



Pathways to Opportunity: A Quantitative Case Study of Persistence and Credential Attainment Among Adult Education Learners in Washington, DC

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Adult education programs play a pivotal role in closing skills gaps, strengthening the workforce, and bolstering the U.S. economy. Persistence in this type of programming can influence educational and long-term employment outcomes. At the same time, persistence itself can be influenced by a multitude of individual and contextual factors. Adult learners may face life stressors that work against continued participation in programs aimed at developing knowledge and skills.

Using administrative data from an adult charter school in Washington, DC, this quantitative case study explored the complex relationships among adult learners' background characteristics and essential needs, persistence in adult foundational programming, and high school credential attainment. Learners with dependents or unmet mental health needs had low attendance rates and learners with housing needs were less likely to attain a high school credential than learners with no housing needs. These findings suggest that certain life stressors may pose long-term challenges for some learners. As such, opportunities to participate in and complete adult education programs that lead to occupational training and jobs in high-demand, high-growth fields may be limited to adults without these barriers. In the absence of comprehensive support services, adult learners' economic mobility may be significantly hindered, impacting overall workforce development and economic growth.

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Research Brief

I. Introduction

There are nearly 25 million adults in the United States who have not yet attained a high school diploma, while postsecondary education remains out of reach for many millions more (U.S. Census Bureau, 2023). These conditions are particularly unsettling in the current economic landscape, in which four of every five middle-income jobs require a postsecondary education (Georgetown University Center on Education and the Workforce, 2018). This skills gap can hinder economic growth and limit opportunities for upward mobility.

Many programs address this issue by providing adult foundational education—that is, academic instruction meant to improve individuals’ literacy, numeracy, and/or English language skills, often to prepare these individuals to obtain a high school credential. Since the onset of the Workforce Innovation and Opportunity Act (WIOA), in 2014, many programs have taken advantage of a new provision that allows federal funding to be used for adult foundational education combined with accelerated programs that provide workforce preparation and pathways to careers in high-demand, high-growth occupations. This approach helps alleviate the burden on adult learners, who have limited time, flexibility, and financial resources for lengthy educational programs (Cronen et al., 2021). Participation in these programs has been shown to increase adult learners’ likelihood of obtaining industry credentials or enrolling and persisting in postsecondary education (Gardiner et al., 2021; Martinson et al., 2018, 2021, 2022). However, it is not uncommon for workforce programs to have entry requirements—such as a high school credential and qualifying scores on literacy and numeracy assessments—that prevent many adult learners from benefitting from occupational education programs and progressing toward sustainable career paths.

This brief explores adult foundational education at Academy of Hope Adult Public Charter School in Washington, DC, with sites in Wards 5 and 8, two of the more impoverished areas of DC. Academy of Hope partnered with the PROPEL (Promoting Resilience, Opportunity, and Progress in Employment and Learning) Center at the American Institutes for Research® (AIR®) to explore the factors that contribute to adult learners’ persistence and attainment of a high school credential, aiming to leverage data-driven insights to improve future learner outcomes.

For context, Academy of Hope was established in 1985 as a small grassroots community-based organization that provided adult foundational skills instruction. As of June 2024, it has grown to support the nearly 1,000 Washington, DC, residents who have earned their high school credential and the more than 10,000 who have improved their basic reading, writing, math, and computer skills through beginning to intermediate literacy and numeracy programs, as well as through the General Educational Development (GED®) and National External Diploma Program (NEDP) high school credentialing programs. In 2014, Academy of Hope transitioned from being a community-based

organization to become the eighth adult public charter school in the District of Columbia.² This decision was fueled by the changing adult education landscape—both a revised common-core-based GED exam and NEDP, as well as the implementation of WIOA. By becoming a charter school, Academy of Hope was able to replace its mostly volunteer-based instructors with professionally trained teachers; enhance the programming offered to learners, including workforce education and college transitional services; and invest in critical support services to be able to better address learners’ needs.

In March 2020, Academy of Hope, like most other schools in the country, abruptly shifted to a full distance learning model. Although this shift was challenging, it also allowed Academy of Hope to meet its long-held goal of providing a permanent hybrid instructional model for all learners, allowing its programming to better fit the realities of adult learners’ busy lives. Currently, most learners in the academic program can choose between a virtual schedule and an in-person schedule, and learners in workforce programs are offered courses in a hybrid format as they work toward earning occupational certifications.

II. Purpose

The purpose of this brief is to identify the factors that hinder or promote persistence, progress, and high school credential attainment of learners in academic courses at Academy of Hope. The findings shed light on factors that can impede learners’ progress, such as basic needs (e.g., childcare, housing); foundational skill levels; and other factors related to social and health circumstances, such as having a disability that can play a critical role in learners’ growth in adult foundational education. Because adult foundational education is designed to help learners build the skills needed to enter postsecondary and workforce education programs, an understanding of the factors needed to persist, make progress, and attain a high school credential is critical. This knowledge can shape effective solutions and promote economic mobility, leading to middle-skill jobs with better prospects.

III. Study Sample

The study sample consists of learners who were enrolled in the academic program at Academy of Hope between fall 2020 and summer 2022. The academic program offers reading, writing, math, social studies, and science courses taught at a range of skill levels in adult basic and adult secondary education, with the aim of supporting learners in building their foundational skills and earning a high school credential. Learners’ skill levels for enrollment in these courses were determined by their performance on the Comprehensive Adult Student Assessment Systems (CASAS) Reading GOALS (Greater Opportunities for Adult Learning Success) assessment or the CASAS Math GOALS assessment.

Our study sample includes 840 adult learners who enrolled in at least one academic course, did not participate in a workforce program, and had 12 or more hours of attendance (Exhibit 1).^{3,4} Notably, the data analyzed in this study were collected during the COVID-19 pandemic, which had severe teaching

² The District is rare in that it is home to more than 10% of adult charter schools in the nation (Simpson Baird, 2020).

³ Due to the COVID-19 pandemic, Academy of Hope did not offer any courses in summer 2020.

⁴ Fall 2020 marked the first term of virtual learning since the start of the COVID-19 pandemic. As we previously mentioned, the modality of instruction eventually evolved into a hybrid model, consisting of in-person and online courses.

and learning impacts on all schools (Di Pietro, 2023). Because of this, Academy of Hope’s attendance and assessment data are unique to this unusual period; however, the insights gleaned are helpful in better understanding possible persistence factors both during the pandemic and postpandemic.

Exhibit 1. Learners With 12 or More Hours of Attendance in Academic Courses

Enrollment term	Number of learners
<i>Any term between fall 2020 and summer 2022</i>	840
Fall 2020	330
Winter 2021	254
Spring 2021	292
Summer 2021	147
Fall 2021	423
Winter 2022	403
Spring 2022	428
Summer 2022	280

Academy of Hope Learner Backgrounds

We obtained learners’ background information from their first term of enrollment at Academy of Hope if they enrolled in fall 2020 or later. If a learner first enrolled prior to fall 2020, we obtained the information they provided in fall 2020.⁵ The appendix shows the learners’ background characteristics.

Nearly all learners at Academy of Hope during this timeframe were Black and non-Hispanic or Latino (96%). In addition, the majority were women (72%). Learners’ ages at the time of first enrollment ranged from 18 years to over 80 years with more than half the learners in the 25-to-44 age group (53%) and about one in five in the 18-to-24 age group (20%) at the time of enrollment. Further, about one in three learners reported living close to one of Academy of Hope’s locations in Ward 8 (31%) and about one in six living in Ward 5 (17%). Finally, about one in five learners reported having a disability (19%). For context, about 9% of Washington, DC, residents between the ages of 18 and 64 years have a disability (U.S. Census Bureau, 2022), which shows that a disproportionate number of learners at Academy of Hope are adults with disabilities.

Essential Needs

Academy of Hope conducts assessments to obtain information about the essential needs of its learners. At program intake, learners complete an assessment of their needs related to housing, food and nutrition, transportation, childcare, and mental health on a 3-point scale, where a response of 1 indicates having the most need, a response of 2 indicates having a need sometimes, and a response of 3 indicates not having a specific need.

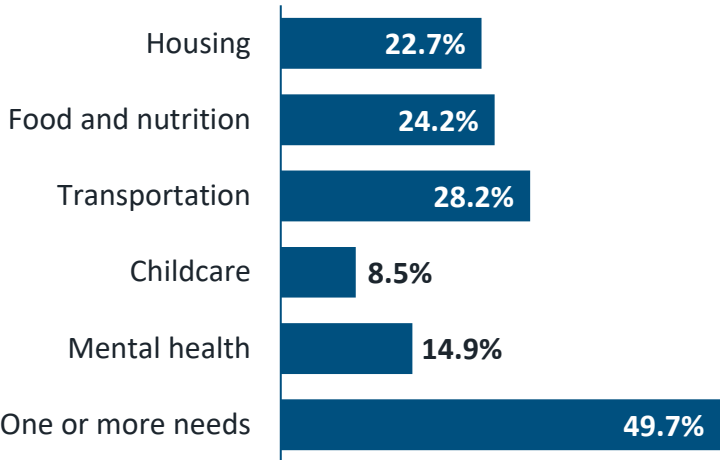
⁵ Of the 840 learners included in this study, 149 learners started at Academy of Hope prior to fall 2020. We used their background information from fall 2020 because we could not obtain any information on these learners prior to that term.

In our analysis, we considered a learner to have unmet needs if they selected a response of 1 or 2 for that need. For example, the question related to transportation needs included the following response options: (1) “I have no transportation to and from school”; (2) “I am having difficulty managing transportation funds to get to and from school”; and (3) “I have transportation to and from school that meets my need.” We treated learners who selected the first and second options as learners with transportation needs.

A total of 772 learners (92% of the study sample) completed the needs assessment at least once between fall 2020 and fall 2022.⁶ Exhibit 2 summarizes the proportion of learners who indicated that they had unmet needs in any of the five areas of need among those who completed the assessment. If a learner completed the needs assessment more than once, we included their earliest responses in this analysis.

About half the learners reported having one or more unmet needs. In general, learners were more likely to have unmet needs related to transportation, food and nutrition, and housing, as compared with mental health and childcare.

Exhibit 2. Percentage of Learners With Essential Needs That Were Unmet at Intake



Note. The number of learners who completed the needs assessment at least once is 772, which is the denominator for each percentage. Among these learners, about 71% first completed it during intake in their first term of enrollment and an additional 10% first completed it toward the end of their first term of enrollment. The remaining 19% of learners who completed the essential needs assessment had started at Academy of Hope prior to fall 2020.

IV. Patterns of Persistence, Progress, and High School Credential Attainment

Many adult learners are unable to participate continuously across multiple terms because of a lack of time and financial resources (Lesgold & Welch-Ross, 2012; Patterson & Paulson, 2016). There is variation, however, in their patterns of persistence. Some learners need to leave their adult education program

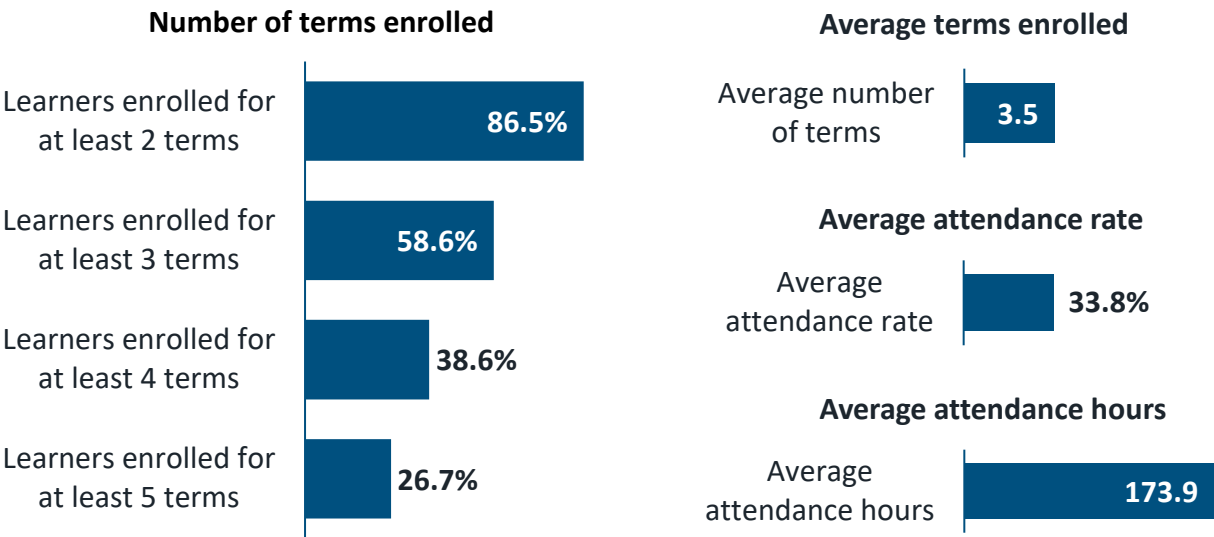
⁶ While data on learners’ pretest CASAS scores and backgrounds were collected in fall 2020 through summer 2022, data on essential needs were obtained from learners who completed the needs assessment at least once between fall 2020 and fall 2022. As an exception, we included data on essential needs from fall 2022 because some learners had not completed their needs assessment until then.

before completing it and do not return (i.e., drop out), whereas some leave but reenroll later (i.e., stop out). In this section, we show the patterns in persistence, progress in reading and math skills, educational functioning level (EFL)⁷ gains, and credential attainment among academic learners. Using data through fall 2022 for all learners, we observed persistence as measured through attendance rates; progress determined through skill gains in reading and math, as well as EFL gains; and high school credential attainment.

Persistence

To understand learners’ persistence patterns at Academy of Hope, we examined the number of terms in which they enrolled in courses and the average number of terms enrolled. As another measure of persistence, we considered learners’ attendance in their courses. We calculated the attendance rate for a learner in a course as the learner’s total hours of attendance divided by the total enrollment hours for the course. For example, the total instructional hours for a Math Skills 3 course in fall 2020 were 45. If a learner attended 36 hours of that course, the attendance rate for that learner in that course would be 80%. It is important to note that this attendance rate calculation is different from the way Academy of Hope officially captures in-seat attendance rate, which is calculated by dividing the total number of days present by the number of days enrolled. Exhibit 3 shows learners’ persistence patterns across terms, average terms enrolled, and average attendance rate. The vast majority of learners enrolled in courses for at least two terms. On average, learners enrolled for a little more than three terms. The average attendance rate across all courses was about 34%.

Exhibit 3. Enrollment, by Number of Terms and Average Attendance Rate



Note. The sample for all measures in this exhibit is 840 learners, all of whom (100%) enrolled in at least one term.

⁷ Educational functioning levels (EFLs) refer to six skill levels that guide teaching and assessment in adult education.

Progress in Reading and Math Skills

In order to explore the progress that learners made in growing their reading and math skills, we examined learners' average change in score and improvements in EFL between pretest and posttest on the reading and math assessments administered by Academy of Hope.

- We define “pretest” as the first time that the learner completed one of these assessments between fall 2020 and summer 2022, which was during intake in the first term of enrollment for most learners.
- We define “posttest” as any test taken by the learner after the pretest through fall 2022 that constituted their highest performance on that assessment.

We excluded any learners who achieved the highest EFL—EFL 6—at pretest because it was not possible for them to demonstrate an EFL gain. Among the remaining learners, pretest and posttest data were available for 527 learners on the reading assessment and 564 learners on the math assessment.⁸

Exhibit 4 shows learners' average change in reading assessment between pretest and posttest and the percentage of learners who gained 1 and 2 or more EFLs. On average, learners who scored at EFL 1 at pretest were able to increase their scores by 8.6 points, the highest increase in reading scores at posttest, followed closely by learners who scored at EFL 2 at pretest. In addition, learners who scored at EFL 4 at pretest were the most likely to improve their EFL, with 53% of the learners in this group gaining one EFL and another 8% gaining two or more EFLs at posttest.

Exhibit 5 shows learners' average change in score and the percentage of learners who improved their EFL on the CASAS Math GOALS assessment between pretest and posttest. On average, learners who scored at EFL 1 at pretest showed the greatest increase in scores at posttest, which is similar to the trend observed in the CASAS Reading GOALS assessment. Learners in this group were also the most likely to improve their EFL, with 43% gaining one EFL and another 23% gaining two or more EFLs at posttest.

⁸ The average change in assessment scores at posttest includes all learners with available data regardless of whether they made a positive or negative change between pretest and posttest.

Exhibit 4. Progress in Reading Skills by Pretest Educational Functioning Level

Educational functioning level (EFL)	CASAS Reading GOALS score range	Number of learners who scored at this EFL at pretest	Average change in score at posttest	Percentage of learners who gained 1 EFL	Percentage of learners who gained 2 or more EFLs
					
EFL 1	203 and below	51 	8.6 	43.1 	9.8 
EFL 2	204–216	68 	8.0 	35.3 	14.7 
EFL 3	217–227	128 	4.7 	34.4 	5.5 
EFL 4	228–238	183 	6.4 	52.5 	8.2 
EFL 5	239–248	97 	2.0 	25.8 	0.0 

Notes. Pre- and posttest data were available for 527 learners on the CASAS Reading GOALS assessment after excluding those who pretested at EFL 6. Of these learners, 75% took the pretest during intake in their first term of enrollment, 1% took the pretest in their second term of enrollment, and 0.4% took the pretest after their second term of enrollment. The remaining 24% of learners had started at Academy of Hope prior to fall 2020. For these learners, we used their pretests from their first term of enrollment after fall 2020 because we could not obtain any information on these learners prior to this term. The average change in scores is measured in points on the CASAS Reading GOALS assessment and includes both positive and negative changes between pretest and posttest.

Exhibit 5. Progress in Math Skills by Pretest Educational Functioning Level

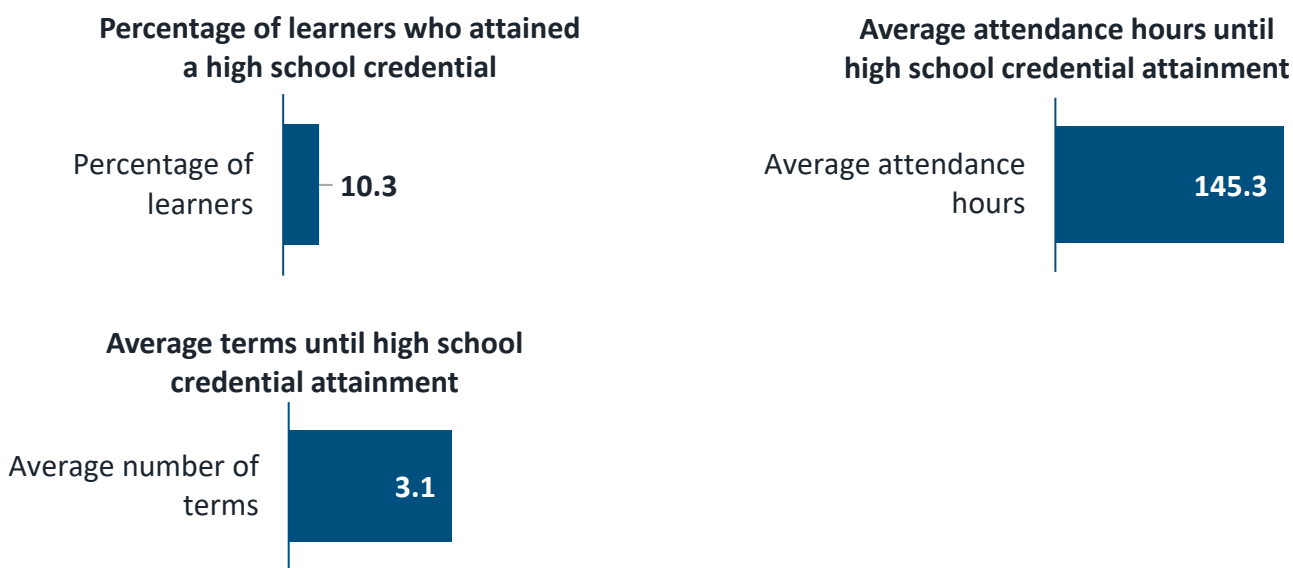
Educational functioning level (EFL)	CASAS Math GOALS score range	Number of learners who scored at this EFL at pretest	Average change in score at posttest	Percentage of learners who gained 1 EFL	Percentage of learners who gained 2 or more EFLs
					
EFL 1	193 and below	53 	8.7 	43.4 	22.6 
EFL 2	194–203	152 	5.3 	49.3 	5.3 
EFL 3	204–214	209 	4.7 	37.8 	3.8 
EFL 4	215–225	119 	3.2 	37.8 	1.7 
EFL 5	226–235	31 	0.1 	19.4 	0.0 

Notes. Pre- and posttest data were available for 564 learners on the CASAS Math GOALS assessment after excluding those who pretested at EFL 6. Of these learners, 76% took the pretest during intake in their first term of enrollment, 0.5% took the pretest in their second term of enrollment, and 0.2% took the pretest after their second term of enrollment. The remaining 23% of learners had started at Academy of Hope prior to fall 2020. For these learners, we used their pretests from their first term of enrollment after fall 2020 because no information could be obtained on these learners prior to this term. The average change in scores is measured in points on the CASAS Math GOALS assessment and includes both positive and negative changes between pretest and posttest.

High School Credential Attainment

At Academy of Hope, learners take academic courses to build their foundational skills. Learners who score at EFL 5 or 6 on the math or reading assessments can start working with a GED specialist or NEDP assessor to attain a high school credential. As Exhibit 6 shows, among learners who scored at EFL 5 or 6 at pretest, about 10% attained the GED or NEDP credentials through fall 2022. EFL 5 and 6 learners took a little more than three terms, on average, to obtain a high school credential.

Exhibit 6. High School Credential Attainment



Note. The denominator for the percentage of learners who attained a high school credential is 243—learners eligible for a high school credential (EFL 5 or 6 at pretest) and learners with at least 12 hours of attendance.

IV. Identifying Factors That Affect Persistence, Progress, and High School Credential Attainment

To understand the ways in which adult learners’ demographic characteristics, skill levels at entry, essential needs, and social and health circumstances may be associated with persistence, progress, and high school credential attainment, we conducted additional analyses. Specifically, we used ordinary least squares and logistic regression models, which reveal more information than simple averages and can isolate the role of each factor that may influence the outcomes. For these analyses, we measured the following outcomes (see Exhibit 7):

- **skill gains in reading**, represented by the difference between pretest and posttest scores on CASAS Reading GOALS;
- **skill gains in math**, represented by the difference between pretest and posttest scores on CASAS Math GOALS;
- **persistence**, measured as the average attendance rate across all courses taken;

- **EFL gain**, indicating whether a learner gained at least one EFL; and
- **high school credential attainment**, indicating whether a learner who scored at EFL 5 or EFL 6 at pretest gained a high school credential.

Across all five analyses, we include several factors that could be associated with the outcomes listed above.⁹ These factors comprise learners' **skill levels at entry**, based on reading and math pretest scores; **unmet essential needs** of housing, transportation, childcare, food and nutrition, and mental health; **demographic characteristics** such as gender, race, ethnicity, and age; and **social and health circumstances**, based on disability status, presence of dependents, and ward of residence. Finally, we include the **average attendance rate** across all courses as an independent factor, to understand the way it may influence the outcomes of progress, EFL gain, and high school credential attainment.

The results are summarized in Exhibit 7. It is important to note that the number of learners included in each analysis varies. Each analysis includes learners for whom data on all factors and the relevant outcomes were available. In addition, we did not include learners with fewer than 12 hours of attendance in any regression. Moreover, for the high school credential attainment analysis, the sample is further reduced to include the subset of learners eligible for high school credential testing.

⁹ We use ordinary least squares regression modeling for the CASAS Reading skill gains, CASAS Math skill gains, and attendance rate outcomes. We use logit modeling for the two binary outcomes of EFL gain (yes/no) and high school credential attainment (yes/no). Both regression models explain associations between independent variables (or factors such as skill level at entry) and outcomes. All analyses presented in this brief show correlations and not causation.

Exhibit 7. Predictors of Reading and Math Progress, Attendance Rate, EFL Gain, and High School Credential Attainment

		OUTCOMES									
PREDICTOR CATEGORY	PREDICTOR	 CASAS Reading GOALS skill gains		 CASAS Math GOALS skill gains		 Attendance rate		 EFL gain		 High school credential attainment	
		(unit: points)				(unit: percentage points)					
 Skill levels	CASAS Reading GOALS pretest score					-0.2**		0.1		0.9***	
	CASAS Math GOALS pretest score					-0.2*		-0.1		0.6*	
 Essential needs	Has housing needs (compared with no housing needs).	0.8		0.9		-0.6		4.2		-10.1**	
	Has food and nutrition needs (compared with no food and nutrition needs).	0.1		-0.1		0.9		-1.8		-5.2	
	Has transportation needs (compared with no transportation needs).	-2.3***		-0.4		4.2**		-7.7**		12.8	
	Has childcare needs (compared with no childcare needs).	-1.6		-0.9		2.2		-4.9		7.8	
	Has mental health needs (compared with no mental health needs).	0.1		-0.8		-4.4*		-7.0			
 Demographics	Female (compared with male)	-1.0*		-0.6		-1.4		-2.4		1.2	
	Black or African American (compared with not Black or African American)	2.0		0.2		0.6		14.7		+	
	Hispanic or Latino (compared with not Hispanic or Latino)	3.8		1.0		3.1		15.3*		+	
	Age 18–24 years (compared with 25–44 years)	1.1		-1.4		-4.1*		1.1		-9.4**	
	Age 45–91 years (compared with 25–44 years)	0.1		-0.3		6.0**		5.6		2.0	
 Social and health circumstances	Has a disability (compared with no disability).	1.2		0.1		3.1**		-0.8			
	Has dependents (compared with no dependents).	0.6		-0.6		-3.9**		0.1		1.9	
	Lives in Ward 5, 6, 7, or 8 (compared with living in Ward 1, 2, 3, or 4).	2.8**		0.2		-1.8		-6.5		+	
 Attendance	Attendance rate	0.1*		0.1***				0.9***		0.2*	
	Sample size	455		462		622		622		98	

Note. The “Sample size” row indicates that the number of learners included in each regression model differed across all outcomes. The sample size for the attendance rate and EFL gain regression models was 622 and included learners who had complete data (i.e., nonmissing data) on all the factors and the two outcomes, and at least 12 hours of attendance. For the CASAS skill gains outcomes, learners who did not have posttest scores on the respective CASAS assessments were excluded, which reduced the sample size from 622 to 455 for reading gains and 462 for math gain outcomes. Finally, for the high school attainment outcome, the sample was limited to learners who scored at EFL 5 or 6 on the CASAS Math or Reading assessments at pretest. In addition, learners with a disability and those with mental health needs were excluded from this regression model because of collinearity issues, which reduced the sample size to 98. Since we use logit models for EFL gain and credential attainment outcomes, their coefficient estimates are average marginal effects and represent changes in percentage points.

†Estimates are not reliable because of small cell sizes.

*Significant at the .10 level; **significant at the .05 level; ***significant at the .01 level.

The following key findings emerged:

Skill Level Predictors

Higher pretest scores were associated with an increased likelihood of attaining a high school credential but a slightly reduced average attendance rate, perhaps because learners with relatively strong incoming literacy skills needed slightly less direct instruction time.

- Learners with higher ***pretest scores*** were more likely to attain a ***high school credential***. On average, scoring 10 points higher on reading at pretest was associated with a 9 percentage point increase in rate of high school credential attainment. A similar positive trend also appears for ***math pretest scores***, although it was statistically significant at the 10% level only.
- Learners with higher ***pretest scores*** had slightly lower ***attendance rates***. On average, scoring 10 points higher on reading at pretest was associated with a 2 percentage point reduction in attendance rates. The same attendance trend also appears for math pretest scores, although it was statistically significant at the 10% level only.

Essential Needs Predictors

Unmet needs of housing and transportation at intake were generally associated with lower reading skill gains and lower likelihood of making an EFL gain and attaining a high school credential.

- Learners with unmet ***housing needs*** at intake were 10 percentage points less likely to earn a ***high school credential*** than were learners without these needs.
- Learners with ***transportation needs*** at intake had lower ***skill gains in reading*** (2 point decrease) and a lower likelihood of making an ***EFL gain*** (8 percentage points lower) compared with learners without transportation needs. Interestingly, learners who had ***transportation needs*** at intake had 4 percentage points ***higher attendance rate*** than those without transportation needs. This may be partially explained by the public transit subsidy offered to participants.¹⁰
- Learners with ***mental health needs*** at intake had 4 percentage points ***lower attendance rate*** than did learners without mental health needs. However, this trend was statistically significant at the 10% level only.

Demographic Predictors

Older adults were more likely to have higher average attendance rates, whereas young adults, aged 18 to 24, were likely to have lower attendance rates relative to learners aged 25 to 44. Young adults were also less likely to attain a high school credential than were learners who were 25 to 44 years old.

¹⁰ It is likely that learners' unmet transportation needs were at least partially addressed by the Adult Learner Transit Subsidy program in Washington, DC, which provides \$70 worth of public transit trips per month to individuals attending publicly funded adult education programs (District Department of Transportation, n.d.). Academy of Hope also has a policy to offer learners tokens to cover public transit trips for a brief time, which may have helped some learners with short-term transportation needs.

- We found no statistically significant associations between *race* and *any of the five outcomes*.¹¹ In terms of ethnicity, being **Hispanic or Latino** was associated with a *higher likelihood of an EFL gain*, but only at a 10% significance level.
- Learners **aged 45 to 91 years** at the first term of enrollment had 6 percentage points *higher average attendance rate* relative to learners aged 25 to 44. Learners in the **age group of 18 to 24 years** had 4 percentage points *lower average attendance rate* relative to learners aged 25 to 44, but this was statistically significant at the 10% level only. In addition, learners who were 18 to 24 years old were 9 percentage points less likely to attain a high school credential than were learners who were 25 to 44 years old.
- **Female** learners had **lower skill gains in math (1 point lower)** compared with male learners.

Social and Health Circumstance Predictors

Having a disability or having dependents was linked with attendance rates in opposite ways. Whereas having a disability was associated with better attendance rates, having dependents was associated with lower attendance rates. In addition, living in the wards surrounding the Academy of Hope sites was associated with higher skill gains in reading and a higher likelihood of high school credential attainment.

- Learners with **disabilities** had higher **attendance rates** by 3 percentage points compared with those without disabilities.
- Learners who had **dependents** had lower **attendance rates** by 4 percentage points than did those without dependents.
- Although there was no association between ward of residence and attendance rate, learners living **in Wards 5, 6, 7, or 8** had higher **skill gains in reading** by 3 points, compared with learners in Wards 1, 2, 3, or 4. As we mentioned earlier, Academy of Hope has sites in Wards 5 and 8. It is possible that learners living in those wards benefit from proximity to their classes.

Attendance Rate Predictor

Better attendance was associated with higher skill gains, a higher likelihood of an EFL gain, and higher likelihood of high school credential attainment, although the magnitude is very small.

- A 10 percentage point increase in attendance rate was associated with a 1-point increase in **skill gains** in both reading and math, a 9-percentage point increase in the likelihood of attaining an **EFL gain**, and a 2 percentage point increase in the likelihood of earning a **high school credential**.

¹¹ The learner population is 96% Black and non-Hispanic or Latino. Due to this lack of variation by race in the sample, we did not expect to be able to detect differences in outcomes by race or ethnicity with high levels of statistical significance.

V. Implications for the Field

In this section, we discuss the implications of the study's findings for improving adult learners' persistence and credential attainment, which may be of interest to adult education practitioners, administrators, and policy makers. Although it is important to note the pandemic context in which this study's data were collected, there are meaningful considerations for the field to explore, especially in relation to adult learners' varied backgrounds. We highlight these considerations and discuss the importance of research–practitioner partnerships.

The findings from this study indicate that attendance matters in adult education. Better attendance was associated with slightly higher skill gains and a higher likelihood of making an EFL gain and earning a high school credential. Similarly, longitudinal research with adult learners shows that attendance hours are related to skill gains and GED attainment (Reder, 2014, 2024).

Unsurprisingly, this study also found that the presence of certain stressors in learners' lives may impede their persistence and progress toward their educational goals. Specifically, learners with dependents or unmet mental health needs had lower rates of attendance in their courses, and learners with unmet housing needs were less likely to earn a high school credential relative to learners without these needs. Unmet housing needs seemed to be particularly important for learners at higher skill levels, specifically among learners who scored at EFL 5 and 6 at pretest. Learners with unmet housing needs were 10 percentage points less likely to earn a high school credential than were learners with no stated housing needs.

Similar barriers to persistence in adult education have been noted in previous research, including the lack of affordable childcare or family support and the cost of purchasing a vehicle and gas (Patterson & Paulson, 2016; Patterson & Song, 2018). Our findings point to the need to implement intensive wraparound services (e.g., childcare assistance, transportation subsidies) to boost attendance and high school credential attainment rates. Interestingly, adult learners with unmet needs in transportation had lower skill gains in reading and were less likely to make EFL gains but had higher attendance rates than learners without transportation needs. One explanation for this finding may be the public transit subsidy offered by the Adult Learner Transit Subsidy program in Washington, DC (District Department of Transportation, n.d.). This program was the outcome of many years of advocacy by local adult education coalitions working together to develop an effective and efficient policy solution to the persistent barrier of transportation costs for adult learners. This program alleviates the burden of transportation costs for learners, possibly allowing for increased attendance. Additional investigation is needed to evaluate the short- and long-term impacts of this type of targeted intervention as well as to understand what other supports may be critical in ensuring EFL gains among those with transportation barriers.

With respect to learners' background characteristics, we found that learners with disabilities and older learners (i.e., at least 45 years old) had higher attendance rates but were not more likely to make an

EFL gain or attain a high school credential. This is an important finding that deserves closer attention by adult education practitioners and policy makers. It is possible that learners with disabilities and older learners need more time to achieve certain academic milestones. One likely explanation for this is that it may simply take these learners more time to show progress on standardized assessment measures, reinforcing the need for more longitudinal studies in adult education (Reder, 2024). However, another explanation may be that some adult education learners, such as adults with disabilities and older adults, may struggle with demonstrating skill growth via standardized assessments, such as the CASAS. Other researchers have also documented that older learners are more likely than younger learners to attend adult education classes (Greenberg et al., 2013; Miller & Johnson, 2020). Past studies have not explored the relationship between attendance and disability status. Academy of Hope has a long history of working with learners who self-report as having a disability, as well as those who are older and/or retired. For many of these learners, Academy of Hope serves as a social supportive space that learners want to attend, allowing them to work toward their individual educational goals within a community. A learner with high attendance but stalled EFL progress may be working toward more nuanced skill-building goals, such as improving skills needed to read to a grandchild or to volunteer in their community. Such outcomes are not typically measured. In order to ensure that all learners are receiving effective instruction, it is important to consider ways in which we can effectively capture learners' progress toward different goals.

This study also suggests the need to more closely examine the specific needs of young adults participating in adult education programs, especially those in the Washington, DC, area. In relation to learners who were 25 to 44 years old, learners 18 to 24 years old had lower attendance rates and were less likely to earn a high school credential. These trends are similar to the recent report of high rates of chronic absenteeism among high school students in Washington, DC, possibly related to lower rates of well-being (D.C. Policy Center, 2024). Further research is warranted on the barriers that affect younger adult learners' participation and outcomes.

Finally, this study's findings also highlight the value of research–practice partnerships in adult education. As this study reveals, adult education programs—and the learners they serve—are complex (Greenberg, 2008) and research partnerships, such as the one between AIR's PROPEL Center and Academy of Hope Adult Public Charter School, can facilitate a more in-depth understanding of this complexity (Wells, 2014). Committed research–practice partnerships can also help ensure that a wealth of data elements is collected and analyzed in the service of improving learner outcomes.

The data analyzed in this study were collected by administrative staff at Academy of Hope as they were facilitating programming and support services during the COVID-19 pandemic. Because of these challenging operational circumstances, staff had limited capacity for data collection, and data elements that were not required for high-stakes performance reviews were less likely to be captured. Another limitation is that, because some learners did not complete a posttest on the CASAS assessments, we do not have any information on their skill gains in reading and math. However, the data that were

collected, especially the essential needs data, helped make important inferences that can be used to inform the field and improve adult education practice and policy, validating the value of robust organizational data collection—and collecting data beyond what is needed for federal reporting requirements. Future efforts to collect more accurate and complete data can lead to more nuanced analysis, which can further inform the field and improve adult education practice and policy. In addition, adult education research–practice partnerships can help ensure that program implementation is evidence based, helping adult learners attain skills needed for better paying jobs.

Appendix

Exhibit A1. Learners' Demographic and Socioeconomic Characteristics

Learner Characteristic	Number of Learners	Percentage of Learners
Race		
Black	805	95.8
Other race	35	4.2
Ethnicity		
Hispanic or Latino	32	3.8
Not Hispanic or Latino	808	96.2
Gender		
Female	609	72.5
Male	230	27.4
Age at first term of enrollment		
18–24 years	155	18.5
25–44 years	446	53.1
45–54 years	116	13.8
55–59 years	45	5.4
60–91 years	78	9.3
Marital status		
Married	52	6.2
Single	579	68.9
Divorced or widowed	30	3.6
Unknown	179	21.3
Number of dependents		
No dependents	445	53.0
1–2 dependents	155	18.5
3 or more dependents	98	11.7
Unknown	142	16.9
Living situation		
Permanent housing	534	63.6
Doubled up	233	27.7
Hotel/motel or sheltered	54	6.4

Learner Characteristic	Number of Learners	Percentage of Learners
Unsheltered	19	2.3
Ward of residence		
Wards 1, 2, 3 or 4	48	5.7
Ward 5	145	17.3
Ward 6	58	6.9
Ward 7	173	20.6
Ward 8	248	29.5
Unknown	168	20.0
Disability status		
Has a disability	168	20.0
Does not have a disability	672	80.0
Military service		
Has served in the military	1	0.1
Has not served in the military	833	99.2
Unknown	6	0.7
Employment status		
Employed	234	27.9
Not employed	603	71.8
Unknown	3	0.4

Note. The “other race” category includes learners who were American Indian or Alaska Native, Asian, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, other, and two or more races. One individual identified as another gender. In terms of living situation, the “doubled up” category includes learners who were living with someone temporarily; the “hotel/motel or sheltered” category includes learners who were living in a hotel or motel where their family or a nongovernment agency was paying for a short-term stay, living in a community or domestic violence shelter, living in transitional housing, or living in an emergency shelter hotel; and the “unsheltered” category includes learners who were living on the streets, living in an unfit building, or were homeless when they completed their application.

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