The Intergenerational Cycle of Low Literacy and Poverty and Solutions through Family Literacy

Programs: A Review of the Literature

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Abstract

This paper synthesizes data from the 2016 Program for the International Assessment for Adult Competencies (PIAAC), the 2002 National Adult Literacy Survey (NALS), and literature on adult and intergenerational literacy, social mobility, and economic equality. The results of the PIAAC revealed that the United States lags behind other developed nations in literacy. Compounding this data, the United States had one of the highest correlations between parental educational attainment and a respondent's literacy score. This indicates that low literacy has a strong intergenerational component. Further, educational attainment is closely related to earnings potential entwining and perpetuating low literacy and poverty across generations. This paper examines family literacy programs as an effective strategy for breaking the intergenerational cycle of limited literacy and poverty.

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Low levels of adult literacy have remained constant in the United States over the last decade, and has gained increased attention after the data collected by Organisation for Economic Co-Operation and Development's (OECD) Program for the International Assessment of Adult Competencies (PIAAC) showed that literacy in the United States was below the average for other developed countries (OECD, 2013). This information is particularly startling because it indicates that levels of adult literacy have remained stagnant. This has prompted articles that call adult illiteracy a "crisis" (Strauss, 2016) and an "epidemic" (Rasco, n.d.). The chances of significantly improving adult illiteracy nationwide appear particularly grim, as enrollment and funding for adult education programs has been in decline for the last decade (Suitt, 2016). Further, matriculation in adult literacy programs has declined from 4.3 million in 1999 to under 1.6 million in the 2013-14 program year (Rosen, 2016, p. 61). Further, within the United States, studies show that children of parents with low literacy skills have a 72% chance of being at the lowest level themselves thus perpetuating cycles of illiteracy and its consequences (ProLiteracy, 2016).

Recognition of the importance parents' literacy levels and their children's educational development has gained traction over the years. Studies have indicated that one of the best indicators of a child's educational attainment is the education level of the child's parents, with many studies focusing on mothers specifically (LeVine, 2007; Lunze, & Paasche-Orlow, 2014; Annie E. Casey Foundation, 2010). Results from the PIACC corroborate this finding, demonstrating that those whose parents had lower levels of education performed most poorly on the literacy portions of the PIAAC survey. This was generally true for all countries; however, in

the United States and Germany the best predictor of a respondent's literacy score was their parents' level of education (Clymer, Toso, Grinder, & Sauder, 2017). The results of the PIAAC survey have shed light on how the United States' illiteracy problem is multigenerational. Lunze and Paasche-Orlow (2014) have asserted that the United States and Germany "stand out as having the most entrenched multigenerational literacy problem among the countries in the PIAAC survey. In other words, these countries have effectively established an educational caste system" (p. 17).

Framing illiteracy as a generational issue provides opportunity to address new ways of tackling the sobering statistics. One of these is family literacy programs. This type of educational programming has been around for decades (Clymer, Toso, Grinder, & Sauder, 2017) having taken shape in the late eighties and was designed to provide training and education to parents for themselves and their children. In 1998, these programs we defined by the federal government:

The term 'family literacy services' means services that are of sufficient intensity in terms of hours, and of sufficient duration, to make sustainable changes in a family and that integrate all of the following activities:

- Interactive literacy activities between parents and children.
- Training for parents regarding how to be the primary teacher for their children and full partners in the education of their children.
- Parent literacy training that leads to economic self-sufficiency.
- An age-appropriate education to prepare children for success in school and life experiences. (National Center for Families Learning, "History," par. 4)

The momentum for Family Literacy Programs has decreased, partly as a result of decreased funding for adult basic education programs across the board in the new millennium (Clymer,

Toso, Grinder, & Sauder, 2017). However, the task of promoting literacy among adults and children is just as vital as ever.

Defining Literacy

The National Center for Families Learning states that their mission is driven by the reality that there are 32 million functionally illiterate adults in the United States and that 67% of students are not proficient in reading at the end of third grade ("Our Why", par. 3). If the figure is adjusted to include only low-income third graders, 83% are not proficient before entering fourth grade (Annie E. Casey Foundation, 2010, p. 7). Third grade is considered a critical point in a child's reading development as in fourth grade students should move from "learning to read" to "reading to learn" (Annie E. Casey Foundation, 2010, p. 10). However, it is important to note that functional illiteracy and literacy levels below the third grade level do not mean that a person cannot decipher any written text. Various definitions and measures have been developed to understand low levels of literacy.

Functional Illiteracy

The term functional illiteracy was defined by UNESCO to provide an international standard for understanding and measuring low literacy levels. It has gained recognition in the United States and world.

A person is functionally illiterate who cannot engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculation for his own and the community's development (UNESCO, 1978, par. 3).

This definition allows for the inclusion of those in the United States who can read and write at a low level. Further, it also includes migrants who may be able to read and write in their native language, but lacks the ability to do so in English for "effective functioning."

Literacy Defined by the National Center for Education Statistics (NCES)

Before the task of measuring adult literacy was assumed by the OECD, the United States conducted National Adult Literacy Surveys (NALS) every ten years. In the report on the results from 2002, they defined literacy as "using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential" (Kirsch, et al., 2002, p. 2). Notably, the emphasis on individual goals and knowledge potential is in rather stark contrast of the UNESCO definition which focuses mostly on society and community. One may argue, the focus on individuals and upward mobility, expressed through mentioning goal and potential, makes this definition distinctly American—even if the data from recent years indicates that this education and social advancement is not equally accessible (Lunze & Paasche-Orlow, 2014; Isenberg, 2016).

Literacy Defined by the OECD

The definition that the OECD employed in its international assessment of adult literacy is remarkably similar to the definition used by the NCES. In their assessment literacy is defined as "understanding, evaluating, using and engaging with written texts to participate in society, to achieve one's goals and to develop one's knowledge and potential" (OECD, 2016b, p. 19). The OECD's conception of literacy varies only in its addition of the words understanding, evaluating, and engaging. It is important to note that the NCES and OECD did not include writing in their definitions of literacy or in their assessments.

Measures of Adult Literacy

As the NCES and OECD have worked to compile national and international literacy statistics, they have found it necessary to develop scales to differentiate among the different levels.

NCES Measures of Literacy

The NCES measured literacy by creating an "ordered set of skills." They acknowledged that there was more than one "type" of literacy and that each "appears to be called into play to accomplish diverse types of tasks" (Kirsch, et al., 2002, p. 3). The three types are explained below.

Prose Literacy. Prose literacy is defined as "the knowledge and skills needed to understand and use information from texts.

Document Literacy. Document literacy is defined as the knowledge and skills required to locate and use information contained in materials such as: job application, payroll forms, transportation schedules.

Quantitative Literacy. Quantitative literacy is the knowledge and skills required to apply arithmetic operations, either alone or sequentially, using numbers embedded in printed materials; for example, figuring out a tip, or determining the amount of interest from a loan advertisement. In the PIAAC survey, this type of literacy was associated with the survey's measure of numeracy.

OECD Measures of Literacy

In contrast to the definitions employed by NCES, the OECD created six levels of literacy proficiency that were based on the raw scores of participants in the PIAAC survey. The levels ranged from below level one, below 176 points, which did not indicate illiteracy, but involved

only having the skills to interpret short texts and a very basic vocabulary, to level five. Scores at level five were greater than or equal to 376 points. Texts at this level were dense and required readers to make "high-level inferences" (OECD, 2016b, p. 72). Four percent of survey respondents in the United States scored below level one while 13% scored at level five. The largest clusters were at level three with 33% and level four with 39% (OECD, 2016a, p. 45). Skills at level three involve reading lengthy and dense texts, but the level of inference necessary is not high. At level four the difficulty of inference varies, but does not stray from central ideas. At level four, however, readers are required to make inferences from "subtle data" (OECD, 2016b, p. 72).

How Does the United State Measure Up?

The NCES conducted its last National Adult Literacy Survey (NALS) of adult literacy in 2002. The results of the study concluded that between 21% and 23% of American adults, over 40 million people, were at the lowest level of prose literacy skill (Kirsch, et al., 2002, xvi). Of the adults that scored in the lowest level of prose literacy, 25% were immigrants who may have still been learning English, 62% had not finished high school, one third were over 65 years old, and 26% had physical, mental, or health conditions that kept them from fully participating in work or school (Kirsch, et al., 2002, xvi). It is apparent that literacy transcends simple categories.

The results of the PIAAC, first released over a decade after the last NALS, have shown that the United States still has large swathes of its population at low levels of literacy. The lack of improvement between the two surveys led the *Huffington Post* (2013) to publish an article with the title "The U.S. Illiteracy Rate Hasn't Changed in 10 Years." Further, the PIAAC results showed that the United States is lagging behind other developed nations in literacy. The United States' mean literacy score was below the international mean of 273 in 2013 when the data from

the first 24 countries to take the survey were analyzed (OECD, 2013, p. 70). However, the United States had a larger percentage of adults at level five and below level one, while other nations tended to have a more balanced distribution (Rampey et. al., 2016). The data suggests there is profound social stratification along educational lines in the U.S. and demonstrates that the nation has not been proactive in combating illiteracy over the last ten years.

Adult Illiteracy and Socioeconomic Status

Another key factor that contributes to and perpetuates low levels of literacy across generations is socioeconomic status. Just as the United States has stratified literacy levels, it has high income inequality. The United States' Gini coefficient, a figure that measures income inequality, is .394 (OECD, 2016, November, p. 7). This is the third highest of member OECD nations behind Chile and Mexico indicating that the United States has greater economic disparities between rich and poor than other developed countries.

In America, socio-economic inequality has been acceptable so long as one can improve their status through hard work. However, recent research has shown that this may not be the case and that inequalities—educational and socioeconomic—are limiting the social mobility of Americans. This has been explored through the Great Gatsby Curve. The Great Gatsby Curve was named and introduced by labor economist Krueger (2012, January) as he explained the correlation between a nation's income inequality and limited opportunity for social mobility as expressed by plotting a country's Gini coefficient on the X-axis and income mobility across generations on the Y-axis (p. 4). The data definitively shows there exists a distinct connection between inequality and limited social mobility, as expressed through increased income across generations.

In the context of the United States, this correlation found by the Great Gatsby Curve has been used to advocate for policies that support greater income equality. Those who oppose such policies still hold strongly to the ideals of the American Dream and the notion that a solid work ethic can create opportunities for increased prosperity. *The Economist* (2013, July) charmingly put this mindset this way: "If today's burger-flipper can become tomorrow's prosperous burgher with a little grit and hard work, society is still fair" (par. 3). Unfortunately, there is mounting evidence that if the burger-flipper's parents were poor and poorly educated, he's got little hope.

This conclusion is driven home by the reality that poverty is closely connected with low literacy levels. According to the 2002 NALS survey, 41% to 44% of those who performed the in the bottom tier were in poverty. At the highest literacy tier, only 4% to 6% lived in poverty (Kirsch, et al., 2002, p. 60). In the PIAAC survey, parents' educational level was used as a "proxy for socio-economic status" (OECD, 2016a, p. 87). The nature of using parents' education as a proxy adds potency to the argument that education is closely connected to wealth.

Jerrim and Macmillan (2015) utilized the data from the PIAAC survey up to 2013 to examine "the cross-national relationship between parent education, educational attainment of offspring, and labor-market outcomes, and whether stronger associations are found in societies with more income inequality" (p. 506). They were essentially testing the reality of the Great Gatsby Curve with information from the PIAAC. Their results substantiated the curve and clearly demonstrated how economic inequality impacts American's earnings prospects. For example, in the United States, the nation with the second highest Gini coefficient in Jerrim and Macmillan's data, behind Russia, individuals who came from a low parental education background could make as much as 75% less than those from high parent education backgrounds (Jerrim & Macmillan, 2015, p. 519). Further, the United States showed the highest wage returns

to university qualifications, showing that those with university degrees earn more than double, 107%, of what those without a degree earn (Jerrim & Macmillan, 2015, p. 525).

These results corroborate the notion that education and income are tightly linked in the United States. However, the country is failing its poorest citizens with many unable or struggling to attain the education that could elevate them out of poverty.

Family Literacy Programs

The notion that education is a remedy for poverty is not new. Neither is the concept of a cycle of poverty spanning generations. These ideas provided the initial impetus for family literacy programs. However, renewed vigor and improved approaches are necessary to improve literacy and, ultimately, economic equality for the present and future generations. The data from the NALS, PIAAC, and the many studies resulting from them, paint a sobering picture and emphasize deficiency among the poor. Unfortunately, the deficiency perspective bleeds into the way adult learners in family literacy programs are perceived. Auerbach (1995) has offered the critique that while many programs have changed from an openly deficit-oriented approach to an "intervention prevention" approach, the deficit language such as "at risk" and "disadvantaged" or referring to illiteracy as a "disease" is still used and continues to invoke "stereotypes of cultural deprivation" (p. 646). Unfortunately, according to Auerbach, this approach places the blame for illiteracy on "deficiencies in family literacy practices or attitudes" (p. 645). It fails to recognize different epistemologies and recognize the many unique resources that those struggling with English literacy can contribute.

Fortunately, more progressive programs have developed. Caspe (2003) profiled the Jane Addams School for Democracy the school's strategy creating family language and literacy programs that seek to treat adult students as capable individuals. The school targets Spanish-

speaking and Hmong groups for their English language instruction. They divide their instruction into three "circles" (based on Paulo Freire's pedagogical theory): one for Hmong adults, one for Spanish-speaking adults, and one for children of various cultural backgrounds. Circles may include members that do not belong to the cultural group—and all circles do have native English speakers in their midst, but everyone in the circle is both a learner *and* a teacher (Caspe, 2003). With the notable exception of the children's circle, the Hmong and Spanish-speaking adults participate in separate groups, but all are accommodated within the program.

Adult learners face many barriers to learning and responsive programs like the one at the Jane Addams School for Democracy can help break down these barriers. Patterson and Paulson (2016) divide factors that play a role in adult's learning participation into three clusters: situational, institution, and dispositional (p. 7). Situational refers to barriers resulting from specific circumstances. For a parent, it may be childcare. Institutional barriers occur when procedures, policies, or practices limit learners' availability to participate. Dispositional barriers are created by learners' attitudes including fledgling self-confidence and fear of failure. While family literacy programs may not be able to break down barriers for all learners, well planned and executed programs have the potential to minimize the obstacles a learner faces.

Garcia and Hasson (2004) reported that the FLASH family literacy program in Southern Florida with over 1,600 participants has a retention rate of over 60% and cited another national family program that retained over 74% of its adult learners. They contrasted these rates with the average adult education attrition rates of 50% (p. 114). These figures demonstrate that family literacy programs have the potential to better serve adults in need of basic skills training. Garcia and Hasson further elaborate that to create effective programs it is crucial to conduct initial and ongoing needs assessments, have plans for recruitment and retention, build programming on

proven instructional methods and curricular materials, and conduct participant assessments and program evaluations (p. 115).

Conclusion

The data from the PIAAC indicates that the achievement gap is widening and with it, economic inequality. Education is a vital tool in allowing individuals to combat poverty; however, quality and higher educational is less attainable for those whose parents have not obtained advanced education. The problem is compounded by decreased funding for adult education and specifically, family literacy programs (Clymer, Toso, Grinder, & Sauder, 2017). This creates a grim situation that requires awareness and revamping of national policy. Existing research suggests that investing in family literacy programs can have an impact on two generations by improving the educational attainment of adults while working with their children.

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