

Research Article

Barriers to English Learning for Adult Immigrants in Urban America

Ginger Kosobucki, Immigrant Welcome Center

Brooke Smith, Pathway to Literacy Program

Cindy Reinhard, Independent Scholar

Abstract

The primary aim of this study was to investigate barriers to English learning for adult immigrants residing in urban America. A secondary aim was to study the effect of baseline reading levels on immigrants' participation in English class. The study design was a survey study of a convenience sample of 1,254 immigrants living in Indianapolis, Indiana, from 2018 to 2019. Among immigrants surveyed, 31% were emergent readers of English and 23% had 5 years or less of formal education. Both interrupted education and limited literacy are factors for classroom enrollment. Common barriers of work, family, health, transportation, and weather were mentioned; emergent English readers mentioned "can't learn" and "too hard" at higher rates than all participants as reasons to never enroll or disenroll.

Keywords: immigrant research, limited literacy, barriers to English learning, reading level

Capturing immigrant voices in research has never been more crucial than now, as the United States stands on a precipice of an immigration crisis. In 2020, the United States had more immigrants than any other country in the world, with more than forty million foreign-born people living in the United States at that time (Geiger, 2024). Based on an identified knowledge gap revealed in previous national and local research, our research investigated the barriers to learning English faced by immigrants and the effect of limited literacy on their enrollment in adult education English classes.

Literature Review

Large-scale immigrant research is challenging to conduct, and largely dependent on federal organizations such as the U.S. Census Bureau, New American Economy/American Immigration Council, Migration Policy Institute and Pew Research Center to provide data (Brown, 2023; Geiger, 2024; Greenwood, 2024; New American Economy, 2019, 2024; Pew Research Center, 2019; U.S. Census Bureau,

2023). We suspect that a significant amount of data collected by organizations that work with immigrants and refugees excludes those who lack print and digital literacy skills. Research focusing on barriers adult immigrants face to learning English used methodology that prohibits participation by adult English language learners (ELLs) with limited literacy skills in English. The Programme for the International Assessment of Adult Competencies (PIAAC) study (2011-2012) of 5,010 participants included 12% who were adult ELLs, and was conducted by sampling on laptop computers and completing an extensive background questionnaire. The study method may have been an obstacle to those with limited English language and digital literacy skills; notably 112 adults were unable to respond to the questionnaire because of limited literacy (Patterson et al., 2015). Similarly, previous local immigrant research was conducted via surveys and resulted in many skipped questions, likely due to lack of understanding (IWC, 2017). Another study on barriers to participation in adult education required a written survey before attending interviews (Patterson & Song, 2018).

Previous research does, however, point to the preponderance of limited literacy among adult ELLs. The 1993 National Adult Literacy Survey (NALS), a national effort to measure literacy among the adult population in the United States included 13,600 participants; 22% of whom were adult ELLs, and placed 35% of its participants in the lowest literacy category (Kirsch et al., 2002). The 2003 National Assessment of Adult Literacy included 2,807 adult ELLs, most of whom had Below Basic or Basic literacy (Jin et al., 2009). More recently, the PIAAC conducted studies in 2011-2012, and 2013-2014, and found that non-U.S.-born adults constituted 34% of the population with low literacy skills, compared to 15% of the total population (U.S. Department of Education, 2019).

The Immigrant Welcome Center (IWC) in Indianapolis, Indiana, conducted a cross-sectional questionnaire study from September 2018 to June 2019, funded with a grant from Lilly Endowment Inc. The research project was entitled Adult ELL (English Language Learner) Research Project. Our overarching goal was to use a method that served to lower hurdles for obtaining data; namely by conducting the research orally and in the native language of the immigrants. We felt that this approach to immigrant research would maximize data capture and provide a more accurate representation of the local immigrant communities, and the learning obstacles they faced. Research that aims to better understand these impediments to English learning for the immigrant population will serve to inform programs and policy.

Theoretical Framework

The aim of our research was to answer the following questions:

Research Question: What are the main barriers to learning English for the immigrant population of Indianapolis?

Sub Questions: What are the main factors which cause them to miss class, to stop attending, or never enroll? What role does reading level (in native language and English) have on enrollment?

Barriers to class participation can be categorized as situational, dispositional and organizational; situational being when adults attempt to balance many roles in

their lives or face challenges such as increasing age, parental education, low income, and work and family responsibilities; dispositional are when learners lack confidence in their skills or lack awareness of career options, and may relate to health or disability challenges or low social trust. Institutional barriers result from educational or employment policies which prevent participation, such as cost of education and lack of flexibility in work schedule (Bairamova & Dixon, 2019a; Patterson, 2018). Our research questions considered these types of roadblocks from the outset.

We aimed to investigate the association between reading ability in native language and English on English class attendance. We hypothesized that common situational barriers, such as work and family obligations, would exist, and that limited literacy due to interrupted formal education would also be a significant obstacle for immigrant English learners. Our hypothesis would be tested by large-scale data collection using a questionnaire study design, oral surveys and a reading diagnostic tool to measure native language and English decoding ability.

Study Design

The research study took place in three phases.

Phase I of the project (September – October 2018) included advisory board and data collection team creation, research design, and training of the data collectors. The advisory board included representatives from Indy Reads, Exodus Refugee Immigration, Indiana University, Marian University, and the IWC.

The data collection team was comprised of three native English speakers who are teachers of speakers of other languages (TESOL) professionals and instructors, as well as 16 multilingual immigrants representing over 10 countries and 18 languages. The multi-lingual immigrant data collectors were compensated for their time, and were chosen based on the following characteristics:

- High level of fluency (both oral and written) in English and their native language
- Ability to use a smartphone to conduct the survey
- Strong connection to their immigrant community
- Recommendation from a known source

Using multi-lingual immigrant data collectors to conduct surveys allowed for the voices of those who are sometimes unintentionally excluded in immigrant research to be heard. The majority (69%) of surveys were conducted by multilingual data collectors.

Phase I also included two pilot surveys – sent to small groups to test usability, accessibility, understandability, and survey time, and changes were made accordingly. Once the final survey was ready, the data collection team received training at an initial meeting, which included practicing administering the reading diagnostic with fellow data collectors.

Phase II (October 2018 – March 2019) was the data collection phase, which took place over a 6-month time frame. Our aim was to conduct 1,000 surveys, which is approximately 1% of the immigrant population in Indianapolis. The multilingual data collectors (69%) conducted surveys in their communities, including apartments and houses, places of worship, medical clinics, community centers, and grocery stores (Figure A1). The English-speaking data collectors (31%) visited 48 different class sites throughout the city.

Phase III (April 2019 - June 2019) included data analysis, which was conducted by three TESOL professionals (including the lead researcher), and an intern with Indiana University's Public Policy Institute. The data was exported from SurveyMonkey into a spreadsheet on Google Drive, and all data points were compiled and examined by the TESOL professionals and intern, after which the initial findings were analyzed by three PhD researchers from Marian and Indiana University.

We classified comments into barriers that caused the immigrants to miss or never attend class (i.e., work, family, health, etc.) and motivations for attending class (work, integration, daily life, future study, etc.). Quotations that were most often expressed or best represented the classification criteria are reported here. Furthermore, we compared the literacy level data for those attending classes versus those not attending, and recorded differences in responses from surveys which were conducted at class sites versus surveys conducted in the community.

Methods

The materials for our study included a survey delivered using the smartphone application of the global software SurveyMonkey and laminated paper reading diagnostic cards. The survey included initial screening questions, followed by the main survey questions, after which the reading diagnostic was administered.

The diagnostic tool, aligned with Comprehensive Adult Student Assessment Systems (CASAS) standards, was developed by TESOL professionals as an alternative assessment to measure decoding ability (CASAS RDG 1.6) in their native language and English by having them “demonstrate understanding of and apply phonics and word analysis skills in decoding words” (CASAS, 2016, n.p.). At the time of the study, there were only a few tools to assess native language literacy among adult learners. The University of Minnesota and Minneapolis Public Schools developed the widely used Native Language Literacy Assessment (King & Bigelow, 2016), while the Florida Department of Education created a Native Language Literacy Screening (2014-2015). For our research, we created a portable tool based on CASAS standards and connected to K-12 U.S. grade levels, which solely focused on decoding. It measures fluency in native language and English on a scale of 0 to 10, resembling an eye test that gradually increases in difficulty. Fluency factors included speed, pauses, omitting or adding sounds and comprehensibility. Translation for the tool was provided by our team and a language company, and it is available in 32 languages besides English (Pathway to Literacy, 2018).

Demographic data collected included country of origin, native language, year of arrival to the U.S., and level of schooling in their home country. Questions varied based on whether immigrants were enrolled in classes (Appendix D). After completing the survey questions, the data collector administered the reading diagnostic to measure decoding skills (Pathway to Literacy, 2018). The results were inputted into SurveyMonkey.

Study Participants

The study participants consisted of a convenience sample of immigrants. The inclusion criteria for the study were: 18 years of age or greater, living in Marion County or surrounding area, and foreign-born (i.e., an immigrant to

the United States). Verbal consent was obtained at the time of the interview, prior to administering the survey. Research assistants and data collectors used smartphones to access the survey. Multiple surveys were conducted from the same device, and at various locations. Research assistants and data collectors asked the survey questions orally and recorded the answers immediately. They also documented where the interview took place and the location of adult education class.

Results

Demographic Data

Demographic and decoding data from 1,254 adult immigrants was collected and analyzed, which represented > 1% of the immigrant population at the time of the study. Although the data results reflect the composition of the data collection team, and there are inherent limitations to convenience sampling, the critical demographic characteristics of the sample align well with the target population.

The respondents were 60% female, 40% male, ranging in age from 18-70+ years, with the majority in the 30-39 age group. Most respondents arrived in the U.S. before 2007, but there was a spike in arrivals in 2016, which corresponds to the increase in refugees to the United States from Syria under the Obama Administration (Connor, 2024).

The top three countries represented were Mexico, Burma (Myanmar), and Democratic Republic of Congo (DRC) (Figure B1). This data corresponds with the

top origin countries of refugees in 2016, which were the DRC, Syria, and Burma (Myanmar) (Greenwood, 2024). Refugees from those three nations represented nearly half (49%) of all refugees admitted to the United States in 2016 (Connor, 2024). In addition to the top 10 countries shown in Figure B2, over 60 other countries were represented. The most common languages spoken by the participants were Spanish, languages of Burma, Arabic, and Kiswahili, as well as over 60 other languages represented by our participants.

Twenty-five percent of the respondents said they had completed a postsecondary degree of some kind (Figure B2). This statistic corroborates the New American Economy 2016 data, which showed 27% of Indianapolis’s foreign-born residents (ages 25+) held at least a bachelor’s degree (New American Economy, 2018). Fifty-two percent had completed Grades 6-12, and 23% had only completed Grade 5 or below.

Class Enrollment

Fifty-seven percent of the immigrants surveyed were not enrolled in English class, whereas 43% were enrolled in an English class at the time of the study. However, 31% of the surveys were conducted by the researchers at English class sites which automatically implied class enrollment. If the surveys conducted at class sites were removed from the sample, the results showed that only 20% of those surveyed in the community were enrolled in English class. The top three countries of non-attendees in our study were Mexico, Burma (Myanmar), and DRC. The comparative educational levels of attendees and non-attendees can be seen in Table 1.

TABLE 1: Comparative Highest Schooling Level Completed

Highest Schooling Level Completed	Attendees	Non-Attendees
Grades 5 and Below	15.2%	30%
Grades 6-12	52.3%	51%
Postsecondary	32.5%	19%

The top three motivations for enrolling in English class were work, integration, and daily life (Figure C1). Reasons classified as “work” included responses such as, “...to be a nurse...to improve myself as a hotel worker... open business

here because of war in Syria...to speak with customers at my restaurant job... to defend myself at work when they say bad things about me to the supervisor.” The definition of integration in this study was the desire to feel included

and become part of the fabric of society here, and could be characterized by comments such as, “to understand my children’s future boyfriends/girlfriends, English is the key to life here; it is indispensable; I want this country; in this country I need English; to understand people’s jokes; to understand the TV, to open other doors, to be independent from children, to speak with my grandbaby.” Feelings of frustration permeated the comments, as seen in “I feel stuck in house; I feel sometimes really blocked; if you don’t speak English, you can’t be high.”

For those who were attending classes, the top three reasons they missed classes were work, health, and family, followed by weather and transportation (Figure C2). The work-related reasons for missing class often involved schedule and fatigue. Thirty percent of the responses involved overtime at work, and 24% of the responses were related to fatigue from work schedule, such as working 12-hour night shifts. For those who disenrolled from a class, work and family were the top reasons, followed by finished my goal and class ended.

As mentioned, 80% of people surveyed in the community were not enrolled in English classes at the time of the study, and 67% of all respondents had never enrolled in English classes, citing work, family, and transportation as the main reasons (Figure C3).

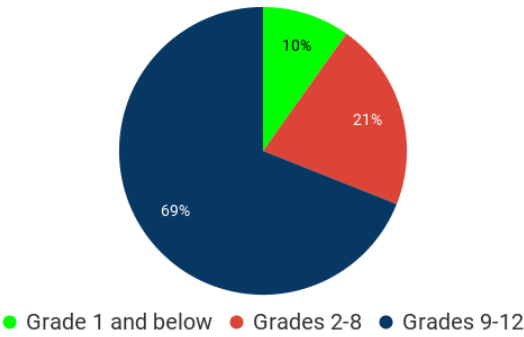
Reading Levels

Native Language Decoding

Most survey respondents (69%) read at a high school level in their native language (Figure 1).

FIGURE 1: Native Language Reading Levels of All Respondents

Native Language Reading Levels of All Respondents



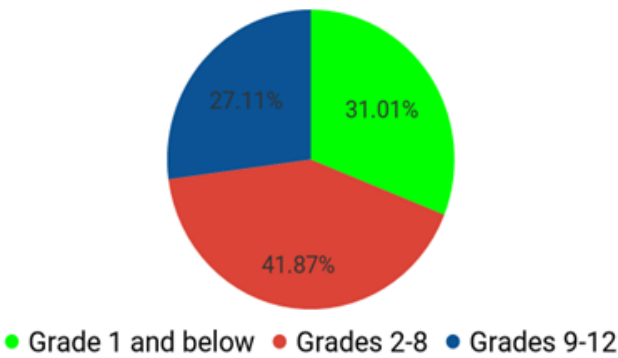
Ten percent of the respondents scored Grade 1 and below in their native language. We will refer to these learners as pre-literate. Eighty percent of pre-literate learners were currently not taking classes, and 70% had never gone to class. The three main reasons for never attending class were work, family, and can’t learn. If they attended and then stopped, the top three reasons they gave were family, work, and too hard.

English Language Decoding

Reading levels in English, based on the reading diagnostics, are shown below (Figure 2).

FIGURE 2: English Reading Levels of All Respondents

English Reading Levels of All Respondents



Thirty-one percent of all immigrants surveyed, totaling 389 people, had decoding ability of Grade 1 and below in English. The top three countries reflected in this group were Mexico, DRC, and Burma (Myanmar), and the main languages of this group were Spanish, Kiswahili, Arabic, and Karenni. We will refer to this 31% as emergent readers of English.

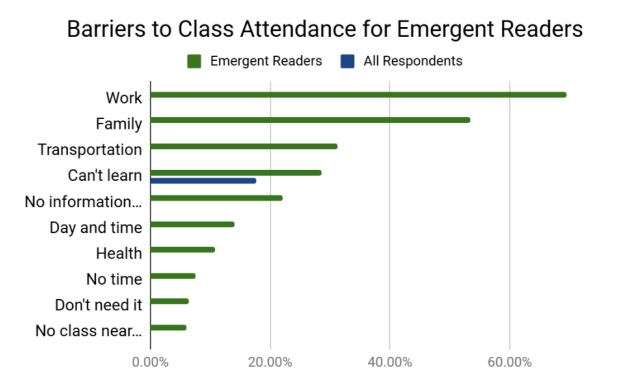
At the time of the study, 79% of emergent English readers were not currently enrolled in classes - comparable to all respondents (80%). The results of our research showed, however, the effect of literacy on past enrollment tendencies. Specifically, 81% of emergent readers had never enrolled, compared with 67% of all respondents (Table 2).

TABLE 2: Comparative Enrollment Tendencies

Respondents	Not Currently Attending	Never Attended
All Respondents	80%	67%
Emergent Readers of English	79%	81%

The main reasons for emergent readers never enrolling in English class were work, family, and transportation, followed by can't learn. Twenty-nine percent said, "can't learn," compared to 18% of all respondents (Figure 3).

FIGURE 3: Barriers to Class Attendance for Emergent Readers of English



For the emergent readers, too hard was a much more common reason for disenrolling from classes. In comparing the reasons why emergent readers of English stopped attending classes, too hard moved up from seventh position (all respondents) to third position, after work and family.

FIGURE 4: Comparative Reasons for Discontinuing Classes



Additionally, when asked their opinion about class level, 62% of emergent readers expressed that the class level was "too hard," compared with 28% of all respondents (Figure 5).

FIGURE 5: Comparative Opinions of Class Level

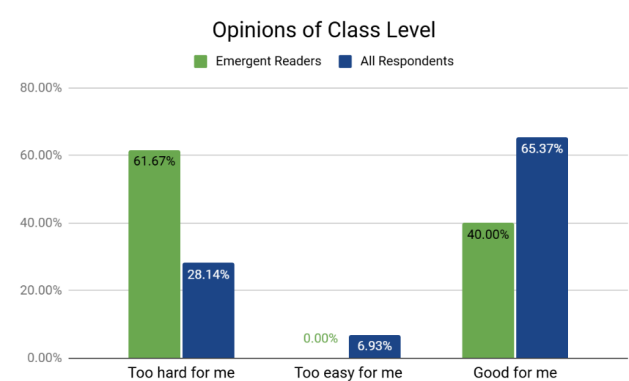
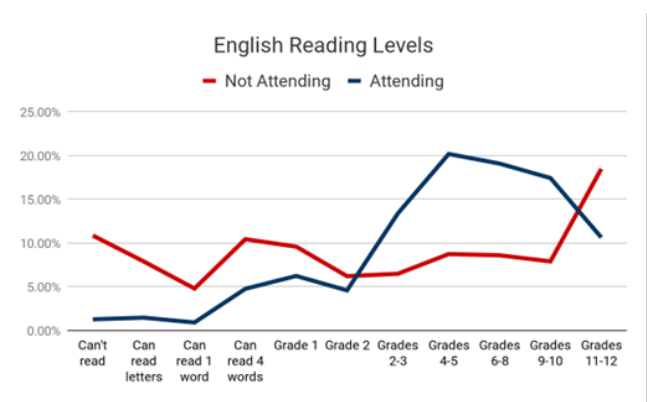


Figure 6 depicts the comparative reading diagnostic scores of those attending and not attending English classes at the time of the study.

FIGURE 6: English Reading Levels and Attendance



The majority of immigrants attending class had decoding levels in English between Grades 2-10 (Figure 6). For those not attending, the highest points on the line graph were at either end, representing those who "can't read" and those who decode English quite fluently.

Discussion

Educational Background

One of the main findings from our research was that emergent readers with minimal levels of education from their home countries exist in immigrant communities, possibly at a much higher rate than traditional immigrant data can show. Nearly one-third of immigrants (31%) surveyed were emergent readers of English, and nearly one-fourth (23%) had limited formal education (Grade 5 or less). Regarding collecting educational background data, the lowest educational attainment in immigrant research is often designated as less than high school (New American Economy, 2024). U.S. Census data does not include educational background, and in the PIAAC study, the educational level designations were less than high school, high school diploma, or postsecondary (Patterson & Paulson, 2015). An important aspect of our research was to show more differentiation in educational levels for the immigrant English learner population. We found that 23% (288) had educational levels of Grade 5 and below. Because this group may be overlooked in traditional immigrant survey methods, their existence in the immigrant communities can be hidden. If immigrants complete traditional surveys, less than high school does not adequately portray their educational backgrounds and needs. There is a significant difference in the educational needs reflected by someone with 10 years of education, and someone with none.

Reading Levels

As previously mentioned, nearly one-third of immigrants (31%) surveyed were emergent readers of English, and while this data may not be captured in traditional research methods such as written surveys, these findings do correlate with other national research (Kirsch et al., 2002; Wiley, 1996); the NALS findings placed 35% in the lowest literacy category for English. Our findings showed 31% of all participants (389) had decoding skills of Grade 1 or below in English, a subset of which (122 respondents) were preliterate learners with limited decoding ability in their native language. Literacy in one language aids literacy development in another language (Condelli et al., 2003); many of these students face the challenge of developing basic literacy skills—including decoding, comprehending, and producing print—along with proficiency in English

(Condelli et al., 2010). Although there is minimal research on adults who are learning English while simultaneously acquiring basic literacy for the first time (Bigelow & Schwartz, 2010), if someone has not had the opportunity to gain literacy skills in their first language, the challenge is even greater in a second language.

Barriers to Learning English

The study set out to discover the main hurdles for English learning in our urban setting, and the results showed that while 80% of people surveyed in the community were not currently enrolled in English classes, 67% had never enrolled, citing work, family, and transportation as the main barriers. The chief reasons for missing classes were work, health, and family, followed by weather and transportation. For those who disenrolled from a class, work and family were cited most. Family needs are a common situational barrier for English learning in that children's activities, family events and household responsibilities are often prioritized over attending English class. In our study, some of the reasons given for missing or not attending classes were children's school or sports schedule, family health or pregnancy, or no time due to family responsibilities, such as a single mother or widow caring for children. Those with babies or preschool children were unable to find local classes which provided childcare. These barriers of work, family, health, weather, and transportation correlate to findings from other studies, such as the CAPE study, which showed work, family, and transportation as most often cited (Patterson & Song, 2018), and were therefore unsurprising.

In examining the barrier of work more closely, we noticed it presented more often as an institutional barrier because it related to policies which prevented English class participation, such as mandatory overtime or inflexible work schedules. In our study, 30% of the work-related responses involved mandatory overtime, and 24% of the responses were related to fatigue from working long shifts. Improving work situations was the main motivation for learning English, but work policies stood as an impediment.

The study revealed that dispositional barriers were more prevalent among those with emerging English literacy skills (decoding of Grade 1 or below in English). For both lack of enrollment and disenrollment, emergent readers of English mentioned can't learn and too hard

at higher rates than all other participants. For emergent readers, can't learn was a stronger reason to never enroll (Figure 3), and too hard was a more prominent cause for disenrollment (Figure 4). Furthermore, when asked their opinion about class level, 62% of emergent readers chose too hard, compared with 28% of total respondents (Figure 5). These persistent reasons given for why emergent readers never enroll, or disenroll are dispositional deterrents because they are internal to the learners, and include "lack of motivation, anxiety or fear, or loss of confidence in themselves" (Patterson & Song, 2018, p. 1-2; Bairamova & Dixon, 2019b). Can't learn reveals lack of confidence in their ability as a language learner, and was given as a reason why not to enroll; too hard implies an insurmountable obstacle based on their skills, and was given as a reason to disenroll. These dispositional deterrents add nuance to the barriers faced by immigrants in our urban setting.

Effects on Enrollment

To answer the research question of the effect of literacy levels on classroom enrollment, our study revealed some predictable albeit previously speculative findings. The effect of limited or interrupted formal education on enrollment was evident in that respondents with 5 years or less of formal education were much less likely to attend class than respondents with higher education levels, and twice as likely not to attend than to attend (see Table 1). Similarly, we found that enrollment tendencies decrease as limited literacy increases; 81% of emergent readers had never enrolled, compared to 67% of all respondents. The English diagnostic decoding levels for non-attendees compared with attendees revealed that the lower the decoding level, the higher the non-enrollment (Figure 6). For participants with decoding levels between Grades 2 and 10, enrollment in classes increased, after which it tapered off. This implies that the adult education programs are geared for and serve well those learners with English decoding skills between Grades 2–10. Meanwhile, those with decoding skills of Grades 0–1.9 (i.e., National Reporting System Level 1) were less likely to attend.

Implications of Research

Obstacles to learning exist - many are predictable and unavoidable; others are actionable. Barriers of family,

health, transportation, and weather are inherent to the human immigrant experience; institutional barriers related to work, such as mandatory overtime, are prevalent but actionable if employers recognize the value of investing in English learning at workplaces. Advocating for incentivizing businesses to support immigrant employees' English language needs could lead to work, the main motivation and the main roadblock, becoming the main vehicle for growth. Dispositional barriers related to lack of confidence in skills or ability to learn can be altered with more targeted classroom offerings, better teacher training, and funding to support programming.

Lack of native language and English decoding abilities influence enrollment tendencies; the barrier of limited literacy is consequential in immigrants accessing English learning opportunities. Our research supports the need to create learning environments tailored to the unique needs of adult ELL emergent readers, such as building foundational skills and fostering confidence, so they will feel supported and set up for success.

Furthermore, our study brings to light the need for more teacher training to work with emergent readers. In the citywide and adult education professional development gatherings following the research, teachers consistently expressed the need for more training because they generally felt ill-equipped to work with adult ELL emergent readers, as many higher education TESOL certificate and degree programs do not provide specific training in that area. Research shows that the chances of success of migrant adult learners significantly increase when they are taught by well-trained and knowledgeable teachers (Condelli et al., 2010). Teacher training programs should include skills for working with adult ELL emergent readers, to better equip TESOL professionals. Moreover, there is a national trend of a steady increase of students entering adult education English classes at the beginning level. According to 2008 program year statistics from the U.S. Department of Education, 8% of the students in federally funded adult education programs entered at the lowest ESL level, beginning literacy (Condelli et al., 2003). More recent data (Indiana Department of Workforce Development, 2023) shows the percentage of learners entering adult education at National Reporting System Level 1 rose to 15% in 2021-2022 program year. Given the high percentage of adult immigrants with limited literacy at the time of our study, as well as the increasing numbers

of learners at National Reporting System Level 1 entering adult education programs, more priority should be given to teacher training in this area.

The preliterate learners, i.e., the 10% of respondents with limited decoding ability in their native language, face difficulties and present unique challenges for classroom teachers. Although in this study we don't have comparative disenrollment percentages, other research shows that "adults with no print literacy did poorly in beginning ESL classes that stressed literacy, and they dropped out in much larger numbers than did more literate students," (LaLyre, 1996, n.p.). They need focused instruction on foundational literacy skills as they navigate the text-heavy world they live in. Some of them may feel intimidated by the classroom setting and their lack of native language literacy. If they are grouped with learners who have literacy skills in their native language, they often fall behind and get discouraged (Bigelow & Schwarz, 2010). Their starting places should be considered in educational offerings.

Limitations

One limitation of our study was that the data collection team was not a complete representation of the immigrant population of Indianapolis. There was no one on the team who spoke Urdu, Hindi, Portuguese, or Farsi, although these language groups are represented in our local urban area. The data results reflect the composition of the data collection team, and not the full immigrant population of our city.

The research was a convenience sampling with defined parameters for inclusion criteria. Convenience sampling has inherent potential biases, such as sampling and observer bias. Participants were chosen based on proximity and convenience, after which they were required to meet the inclusion criteria. To limit bias, we attempted to diversify our data collection team by including a variety of languages and cultural backgrounds on the team and collecting data on as many participants as possible within the time frame allotted. Furthermore, surveys were conducted on different days and times, and in various locations.

Additionally, this research was limited to an urban setting—a mid-size city in the midwest United States;

results of convenience sampling in a more rural setting may differ significantly.

Conclusions and Recommendations

Our study found an important gap in English language learning services for immigrants with emerging English literacy. About one third of the immigrant cohort had limited literacy in English. To ensure equitable access to those referred to as the highest of high-risk students (DeCapua et al., 2007), funding to increase classes, curriculum and teacher training is critical. These students are often overlooked in educational offerings because they are hidden in traditional immigrant data. Our findings highlight the need for states, municipalities, and local programs to work together to expand opportunities for holistic support and English language and literacy programming (Vanek et al., 2020). Those with 5 years or less of formal education often do not receive the support they need from employers, educational institutions, governmental agencies, health providers and community partners to help them navigate the complicated bureaucratic systems. Support from employers seems to be lacking for adults who need it most—those at the lowest education levels (Patterson, 2018). They have lacked opportunities for schooling in their home countries; their needs should be considered in citywide services.

Due to the research project's findings, concrete steps have been taken to make our city more welcoming and equitable. Among those steps: the IWC developed two programs focused on addressing the gaps revealed in the research—the need for more classroom instruction, curriculum and teacher training for adult ELL emergent readers, and a focus on raising awareness about the return on investment for employers in their immigrant employees' learning opportunities.

Future research should strive to increase the number of languages represented on the data collection team and the number of study participants, which would lessen potential research bias inherent in convenience sampling studies. Future research could also replicate this study in other mid-size urban areas in the U.S. who desire to gain deeper insight into the constituency of their immigration populations to ensure resources are aimed at meeting gaps in services.

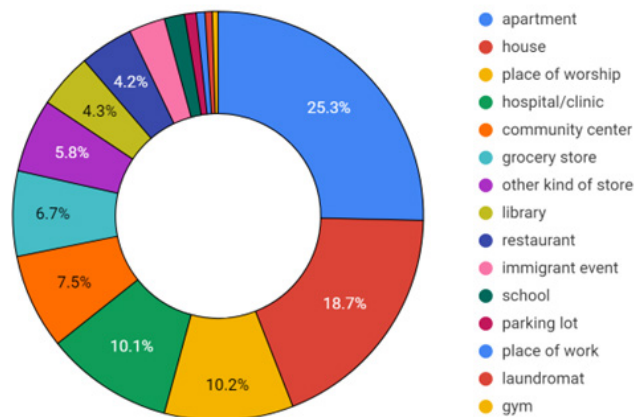
References

- Bairamova, N., & Dixon, C. (2019a). *Barriers to learning, part 1. 21st Century Learning Ecosystem Opportunities* (21CLEO). EdTech Center at World Education. <https://edtech.worlded.org/barriers-to-learning-part-1/>
- Bairamova, N., & Dixon, C. (2019b). *Barriers to learning, part 2. 21st Century Learning Ecosystem Opportunities* (21CLEO). EdTech Center at World Education. <https://edtech.worlded.org/barriers-to-learning-part-2>
- Bigelow, M., & Schwarz, R. (2010). *Adult English language learners with limited literacy*. National Institute for Literacy. <https://eric.ed.gov/?id=ED512297>
- Brown, A. (2023). *When surveying small populations, some approaches are more inclusive than others*. Pew Research Center. <https://www.pewresearch.org/short-reads/2023/05/08/when-surveying-small-populations-some-approaches-are-more-inclusive-than-others/#random-sampling>
- Burt, M., Peyton, J. K., & Adams, R. (2003). *Reading and adult English language learners: A review of the research*. Center for Applied Linguistics.
- Campbell, A., & Kirsch, I.S. (1992). Assessing literacy: The framework for the National Adult Literacy Survey (NCES 92-113). U.S. Department of Education, National Center for Education Statistics.
- Comprehensive Adult Student Assessment Systems (2016). *CASAS reading standards: The relationship to the college and career readiness standards for adult education and the NRS educational functioning levels for ABE/ASE*. https://www.casas.org/docs/default-source/research/casas-reading-standards-2016-second-edition.pdf?sfvrsn=36733d5a_2?Status=Master
- Condelli, L., Cronen, S., Bos, J., Tseng, F., and Altuna, J. (2010). *The impact of a reading intervention for low-literate adult esl learners* (NCEE 2011-4003). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. <https://www.air.org/project/what-works-study-adult-esl-literacy-students>
- Condelli, L., Wrigley, H., Yoon, K., Cronen, S. & Seburn, M. (2003). *The What Works Study for adult ESL literacy students: Final report*. American Institutes for Research. <https://www.air.org/project/what-works-study-adult-esl-literacy-students>
- Connor, P. (2024, April 14). *U.S. admits record number of Muslim refugees in 2016*. Pew Research Center. <https://www.pewresearch.org/short-reads/2016/10/05/u-s-admits-record-number-of-muslim-refugees-in-2016/>
- DeCapua, A., Smathers, W., & Tang, L. F. (2007). Schooling interrupted. *Educational Leadership*, 64(6), 40-46.
- Geiger, A. (2024, April 14). *5 facts about the U.S. rank in worldwide migration*. Pew Research Center. <https://www.pewresearch.org/short-reads/2016/05/18/5-facts-about-the-u-s-rank-in-worldwide-migration/>
- Greenwood, S. (2024, July 26). *Facts on U.S. immigrants, 2018*. Pew Research Center. <https://www.pewresearch.org/hispanic/2020/08/20/facts-on-u-s-immigrants-current-data/>
- Indiana Department of Workforce Development. (2023). *Indiana adult education*. <https://www.in.gov/dwd/career-training-adult-ed/adult-ed/>
- Immigrant Welcome Center. (2017, December 5). *Indianapolis immigrant integration plan*.
- Jin, Y., Kling, J., & American Institutes for Research. (2009). *Overcoming the language barrier: The literacy of non-native-English-speaking adults*. <https://www.dol.gov/sites/dolgov/files/ETA/publications/Overcoming%20the%20Language%20Barrier%20-%20The%20Literacy%20of%20Non-Native-English-Speaking%20Adults.pdf>
- King, K.A., & Bigelow, M. (2016). *Native language literacy assessment (NLLA)*. University of Minnesota College of Education and Human Development.
- Kirsch, I., Jungeblut, A., Jenkins, L., & Kolstad, A. (2002). *Adult literacy in America: A first look at the findings of the National Adult Literacy Survey*. U.S. Department of Education <https://nces.ed.gov/pubs93/93275.pdf>
- LaLyre, Y. (1995). Issues in assessment of native language literacy. *Adventures in Assessment*, 8, 19-28.
- New American Economy (2019). *Indianapolis Metro Area*. <https://www.newamericaneconomy.org/city/indianapolis/>
- New American Economy (2024). *Indianapolis Metro Area*. <https://www.newamericaneconomy.org/city/indianapolis/>
- Pathway to Literacy. (2018). *Reading diagnostic tools*. <https://www.pathwaytoliteracy.org/intake-diagnostic-assessment>
- Patterson, M. B. (2018). The forgotten 90%: Adult nonparticipation in education. *Adult Education Quarterly*, 68(1), 41-62. <https://doi.org/10.1177/0741713617731810>
- Patterson, M. B., Paulson, U. G., & Research Allies for Lifelong Learning. (2015). *Adult transitions to learning in the USA: What do PIAAC survey results tell us?* [Commissioned Paper]. American Institutes for Research. https://static1.squarespace.com/static/51bb74b8e4b0139570ddfo20/t/54da7639e4b0990535ec333a/1423603257773/Patterson_Paulson_PIAAC.pdf

- Patterson, M. B., & Song, W. (2018). *Critiquing adult participation in education, report 1: Deterrents and solutions*. ValueUSA. <https://researchallies.org/services/critiquing-adult-participation-in-education-cape>
- Pew Research Center. (2019, February 5). *U.S. unauthorized immigrant population estimates by state, 2016*. <https://www.pewresearch.org/race-and-ethnicity/feature/u-s-unauthorized-immigrants-by-state/>
- U.S. Census Bureau. (2022, November 29). *2020 Census*. <https://www.census.gov/programs-surveys/decennial-census/decade/2020/2020-census-main.html>
- U.S. Census Bureau. (2023, August 4). *Decennial census of population and housing by decades*. <https://www.census.gov/programs-surveys/decennial-census/decade.2010.html>
- Vanek, J., Wrigley, H. S., Jacobson, E., & Isserlis, J. (2020). All Together Now: Supporting Immigrants and Refugees through Collaboration. *Adult Literacy Education*, 2(1), 41-47.
- Wiley, T.G. (1996). Literacy and language diversity in the United States. Center for Applied Linguistics and Delta Systems. <https://ci.nii.ac.jp/ncid/BA81818884>

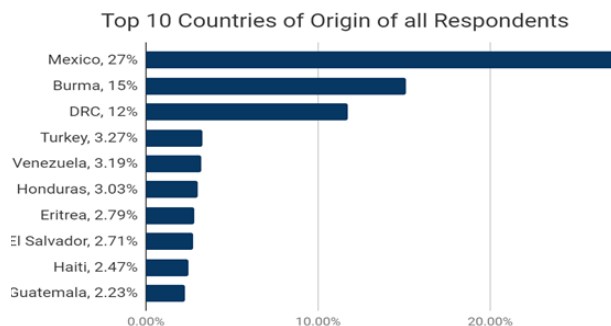
Appendix A

FIGURE A1: Sites of Surveys around City



Appendix B

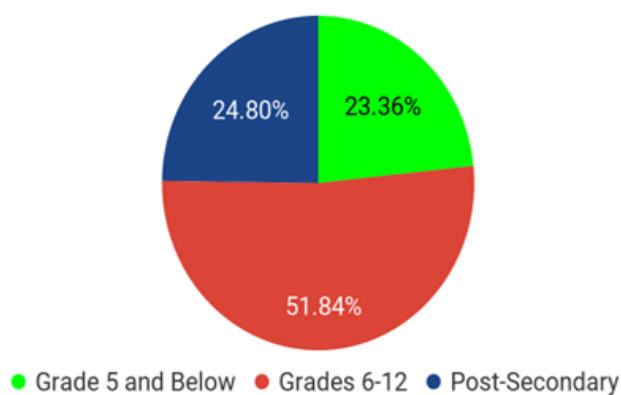
FIGURE B1: Countries of Origin



Note. Percentages will not add up to 100% because of omitted data. (Burma = Myanmar)

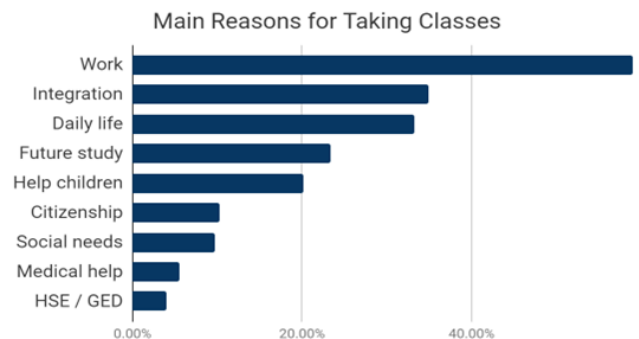
FIGURE B2: Highest Schooling Levels Completed of All Participants

Highest Schooling Level Completed in Country of Origin



Appendix C

FIGURE C1: Motivation for Classes



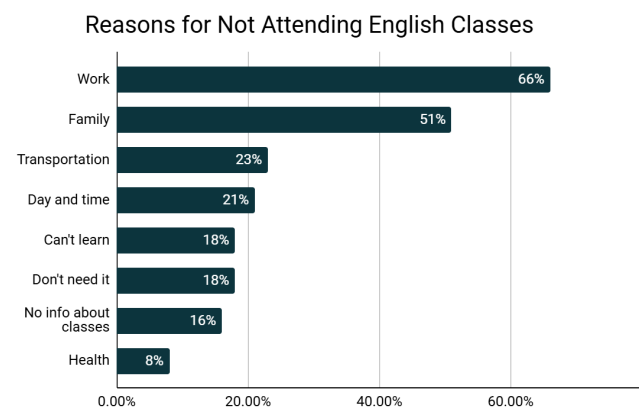
Note. Percentages are more than 100% because respondents chose two answers.

FIGURE C2: Reasons for Missing Classes



Note. Percentages are more than 100% because respondents chose two answers.

FIGURE C3: Reasons for Not Attending English Classes



Note. Percentages are more than 100% because respondents chose two answers.

Appendix D

Survey Questions

Demographic data collected included country of origin, native language, year of arrival to the U.S., and level of schooling in their home country.

If they were currently taking classes, the questions were about how they found out about class, their main reasons for taking class, how they got to class, reasons why they missed class, opinions about size, level, testing, classroom

activities, and what they felt they needed to learn more.

If they weren't currently enrolled in classes, they were asked if they had ever enrolled. If yes, the follow-up questions asked were centered around reasons for discontinuing, their opinions about size, level, testing, classroom activities, needs, and how they felt about learning English.

If they had never enrolled in an English class, the questions focused on reasons why, their perceived learning needs, and how they felt about learning English.