

THE CASE FOR INVESTMENT IN ADULT BASIC EDUCATION

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Executive Summary

Thirty-six million adults in the United States have low-literacy skills, reading at or below a third-grade level.¹ Forty-three percent of adults living in poverty have limited literacy skills.² Historically, there has been little research to demonstrate the positive impact on adults, jobs, and future generations, as well as the return on investment that adult literacy skills programs realize. However, research conducted by Dr. Stephen Reder provides a new opportunity to demonstrate for stakeholders the positive outcomes that adult basic skills (ABS) programs can have on an individual's life, career, and income.

Dr. Reder's research examined the correlation between participation in adult basic skills programs and later increases in income, literacy levels, high school equivalency attainment, postsecondary education engagement, and civic participation/voting activity. The study findings showed a positive outcome for individuals in four of these five areas:

- 1. individuals participating in an ABS program showed a dramatic increase in income over time, especially those participating for 100 or more hours
- 2. participants were more likely to go on to obtain a high school equivalency credential, especially those participating for 100 or more hours
- 3. program participants were more likely to pursue secondary education and received more credits than nonparticipants
- 4. program participants were more likely to develop improved literacy proficiency over time, especially those participating for 100 or more hours

This research provides a strong case for an increased investment in adults and adult education. These outcomes directly impact all Americans in that they contribute to a healthy economy, increase employment, reduce public assistance, and lower health care costs.

This paper will examine the research results and implications for a change in policy related to investment in adult literacy and education. The intent is to provide stakeholders of all types with the data needed to prove that support of ABS programs results in a strong return that impacts both the adult learner and society as a whole.

¹ OECD, "Time for the U.S. to Reskill?: What the Survey of Adult Skills Says," OECD Skills Studies, OECD Publishing, 2013

² National Institute for Literacy, "The State of Literacy in America: Estimates at the Local, State, and National Levels," 1998



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Acknowledgements

This paper was prepared by ProLiteracy, the largest adult literacy and basic education membership organization in the nation. ProLiteracy believes that a safer, stronger, and more sustainable society starts with an educated adult population. For more than 60 years, ProLiteracy has been working across the globe to create a world where every person can read and write. Authors of this paper are Kevin Morgan, president/CEO; Dr. Peter Waite, senior vice president; and Michele Diecuch, director of programs.

This paper examines the longitudinal study done by Dr. Stephen Reder on the positive impacts of adult basic skills programs. Dr. Reder is Professor Emeritus of Applied Linguistics at Portland State University. His research interests focus on adult literacy and language development, the role of technology in supporting lifelong learning, and the ways in which adult basic skills development contribute to reducing poverty and economic inequality. He is a member of the Literacy, Language, and Technology Research Group; the Skills Use expert group of the Organization for Economic Cooperation and Development (OECD); and the board of directors of the National Council for Adult Learning (NCAL). Dr. Reder has also served two terms as a member of the ProLiteracy Board of Directors.



Introduction

Adult Literacy in the United States

Among the top social issues of importance to Americans, these consistently rise to the top: poverty, crime, jobs, immigration, education, health care, and the economy. One factor that can have a positive impact on all of these issues is increasing adult literacy rates. Fourteen percent of adults in the United States struggle with low reading, writing, and basic math skills.³ And according to the 2013 Survey of Adult Skills by the Program for the

International Assessment of Adult Competencies (PIAAC), the literacy skill level of U.S. adults ages 16 to 65 is well below the international average of adults in 23 other developed countries.⁴

The implications of low adult literacy rates are significant. Forty-three percent of adults living in poverty function at low literacy rates.⁵ Seventy percent of inmates have low literacy rates. The incarceration rates for high school dropouts between the ages of 16 and 24 are sixty-three times higher than among college graduates.⁶ Immigrants to the United States must learn to navigate in a country where English is a new language, while often they cannot read or write well in their native language. This fact is especially significant considering that by 2030, nearly one in six U.S. workers will be an immigrant.⁷

The cycle does not end with adults. The children of low-literate parents are exposed to 30,000,000 fewer words and enter kindergarten with a much larger skills gap than their peers.⁸ Low-literate adults in the United States add as much as \$238 billion in costs to the health care system every year.⁹ In addition, low literacy costs the U.S. at least \$225 billion each year in nonproductivity in the workforce, crime, and loss of tax revenue due to unemployment.¹⁰

Despite these compelling statistics and the fact that low adult literacy rates have a direct impact on our economic well-being, awareness of the adult literacy issue is low: Only 59 percent of Americans are even aware it is a problem.¹¹ To address the issue, adult education programs in the United States must increase capacity, at a time when federal funding of these programs has been cut 21percent over the last 15 years.¹²

11 ProLiteracy Omnibus Survey, 2016

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³ OECD, "Time for the U.S. to Reskill?: What the Survey of Adult Skills Says," OECD Skills Studies, OECD Publishing, 2013

⁴ OECD, "OECD Skills Outlook 2013: First Results from the Survey of Adult Skills," OECD Publishing, 2013

⁵ National Institute for Literacy, "The State of Literacy in America: Estimates at the Local, State, and National Levels," 1998

⁶ Northeastern University - Center for Labor Market Studies, "The Consequences of Dropping Out of High School," Northeastern University, 01 October 2009

⁷ Center for Immigration Studies, "Projecting Immigration's Impact on the Size and Age Structure of the 21st Century American Population," December 2012

⁸ Betty Hart & Todd R. Risley, "Meaningful Differences in the Everyday Experience of Young American Children," Paul H. Brookes Publishing Co., 30 June 1995

⁹ Vernon JA, Trujillo A, Rosenbaum S, DeBuono B., "Low Health Literacy: Implications for National Health Care Policy," Washington, DC: George Washington University School of Public Health and Health Services, 2007

¹⁰ OECD, "OECD Skills Outlook 2013: First Results from the Survey of Adult Skills," OECD Publishing, 2013

¹² National Skills Coalition, "Invest in America's Workforce: We Can't Compete If We Cut," 03 February 2017



Defining Adult Literacy

The definition of literacy is constantly evolving. Historically, literacy or the state of being literate has been defined as having the ability to read and write, skills which are generally associated with being qualified for entry-level employment. The definition of functional literacy has often been tied to meeting grade-level expectations. But in today's fast-paced and increasingly technological society, the definition has expanded.

The Survey of Adult Skills (PIAAC) defined literacy as "the ability to understand, evaluate, use, and engage with written text to participate in society, to achieve one's goals, and to develop one's knowledge and potential." While most jobs require at least 12 years of education, that benchmark is quickly becoming outdated as employers increasingly require additional workforce training or at least two years of postsecondary education. The "adult" in adult literacy refers to people ages 16 or older, living in U.S. households or prisons. The adult literacy education field comprises three segments:

Literacy is defined as "the ability to understand, evaluate, use, and engage with written text to participate in society, to achieve one's goals, and to develop one's knowledge and potential."

- 1. Adult Basic Education (ABE) education provided for adults at the elementary level of literacy (grades 0-8), with an emphasis on communicative, computational, and social skills.
- 2. Adult Secondary Education (ASE) education for adult students who have not completed high school and/or are seeking a high school equivalency credential, and have literacy skills that are at approximately a grade 9 level or higher.
- 3. English Language Learning (ELL) instruction for adults who lack proficiency in English and who seek to improve their reading, writing, listening, and speaking skills in English. ELL is also known as ESL (English as a Second Language) or ESOL (English for Speakers of Other Languages).

About This Report

The goal of this report is to provide useful information on the current status of adult literacy in the United States and its implications, and to present research that outlines the positive long-term outcomes for adults when adult literacy programs are accessible and adequately funded. This report will also show how these positive long-term outcomes for adults correlate with a positive impact on so many of the socioeconomic issues affecting the United States.



Research

Overview

Until recently there has been limited research or documentation on the specific impact of adult literacy programs. A number of national and international reports have noted the important correlation between income and education levels. But few have discussed the relationship between active participation in literacy programs and the impact realized on income levels and other key outcomes related to the increase in the stability and well-being of adult learners.

This lack of critical data on the link between literacy programs and specific outcomes for adult learners has limited the capability of programs to articulate their relative value to their communities, funders, and legislators.

More recent research is finally providing some important documentation that will help to make the case for the active benefits of literacy programs at the local level. ProLiteracy expects this research to also equip national stakeholders—businesses, governments, funders, and others—with the necessary evidence to encourage an increased investment in policy and funding to support adult education.

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Methodology

There are a number of primary and secondary research sources cited in this paper, but the focus is on the Longitudinal Study of Adult Learning (LSAL) conducted by Dr. Stephen Reder, Professor Emeritus of Applied Linguistics at Portland State University. Dr. Reder's research interests center on adult literacy and language development, the role of technology in supporting lifelong learning, and the ways in which adult basic skills development contributes to reducing poverty and economic inequality.

Dr. Reder conducted the LSAL study over nearly a decade, from 1998 to 2007. The goal of the study was to bring to light the long-term outcomes and benefits realized by adults who participate in an adult education program as they relate to improving economic well-being, health, social cohesion, and civic engagement.

The LSAL study randomly sampled approximately 1,000 high school dropouts and followed both participants and nonparticipants in adult basic skills (ABS) programs. The study assessed the adults' skills during six intervals (waves) over a 10-year period, while monitoring changes in their social, educational, and economic status.

The study population for LSAL was defined as adults living in the Portland, Oregon, metro area; ranging in ages from 18 to 44 (average age: 28); who had not completed high school; and who were proficient, but not necessarily native, speakers of English. Participants were evenly divided between males and females. One-third were from minority groups and one-tenth were immigrants. The LSAL study, which was conducted by staff at Portland State, measured long-term impacts in five outcome areas: economic outcomes, literacy growth, high school equivalency (hse) attainment¹³, postsecondary engagement, and voting activity.

Full papers on these five impact areas can be downloaded at http://lsal.pdx.edu/reports.html. The papers include additional details on the research methodology and findings.

¹³ At the time of the study, only the GED * test was used in the United States to issue high school equivalency diplomas. Since 2014, two new tests have entered the market: HiSET * and TASC.



Findings

While significant improvements were seen in most areas for the participants in ABS programs, as compared to matched nonparticipants, the longterm impacts in the area of economic gains for adults were particularly encouraging. The outcomes of HSE attainment, literacy acquisition, and postsecondary engagement were all higher when individuals were enrolled and active in basic skills programs.

ABS participants showed mean income gains of 53 percent as compared to an income drop of 2 percent for nonparticipants.

Economic Gains

The study showed significant improvement in economic gains for participants compared with what they would have earned had they not participated. The wage trajectories for ABS program participants vs. nonparticipants were dramatically different over time (see Figure 1). During the 10-year period, ABS participants showed mean income gains of 53 percent (in constant 1997 dollars) as compared to an income drop of 2 percent for nonparticipants. According to the LSAL study report, "This large overall difference suggests that ABS program participation may be central to sustained income growth for this low-education population."



Figure 1. Income trajectories of propensity score-matched participants and nonparticipants. Participants had attended programs for a total of at least 100 hours between 1998 and 2006. Nonparticipants had never attended a program through 2006.



The findings also point to an important correlation between the amount of instruction and improved educational, economic, and social benefits. This was particularly noteworthy when students attended programs for more than 100 hours. Participants who attended an average of more than 100 hours of instruction averaged \$10,000 more in annual income, a premium that often took as long as five years to fully develop after program participation.

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These findings, along with additional reports on return on investment, show that adult literacy programs provide a good return on investment for local, state, and federal agencies, as well as private funding organizations. Specific findings for the participants in ABS programs are equally telling and very positive in terms of relative participation and personal achievement.

Literacy Growth

In terms of actual literacy acquisition, once again, individuals who were active in literacy programs were more likely to show an increase in literacy skills than those who were not. Individuals who were not enrolled in programs showed virtually no literacy skill gain over time. Those who were active not only showed growth, but their growth in skills increased over time, with 100 or more hours in active instruction (see Figure 2). Adult basic skills program participants also continue to improve their skills, achieving higher levels of literacy in the future, as a result of participating in a program.

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Figure 2. Mean Assessed Literacy Proficiency at Six Longitudinal Study of Adult Learning (LSAL) Waves for ABS Program Participants. Participants are defined as individuals who attended an ABS program for at least 100 hours. LSAL waves 1–6 are placed on a time axis to represent their temporal spacing.



The LSAL study shows that both literacy program participation and HSE credential attainment have an impact on literacy development. However, program participation had a slower, longer-lasting impact on literacy proficiency.

HSE Attainment

In regards to HSE credential attainment, individuals participating in ABS programs were more likely to obtain an HSE credential than nonparticipants—35 percent versus 25 percent, respectively. Intensity of instruction was also a strong factor. Individuals were shown to be twice as likely to have achieved their HSE when they were enrolled in a program for 100 hours or more (see Figure 3). Of particular significance was the HSE attainment rate for those who explicitly listed this achievement as a goal.

Individuals were shown to be twice as likely to have achieved their HSE when they were enrolled in a program for 100 hours or more.

For these individuals, the HSE attainment rate for ABS program participants was remarkably higher—35 percent for participants versus 4 percent for nonparticipants. Other studies show that following preparation for an HSE credential, nearly 50 percent of the students went on to achieve an HSE credential. Receipt of an HSE credential has very significant implications for job advancement, income, and lifetime earnings. Studies show that HSE recipients earn an average of \$10,000 more annually than those without high school equivalency credentials.

Hours of ABS Program Attendance Before HSE Receipt	Percentage Receiving HSE
100 or more	46.4
1-99	27.2
0 (no participation)	25.9

ABS Participation and HSE Attainment

Figure 3. The percentage of the Longitudinal Study of Adult Learning (LSAL) population comprising three participation groups: (1) those who did not participate in ABS programs; (2) those who participated in ABS programs for 1-99 hours prior to receiving GED credentials; and (3) those who participated for 100 or more hours. The table displays the percentage of individuals in each group who attained GED credentials by the end of LSAL.

LSAL was able to separate the impacts of program participation and HSE credentials on income by comparing the income trajectories of those who participated and got an HSE credential, those who participated but did not get a credential, those who did not participate but got a credential, and those who did not participate and did not get an HSE credential. LSAL findings indicate that both program participation and HSE credential attainment have concurrent positive impacts on income; HSE credentials explain a small but significant portion of the overall impact of ABS program participation.



Postsecondary Engagement

The impact of program participation on postsecondary engagement was described as "robust." Most participants and nonparticipants indicated interest in additional postsecondary education, but participants showed much greater progress toward this goal, with 31 percent participating in some level of postsecondary engagement (see Figure 4). Participation in an ABS program had a positive effect on all measures related to postsecondary engagement: matriculation, receipt of credits, and the total number of credits received. Further, the intensity of instruction (measured by higher number of hours of participation) had a positive impact on all outcomes related to postsecondary achievement. The effect of postsecondary education on income and job advancement is significant in other studies as well. Individuals with some college but no degree earned 14 percent more than high school graduates working full-time.¹⁴



Figure 4. The four postsecondary engagement measures for ABS program participants and nonparticipants in the Longitudinal Study of Adult Learning (LSAL).

14 Sandy Baum, Jennifer Ma, Kathleen Payea, "Education Pays 2013: The Benefits of Higher Education for Individuals and Society," The College Board, 2013



Voting Activity

Finally, in terms of both voter participation and actual voting, the findings are similar, with ABS program participants showing more involvement and greater voting patterns than nonparticipants (see Figure 5) although not as significant as the positive findings in the other four studies. The chart below shows the slightly positive trend in voting rates for program participants between two monitored national elections.



Figure 5. The voting rates in 1996 and 2004 according to whether individuals participated in ABS programs between the two elections. ABS participants showed a larger increase in voting between 1996 and 2004 (a gain of 18.3 percentage points) than did nonparticipants (whose voting rate increased 12.8 percentage points).



Implications

The overall implications of these and related findings on the value of ABE programs are significant. This highlights the incongruity between research that shows that the demand for adult literacy program services is increasing and the fact that available funding is decreasing.

This significance is important because it shows dramatic, positive results in several key areas including income gain, HSE acquisition, postsecondary transitions, and overall literacy proficiency development. These findings show clear long-term benefits for individuals who participate in ABS programs. They further show significant benefit to the communities in which these individuals live and work on a regular and sustained basis. These findings show clear long-term benefits for individuals who participate in ABS programs. They further show significant benefit to the communities in which these individuals live and work on a regular and sustained basis.

Results of this magnitude underscore the importance of investing in ABS programs and show the clear return on investment for individuals who are participating in programs over time. These results need to be articulated and shared widely with key local, state, and national policy makers who have not provided the necessary funding or policy support for adult literacy programs. Key stakeholders need to consider these findings proof that adult education funding is a solid investment in social impact rather than just a cost.

It is more important to share these findings with individuals and organizations that can offer additional funding for programs and prospective students. Based on this new data and the performance of Americans in the Survey of Adult Skills (PIAAC), it is obvious that investing in ABS programs will yield an enormous return. The overall increased value to the community and the economy is far greater than the marginal cost for providing effective services to individuals in need. This case must be made effectively and ardently based on the latest research and data from Dr. Reder's findings and related studies.

Key Implications

- There are significant, dramatic gains in personal income for individuals who participate in ABS programs over time. These income gains result in an increased tax base, an improved labor force, and decreases in income subsidies.
- Adults who participate in ABS programs significantly increase their chance of receiving HSE credentials. These achievements also result in a more talented and prepared labor market, higher employment rates, greater participation in additional education, and increased job prospects for workers. Income levels are shown to be higher for those who receive HSE credentials, again, adding to the increase in tax contributions.
- There are significant gains in transition to postsecondary opportunities for individuals who participate in ABS programs. These gains lead to an increase in opportunities for other work-based credentials and certificates. The result is, again, a higher quality labor force and greater opportunities for job advancement for individuals.



- Adult basic skills programs are effective in significantly improving the overall education levels of
 participants. Increased proficiency levels of adults help to ensure better opportunities for credential
 attainment and educational advancement, as well as employment training and promotion. Higher
 literacy and education levels also equate to lower health care costs for all Americans. The increases
 provide a stronger base for parents to help encourage and assist in the education of their children,
 a key element in the effort to improve cross-generational low skills. Several studies cite that the
 greatest determinant of a child's educational success is the literacy level of his or her parents.
- Civic participation, specifically voting, improves with higher participation in ABS programs. This higher level of involvement leads to greater overall community activity including voting, volunteerism, community engagement, and social cohesion.

Policy Implications

It is vital that people working in the field of ABS instruction take advantage of the key findings of recent research and studies that validate the impacts of adult literacy programs. Local, state, and national policy makers and stakeholders need to be aware of these findings and the potential for a significant return on their investment in adult literacy programs.

Adult literacy programs and advocates must articulate this message often and in multiple ways to ensure that key supporters and potential supporters are knowledgeable about the problem, the proven positive effects on individuals, and the potential impact on local communities. Local, state, and national policy makers and stakeholders need to be aware of the findings and the potential for a significant return on investment of adult literacy programs.

Programs need to suggest that given the available data, adult basic skills issues must be part of any initiatives, regulations, or legislation that might relate to adults with low-level basic skills.

Due to a lack of funding, traditional adult education programs are only serving a fraction of the adults who need assistance. The 2016 survey of 1,000 ProLiteracy member programs shows that two-thirds of programs have waiting lists that average three months to admit new students. To reach more students and better serve them, adult literacy programs need additional funding to expand capacity and build partnerships with other social service agencies and with constituents who are impacted by low literacy skills, including:

- Homeless shelters
- Domestic violence centers
- Anti-poverty programs
- Addiction rehabilitation programs
- Food banks and nutrition programs
- Housing projects
- Faith-based organizations
- Corrections re-entry programs

These and other organizations can be important allies in efforts to share the importance of greater investments in ABS programs and the resulting return on investment for local communities.



CONCLUSION

Thirty-six million adults in the United States have low-literacy skills, reading at or below a third-grade level. While post-recession unemployment rates are decreasing, many still live in poverty. There are an estimated five million jobs available in the United States that employers cannot fill due to a lack of available skilled workers. Dr. Reder's study shows the correlation between adult basic skills program participation and increased literacy and income levels, HSE attainment, postsecondary education, and civic participation. All of these positive outcomes lead to a healthier economy, greater income equality, and a break in the cycle of intergenerational illiteracy. It is crucial for policy makers, funders, and other key stakeholders to act now and invest in ABS programs. It is also essential that literacy programs of all types use these research findings to educate national, state, and local stakeholders.

To learn more about how to use the information in this report, please visit www.proliteracy.org/Resources/ Need-for-Literacy-Program-Research.