English Language Arts Scores for 3rd Grade Content

Detroit Public Schools Community District

Testing Group	School Year	State Percent Students Proficient	District Percent Students Proficient	Percent Advanced	Percent Proficient	Percent Partially Proficient	Percent Not Proficient
English Learners	2014-15	34.7%	16.4%	5.0%	11.5%	27.2%	56.3%
English Learners	2015-16	31.9%	12.8%	3.9%	8.9%	24.5%	62.7%
Hispanic of Any Race	2014-15	37.2%	14.8%	4.6%	10.2%	28.4%	56.7%
Hispanic of Any Race	2015-16	33.5%	12.5%	3.5%	9.1%	23.2%	64.3%
White	2014-15	58.2%	12.1%	3.0%	9.1%	21.2%	66.7%
White	2015-16	53.9%	13.0%	5.0%	8.0%	21.0%	66.0%
African American or Black	2014-15	23.2%	10.5%	2.4%	8.1%	21.2%	68.3%
African American or Black	2015-16	20.0%	9.0%	2.9%	6.1%	16.1%	74.9%

The achievement gap between Hispanic/Latino English language learners and all other students persists and negatively impacts national high school graduation rates. The Detroit Public Schools report unmet academic needs for many of its 6,733 students who are Hispanic/Latino. The District’s 2016 graduation rate for Hispanic students was 72.6% (down from 73.7% in 2015) and 67.36% for African-American students. That year the average rate for white students was 83.38% and for Asian students it was 90.2% (Higgins, 2017). The data represent the traditional achievement gap, the gulf between the scores of more affluent, English speaking students and those of students who represent ethnic minorities and English language learners.

Table 2
Enrollment and Demographics of Participating Schools

School	Total Enrollment	Hispanic	Limited English Speaking	Economically Disadvantaged
Avancemos	247	187	227	247
Harms	472	404	303	411
Discontinued Schools				
Lighthouse	352***	207	DNA	341
Maybury	383	312	242	357
Munger	955	714	609	573
Phoenix*	372**	DNA	DNA	

* The Education Achievement Authority closed Phoenix Multicultural Academy in May 2016 due to declining enrollment and low achievement. Phoenix discontinued ELLP in 2013.

**2012-2013

***Southwest Detroit Lighthouse Charter Academy discontinued after one year in ELLP

DNA=Data not available

APPENDIX G

Further Analysis of Previous Reading Outcomes

The analysis of aggregated data is representative of data analysis per program year (see Appendices D, K, L, M for a complete analysis of variables including parent participation in the intervention). For example, we present the analysis of reading outcomes as measured by the two STAR instruments in 2013 -2014, followed by 2014 – 2015 and 2015-2016. The analyses ground the introduction to this study component that recognized limitation due to the availability of a common measure and vertically alignment of the scale scores with grade levels.

Reading Outcomes 2013 – 2014. Academic achievement was analyzed using scaled scores from the STAR Early Literacy assessment, for grades kindergarten and first combined. Data was analyzed for the beginning of the year (BOY), the end of the year (EOY), and growth. No statistically significant difference was found on any of these measures between the Focus students' performance and the Comparison students' performance. However, in practical terms, the Focus students out performed the Comparison students on both BOY and EOY measures. Difference in rate of growth between these two groups was only 7.47 scale scores while the range of scores was 345-1864.

Table 1

Statistical Analysis for Grades K-1 on Star Reading 2013 - 2014

	Mean	t-Test: Two Sample Assuming Equal Variances (Equal Sample Size, Two-tail)	F-Test Two-Sample for Variances (Two-tail)
BOY (Beginning of Year)	Focus – 587.97 Comparison - 545.03	t(70)= 0.702, p=0.485	F(35,35)=1.52, p=0.219
EOY (End of Year)	Focus – 748.08 Comparison - 721.53	t(70)= 0.425, p=0.672	F(35,35)=1.56, p=0.194
Difference in Growth	Focus – 160.11 Comparison - 176.50	t(70)= -0.666, p=0.507	F(35,35)=1.37, p=0.362

Analysis of 1st and 2nd Grade Students: Academic achievement was analyzed using scaled scores for the Star Reading assessment, for grades two and three combined. Data from the BOY, the EOY, and growth were also used in the analysis. No statistically significant difference was found on any of these measures between the Focus students' performance and the Comparison students' performance. In practical terms, the Focus students outperformed the Comparison students on both the BOY and the EOY measures. Difference in rate of growth between these two groups was only 16.39 scale scores when the range of scores was 63-2239.

Table 2

Statistical Analysis for Grades 2-3 on Star Reading 2013 - 2014

	Mean	t-Test: Two Sample Assuming Equal Variances (Equal Sample Size, Two-tail)	F-Test Two-Sample for Variances (Two-tail)
BOY (Beginning of Year)	Focus – 222.75 Comparison - 196.00	t(54)= 0.271, p=0.788	F(27,27)=0.84, p=0.659
EOY (End of Year)	Focus – 346.39 Comparison - 328.11	t(54)= 0.168, p=0.867	F(27,27)=1.04, p=0.926
Difference in Growth	Focus – 123.64 Comparison - 132.11	t(54)= -3.37, p=0.738	F(27,27)=0.85, p=0.671

For the following project year (2014 – 2015), similar results were found when the amount of growth between percent at or above grade level at the BOY and the EOY was analyzed.

Reading Outcomes 2014 – 2015. The Focus group had a gain of 7.44% at or above grade level while the Comparison group had a gain of 1.88%. The Focus group increased their proficiency rate by 5.66% more than the Comparison group.

Table 3

Percent of Students Reading At or Above Grade Level 2014 -2015

	Percent At or Above Grade level at Beginning of Year	Percent At or Above Grade level at End of Year
Focus	13.21%	20.75%
Comparison	13.21%	15.09%

Analysis of academic achievement was conducted using scaled scores for the two versions of the STAR assessments just as it had been done the previous year. Because the range for the scaled scores on the two assessments differed, they had to be analyzed separately. Kindergarten and first grade were analyzed together and 2nd and 3rd grades were analyzed together.

The academic achievement was analyzed for grades kindergarten and first combined using scaled scores for the STAR Early Literacy assessment. Data from the BOY, the EOY, and for growth were analyzed. No statistically significant difference was found on any of these measures between the Focus students' performance and the Comparison students' performance. Difference in average rate of growth between these two groups was 27.61 scale scores with the Comparison group growing more. The range of scores was 52-870.

Table 4

Statistical Analysis for Grades K-1 on Star Early Literacy Reading 2014 - 2015

	Mean	t-Test: Two Sample Assuming Equal Variances (Equal Sample Size, Two-tail)	F-Test Two-Sample for Variances (Two-tail)
BOY (Beginning of Year)	Focus – 402.85 Comparison - 353.08	t(50)= 0.947, p=0.348	F(25,25)=1.18, p=0.678
EOY (End of Year)	Focus – 537.00 Comparison - 514.85	t(50)= -0.296, p=0.768	F(25,25)=1.02, p=0.961
Difference in Growth	Focus – 134.15 Comparison - 161.77	t(50)= -0.674, p=0.503	F(25,25)=0.57, p=0.164

Analysis of 2nd and 3rd Grade Students: Academic achievement was analyzed using scaled scores for the STAR Reading assessment for grades two and three combined. Data from the BOY, the EOY, and growth was analyzed. No statistically significant difference was found on any of these measures between the Focus students' performance and the Comparison students' performance. Difference in average rate of growth between these two groups was 23.96 scaled scores with the Focus group growing more. The range of scores was 63-673.

Table 5

Statistical Analysis for Grades 2-3 on STAR Reading 2014 -2015

	Mean	t-Test: Two Sample Assuming Equal Variances (Equal Sample Size, Two-tail)	F-Test Two-Sample for Variances (Two-tail)
BOY (Beginning of Year)	Focus – 156.89 Comparison - 188.22	t(52)= -1.245, p=0.219	F(26,26)=1.15, p=0.717
EOY (End of Year)	Focus – 227.37 Comparison - 234.74	t(52)= -0.252, p=0.802	F(26,26)=2.05, p=0.073
Difference in Growth	Focus – 70.48 Comparison - 46.51	t(52)= 1.203, p=0.234	F(26,26)=1.61, p=0.229

Reading Outcomes 2015 – 2016. The patterns carried forward to the 2015 – 2016 school year. Again, we measured student achievement using STAR reader in second and third grades and the STAR Early Literacy in kindergarten and first grade in three of the schools. The fourth school, Avancemos used NWEA-MAP. Standard scores were available for assessment at all grades, although they were not provided in all cases. Data collection and availability confounded the analysis. Percentiles used to determine “at” and “below” level functioning in reading for the NWEA as cutoffs were not available to use for interpretation.

Students whose percentile was 50 or higher were considered at level. Grade level equivalents for 2nd and 3rd grades are available to use in determining whether or not students are at level. Scaled scores for kindergarten and 1st grade can be compared to risk cut off based on the time of the year. Those that fell in the “low risk” range were considered to be at level while both “at risk” and “some risk” were considered below. Benchmark cutoff scores were found on page 23 of the Early Literacy Teacher guide. Cutoff scores for “at level” are provided below.

Table 6

Cutoff Scores for the Early Literacy STAR

	September	May
Kindergarten	>555	>674
1 st grade	>705	>816

In this section, achievement analysis began with grade level functioning, followed by scale scores analysis. Prekindergarten student analysis concludes the section and was based on the results of the Ages and Stages developmental screening questionnaire.

Students in the Analysis 2015 - 2016: Of the total number (n = 91) of students in pre-kindergarten to 3rd grade, there were 19 pre-kindergarteners who had no data. For the remaining 72 students, the only way to analyze them as a group was to evaluate whether they were performing at grade level according to the data provided to the evaluators. While results may have been reported differently for different schools, different classrooms, and/or different grades, within matched pairs of Focus and Comparison students, reporting was consistent.

Analysis of Grade Level Performance. Consistent with the previous years' analysis, grade level functioning was defined as whether students were at or above grade level expectations using the benchmark cutoff scores for STAR Early Literacy and grade level for the STAR Reading Assessment. For students assessed by the NWEA, percentiles were used to determine whether students were reading at grade level. Students with a percentile of 50 or above were identified as reading at grade level. The results are provided in Table 25 below.

Table 7

Pre-Test: Students Reading At or Above Grade Level – Fall 2015

	Focus Students		Comparison Students	
	Number of Students	Percent of Students	Number of Students	Percent of Students
At or above grade level	7	9.7%	14	19.4%
Below grade level	50	69.4%	39	54.2%
No data provided	15	20.8%	19	25.3%

Considerable changes in students' reading abilities were seen by the spring assessment data. As a group, Focus students made substantial gains, surpassing the Comparison group in the number proficient at the end of the year despite the Focus group having less students scoring at grade level, or "proficient" at the beginning of the year.

Table 8

Post-Test: Students Reading At or Above Grade Level – Spring 2016

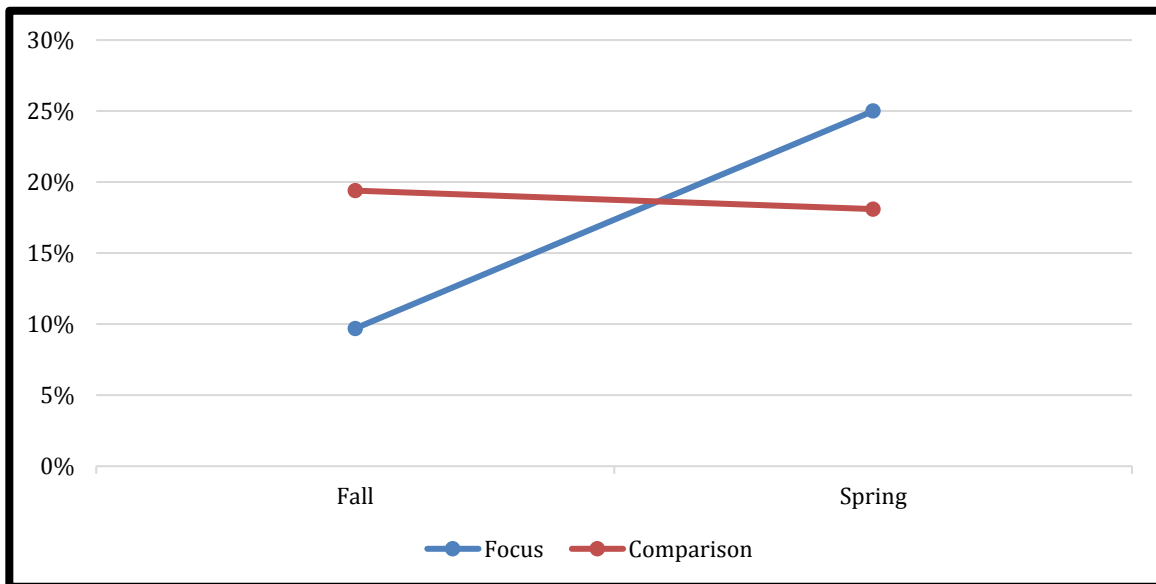
	Focus Students		Comparison Students	
	Number of Students	Percent of Students	Number of Students	Percent of Students
At or above grade level	18	25.0%	13	18.1%
Below grade level	39	54.2%	46	63.9%
No data provided	15	20.8%	13	18.1%

Tables 7 and 8 show that several students did not have data. When these students were eliminated, 49 pairs of Focus students and Comparison students were analyzed by reading ability.

As can be seen on the graph (Figure 1), the Focus group started with a much lower percentage of students reading at grade level. The Comparison group started the year with more students reading proficiently but did not grow over the course of the year and ended with fewer students reading on level and one student dropping into the below grade level category. By the end of the year, the Focus group had more proficient readers.

Figure 1

Percent of Students Reading At Grade Level or Above 2015 -2016



The results of this analysis mirrored the total group analysis, with a steeper decline in the proficiency percentage of the Comparison group (Table 9).

Table 9

Matched Pairs: Students Reading At or Above Grade Level

	Focus Students		Comparison Students	
	Pre-test	Post-test	Pre-test	Post-test
At or above grade level	12.2%	34.7%	26.5%	24.5%

The amount of growth between percent at or above grade level at the beginning of the year and the end of the year was analyzed. Using the matched pairs, the Focus group had a gain of 22.5% reading at or above grade level while the Comparison group had a loss of -2.0% when scaled score cut off were used.

Analysis of Scaled Scores: Using scaled scores for the STAR Early Literacy assessment and from STAR Reading assessment, academic achievement was analyzed for all grades combined using data from the BOY, the EOY, and growth. Avancemos was not included in the analysis of scaled scores because they used a different assessment with a different scaled scores index.

A few student pairs only had grade equivalents and percentiles reported. Therefore, they were not included in this analysis. Thirty-seven pairs were included in the analysis of scaled scores. As with the two previous years and the aggregated study, no statistically significant difference was found on pre- or post-measures between the Focus students' performance and the Comparison students' performance.

APPENDIX H

Demographics of the Participant Families

Demographics of the Focus Students' Families. Parents were interviewed (Family Interviews) upon enrollment and again in the late spring of the school year. Demographic data was collected on the Initial Family Interview during the first few weeks of the program year. Data for all Focus students' families show that 298 (N=302) of the parents enrolled in ELLP were female, and of these one was a grandmother, one was a foster parent, and three were aunts. Given that a total of four were not mothers and three were male, the term parent will be used throughout this analysis.

Approximately two-thirds of the Focus students' parents were married at the time of their enrollment. As stated, the ELLP parents were female, 88.6% were not employed during their enrollment. This in part explains how they were able to work other responsibilities and time with the 11 hours per week of engagement in the ELLP.

Figure 1

Marital Status of Focus Students' Parents

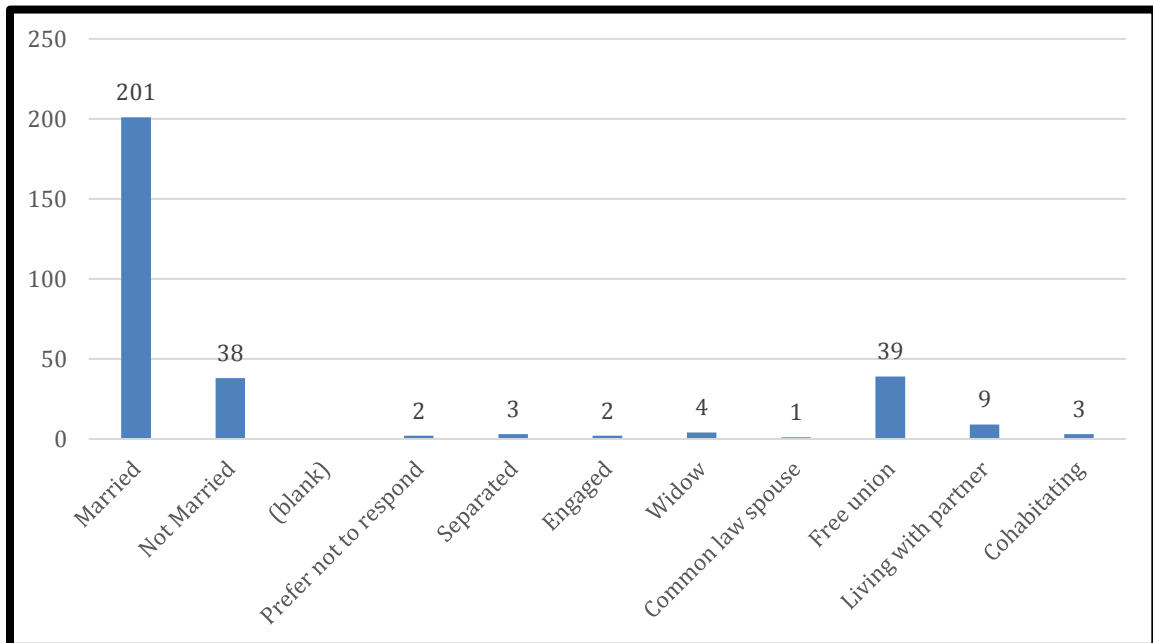
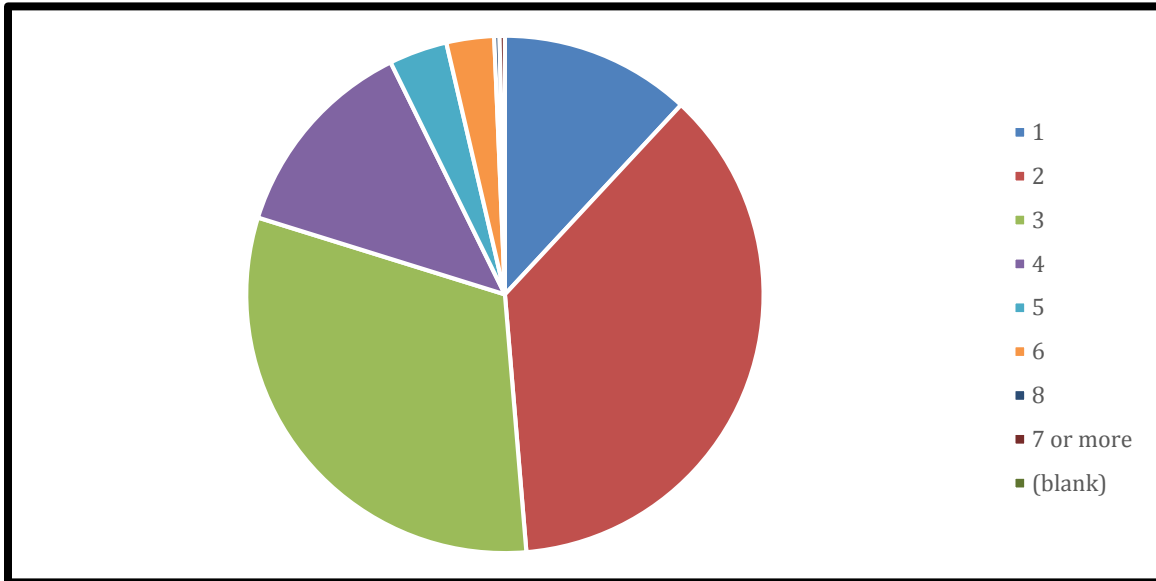
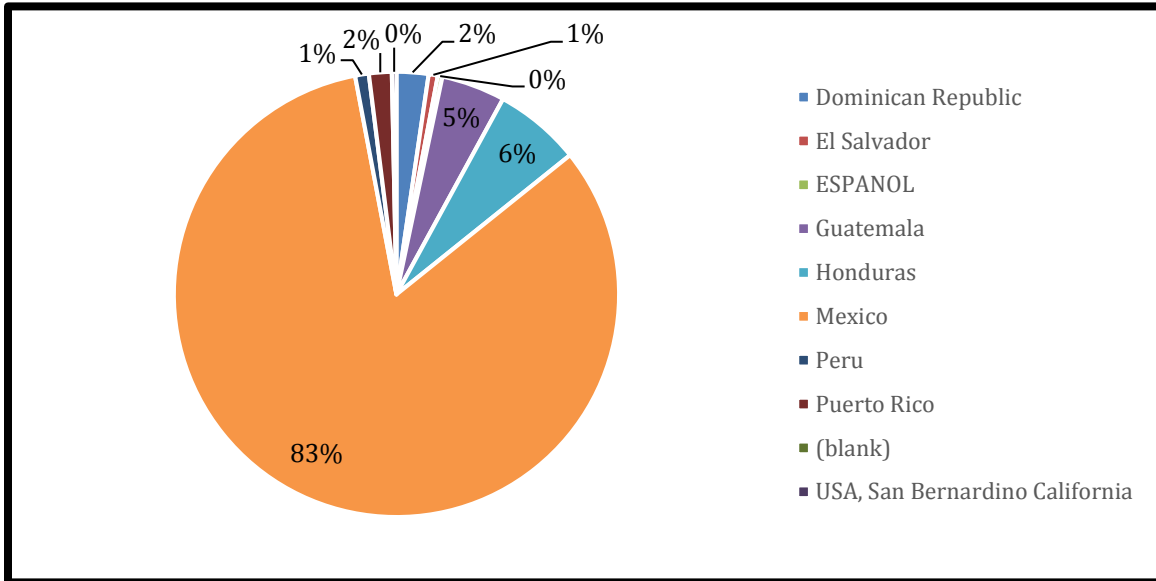


Figure 2
Number of Children in Focus Students' Homes



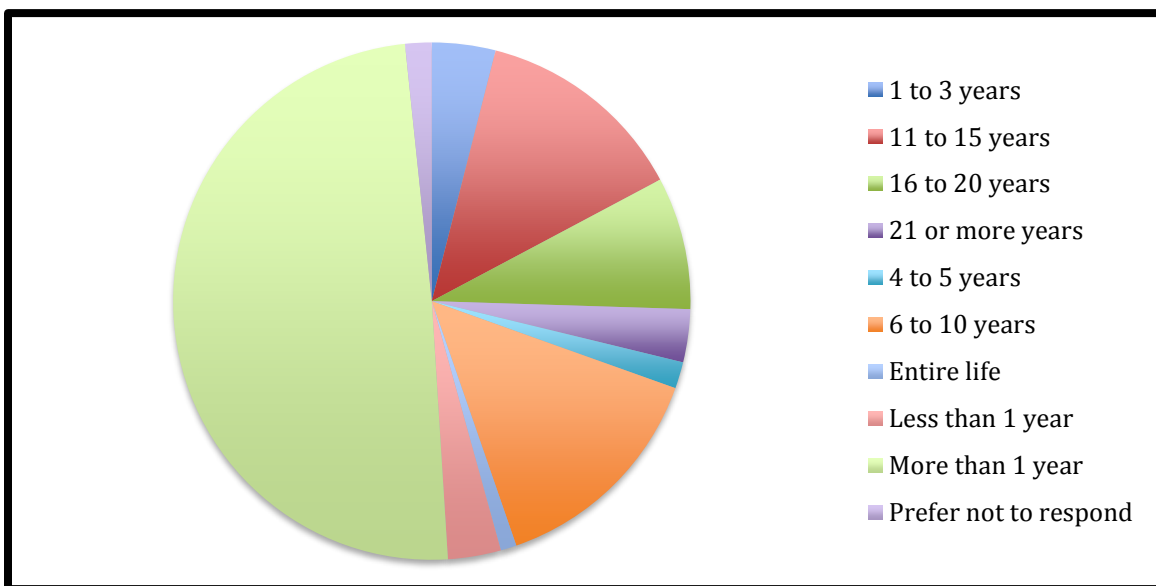
The Census Reporter (2017) states that 2.1 is the mean family size for Detroit. The study sample shows approximately half of the families were composed of five or more members (Figure 2 shows two-thirds of the students' parents were married – thus a family with 1 child would be reported as 3 members when reported by size). The family size in excess of the Census mean also indicates that income levels (Figure 8) would be more indicative of the poverty level. Data show the Focus students were members of Hispanic/Latino families. The majority of parents (n = 250/302) had Mexican heritage.

Figure 3
Countries of Origin for Parents of the Focus Students 2014 – 2017



Nationally, 16% of English learners who are Hispanic/Latino are first generation immigrants (OELA, 2015). Ten of the Focus students’ parents enrolled in ELLP had lived in the U.S. for less than a year. Seventy parents had lived in the U.S. 10 or fewer years. The highest response (n =149) was that they had lived in the U.S. for more than one year.

Figure 4
Number of Years the Focus Students’ Parent Enrolled in ELLP Lived in the U.S.



Most of the Focus students (N = 54) communicated with their families at home in Spanish to some extent. Data show that at least 70% of the Focus students will become bilingual as they are exposed to English and Spanish at home and in school. Bilingualism is a strength that strengthens brain development and prepares children for a global economy (Barac, Bialystok, Castro, and Sanchez, 2014, Levesque, 2017).

Increasing English language proficiency was a primary goal of the parents of Focus students for enrolling in the ELLP.

Figure 5

Parents' of Focus Students Value of Enrolling in ELLP to Improve English Language Skills

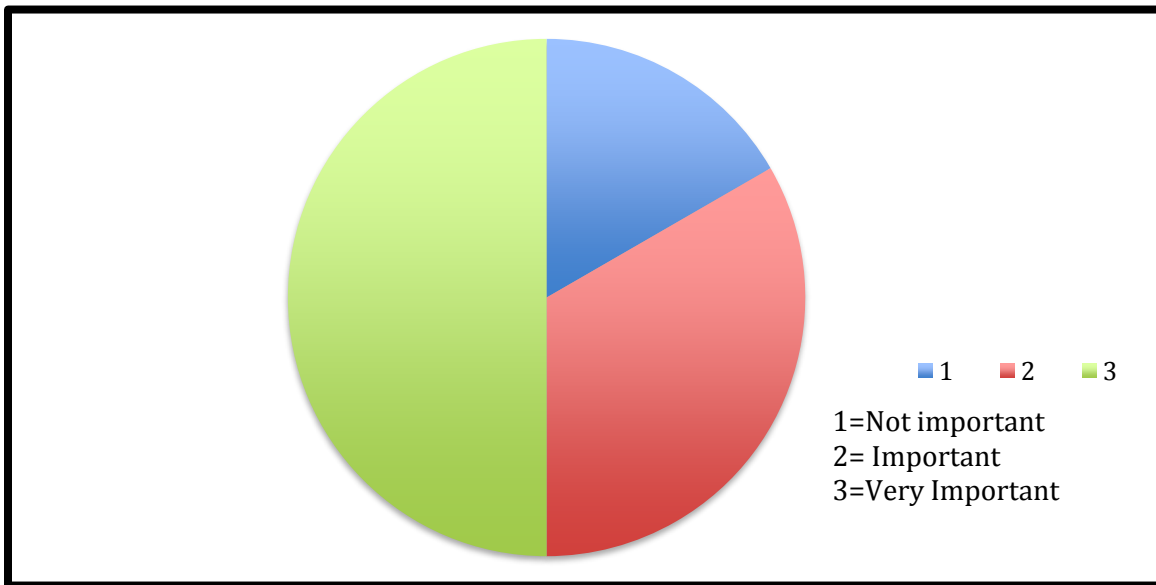
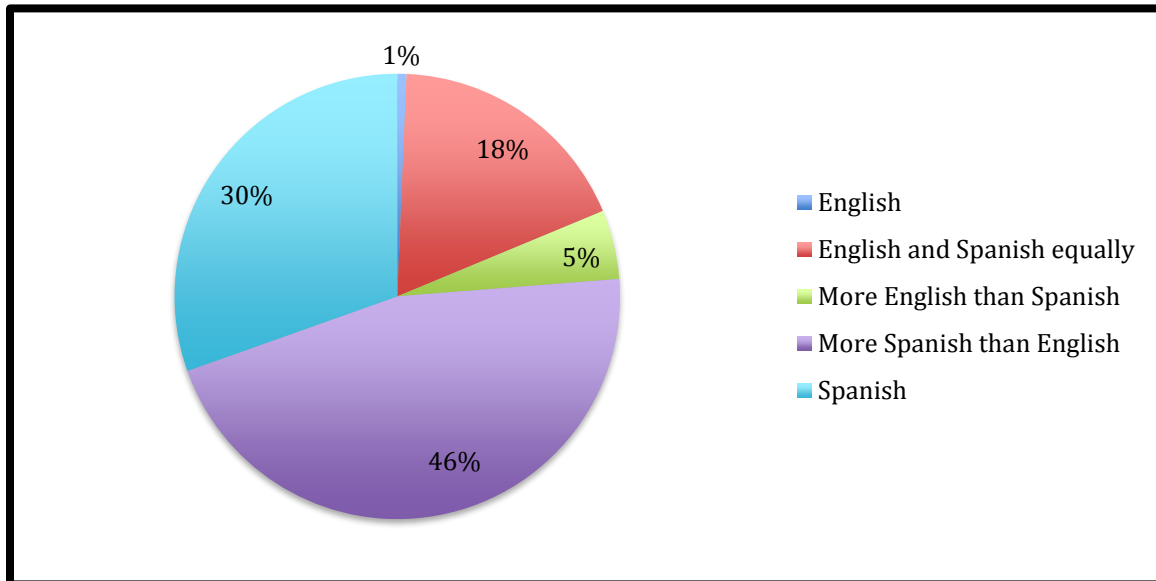


Figure 6

Language Spoken in the Homes of Focus Students

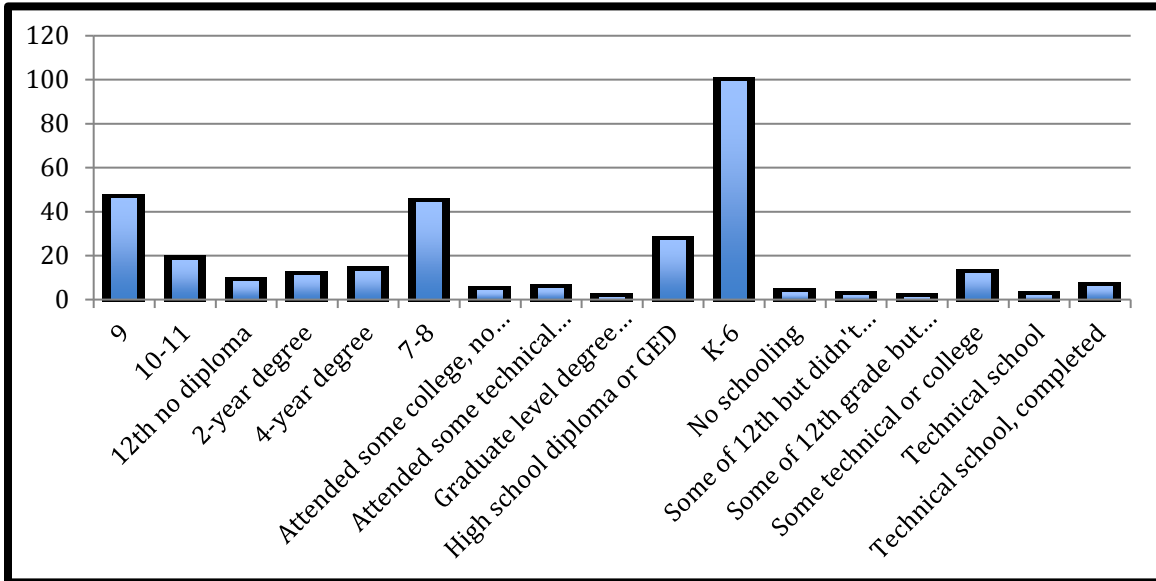


Nationally among Hispanic/Latino mothers, about 22% more mothers of English proficient students have a high school degree or higher, than mothers of English learner students (OELA, 2015). Clearly, there is a link between the educational attainment of mothers' and that of their Hispanic/Latino Focus students. For example, 47.1% of students of Hispanic/Latino mothers who hold a high school diploma are proficient English Learner students (Gambino, Acosta, & Grieco, 2014). Parents enrolled in ELLP reported the highest grade or level of schooling they had attained. Three hundred and two parents responded to the survey item, of these 30 (10.7%) had attended some form of postsecondary education, such as technical school, two year and four year colleges. One parent had a graduate degree.

Conversely, 62.5% of parents' highest level of education was ninth grade. Nearly a third (n=99) ended school in sixth grade. Only seven parents had been schooled in the U.S., and 11 had been educated within and outside of the U.S. The overwhelming reason given for leaving school was financial hardship for the family.

Figure 7

Highest Grade or Level of Education Attained by Focus Students' Parents

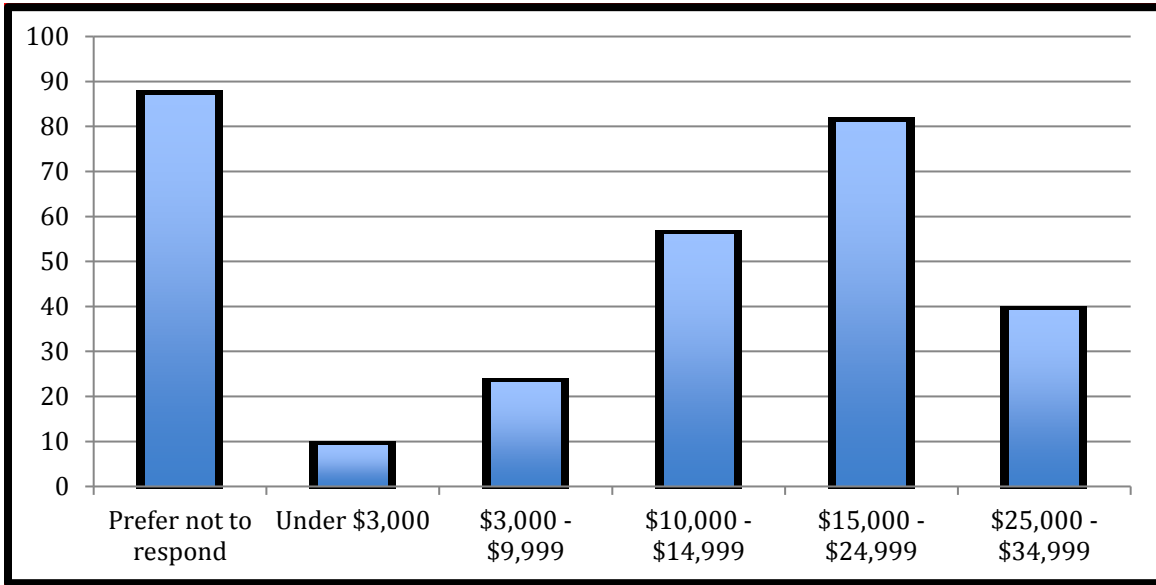


Poverty is a key independent variable that impacts the English proficiency of Hispanic/Latino students (U.S. Census Bureau, 2013). The poverty level set for a family of four is \$24,008 (U.S. Census Bureau, 2017). The family income levels of the Focus group, all of whom are Hispanic/Latino English learners, ranged from \$3,000 per year to more than \$35,000 (n = 7/302). One hundred sixty (160) of the 215 parents who reported stated their total household income was less than \$25,000. This means that poverty and deep poverty are common for 74% of Focus students. However, 51% of the parents reported that they had more than two children – meaning the poverty threshold was higher and economic hardships were more severe.

The reported data on family income for Focus students' families is reinforced by the high percentage (>95%) of students on Free and Reduced Lunch program at all schools. Census data also shows that 51% of all children under age 18 in Detroit live below the poverty line (Census Reporter, 2017).

Figure 8

Annual Household Incomes Reported by Parents of the Focus Group



Nationally, approximately 74% of English learner students who are Hispanic/Latino live at, or below, the poverty level. The same analysis found that approximately 57% of English proficient students who are Hispanic/Latino live at, or below, poverty level¹². Higher incomes are positively correlated with higher numbers for English proficient students who are Hispanic/Latino.

¹² Below poverty level is defined by the U.S. Census Bureau (2013) as having income 185% or below the poverty level.

APPENDIX I

Request to the Detroit Public Schools for Longitudinal Student Reading Achievement Data

See attached file folder for PDF

APPENDIX J

Revised Subgrantee Evaluation Plan 2016

See Attached File Folder for PDF

APPENDIX K

2013 – 2014 Implementation Study

See attached file folder with PDF

APPENDIX L

Southwest Solutions English Language Learners Program

2014 – 2015 Implementation Study

See attached file folder with PDF

APPENDIX M

Southwest Solutions English Language Learners Program

2015 – 2016 Implementation Study

See attached Southwest Solutions file folder with PDF