The decline of adult education in the United States: exploring supply-side and demand-side explanations

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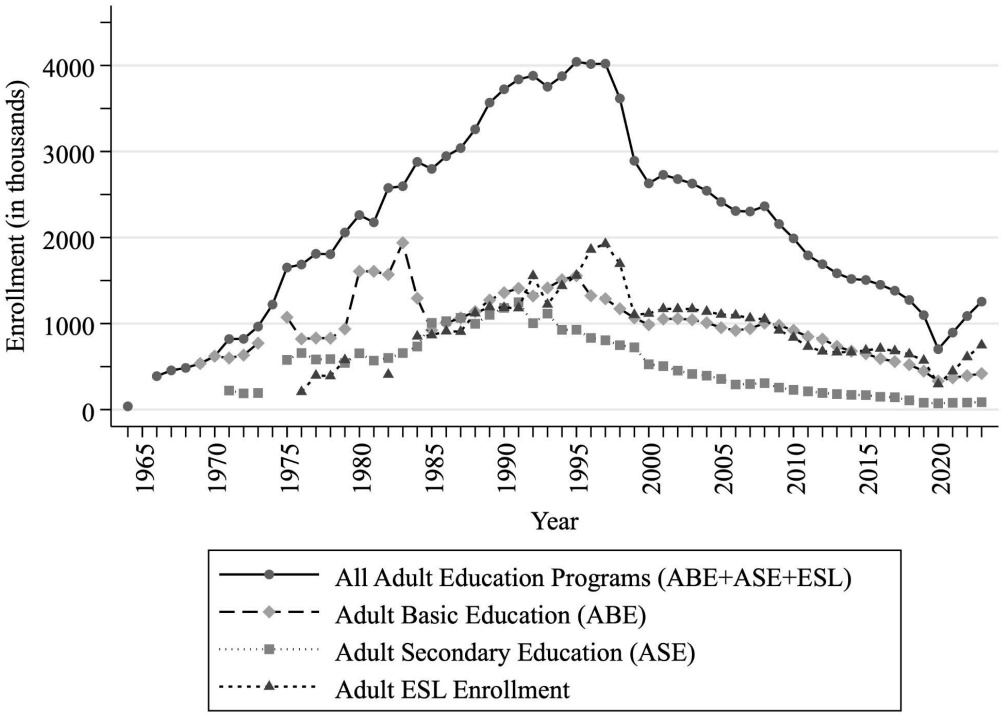
Introduction

Public adult education programs serve some of the most marginalized populations in the United States. Targeting learners outside the conventional K-12 and postsecondary education systems, adult education classes allow adults with incomplete secondary schooling, special needs, limited literacy skills, or limited English proficiency to re-engage in formal schooling at any phase of life. Adult education programs provide two primary types of services: (1) Adult Basic Education or Adult Secondary Education (ABE or ASE) courses, which help adults with skills below the high school level develop foundational skills and/or prepare for high school equivalency exams (e.g., the GED® Test), and (2) adult English as a Second Language (ESL) courses, where adults with limited English language proficiency develop their English language skills. Adult education programs have for decades provided these services at a fraction of the costs of other sectors and with limited attention from policymakers and researchers alike.

Despite its historically low profile, however, adult education once served a substantial part of the population. In 2001, federally-funded adult education programs enrolled 2.7 million students, or about 1.3% of the US adult population, and roughly triple the enrollment of Head Start and Early Head Start combined (Lynch, 2014; U.S. Census Bureau, 2000; U.S. Department of Education National Reporting System for Adult Education [NRS], n.d.). As Pickard (2022) notes, the

reach of adult education programs decreased dramatically in the years that followed, as shown in Figure 1. In 2020, the nadir of adult education enrollment, the number of participants had fallen to just over 700,000, or under 0.3% of U.S. adults. While three years of successive enrollment growth have helped total enrollment recover to pre-pandemic levels, adult education enrollment remains below 2018 levels and is less than half of its 21st century peak.

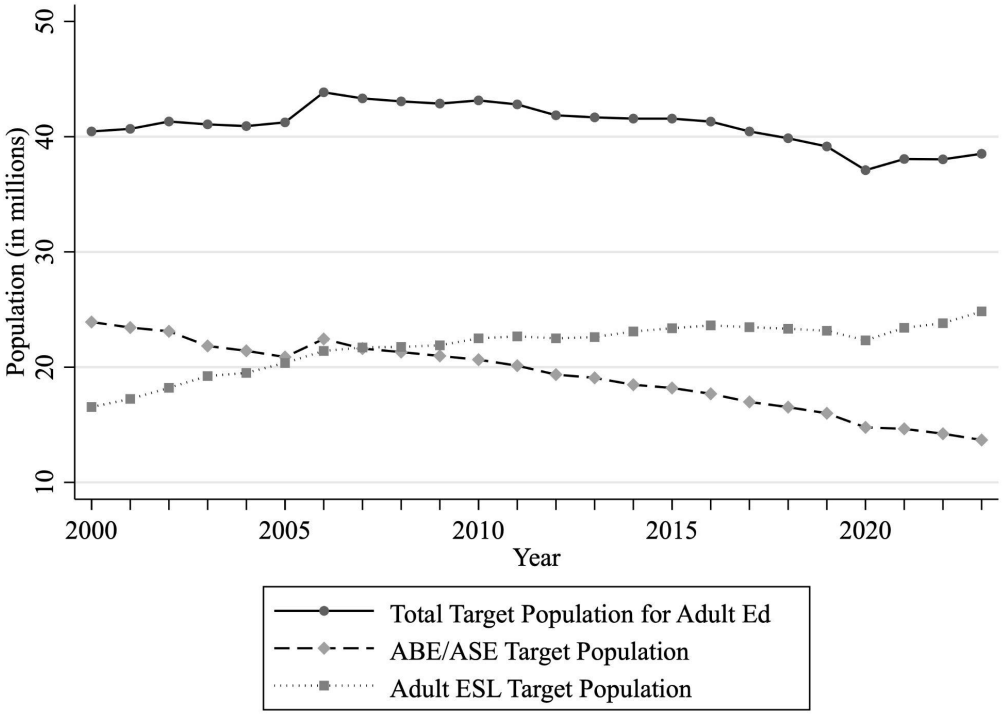
Figure 1: Public adult education enrollment, overall and by service type, 1964-2023



Notes: Each line documents cumulative enrollment in federally supported adult education classes in the United States by service type and year. Year refers to program year (PY), which is indexed to the calendar year of the fall semester (e.g., PY2015 = 2015-2016).
Sources: NRS, n.d.; Pickard, 2022; U.S. Department of Education, 2013.

These dramatic declines in enrollment cannot be explained by changes in the total number of adults who could benefit from participating. To measure the pool of potential participants in administrative data, we define the target population for ABE/ASE services as English-proficient adults without a high school diploma or equivalent credential and the target population for adult ESL as limited English proficient (LEP) adults. As shown by the top line in Figure 2, the total target population for adult education services has decreased only slightly over the past two decades (<5%). If enrollment as a share of the target population were the same in 2023 as it was in 2000, there would be 1.25 million additional participants in adult education classes, roughly doubling actual enrollment.

Figure 2: Target populations for adult education, overall and by service type, 2000-2023



Notes: Year refers to calendar year. See text for target population definitions. Source: Ruggles et al., 2025.

While the size of the total target population has been relatively stable over time, its composition has changed substantially. Since 2000, the target population for ABE/ASE services has declined while the target population for ESL services has increased, surpassing the ABE/ASE population in 2007. These opposing trends point to one potential explanation for falling enrollment: shifts to an increasingly foreign-born pool of potential students. Adult ESL courses offered by adult education programs are one of the few public services available to help immigrants build the skills they need to succeed in the U.S. labor market and integrate into U.S. society. Anecdotal evidence suggests these programs remain

popular, with some programs reporting multi-year wait lists for adult ESL courses (Heller & Slungaard Mumma, 2023).

The purpose of this study is to assess the roles of demand-side and supply-side factors in explaining falling enrollment in adult education services over the past 25 years. We start by providing background and descriptive evidence on key changes in enrollment, funding, and program administration in adult education. Next, we present a conceptual framework for our analysis and articulate three primary hypotheses to explain enrollment trends. We then describe the primary measures and data used to assess our hypotheses and present our analysis. We conclude with a discussion of our findings and their implications.

Adult Education in the United States

Distinct from traditional K-12 and postsecondary education, public adult education has a long history in the United States. Records of organized adult education in individual states and cities date back to the 18th century. By the 1920s, public citizenship and "Americanization" classes for recent immigrants complemented a patchwork of evening and part-time programs for adults with limited formal education (Knowles, 1994). The 1964 Economic Opportunity Act significantly expanded the role of the federal government in adult education. Federally funded adult education programs provide two general types of

services—ABE/ASE classes and adult ESL classes—that each enroll about half of adult education students.

Today, school districts, community-based organizations, community colleges, libraries, and other organizations operate federally funded adult education programs nationwide at an annual cost of over $2 billion (U.S. Department of Education, 2023a). Federal funding is distributed by formula to states based on the number of adults without a high school diploma and the number of immigrants who were approved for permanent legal residence. States are required to contribute matching funds of about 25% and many states exceed this threshold (Collins, 2014).

The adult education sector has evolved over the past quarter century. Following general trends toward accountability in education, the sector has experienced an increasing emphasis on quantifiable performance indicators (Cherewka & Prins, 2023). Under the most recent reauthorization of the primary federal law on adult education—Title II of the Workforce Innovation and Opportunity Act (WIOA) of 2014—performance is judged primarily on student-level economic outcomes (e.g., earnings and employment), degree attainment, or improvements in skills measured by standardized tests (NRS, 2025). The field has also professionalized, replacing volunteers with full-time instructors, emphasizing evidence-based instructional pedagogy, and increasing formal training for teachers (Smith, 2017).

Despite its long history, causal research on adult education remains limited. Two recent studies using randomized enrollment lotteries for adult ESL programs in Massachusetts find positive effects on earnings and civic outcomes (Heller & Slungaard Mumma, 2023; Roder & Elliot, 2020). Two older randomized evaluations of adult education programs found that assignment to job training and adult education classes—including ABE, ASE, and ESL—had positive effects on earnings and employment (Hamilton et al., 2001; Zambrowski & Gordon, 1993). Another longitudinal study that followed high school dropouts around Portland, Oregon from 1998-2007 found positive effects of participating in adult education on earnings using student fixed effects and propensity-score matching (Reder, 2014).

Trends in Adult Education in the 21st Century

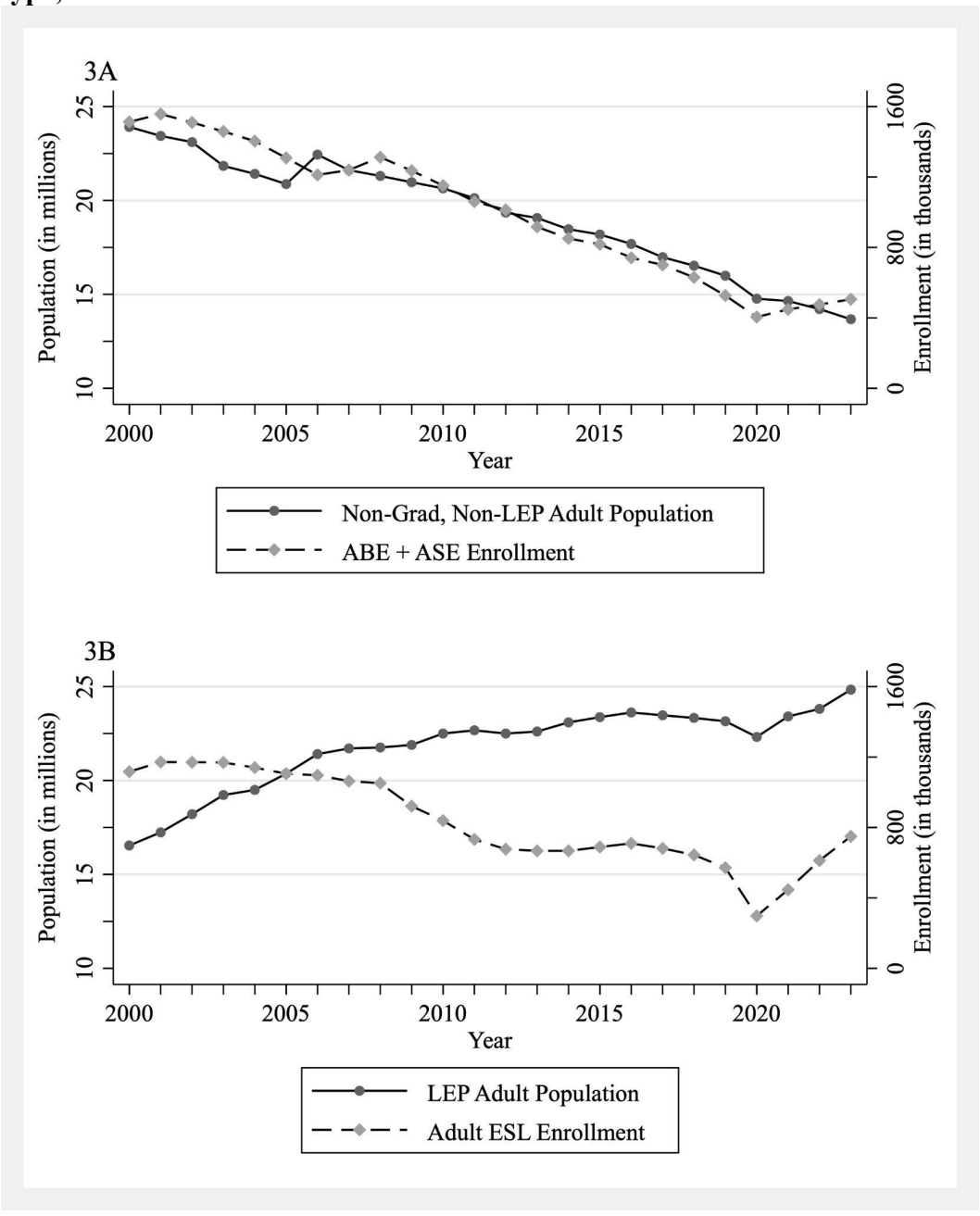
In this section, we present key descriptive findings on changes in the adult education sector to contextualize our analysis and motivate our primary hypotheses.

Enrollment and Target Populations by Service Type

Enrollment declines occurred despite opposing trends in the target populations for ABE/ASE and adult ESL services. From 2000 to 2023, enrollment in ABE/ASE declined by 67%. Consistent with improvements in the graduation rate and reduced participation in high school equivalency exams, the target

population for ABE/ASE services also fell by 43% over this time (Figure 3A; Barshay, 2018; Heller, 2024; Ruggles et al., 2025). In contrast, enrollment in adult ESL programs fell by 33% despite tremendous growth in the adult LEP population (Figure 3B), which expanded by 50% from 2000 to 2023. Nonetheless, enrollment in both ABE/ASE and adult ESL as a share of their target populations has declined substantially, with ABE/ASE enrollment falling from 6.3% to 3.7% of the target population between 2000 and 2023 and adult ESL participation declining from 6.8% to 3.0%.

Figure 3 - Adult education enrollment versus target population by service type, 2000-2023



Notes: Lines contrast cumulative enrollment in federally supported adult education programs from Figure 1 (dashed) for ABE/ASE (3A) and Adult ESL (3B) against the size of the relevant target population (solid). Enrollments are indexed to program years and populations are indexed to calendar years. Source: NRS, n.d.; Ruggles et al., 2025.

Funding

Overall current spending on adult education fell by 14.3% in real dollars from 2000 to 2019 and continues to decline (U.S. Department of Education, 2023a). Declining funding for local grantees was driven by state sources, which contribute the majority (67%) of grantee funding reported in the NRS and fell 39% in real terms from 2005 to 2023. Real federal funding for grantees also decreased by 14% over this period. State funding declines were particularly stark in California, where the recession led to dramatic budget cuts around 2010 (Nichols, 2011).

Providers

Fewer organizations operate federally funded adult education programs today than in the past, driven by decreases in the number of local education agencies (LEAs) providing adult education services. In 2005, the first year of available data, NRS documented 3,275 adult education providers, including 1,803 LEAs. By 2023, there were only 2,061 adult education providers (-37%), including just 957 LEAs (-47%), though LEAs remain the modal provider of adult education services. The number of community-based organizations providing federally funded adult education services also fell substantially over this time (-47%), while the number of colleges providing adult education slightly increased (+9%).

Student Demographics

The racial and ethnic composition of adult education students has shifted as the relative share of students participating in adult ESL has grown. Since 2000, the share of white students in adult education programs has declined from 31% to 20% while the share of Hispanic students has increased, growing from 39% of students in 2000 to 47% in 2023. The Asian/Pacific Islander (~8%) and Black (~20%) shares of enrollment have remained relatively stable over this period. The proportion of female adult education students has also steadily grown from 53% in 2000 to 57% in 2023.

Conceptual Framework and Hypotheses

Our conceptual framework is based on a simple economic model of supply and demand. We propose that adult education enrollment can be expressed as a function of the supply of (*S*) and demand for (*D*) those services, as follows:

$$Enrollment = f(S, D) \quad (1)$$

Supply *(S)* is an aggregate measure of the willingness and ability of potential adult education providers to operate programs and how many students to serve if they do. Supply is itself a function of two key factors: it is decreasing in the costs of providing adult education services ($Costs_S$) and increasing in the amount of public funding available to pay for these services ($Funding$). Putting these together yields the following equation:

$$S = f(Costs_S, Funding, \alpha_S) \quad (2)$$

where α_S refers to all other factors that influence supply, such as institutional capacity, regulatory or administrative constraints, and access to facilities.

We do not treat funding for adult education as exogenous. Instead, we model $Funding$ as a function of state-level demographic, political, and economics factors. We focus on state (versus federal) funding because it is the largest source of grantee funding reported in the NRS and, unlike federal funding, it is not dictated by statute, making it more sensitive to changes in priorities and preferences over time. Drawing from the related literature on the determinants of state appropriations to higher education (e.g., Okunade, 2004; Delaney & Doyle, 2011), we model funding as follows:

$$Funding = f(Target\ Population, Population, Economic\ Politics, Other\ Costs, Public\ Willingness\ to\ Spend, \alpha_f) \quad (3)$$

We selected the first five factors based on the literature on the determinants of funding in higher education. The last factor—$Public\ Willingness\ to\ Spend$—accounts for the fact that public support for spending on social programs is sensitive to the perceived identities of beneficiaries. For example, research has found that public support for welfare spending decreases if the perceived recipients are members of racial, ethnic, or linguistic out-groups (e.g., Alesina & Glaeser, 2004). In adult education, group-based differences in the potential beneficiaries vary by service type, with the

(overwhelmingly) native-born target population for ABE/ASE services contrasting with the (overwhelmingly) immigrant target population for adult ESL. Thus, theory predicts that support for spending among native-born U.S. voters will decline as the adult ESL share of the target population grows.

Demand (D) is an aggregate measure of the public's interest in participating in adult education services. Demand is a function of three key factors: it is increasing in the size of the target population ($Target\ Population$), increasing in the private benefits of participating ($Benefits_D$), and decreasing in the private costs to participants ($Costs_D$). Since most federally funded programs do not charge fees, $Costs_D$ consist mostly of the time, effort, and opportunity costs associated with participation. Thus, a simple way to express the demand function is as follows:

$$D = f(Target\ Population, Benefits_D, Costs_D, \alpha_D) \quad (4)$$

where α_D captures any other factor that influences demand and is not already included in the model.

Our conceptual framework proposes that declines in enrollment in adult education programs will reflect declines in supply, demand, or both. While we cannot directly estimate the supply or demand functions, we compile evidence on the key inputs to these functions to assess whether the changes we observe predict reductions in supply or demand. More specifically, drawing on our descriptive

analysis and understanding of key policy changes in the sector, we articulate and investigate three primary hypotheses for declining enrollment in adult education:

- *Hypothesis 1 (Declines in Demand): Enrollment decreased because fewer adults in the target populations for these services want to participate.*
- *Hypothesis 2 (Rising Costs - Supply): Enrollment decreased because of increases in the costs of operating adult education programs.*
- *Hypothesis 3 (Decreased Willingness to Pay - Supply): Enrollment decreased because of reductions in public funding that reflect reduced willingness to pay for services that increasingly benefit immigrants.*

The first hypothesis emphasizes declines in demand as a driver of falling enrollment. The second and third highlight the role of supply-side factors.

Data Sources

The primary data used in our analyses come from the U.S. Department of Education National Reporting System for Adult Education (NRS), the federal reporting and accountability system for adult education programs. Public NRS data include national and state-level aggregate data on adult education students, providers, and funding for years 2000 to 2023. There are several limitations to NRS data. First, NRS data is not provided at the program level, precluding disaggregated analyses. Second, NRS data do not include information on

programs that do not receive federal funding in that year. Finally, while NRS data include state and federal funding (88% of total program funding on average), NRS excludes local, philanthropic, and other sources of funding (Cronen, Diffenderffer & Medway 2023). We supplement data from the NRS with data from other public sources, such as the Digest of Education Statistics, IPUMS, and the U.S. Census Bureau.

Results

Hypothesis 1 (Declines in Demand): Enrollment decreased because fewer adults in the target populations for these services want to participate.

We have already shown that declines in enrollment far outpaced changes in the target population from 2000 to 2023. As such, if demand-side factors are driving decreases in enrollment, it must be the case that adults *within* the target population are less interested in participating now than in the past. Within our framework, we expect this to occur if the benefits of participation have decreased or the costs of participation have increased.

First, we assess whether the economic benefits to the skills and credentials adult education programs help individuals attain have fallen over time. To do this, we use IPUMS microdata from the American Community Survey (ACS) to estimate the change in personal income associated with 1) holding a high school diploma or equivalent credential (versus no secondary credential) and 2)

achieving full proficiency in English (versus limited or no English proficiency), controlling for individual-level factors (Ruggles et al., 2025). Point estimates and full details of our models are included in Appendix A. We find that the estimated returns to (A) a high school credential or (B) English proficiency both *increased* modestly between 2000 and 2023, contrary to Hypothesis 1. We note that we are unable to measure the direct returns to basic literacy and numeracy skills, which ABE/ASE also help individuals develop, whether en route to a high school equivalency credential or as the sole focus of their participation. However, prior work shows that the positive association between adult literacy/numeracy and labor market outcomes is particularly large in the United States (Hanushek et al., 2015).

We then ask whether the costs of participation—in terms of time and effort—have increased. We are not aware of evidence that adult education classes require a greater time commitment from participants now than in the past. Nevertheless, participation may be more costly if declining skills within a target population make it more difficult for typical participants to achieve desired learning goals.

To explore this possibility, we examine trends in the baseline skills of individuals entering adult education programs over time using data from the NRS. After harmonizing data over time to account for changes in reporting, we find that the skills of entering adult ESL participants have remained more or less the same

over the past 25 years. In contrast, the skills of ABE/ASE participants have shifted downward: while 36% of entering ABE/ASE students were categorized as advanced in 2000, that figure fell to 17% in 2023 (-54%), and the share entering at the lowest level has increased by 10pp (from 21% to 31%). This reflects national population-level trends: while ACS data shows that the (self-rated) English skills of LEP adults have stayed about the same over time, data from the Programme for the International Assessment of Adult Competencies (PIAAC) reveal declines in literacy and numeracy skills for adults across the education distribution from 2012 to 2023 (PIAAC Data Explorer, n.d.). Together, this suggests that increased costs associated with lower baseline skills of participants may have dampened demand for ABE/ASE services but not for adult ESL.

Thus far, we have tested Hypothesis 1 by asking whether changes in the inputs to our demand function predict decreased demand. We acknowledge, however, that the demand function is complex, incorporating many factors that we are unable to directly consider. To conclude our discussion of demand-side factors, we consider more general evidence that indicates there is unmet demand for adult education services, contrary to Hypothesis 1.

Uniform data on waitlists for adult education programs over time is not available; however, a survey of adult education providers from PY2018 suggests that many programs turn away potential students because of capacity constraints, with 29% of adult ESL programs reporting they turned away at least one student

along with 12% of ABE and 10% of ASE programs (Cronen, Diffenderffer & Medway, 2023). This is consistent with anecdotal evidence from research and news reports that document unmet demand for adult ESL services, with some programs reporting wait times of months or years (Heller & Slungaard Mumma, 2023).

In summary, demand for ABE/ASE and ESL services have diverged over the last 25 years. The target population for ABE/ASE programs has become smaller and has lower baseline skills than before, reducing demand. This partially explains falling ABE/ASE enrollment. In contrast, the target population for adult ESL has grown as the number of seats in these programs has fallen, leading to unmet demand. This suggests that supply-side constraints must be the primary driver of falling enrollment in adult ESL.

Hypothesis 2 (Rising Costs): Enrollment decreased because of increases in the costs of operating adult education programs.

The second hypothesis is that enrollment has declined because rising costs have constrained supply. Spending in adult education remains low compared to other educational sectors. In 2019, average per-pupil spending in adult education was $2,105, 15.6% of average current expenditure per-pupil in public K-12 schools ($13,496) and 22.5% of average tuition and fees for public four-year colleges ($9,349) (U.S. Department of Education, 2023a, 2023b, 2023c). Although spending remains comparatively low, spending per participant has risen

considerably over time. In 2000, public adult education spending per participant was approximately $1,015 in 2019 dollars, meaning real costs more than doubled from 2000 to 2019. Combined with falling funding, these increases in costs per participant are consistent with the hypothesis that falling enrollment reflects supply constraints.

Why has spending increased so dramatically? Rising costs are not unique to adult education: over this period, K-12 per-pupil spending increased by nearly 25% in real terms, and the average costs of attending a public four-year college increased by over 80% (U.S. Department of Education, 2023b; 2023c). Many of the same factors that have contributed to rising costs in these fields may also be relevant for adult education, such as the "cost disease" theory (Archibald & Feldman, 2008).

Trends toward professionalization and accountability may also play a role in rising costs. In 2000, over 30% of adult education teachers were unpaid volunteers, while in 2023 the volunteer share of teachers was under 13%. Similarly, the share of full-time paid instructors has grown from 11% in 2000 to 19% in 2023. Instructors are also more likely to be licensed. Furthermore, new data reporting requirements under federal accountability rules have added to the administrative burden on programs. In a large-scale survey of adult education programs, most programs (64%) rated one or more WIOA-mandated data collection requirements as "very challenging" (Cronen, Diffenderffer & Medway

2023). The proportion of spending allocated to administrative positions has also increased. In 2000, there were 12,963 paid adult education administrators and 2.67 million participants, or 206 participants per administrator. By 2023, the number of administrative personnel (11,864 administrators) had declined by less than 10% while enrollments more than halved, leaving only 106 participants per administrator.

Hypothesis 3 (Decreased Willingness to Pay): Enrollment decreased because of reductions in public funding that reflect reduced willingness to pay for services that increasingly benefit immigrants.

Our final hypothesis is that public support for spending on adult education programs has declined because the immigrant share of potential beneficiaries has grown. High-level trends are consistent with this theory. As the share of the target population for adult education services that is composed of potential adult ESL students has grown, funding for adult education has declined.

To further explore this hypothesis, we use ordinary least squares (OLS) regression models to assess whether the ESL share of the target population is related to cross-state differences in spending in the most recent program year (PY2019) for which we can observe all predictors and outcomes in our model (omitting PY2020 due to the impact of the COVID-19 pandemic on state funding allocations and predictors). The outcome for our OLS models is the natural logarithm of state-level spending on adult education in 2019 [ln(Funding)]. The

predictor of interest is the adult ESL share of the target population for adult education in a state (*PctESL;* percentage points). A simple association between *PctESL* and state spending would be biased if immigrants are attracted to states that are more willing to spend on immigrant-serving social services. To account for differences in sociopolitical contexts, we also include an interaction between a state's ESL share and the percent of votes for Donald Trump in the 2016 presidential election (*PctESL*PctTrum*p). Our results also include the indicated controls for the overall size of the target population and other determinants of state funding, as described in equation (2).

The results of this analysis are presented in Table 1. In our preferred estimates (column 2), *PctESL* is positively related to funding (p=0.055). *PctTrump* is not significantly related to funding overall, but the interaction term between share for Trump and share ESL is negative (p=0.043). Each additional percent for Trump decreases the positive relationship between share ESL such that the relationship between percent ESL and funding becomes negative at 50.7% for Trump or higher.

[INSERT TABLE 1 HERE]

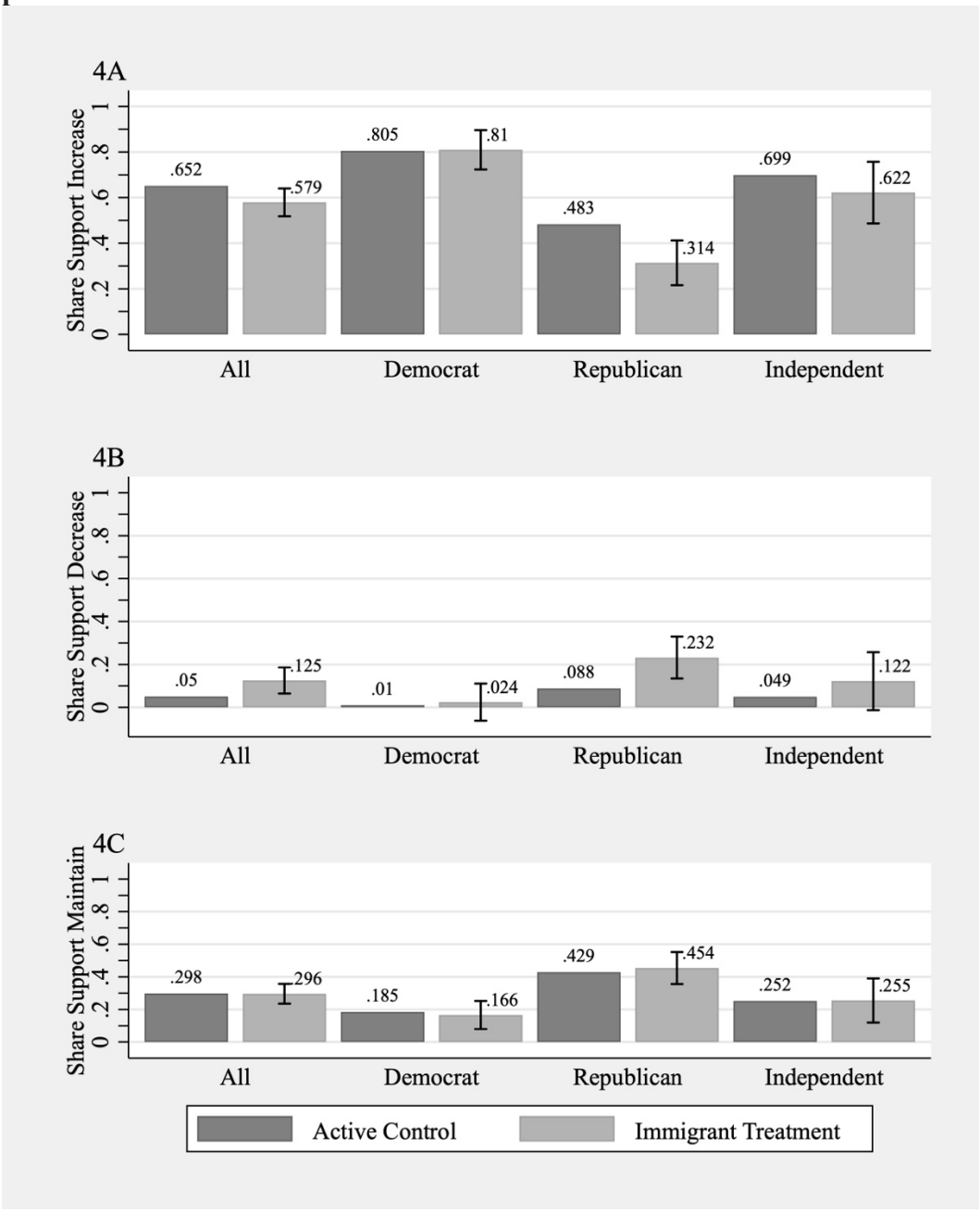
As a final way to assess this hypothesis, we conduct a simple survey experiment in a sample of 1,000 U.S. citizens recruited from the CloudResearch Connect online survey platform. In our pre-registered survey experiment, we start

by providing respondents with a neutral description of adult education services based on language from the U.S. Department of Education website ("Public adult education classes in your state help adult learners acquire the basic skills they need including reading, writing, math, English language proficiency, and problem-solving to be productive workers, family members, and citizens.") (U.S. Department of Education, 2025). We then randomly assign respondents to see a second sentence that emphasizes either U.S. citizens without a high school diploma (Active Control: "Many adult education students are U.S. citizens without high school diplomas who are seeking to earn a high school equivalency credential.") or immigrants (Immigrant Treatment: "Many adult education students are recent immigrants who are seeking to improve their English language skills.") as the beneficiaries of these services.

We then assess whether treatment assignment impacts support for funding adult education programs by asking respondents "Do you think that government funding for adult education classes in your state should increase, decrease, or stay about the same?" Respondents who answered "slightly increase" or "greatly increase" are coded as supporting increasing funding for adult education. Respondents who answered "slightly decrease" or "greatly decrease" are coded as supporting decreasing funding. Respondents who answered "Stay about the same" are coded as supporting maintaining funding at current levels.

The results of our survey experiment, reported in Figure 4 support our hypothesis. Overall, being assigned to the Immigrant Treatment reduces support for increasing funding by 7.2pp (-11%) and increases support for decreasing funding by 7.4pp (+148%), driven by changes in the preferences of Republican respondents. When services to U.S. citizen participants are emphasized, 48.3% of Republicans favor *increasing f*unding for adult education. This drops to 31.8% of Republicans in the Immigrant Treatment condition. In contrast, respondents who identify as Democrats or political independents are not affected by their treatment assignment. The results of both our regression analysis and survey experiment suggest that Republican willingness to invest in adult education decreases is sensitive to the role of adult education as an immigrant-serving sector.

Figure 4: Adult education funding preferences, by treatment group and political affiliation



Notes: Each subfigure reports the mean values of the outcome described on the y-axis by treatment condition among respondents with the party affiliation on each x-axis. Error bars report the 95% confidence interval of the treatment group mean. N=1,000; N_{Dem}=400; N_{Rep}=399; N_{Ind}=201. See Appendix C for further details.

Discussion

Federally funded adult education programs once represented a substantial investment in the human capital of adult learners caught between K-12 and higher education, with enrollment rates exceeding 1-in-100 adults in 2001. Two decades later, that figure is closer to 1-in-1000. In this paper, we consider the evidence for three competing explanations for falling enrollment.

We find that declining enrollment cannot be fully explained by decreases in aggregate demand (Hypothesis 1). While aggregate demand has not substantially declined, the nature of this demand has changed. Declines in the number of adults without a high school diploma, which reduced demand for ABE/ASE services, have been largely offset by dramatic growth in the adult LEP population, increasing demand for adult ESL. These sectoral shifts have been striking: in 2000, just 42% of adult education students enrolled in adult ESL classes, while in 2023, adult ESL participants comprised nearly 60% of adult education enrollments.

Through a survey experiment and cross-state analysis of spending differences, we find evidence that the increasing role of adult education as an immigrant-serving sector reduces public willingness to spend, especially among political conservatives (Hypothesis 3). This finding echoes other empirical evidence demonstrating that immigration reduces spending on K-12 education and social services (Mayda, Senses & Steingress, 2022; Speciale, 2012).

We also find that per-participant spending on adult education has increased over time, in line with spending increases in other sectors (Hypothesis 2). Increases in costs reduce the reach of each additional dollar spent on adult education, exacerbating supply-side constraints from cuts to real funding. Without rigorous evidence on the effects of these programs over time, it is unclear whether increased per-pupil spending directly benefits participants or not; either way, it seems unlikely this trend will reverse itself over time.

One major limitation of our work is that we are unable to speak to the social or private impacts of declining enrollment and supply-side constraints in adult education. Future research should expand on promising recent work in this area to quantify the economic and non-economic effects of access to these programs for individuals, communities, and state budgets.

References

Alesina, A., & Glaeser, E. L. (2004). *Fighting poverty in the US and Europe: A world of difference*. Oxford University Press.

Archibald, R. B., & Feldman, D. H. (2008). Explaining increases in higher education costs. *The Journal of Higher Education*, *79*(3), 268-295.

Barshay, J. (2018). GED and other high school equivalency degrees drop by more than 40% nationwide since 2012. Hechinger Report. Retrieved July 2, 2024 from: https://hechingerreport.org/ged-and-other-high-school-equivalency-degrees-drop-by-more-than-40-nationwide-since-2012/

Cherewka, A., & Prins, E. (2023). Adult basic education under WIOA title II implementation: an integrative literature review. *Adult Education Quarterly*, *73*(2), 113-132.

Collins, B. (2014). Adult Education and Family Literacy Act: Major Statutory Provisions. Congressional Research Service Report R43789. Retrieved July 19, 2024 from: https://crsreports.congress.gov/product/pdf/R/R43789

Cronen, S., Diffenderffer, A., & Medway, R. (2023). Linking Adult Education to Workforce Development in 2018-19: Early Implementation of the Workforce Innovation and Opportunity Act at the Local Level. NCEE 2023-001a. National Center for Education Evaluation and Regional Assistance.

Delaney, J. A., & Doyle, W. R. (2011). State spending on higher education: Testing the balance wheel over time. *Journal of Education Finance*, 343-368.

Hamilton, G., Freedman, S., Gennetian, L., Michalopoulos, C., Walter, J., Adams-Ciardullo, D., Gassman-Pines, A., McGroder, S., Zaslow, M., Brooks, J., & Ahluwalia, S. (2001). How effective are different welfare-to-work approaches. Five-Year Adult and Child Impacts for Eleven Programs. National Evaluation of Welfare-to-Work Strategies. Washington, DC: US Department of Health and Human Services.

Hanushek, E. A., Schwerdt, G., Wiederhold, S., & Woessmann, L. (2015). Returns to skills around the world: Evidence from PIAAC. *European Economic Review, 73*, 103-130.

Heller, B. H. (2024). GED® College Readiness Benchmarks and Post-Secondary Success. EdWorkingPaper no.24-914. Annenberg Institute at Brown University. Retrieved July 2, 2024 from: https://doi.org/10.26300/mvvp-cf18.

Heller, B. H., & Mumma, K. S. (2023). Immigrant integration in the United States: the role of adult English language training. *American Economic Journal: Economic Policy, 15*(3), 407-437.

Knowles, M. S. (1994). A history of the adult education movement in the United States. Krieger Publishing Co., Melbourne, FL.

Lynch, K. (2014). Head Start: Background and Funding. Congressional Research Service Report RL30952. Retrieved June 16, 2025 from: https://www.congress.gov/crs-product/RL30952.

Mayda, A. M., Senses, M. Z., & Steingress, W. (2023). Immigration and provision of public goods: Evidence at the local level in the US (No. 2023-57). Bank of Canada Staff Working Paper. Retrieved July 3, 2025 from https://www.econstor.eu/bitstream/10419/297442/1/swp2023-57.pdf.

Nichols, R. (2011). California's Adult Ed Programs Collapse in Financial Crisis. Governing.com. Retrieved July 17, 2024 from: https://www.governing.com/archive/californias-adult-schools-collapse-in-financial-crisis.html.

Okunade, A. A. (2004). What factors influence state appropriations for public higher education in the United States?. *Journal of Education Finance*, 123-138.

Pickard, A. (2022). Declining Enrollment in Federally-Funded Adult Education: Critical Questions for the Field. *Adult Literacy Education, 4*(2), 36-41.

Reder, S. (2014). *The Impact of ABS Program Participation on Long-Term Economic Outcomes* (Research Brief). U.S. Department of Education, Office of Career, Technical, and Adult Education. https://lincs.ed.gov/publications/pdf/ABS_EconomicOutcomes.pdf.

Roder, A. & Elliott, M. 2020. Stepping Up: Interim Findings on JVS Boston's

English for Advancement Show Large Earnings Gains. New York: Economic Mobility Corp.

Ruggles S., Flood, S., Sobek, M., Backman, D., Cooper, G., Rivera Drew, J.A., Richards, S., Rogers, R. Schroeder, J. & Williams, K.C.W. (2025). IPUMS USA: Version 16.0 [dataset]. Minneapolis, MN: IPUMS. https://doi.org/10.18128/D010.V16.0.

Smith, C. (2017). Professional development and professionalization in the field of adult basic education. *New directions for adult and continuing education*, *155*, 71-81.

Speciale, B. (2012). Does immigration affect public education expenditures? Quasi-experimental evidence. *Journal of public economics*, *96*(9-10), 773-783.

U.S. Census Bureau. (2000). TABLE P035. AGE BY LANGUAGE SPOKEN AT HOME BY ABILITY TO SPEAK ENGLISH FOR THE POPULATION 5 YEARS AND OVER.
Retrieved July 2, 2024 from: https://www2.census.gov/acs/downloads/Core_Tables/2000/.

U.S. Department of Education Institute of Education Sciences, National Center for Education Statistics. (2023a). Table 236.20. Total expenditures for public elementary and secondary education and other related programs, by function and subfunction: Selected school years, 1990-91 through 2020-

21. Retrieved July 23, 2024 from: https://nces.ed.gov/programs/digest/d23/tables/dt23_236.20.asp.

U.S. Department of Education Institute of Education Sciences, National Center for Education Statistics. (2023b). Table 236.55. Total and current expenditures per pupil in public elementary and secondary schools: Selected school years, 1919-20 through 2020-21. Retrieved July 23, 2024 from: https://nces.ed.gov/programs/digest/d23/tables/dt23_236.55.asp.

U.S. Department of Education Institute of Education Sciences, National Center for Education Statistics. (2023c). Table 330.10. Average undergraduate tuition, fees, room, and board rates charged for full-time students in degree-granting postsecondary institutions, by level and control of institution: Selected years, 1963-64 through 2022-23. Retrieved August 7, 2024 from: https://nces.ed.gov/programs/digest/d23/tables/dt23_330.10.asp.

U.S. Department of Education Institute of Education Sciences, National Center for Education Statistics. (n.d.) PIAAC Data Explorer. Retrieved June 12, 2025 from https://nces.ed.gov/surveys/piaac/ideuspiaac/dataset.aspx

U.S. Department of Education, National Reporting System for Adult Education (NRS). (n.d.). Aggregate Reports. Retrieved July 2, 2024 from: https://nrs.ed.gov/rt/reports/aggregate.

U.S. Department of Education, National Reporting System for Adult Education

(NRS). (2025). Technical Assistance Guide for Performance Accountability under the Workforce Innovation and Opportunity Act. Retrieved June 18, 2025 from: https://nrs.ed.gov/sites/default/files/2025-05/NRS-TA-Guide-April-2025-508.pdf.

U.S. Department of Education, Office of Adult, Career, and Technical Education (2025). Adult Education and Literacy. Retrieved June 16, 2025 from: https://www.ed.gov/adult-education-and-services/adult-education-and-literacy-homepage.

U.S. Department of Education, Office of Vocational and Adult Education (2013). An American Heritage—Federal Adult Education: A Legislative History 1964-2013, Washington, DC. Retrieved on September 26, 2018 from https://lincs.ed.gov/publications/pdf/Adult_Ed_History_Report.pdf.

Zambrowski, A., & Gordon, A. (1993). Evaluation of the Minority Female Single Parent Demonstration: Fifth-Year Impacts at CET. Princeton, NJ: Mathematica Policy Research.

Table 1 - Predictors of State Funding for Adult Education, 2019

	ln(Funding)	ln(Funding)
	(1)	(2)
PctESL	0.055	0.152+
	(0.035)	(0.076)
*PctESL*PctTrump*	-0.002+	-0.003*
	(0.001)	(0.001)
PctTrump	-0.006	-0.006
	(0.029)	(0.053)
ln(Target Population)	-0.365	-0.539
	(0.816)	(1.466)
State Population	X	X
State Demographic Controls		X
State Economic Controls		X
Other Costs (Medicaid Spending)		X
State Political Controls		X
Observations	49	49

Notes: Cells report point estimates from an OLS regression of ln(Funding) on the predictors listed in each row, followed by robust standard errors in parentheses. Funding measures state funding allocated to local grantees in PY2019, as reported in NRS Table 14. *Target Population* is the total number of (1) LEP adults and (2) non-LEP adults without high school diplomas in a state in 2019. *PctESL* is the share of the target population in a state who are LEP adults in 2019. *PctTrump* is the percent that voted for Donald Trump the 2016 presidential election (percentage points). State demographic controls include share of 2019 population by race/ethnicity. State economic controls include ln(GDP), unemployment rate, and ln(median income) in 2019. State political controls include indicators for a unified Democratic legislature (house and senate), having a Democratic governor, and their interaction in 2019. Medicaid spending is ln(total Medicaid personal health care spending) in 2019. See Appendix B for details on data sources. We drop Colorado because of irregularities in data reporting. Regressions do not include Washington, D.C. +=p<0.1; *=p<0.05

Figure Captions

Figure 1 Title: Public adult education enrollment, overall and by service type, 1964-2023
Figure 1 Caption: Notes: Each line documents cumulative enrollment in federally supported adult education classes in the United States by service type and year. Year refers to program year (PY), which is indexed to the calendar year of the fall semester (e.g., PY2015 = 2015-2016). Sources: NRS, n.d.; Pickard, 2022; U.S. Department of Education, 2013.

Figure 2 Title: Target populations for adult education, overall and by service type, 2000-2023
Figure 2 Caption: Notes: Year refers to calendar year. See text for target population definitions. Source: Ruggles et al., 2025.

Figure 3 Title: Adult education enrollment versus target population by service type, 2000-2023
Figure 3 Caption: Notes: Lines contrast cumulative enrollment in federally supported adult education programs from Figure 1 (dashed) for ABE/ASE (3A) and Adult ESL (3B) against the size of the relevant target population (solid). Enrollments are indexed to program years and populations are indexed to calendar years. Source: NRS, n.d.; Ruggles et al., 2025.

Figure 4 Title: Adult education funding preferences, by treatment group and political affiliation
Figure 4 Caption: Notes: Each subfigure reports the mean values of the outcome described on the y-axis by treatment condition among respondents with the party affiliation on each x-axis. Error bars report the 95% confidence interval of the treatment group mean. N=1,000; N_{Dem}=400; N_{Rep}=399; N_{Ind}=201. See Appendix C for further details.