IMPROVING GRADUATION RATES FOR ENGLISH LEARNERS IN FAIRFAX COUNTY PUBLIC SCHOOLS

NORA SURBEY

UNIVERSITY of VIRGINIA
FRANK BATTEN SCHOOL of LEADERSHIP and PUBLIC POLICY

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Disclaimer

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Honor

On my honor as a student, I have neither given nor received unauthorized aid on this assignment.

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Glossary & Acronyms

- **ESOL:** English for Speakers of Other Languages; school programs and categorization for English learners
- **EWS:** early warning system; data-based intervention system for indicators of graduation rates
- **FCPS:** Fairfax County Public Schools
- **Mainstream Student:** refers to anyone who is not an English learner
- **Newcomer:** a student who has recently arrived in the United States
- **Nontraditional High School:** refers to two high schools in Fairfax County; smaller, alternative high school for students with significant life, academic, or behavioral obstacles
- **SIFE:** Students with Interrupted Formal Education; subset of students within 'newcomer' category who have large gaps in years of education
- **SOL Test:** *Standards of Learning*; Virginia end-of-course standardized test

Executive Summary

English learners are more likely to face obstacles in and out of school that prevent them from achieving at the same level as their peers. This is most evident in graduation rates, where the gap between English learners and all other students is troubling. **In Fairfax County Public Schools (FCPS), English learners graduate at a rate that is 20.5 percentage points lower than the average for all other students.** This is a growing concern, especially as English learners have been disproportionately affected by the Covid-19 pandemic.

FCPS is working to address achievement gaps across all demographics. The FY21 and FY22 budgets include funding for new graduation coordinators in high schools and additional ESOL teachers across all grade levels. For English learners specifically, FCPS is working to make graduation easier for newcomers through modified requirements and additional school support. While these are great steps towards a more equitable outcome for English learners, they are insufficient given the drastic differences in graduation rates.

This report explores the potential causes and effects of low graduation rates for English learners and examines existing literature on the topic. It then proposes four potential alternatives to mitigate the gap in graduation rates:

1. Let present trends continue
2. Increase ESOL-specific professional development opportunities for all school counselors
3. Develop and implement protocols for data-based early warning systems (EWS) in high schools
4. Partner with George Mason University to establish a volunteer mentorship program for ESOL students

After analyzing each alternative based on the criteria of effectiveness in improving graduation rates, equity with resources specifically targeted towards English learners, cost of time for existing staff, and administrative feasibility, **this report recommends that FCPS establish a volunteer mentorship program in partnership with George Mason University to support ESOL students.** This has the greatest potential to improve academic and non-academic support for English learners and improve graduation rates in the future.

Problem Definition

While the overall graduation rate for all students in Fairfax County Public Schools is 93 percent, **only 72.5 percent of English learners graduated from high school in 2019** (VDOE, 2020). Though this is a problem throughout the United States, the graduation rate for English learners in Fairfax County is lower than the average across the state of Virginia and within surrounding counties.

Fairfax County Public Schools, an affluent school district in the suburbs of Washington, D.C., is the 10th largest school district in the country, serving more than 188,000 students (FCPS, 2020). Of these 188,000 students, nearly 27 percent are English language learners who speak 200 different languages (FCPS, 2020). Within FCPS, there are 26 high schools, including 2 nontraditional, alternative high schools which serve students who have faced disruptions in education from differing life circumstances.

English learners face significant obstacles to learning throughout their education. These include language and culture barriers, insufficient support in and out of schools, and competing priorities. Many are forced to work outside of school to support their families or take care of family members and siblings, all while trying to get an education. These obstacles are seen in students across the district, and the effects are most evident in graduation rates. The low graduation rate for English learners is detrimental to individual students and families as well as the community at large.

In order to understand the severity of the problem of graduation rates between English learners and other students, it is important to compare these numbers nationally and with nearby, similar counties (Figure 1).

In 2018, the public high school graduation rate in the United States was 85 percent (National Center for Education Statistics, 2020). The national graduation rate for English learners is around 67 percent, which is slightly less than the rate in FCPS (US Department of Education, 2019). Nationally, the graduation rate gap between English learners and other students is 18 percentage points, however, in FCPS, the gap is 20.5 percentage points.

In nearby counties of Arlington, Loudoun, and Alexandria, the disparity between English learners and non-English learners is not as pronounced. The gap between English learners and mainstream students in Arlington and Alexandria is only around 11 percentage points. In Loudoun County, the gap is about 17 percentage points. Each gap in graduation rates is lower than the national and state average and FCPS.

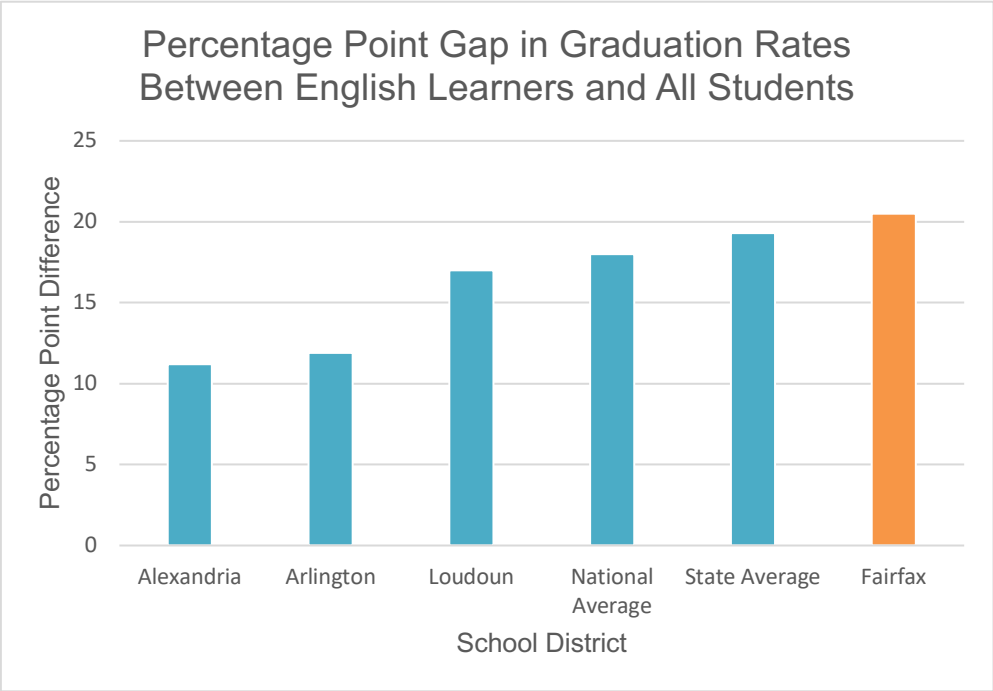

Figure 1: Gap in graduation rates by county, including state and national average (VDOE, 2020; US Department of Education, 2019)

However, since 2017, the trends of English learner graduation rates in Fairfax County have been promising (Figure 2). In 2017, only 67.5 percent of English learners graduated in four years (VDOE, 2020). That number has been steadily increasing, from 69 percent in 2018 to 72.5 percent in 2019 (VDOE, 2020). However, the overall graduation rate for all students also increased in that period from 91.5 percent in 2017 to 93 percent in 2019 (VDOE, 2020). This demonstrates that FCPS is working on graduation rates more generally, as well as improving support for English learners specifically. Despite the 5-point improvement in the past two years, there is still significant gap in graduation rates between English learners and all other students.

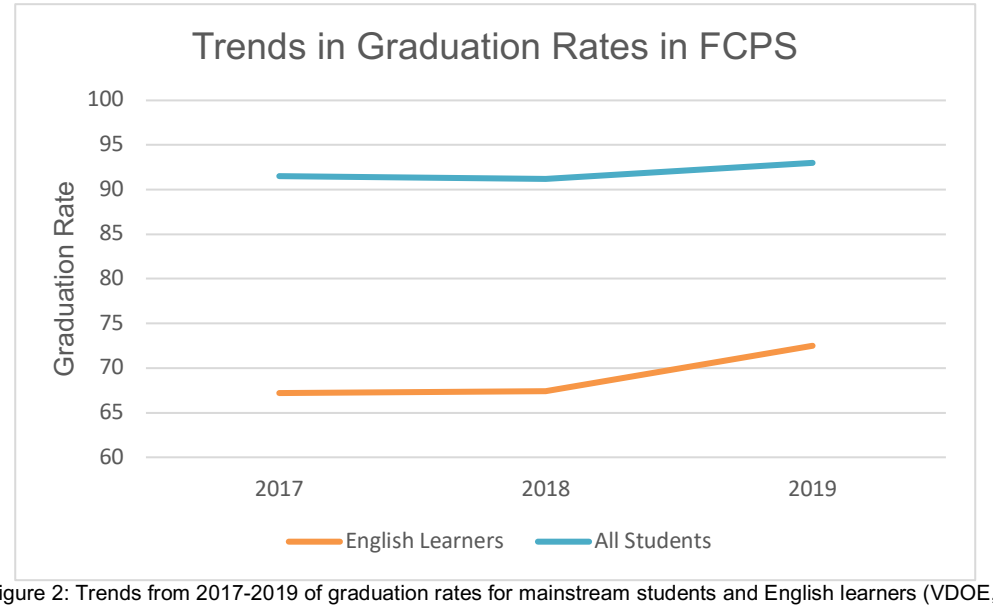

Figure 2: Trends from 2017-2019 of graduation rates for mainstream students and English learners (VDOE, 2020

Background

In order to explore the issue of graduation rates further, it is important to understand background factors that are potentially contributing to the problem. The factors that are most relevant to English learners in Fairfax County include poverty, academic performance, and family engagement.

Poverty

Many studies have demonstrated that poverty has a strong effect on graduation rates and school achievement. Poor students are five times more likely to drop out of high school than wealthier students (Rumberger, 2013). Families and children in poverty are more likely to have negative stressors in their home lives. Factors such as homelessness, food insecurity or substance abuse among family members negatively contribute to school performance (Rumberger, 2013).

In addition to negative psychological effects, students living in poverty are more likely to have to work outside of school and contribute to their familial income (Latham, Scott, & Koball, 2016). Nearly 30 percent of high school dropouts were working another job (Latham, Scott, & Koball, 2016). On average, many of these students contributed 24 percent of their overall household income (Latham, Scott, & Koball, 2016). When students are required to work a job outside of school, they have less time to contribute to academics. This may be a factor for English learners in Fairfax County, as working teenagers are more likely to be first-generation Americans and Hispanic individuals (Latham, Scott, & Koball, 2016).

It is important to look at the potential impact of poverty for Fairfax County specifically. The overall poverty rate in Fairfax County is only 6 percent, but 9 percent of people who speak a language other than English at home are in poverty (Fairfax County, 2020). Both of these are lower than the national poverty rate, but in an affluent area such as Fairfax County, Virginia, poverty can have a big impact on learning and other outcomes. As students compare themselves to classmates, they may become discouraged and choose instead to give up.

Poverty is a contributing factor to graduation rates in FCPS and nationally, but it may not be the strongest factor for English learners. In FCPS, economically disadvantaged students still graduate high school at much higher rates than English learners. The graduation rate for economically disadvantaged students is still lower than that of all students at nearly 90 percent, yet it is 18.5 percentage points higher than English learners (VDOE, 2020). Poverty may be a part of the story for English learners, but it is likely not the main reason that students do not graduate from high school.

Academic Performance

Similar to students living in poverty, students who struggle academically are less likely to graduate from high school (Melville, 2006). Many English learners struggle in part because they enter into the school system behind their peers or are held to less

rigorous academic standards. Based on the classification of English proficiency, English learners are often unable to reach the required credits to graduate high school in four years (Callahan, 2005; Umansky, 2015). The requirements for classes and the 'tracks' of courses that students are allowed to take changes based on different levels of English proficiency (Callahan, 2005; Johnson, 2019; Umansky, 2015). This poses a problem for students trying to achieve a certain number of credits to graduate. While the other students in the school have few issues enrolling in all of the credits, it becomes nearly impossible for immigrants who have recently arrived in the country or students with low English proficiency to graduate on time.

This is likely a problem for English learners in Fairfax County. For a standard diploma in Virginia, students need 22 credits: 4 English classes, and 3 math, history, and science classes as well as electives and health classes. They need to pass 5 Standards of Learning (SOL) tests. This is difficult for some English learners, especially if they immigrate to the country at an older age or in the middle of their high school years. English is the most difficult credit to obtain, especially if a student's proficiency is too low for mainstream classes in their freshman year. They are then a year behind their peers for English credits.

*Only **23 percent** of English learners passed the 11th grade English reading SOL in 2019*

The extent to which English learners struggle on standardized tests is especially concerning. For example, only 23 percent of English learners passed the 11th grade English reading SOL in 2019 (VDOE, 2020). This was significantly lower than every other demographic. This number is 45 percentage points lower than economically disadvantaged students (VDOE, 2020). Virginia students need to pass at least two English SOLs to graduate high school. If only 23 percent of English learners passed their final English SOL, this presents a significant obstacle to graduation. English learners may not be able to complete these credits in time or may drop out in response to the difficulty of school.

Family Support

Research has demonstrated that a lack of family support and engagement can contribute to poor academic performance, eventually leading to high school dropouts (Henderson & Mapp, 2002). This effect can be seen regardless of socioeconomic background. Students with involved parents are more likely to stay in school, perform well academically, refrain from substance abuse, and attend school regularly (Henderson & Mapp, 2002). However, language and culture barriers for English learners and their families may result in less parental engagement in schoolwork.

Many studies and anecdotal evidence have demonstrated that parents and families of English learners are less likely to be engaged in their children's schoolwork (Tarasawa & Waggoner, 2015). This might be due to a lack of communication between parents and

schools as a result of a significant language barrier, especially with English learners in FCPS speaking more than 200 different languages (Tarasawa & Waggoner, 2015). These parents also might be more reluctant to volunteer or reach out to schools in fear of revealing their immigration status or experience with schools in the past. It is also possible that these parents are working longer hours and more demanding jobs to provide for their families. Because of this, parental involvement, or lack thereof, could be a contributing factor to English learner graduation rates.

As mentioned above, no singular factor accounts for low English learner graduation rates. Some things, such as familial poverty, will not be able to be solved in the scope of this project. However, it would be possible to tackle student achievement or parental engagement through district and school-wide interventions.

Current Situation

The pandemic has increased the urgency for additional support for English learners. These students have struggled disproportionately as a result of Covid-19 and virtual schooling. In a recent report, the number of English learners in FCPS receiving at least two F's this fall has increased 106 percent since 2019 (Natanson, 2020). In addition, the likelihood of any student passing an English class has decreased by 40 percent (Natanson, 2020). The negative impact of the pandemic will likely persist for years into the future and should be considered when analyzing current and future graduation rates.

> *The number of English learners receiving two 'Fs' this fall has increased by **106 percent***

Prior to the pandemic, FCPS was working on increasing ESOL graduation rates. In 2015, FCPS created a pilot program intended to increase graduation rates among all English learners with a specific focus on newcomers and Students with Interrupted Formal Education (SIFE). "Newcomers" can be defined as students who entered the school year at a school in the US for the first time. SIFE refers to a subset of students within the broader newcomer category who may have had some school in their home country, but have now arrived in FCPS having taken a long gap.

The pilot program was offered at 2 high schools and has since been implemented county-wide. It was a program focused on supporting English learners through specialized courses, instruction, and cultural inclusivity. The program offered a path to newcomers to graduate in four years which has often been difficult in the past. The program changed the regulations for graduation, waiving the world history SOL requirement for these students and allowing ESOL English to count as an English credit. It also offered more opportunities for professional development among teachers and school officials.

The two schools that received the program first were Justice High School and Lewis High School. The results of the intervention have been mixed, but it is also possible that other factors played a role. At Justice High School, the graduation rate actually decreased for English learners from 77.5 percent in 2017 to 75.3 percent in 2019 (VDOE, 2020). At Lewis High School, the graduation rate for English learners increased from 71.8 percent in 2017 to 84 percent in 2019 (VDOE, 2020). At this point, it is too difficult to make a causal claim about the benefits of the current trends in FCPS. The impact of this long-term intervention may also differ in coming years due to the pandemic.

Existing Evidence

While there are many potential solutions to improve graduation rates, the following review of the evidence will be centered around the potential policy alternatives in this proposal: providing specific graduation counselors at schools, increasing the quality of ESOL teachers, improving counselor effectiveness, enhancing interventions with early warning systems, and initiating a mentorship program. In general, there are very few studies about English learners, and more broadly, there are very few randomized trials about interventions to improve graduation rates. This is because it could be perceived as unethical for a potentially life-changing program to be randomly assigned. This is important to keep in mind as most of the studies presented will be case studies.

Specialized Graduation Coordinators

Research demonstrates that individualized monitoring and interventions focused on improving academic and non-academic outcomes can have a positive relationship to graduation rates, especially for students most at risk (Brown & McVee, 2012; Parise et al., 2017). One study of individualized supports to improve long-term outcomes for at-risk high school students demonstrated a positive relationship with non-academic outcomes, but no direct effect on academics (Parise et al., 2017). These non-academic outcomes, such as behavioral and emotional connections to school, can positively influence a student's choice to graduate and persevere academically. Another study in an Alaskan school district determined that the inclusion of comprehensive graduation coordinators on the administrative team, referred to as graduation coaches, was associated with a 9-percentage point increase in student graduation rates (Brown & McVee, 2012). These coordinators were responsible for meeting individually with and preparing students to graduate, helping specifically those who were the most behind.

These studies demonstrate the importance of persistent support for the most at-risk students. However, neither study looked specifically at English learners, so the overall effectiveness for that demographic is unclear. In addition, both had small sample sizes, so the results may vary depending on the students and location. Using these studies as examples is still useful, as it allows policymakers to understand the potential of a successful intervention as well as what could have been done better. Graduation coordinators in FCPS could have a positive impact for high-risk students, such as English learners, if the support is consistent and comprehensive.

Teacher Quality

There is a wide body of research demonstrating a positive correlation between teacher quality, defined through test scores and evaluations, and a positive school environment with student achievement (Barrow & Markman-Pithers, 2016; Callahan, 2005; Koedel, 2008; Messacar & Oreopoulous, 2013). A better environment with more caring and effective teachers for English learners can help them become more engaged in the material while learning efficiently, ultimately leading to higher graduation rates as students stay in school longer (Barrow & Markman-Pithers, 2016; Koedel, 2008; Messacar & Oreopoulous, 2013).

While most research on teacher quality is assessed using test scores, Koedel (2008) specifically looked at teacher quality and the effect on graduation rates. The study demonstrated that teachers who taught more students, and were ultimately determined to be better performing teachers, were able to reduce the dropout rates of their students by between 4 and 14 percentage points. This is a wide range, but demonstrates that individual teacher quality may have a significant effect on graduation rates (Koedel, 2008). However, this study was only done at one school in San Diego, and the author acknowledges that there may be some measurement error in how quality teachers were assessed. It is important to consider this potential effect when looking at the proposed increase in ESOL teachers for the next fiscal year in FCPS.

The evidence demonstrates that an effective teacher can influence academic and non-academic outcomes and create a more positive school environment. This, in turn, could influence a student's desire to stay in school and graduate. A more effective teacher for ESOL students is one that has extensive training and certifications to work with ESOL students. Increasing the number of ESOL-specific teachers in FCPS, as the current trend would do, would ideally positively influence students' achievement if they are effective teachers. However, it is important to keep in mind the distinction between improving the quality of ESOL teachers and simply increasing the quantity of ESOL teachers.

Counselor Effectiveness

In addition to effective teachers, an effective high school counselor can positively influence a student's graduation outcome (Mulhern, 2020). High school counselors have the ability to improve cognitive and non-cognitive outcomes as well as provide information and direct assistance to support students (Mulhern, 2020). In FCPS, each high school has a number of counselors, but they often have caseloads of hundreds of students and do not specifically receive training to work with English learners. The evidence demonstrates that improving the quality of counselors could dramatically improve short-term academic and behavioral outcomes as well as long-term college attendance.

Despite an overall lack of evidence on counselor quality, one recent study of high school counselors in Massachusetts can begin to illustrate a positive correlation between school counselors and student outcomes (Mulhern, 2020). The author estimated a counselor's effectiveness by analyzing the average impact on student's cognitive or academic skills, non-cognitive skills such as absences and behavior, college readiness and selectivity, and education attainment such as the number of years in college (Mulhern, 2020). This study demonstrates an overall positive relationship between counselor effectiveness and a student's graduation rate.

The author of this study found that a more effective counselor improves all measures of student outcomes, but is especially beneficial for already low-performing students. Mulhern demonstrates that a low-achieving student who has been assigned a counselor that is one standard deviation more effective than the average counselor is estimated to be 3 percentage points more likely to graduate from high school (Mulhern, 2020). In

addition, the study found that minority students who were paired with a minority counselor had stronger performance. Non-white students who were paired with an effective non-white counselor were 4.2 percentage points more likely to graduate from high school (Mulhern, 2020). The author suggests that this is related to a student's trust in their counselor as well as a better understanding of the student's needs (Mulhern, 2020).

Mulhern's study has a large sample size and clear outcome measurements making it a strong piece of evidence for counselor effectiveness. The author acknowledges that this is one of the first studies of counselor quality, so there are few other studies to offer comparisons. While this demonstrates the effects of non-white students and counselors, Mulhern does not specifically address English learners. However, the results on graduation outcomes for low-performing students can be associated with English learners in FCPS, as this demographic often struggles academically due to a multitude of factors. More research is needed to explore counselor quality, but it is likely that improving counselor effectiveness can increase graduation rates for English learners.

Early Warning Systems

Most literature points to the idea that struggling students can be identified and helped before they drop out of high school (Bruce et al., 2011; Genao, 2015; Gwynne et al., 2012; Messacar & Oreopoulous, 2013; O' Cummings & Therriault, 2015; Pinkus, 2008; Walsh, 2016). For example, in Chicago Public Schools, 80 percent of students with troubling warning signs in the early years of high school dropped out before graduating (Pinkus, 2008). These warning signs are often referred to as indicators of whether or not students are "on-track" to graduate. "On-track" means that a student is gaining enough credits, attending enough school, and successfully passing classes so they are on the average path to graduate in four years. Keeping students "on-track" to graduate is the goal of most early warning systems (EWS) which use data to track students and coordinate an intervention if necessary. The warning signs of dropouts are better indicators of graduation than any other analysis of demographics, so early intervention is key to increasing graduation rates (Gwynne, et al., 2012; Pinkus, 2008).

Early Warning Systems (EWS) use 'real-time' data to identify students most at risk of dropping out of high school and create programs to offer support. They differ from school to school. The most effective EWS are ones that quickly respond to changes in student behavior, support them in the long-term, and monitor success. The three key indicators for EWS are attendance, behavior, and course performance. The most effective EWS require an intervention with 20 absences or 10 percent of the school year and 2 or more behavioral infractions (Bruce et al., 2011). For course performance, most schools consider multiple factors including failure in English or math, an inability to pass ninth- grade, a GPA below 2.0, or more than 2 failures overall (Bruce et al., 2011). In order for EWS to be successful, there must be coordination and support among multiple levels of school officials and clear technical components and data collection (Bruce et al., 2011).

In one program in Louisiana, teachers and administrators received automatic reports twice a month listing all students that had one of the three indicators. Administrators would then reach out to those students to check-in and develop a plan for success (Bruce et al., 2011). This program was implemented in 175 middle and high schools in Louisiana due to the high rates of poverty, but it targeted all students regardless of demographics. Louisiana school districts have seen a 6-percentage point increase in graduation rates since implementing the EWS, and the researchers believe that the EWS was a significant factor in that increase (Bruce et al., 2011). Despite the success of this program, it is unclear whether it could be replicated in FCPS, as this study did not take student demographics into account. The potential effect on English learners is unknown.

Even if there is little longitudinal data on the success of EWS for graduation rates, case studies in Chicago Public Schools and a randomized trial in the Midwest have demonstrated that EWS has the potential to improve "on-track" indicators such as attendance and behavior (Bruce et al., 2011; Faria, et al., 2017). For example, a randomized trial comparing EWS schools to schools with no intervention showed promise for absences and course performance. Schools with an EWS demonstrated that the number of students who were chronically absent decreased by 4 percentage points, and the number of course failures also decreased by 5 percentage points (Faria, et al., 2017). This is significant because these are two key indicators that EWS systems use to predict future dropouts. In addition, after implementing an EWS to target likely dropouts, the number of students on-track to graduate in Chicago Public Schools increased by 10 percentage points (Bruce et al., 2011). Neither study examined English learners specifically, but this is promising data for the effectiveness of EWS.

Despite widespread acknowledgment about the potential benefits of EWS, very few randomized trials have been completed. This is most likely because of ethical implications surrounding a program like this; you cannot address warning signs for some students while ignoring them for others. Similarly, most programs are new. In 2014, only 52 percent of schools in the United States had some sort of early warning or monitoring system (Department of Education, 2016). Of those 52 percent, only 16 percent took migrant status into account (Department of Education, 2016). This limits the generalizability of the studies to English learners specifically, but these studies offer promising results for all students and are useful to consider in understanding the potential alternatives.

Mentorships

Mentorship programs, especially targeting students in the early years of high school, have the potential to improve academic and social outcomes and eventually lead to higher graduation rates (Bruce & Bridgeland, 2014; Johnson et al., 2014; Dubois, et al., 2011; Bayer, et al., 2013). The transition to ninth-grade is often difficult, especially for English learners struggling to learn the language and culture. Nearly 40 percent of all students reported that they struggled in the transition to high school in some capacity (McCallumore & Sparapani, 2010). For English learners specifically, ninth-grade performance, not English proficiency, was the best predictor of graduation in a study in

Chicago Public Schools (Gwynne et al., 2012). A mentorship program has the potential to provide support to students and encourage them during the difficult transition to high school and throughout their education.

Many analyses propose mentorships as beneficial ways to support incoming ninth-grade students and place them on a path towards graduation, as peers or other young adults can serve as better role models than school officials (Messacar & Oreopoulous, 2013; Johnson et al., 2014; Bayer, et al., 2013). Johnson et al. (2014) discovered a correlation between a mentorship program and graduation rates for students in a low-income high school. They determined that these peer relationships offered beneficial social and emotional development for students to feel connected in school, increasing their desire to stay. Incoming freshmen were paired with junior or senior peer mentors who met weekly to discuss schoolwork and socialize. The effect was not statistically significant for female students. However, for the male students, graduation rates were 18 percentage points higher than students not enrolled in the program (Johnson et al., 2014). Roughly 81 percent of the students in the program graduated high school within 4 years, compared to 63 percent of those who did not participate (Johnson et al., 2014).

About 92 percent of the participants in the program were Latinx students (Johnson et al., 2014). This makes it more generalizable to the English learner population in Fairfax County where many students are also Latinx. However, while the results for these students improved significantly, the sample size was relatively small with only 268 students. In addition, there may be reason to believe that selection bias was involved and students who received a mentor were already more likely to graduate. Repeated trials could have improved the validity of the study.

While there are few robust studies exploring graduation rates specifically, the strongest evidence for the effectiveness of mentorship programs lies in their ability to improve non-academic outcomes (Dubois, et al., 2011; Bayer, et al., 2013; Johnson, et al., 2014). These socioemotional outcomes, such as behavior, confidence, or a sense of belonging in school, have the ability to influence graduation rates by making students feel more connected and motivated. This result is more pronounced with a strong relationship between the mentor and the mentee (Bayer, et al., 2013). When students feel more connected to their mentor, they are more likely to learn from and work with their mentor. This is a key consideration to keep in mind when developing a mentorship program in FCPS.

Evaluative Criteria

I will evaluate four different alternatives based on the following criteria. The alternatives include the status quo, professional development opportunities for high school counselors, protocols for implementing early warning systems, and a partnership with George Mason University for a volunteer mentorship program. Based on the long-term goals of FCPS and the nature of the problem, the most important considerations are effectiveness and equity given that each alternative is aiming to improve graduation rates for English learners.

Effectiveness
Effectiveness refers to the extent to which the alternative could increase the high school graduation rate for English learners. I will measure this by using the results from relevant experimental and observational studies. These estimates may vary in FCPS, but they provide a useful benchmark to understand the potential effectiveness of the interventions. I will present the effectiveness of each option as a potential percentage point increase in graduation rate for English learners. A higher number is preferred.

Equity
Equity refers to the extent to which each alternative specifically targets English learners versus the whole school population. The intended outcome of each alternative is to improve graduation rates for English learners, but a more equitable outcome will provide more resources and support to English learners specifically, rather than a widespread intervention for all students in the school. I will measure this on a scale of low, medium, and high based on the design of the alternative. A highly equitable solution is preferred.

Cost
The cost of each alternative will be a measure of the time cost for existing staff to implement the program, measured by hourly salary rate using the FCPS salary scale. The status quo of the FY21 and FY22 budget will serve as the baseline, given that this cost is already included in the budget. Cost will be measured on a scale of low, moderate, and high. A score of low references a cost from $0 to $200,000; moderate is a cost between $200,000 and $350,000; high refers to a cost above $350,000. All cost analysis is included in Appendix B.

Administrative Feasibility
Administrative feasibility refers to the ease with which the alternative could be implemented given the current administrative structure of FCPS. This includes the likelihood of inclusion in a future budget as well as the ease of adoption and implementation throughout different high schools in the county. To measure the ease of adoption, I will consider the level of coordination required between district and individual school actors and how many different actors are involved. This will be measured on a scale of low, medium, and high based on past and current programs that have been implemented in FCPS. A score of “high” means that the alternative is relatively simple to implement given the current constraints of the school system.

Alternatives

The following alternatives represent the most promising methods to improve high school graduation rates for English learners in Fairfax County Public Schools. Each alternative is based in research from other districts across the country and conversations with FCPS officials. The first alternative would allow present trends to continue, while the following three present new actions that the district can take to intervene for English learners. Each alternative aims to improve graduation rates for English learners in FCPS by increasing access to resources and improving school-based interventions at the high school level.

Alternative 1: Let present trends continue

This option would require no additional interventions and allow for current budget projections and proposed programs to continue. FCPS is aware of the inequities between English Speakers of Other Languages (ESOL) students and the general student population and is working to eliminate overall achievement gaps. Both the FY2021 budget and the proposed FY2022 budget include funding for additional support for ESOL students (FCPS, 2021).

The 2021 budget for FCPS includes funding for new on-time graduation coordinators at nine schools in the district and additional funding for support for English learners in nontraditional schools. While this is a step in the right direction, it does not provide a solution for each of the 26 high schools in the district. The FCPS School Board allocated $1.5 million for the 12 new on-time graduation coordinator positions. These positions are intended to target all students in the nine schools, not just English learners. The budget includes additional ESOL support at the two nontraditional high schools in the district but does not mention any additional support at traditional high schools. Looking forward, the FY2022 budget includes $4.9 million for 50 additional ESOL teachers across the county, but no additional graduation coordinators. This would offer support for English learners at all grade levels but may not have a direct effect on graduation rates.

Evaluation – Alternative 1	
Effectiveness	I measured the effectiveness of the status quo in two parts: the benefits of hiring graduation coordinators and the benefits of increasing the number of ESOL teachers. I then calculated an average effectiveness from the two analyses. To estimate the impact of graduation coordinators, I used data from an observational study of graduation coordinators in an Alaskan school district. This study determined that the inclusion of comprehensive graduation coordinators on the administrative team, referred to as a graduation coach, was associated with a 9

	percentage point increase in student graduation rates (Brown & McVee, 2012). These coordinators were responsible for meeting with and preparing students to graduate, helping specifically those who were the most behind. This study of graduation coordinators is a valuable comparison of effectiveness given the similar demographics of Anchorage School District and FCPS as well as the program structure. In Anchorage, 20 percent of the students speak a language other than English (Anchorage School District, 2021). Though the number of English learners in FCPS is higher at 27 percent, both school districts still have significant proportions of English learners that are higher than the national rate. In addition, the proposed program in FCPS would function in a similar way to that of Anchorage. The coordinators would offer individualized support to students, focusing on academic and non-academic outcomes throughout high school to increase graduation rates in the future. However, it is important to keep in mind that the ratio of coordinators to students in the program in Alaska was much lower, so coordinators could work with smaller groups. As a result, the estimate in this study may be larger than a potential effect in FCPS due to the low number of coordinators and high number of students. The goal of increasing the number of ESOL teachers is to provide more effective teaching to improve academic achievement throughout a student's educational career. I will provide a wide estimate for the effectiveness of this alternative based on the literature. A study in California demonstrated that a more effective teacher is correlated with an increase in graduation rate between 4.2 and 14.1 percentage points (Koedel, 2008). This was examining math teachers, however, and not specifically ESOL teachers. To determine the effectiveness of these interventions, I calculated the average percentage point change between the graduation coordinators (9 percentage points) and the teacher increase by using both ends of the range for teacher quality (4.2 and 14.1 percentage points). Using this calculation, the average effect of the status quo would roughly range **from 6.6 percentage points to 11.5 percentage points.**
Equity	This option is **moderately equitable.** It would provide specific resources to English learners at non-traditional schools. However, the graduation counselors in the traditional high schools are responsible for helping all students equally, not just English learners. The proposed increase in ESOL teachers for FY22 is promising to provide more resources specifically to English learners.

Cost	The FY21 budget has already allocated $1.5 million to new graduation coordinators, and the FY22 budget includes $4.9 million for additional ESOL staff. Because this has already been calculated by FCPS, there is no additional time cost to existing employees above the budget allocation. For this reason, the **cost is low.**
Administrative Feasibility	Because there is broad support for inclusion in the FCPS budget and relatively simple coordination among school officials, this alternative is **highly administratively feasible.** The additional funding for graduation coordinators has already been approved by the school board and will be implemented in the coming year. The additional funding for ESOL teachers has been proposed and will likely be approved. However, it may be slightly more time-consuming to hire and train 50 additional teachers.

Alternative 2: Increase ESOL-specific professional development opportunities for all school counselors

This option would improve the quality of professional development for all high school counselors through required courses and centralized training programs each year. The goal of this alternative is to ensure that all guidance counselors are equipped to work with the unique needs of English learners, including navigating different cultural backgrounds, language barriers, trauma, and resilience. The evidence demonstrates that improving the quality of counselors, more so than the quantity, is associated with a higher graduation rate for students. For example, a low-achieving student with an effective high school counselor has been shown to be nearly 3.4 times more likely to graduate (Mulhern, 2020).

High school counselors in FCPS are not required to complete any professional development courses to improve their work with English learners. However, there are some resources available from the county if counselors want to learn more independently. FCPS has two optional professional development courses dedicated to working with English learners: “School Counseling with English Learners” and “Building a Culturally Responsive School Counseling Program” (FCPS, 2021). These are online modules that are available on the district-wide professional development academy website. These provide the basics, but it is important to follow up with real-time conversations and activities rather than just online modules. In addition, many counselors may not know that these resources exist without actively searching for them. In addition, FCPS requires all high school counselors to have a Master’s degree. Most counseling Master’s programs have courses designated to multicultural learning and counseling, however, these may be insufficient to fully support counselors in the field who are working with ESOL students.

This option would require the FCPS ESOL Department to develop guidelines and training materials for required professional development sessions for high school counselors. This can be in-person, if the current pandemic situation allows, or virtually. The focus of the training would be on the evidence-based Multicultural and Social Justice Counseling Competencies framework (MSJCC) (Ratts & Greanleaf, 2018). This works with school counselors to encourage them to be leaders in their schools and change the narrative for diversity and cultural competence. MSJCC training starts by addressing the counselor’s own worldview and personal identity, and moves to a broader understanding of the student and school culture to intervene more effectively for individual students and the school climate (Ratts & Greanleaf, 2018). Through a presentation on the framework and breakout workshops, this professional development would help counselors better understand how to work with ESOL students in their schools.

Professional development is a proven way to improve educators’ performance. However, mandatory training may have negative effects on counselor’s morale. Instead of the current voluntary system, mandatory professional development may set a

different tone for counselors and decrease the willingness to participate and learn. In turn, it might not be as effective as the voluntary programs. Similarly, this would be time-intensive for counselors who are already busy. This option requires support from and coordination between district officials and school administrators. However, improving the effectiveness of school counselors for diverse students could have a positive impact on English learners' academic success and overall graduation rates.

Evaluation – Alternative 2	
Effectiveness	To measure effectiveness, I compared the results of an observational study on counselor quality to the potential positive impact of this alternative on overall ESOL graduation rates. The goal of this alternative is to improve each counselor's ability to support students, essentially making each counselor a highly effective counselor for English learners. The study of counselor effectiveness demonstrated that low-achieving students matched with a more effective counselor were **3.2 percentage points** more likely to graduate (Mulhern, 2020). This study is a valuable comparison because it had a large sample size to analyze many different subgroups.
Equity	This option is **highly equitable**. It provides resources to counselors to specifically work with English learners. It closes an information gap that may exist between different counselors to ensure that all counselors, regardless of background, are able to provide the same information and support to English learners. Rather than focusing on more broad professional development, this would provide an equitable solution to increase graduation rates for English learners specifically.
Cost	To calculate the cost of this alternative, I estimated the time it would take to create the program, implement, and administer the program to counselors based on discussions with Rich Pollio, Director of ESOL Services. The individuals involved in this alternative include counselors, principals, directors of student services, and ESOL officials. I calculated each yearly time commitment assuming that there is a nine-month schedule for counselors and training (Appendix B). The total cost for this alternative would range between $217,722 and $318,735 per year, meaning that the **cost is moderate**.
Administrative Feasibility	This alternative is **moderately administratively feasible** given that professional development is necessary and valued in FCPS, but this option will require coordination and investment from many different stakeholders. The FY21 budget included professional development at different levels of school staff. These programs included training for administrators and social workers in addition to a line item for

	“comprehensive professional development” to ensure a premier workforce (FCPS, 2021). ESOL services officials currently have limited involvement in professional development, but do meet with small teams in each school each month to work towards equitable counseling outcomes for English learners. This alternative would increase the attention given to professional development for counselors and would require a significant time commitment.

Alternative 3: Develop and implement protocols for data-based early warning systems (EWS) in high schools

This option would require FCPS officials to develop county-wide protocols for high schools to implement early warning systems and identify students at risk of not graduating. An EWS is not a technology in itself, but rather a process by which schools can effectively assess student data that is already in the systems. An EWS could be an effective way to improve graduation rates as many studies show that the warning signs of dropouts, such as behavior, course performance, and attendance, are better indicators of graduation than any other analysis of demographics (Gwynne, et al., 2012; Pinkus, 2008).

For FCPS officials, there are two steps to this alternative: develop a method and instructions to analyze student data through an EWS mechanism and educate high school administrators on how to implement the system and intervene based on the information. While FCPS can develop protocols for the EWS system, it must be implemented at the individual high school level. Each high school is better equipped to intervene for students and collect the data bi-weekly, and the school district is likely too large for a centralized EWS to be effective. Once the plan is developed centrally, it can be dispersed to different schools to ensure all students have access to the same EWS.

In order to carry out a successful EWS, a team within the school made up of administrators, counselors, and teachers would be trained to provide individualized support and counseling if a student meets one of the three indicators. To better help English learners, at least one of the teachers on the team would be an ESOL teacher in the school. This would help them understand the students and provide better assistance such as tutoring or outreach to parents. The idea is to intervene quickly and consistently to any student falling below one of those thresholds. FCPS officials would provide training through online professional development modules to the designated teams within the schools.

Early warning systems have been implemented in many districts and offer the potential to increase graduation rates for all students. This option would allow FCPS to develop a comprehensive plan to intervene and improve graduation rates across all demographics, but has few specific measures to track English learners more so than other groups. In addition, this option is time-consuming for district officials and individual high schools because it requires a bi-weekly intervention team to provide support to students. The time could also vary significantly based on how many students are flagged by the indicators. While it would provide a measurable method for intervention, it may be hard to get all high school administrators involved across the district.

Evaluation – Alternative 3	
Effectiveness	I compared the change in graduation rates for other districts with EWS to understand effectiveness for this alternative. Most of the evidence surrounding the effectiveness of EWS is focused on the percentage of students "on track" to graduate after their ninth and tenth-grade years. However, one observational study of high schools in Louisiana can offer some clarity to the potential impact of an EWS on graduation rates specifically. Louisiana schools began implementing an EWS to focus on attendance, behavior, and course passing rates in 2003. Over ten years, the overall graduation rate increased by 6 percentage points (Bruce et.al., 2011). This system would be similar in FCPS. While the time-frame of this alternative may take longer, the overall effectiveness of this alternative would increase graduation rates by about **6 percentage points.**
Equity	Because this option would improve interventions for all students in the school, it is rated as **moderately equitable.** By including an ESOL teacher on each intervention team, the goal is to improve equity and offer more support for English learners. The ESOL services office will provide information on how to intervene differently specifically for English learners. However, that does not change the overall mechanism of EWS which would provide data for all students regardless of demographics.
Cost	Because FCPS already has a data system that can flag students, the cost of this alternative lies in the time commitment and coordination between administrators, teachers, counselors, and ESOL Department officials. For teachers, counselors, principals, and Directors of Student Services, the time involves analyzing the data and meeting or working with students. The time commitment and cost for ESOL Department officials would include planning, organizing, and training to help implement a strong intervention in each high school for English learners (Appendix B). The total cost for this alternative would range from $373,345 to $651,988 per year**,** meaning that the **cost is high**.
Administrative Feasibility	Based on the number of different actors required, as well as the lack of precedence within the budget, this ranks as **"low" in administrative feasibility.** This option would require significant, and time-consuming, coordination between different levels of authority within each school. The technology for an EWS is already available, so the administrative feasibility is a measure of the ease of implementation of the intervention protocols. While central office staff can administer training and develop protocols, the implementation of

	the intervention team is ultimately left up to each individual high school, decreasing the feasibility of the option. The ESOL office alone will likely not be able to implement this alternative successfully, but they can provide information to schools about the benefits of including ESOL teachers on the intervention team.

Alternative 4: Partner with George Mason University to establish a volunteer mentorship program for ESOL students

This option would partner with volunteer organizations at George Mason University (GMU) to allow university students to connect with high school English learners through a volunteer mentoring program. The goal of a mentoring program is to empower students and develop a positive relationship with an individual who is not a formal authority figure in their lives, such as a teacher or parent. These connections have the potential to improve academic and social outcomes and eventually lead to higher graduation rates (Bruce & Bridgeland, 2014).

This program would work in partnership with George Mason University to match ESOL students with college mentors. GMU currently has an established volunteer organization, *Mason Gives Back. Mason Gives Back* is a volunteer initiative that partners with different community programs around Fairfax County. Currently, there is one after-school program partnering with FCPS at Holmes Middle School (*Mason Gives Back*, 2021). Volunteers from George Mason help sponsor academic, social, and sports clubs every day after school to provide a safe place for middle school students to socialize and learn.

For the FCPS ESOL department, this alternative would require two actions: coordinating between high schools and George Mason University staff and developing guidelines for volunteer training for a successful mentorship program. Once volunteer mentors are trained, they will be matched with ESOL students in the school by a teacher or counselor. For ESOL students, the program will be voluntary, and school administrators and teachers would advertise it to students to gauge interest. Ideally, one college student will be matched with one ESOL student, however, the number of interested students could be greater than the number of volunteers. If that occurs, small groups of similar students can be paired with a mentor. The goal for the program would be weekly meetings between students and their mentor.

Mentorships have the potential to improve individualized support for ESOL students, but there are potential challenges to implementation. First, while this could be an effective way to improve social supports for students, it may not have a direct effect on graduation rates. The mentors would be volunteers from George Mason University, and may not have the professional training, teaching or counseling experience necessary to actually intervene to help a student graduate. School counselors and administrators would still be required to be involved in these students' academic career and social-emotional wellbeing. In addition, this relies heavily on interest from George Mason students. Students need to be willing and able to receive training and meet with ESOL students on a regular basis. The coordination between the University and individual high schools may be difficult for FCPS officials as well as administrators at high schools.

Evaluation – Alternative 4	
Effectiveness	Despite very little evidence on the effect of mentorship programs on graduation rates, I compared the potential of this alternative to a peer mentorship program experiment in another large high school. This study demonstrated a positive effect on graduation rates for male students at 18 percentage points, but no difference for female students (Johnson, et al., 2014). The authors discuss how female students may have been less influence by the program because, nationally, male students drop out of high school at higher rates than female students. However, there is little research to determine why this might be. This is a valuable comparison to this alternative given the similar population in the study and program design. The population of this study would be similar to the ESOL population in FCPS because 92 percent of the students were Latinx and all were low-income (Johnson, et al., 2014). However, the mentorship program in FCPS will be staffed by college-aged volunteers, not older high school peers like the study. The mentors in the study worked with students for a year at the beginning of high school, while the mentors in this alternative would ideally work with students across all years of high school. The program in FCPS will provide more long-term support to students with older mentors, so it is important to consider these potential differences when comparing the alternative to the this study. For the purpose of this analysis, the costs and benefits of the design of both programs will counterbalance, allowing this study to be a strong example for potential effectiveness. Because the study showed no effect for females but an 18 percentage point increase for males, I take the average of that number. This mentorship program could increase graduation rates for ESOL students by **9 percentage points.**
Equity	Because equity is defined by comparing English learners to the whole school population, this alternative is **highly equitable**. College mentors would provide support directly and exclusively to English learners rather than a more widespread intervention targeted towards all students. While it is possible that this could have differing outcomes for students based on gender, as the study of peer mentors demonstrated, this alternative has the potential to be highly equitable for English learners as a whole compared to other groups of students in the school.
Cost	The cost of this alternative includes the time commitment from teachers, principals, and ESOL department officials. The program itself will be staffed by volunteer college students. While this might

	start out on a smaller scale, I calculated the costs if implemented at all 26 high schools. For this reason, the costs in this analysis might be higher than the actual initial costs if the program is only implemented as a pilot program in a few high schools. The time cost for principals includes the organization of teachers and volunteers each month. For teachers, this would be more time-intensive because they would have to organize the volunteer mentors and work with them and the students once a week. For ESOL officials, there will be a time commitment to develop the program and ongoing maintenance and evaluation costs. This program might also require additional materials for outreach, but this analysis focuses on time cost for existing staff (Appendix B). The total cost for this alternative would range from $141,782 to $273,362 per year, meaning the **cost is low-moderate**.
Administrative Feasibility	Because of the difficulty of coordination but level of success in other schools, this is **moderately administratively feasible**. This option would require coordination between FCPS officials, schools and George Mason Students. This might be more difficult to implement given the number of actors involved and the level of uncertainty associated with working with a third party. However, Holmes Middle School has a successful tutoring and after school volunteer program with George Mason University students, so it has been proven to work in the past.

Outcomes Matrix

	Effectiveness ***Percentage point increase in graduation rate***	Equity	Cost ***Time for existing staff per year***	Administrative Feasibility
Alternative 1 **(Status Quo)**	6.6 - 11.5 percentage points	Moderate	Low	High
Alternative 2 **(Professional Development)**	3.2 percentage points	High	Moderate	High
Alternative 3 **(EWS Implementation)**	6 percentage points	Moderate	High	Low
Alternative 4 **(Volunteer Mentorship Program)**	9 percentage points	High	Low-Moderate	Moderate

Recommendation

I recommend Alternative 4: Partner with George Mason University to establish a volunteer mentorship program. Because the goal of each alternative is to increase graduation rates for English learners, effectiveness and equity are the most important criteria to consider. Alternative 4 has significant potential to increase graduation rates more than other options given evidence on the positive effects of mentors in students' lives, not just academics. In addition, it is highly equitable as it would provide support to English learners more so than the rest of the population. Alternative 1, the status quo, also has the potential to make an impact on students' graduation rates, however, the target is more for all students, not just English learners. Based on cost, Alternative 4 is the clear choice because the program itself would be volunteer-based. Alternative 2 is the most administratively feasible, however, the low impact for graduation rates and the higher cost may limit the overall benefits of the professional development. While Alternative 4 might be difficult to implement district-wide and coordinate with George Mason, the low relative cost and the long-term potential impact increases the administrative feasibility of implementing the program in FCPS.

Implementation

To guide the implementation of the partnership between GMU and FCPS, it is helpful to look towards other functioning volunteer programs between universities and communities such as Madison House at the University of Virginia (UVA), DC Reads at American University (AU), and SmartDC at George Washington University (GW) (*GW SmartDC,* 2021; *DC Reads*, 2021). The structure of the program in FCPS would be similar to Madison House, while the volunteer recruitment and training process could be similar to DC Reads and SmartDC.

Madison House, the student volunteer organization at the University of Virginia, has a successful ESOL mentoring and tutoring program, with consistent student interest and participation, in high schools around Charlottesville. This is based in community partnerships with ESOL teachers and coordinators and organized by student leaders at UVA. This could be a good model for the structure of the FCPS and GMU partnership to provide volunteers to high school ESOL students around the county given the community-based nature of both schools.

The Madison House ESOL Tutoring program works with eight different sites in Charlottesville City and Albemarle County. These sites include elementary, middle and high schools as well as adult tutoring centers. Community partners, such as teachers or administrators, can reach out to Madison House if they feel a need for volunteers in their schools or programs. Each site has a student volunteer coordinator from UVA who works with leaders at the site to match UVA volunteers with English learners. UVA student volunteers are recruited each semester on a voluntary basis through social media and email advertising or through courses in which they are enrolled. Anyone is able to be a tutor, but background checks are conducted by the school district. Typically, there are about 10 UVA volunteers per site that are matched with small groups of English learners for set times each week.

The recruitment process for Madison House ESOL tutors is completely voluntary with no application process, so the quality of and commitment from volunteers varies. It is helpful to look towards AU and GW for their more rigorous volunteer recruitment practices. The GW SmartDC program has an extensive recruitment process to ensure that the tutors are qualified and interested in the program (*GW SmartDC*, 2021). There is an online application that is targeted towards students studying education. The program requires a year-long commitment to ensure that the tutees are receiving long-term support. The recruitment process for DC Reads at AU is similar with an additional required interview (*DC Reads*, 2021). These application-based recruitment processes could be strong models to follow to provide qualified mentors to ESOL students.

The AU program has the most promising model for mentor training. AU trains DC Reads tutors centrally, then each volunteer site offers additional training. The training is done virtually through Zoom and is focused on three areas: roles and responsibilities as a tutor, diversity and inclusion, and discussion and breakout sessions with site leaders

and other tutors (*DC Reads*, 2021). FCPS could coordinate with GMU to provide similar training sessions for potential mentors, focusing specifically on the needs of English learners.

Initial Steps

The first steps are to pitch this idea to high school ESOL teachers and administrators throughout the county as well as leaders at GMU. The program will need to be explained and proposed to George Mason and high schools simultaneously. To connect with GMU, a member of the ESOL office will need to reach out to Lisa Snyder, the director of the Mason Gives Back program, to propose a new partnership. To ensure interest from high schools, representatives from the ESOL office can send an email gauging desire, then meet with teams at the high schools to discuss the next steps of the program. Staff in each high school will be responsible for advertising the program to students and organizing participants.

In order to recruit volunteers for the program, the ESOL office will have to collaborate with GMU to provide outreach materials. This can be digital, through social media campaigns and email, or through brochures and fliers. The first place to advertise would be through existing channels at Mason Gives Back. After that, the program can also be advertised through the education school at GMU, specifically future ESOL or high school teachers. ESOL officials could reach out to specific professors or classes to advertise to students. This will offer those students experience in a school environment while also recruiting volunteers for the mentorship program. It is important to consider recruiting students with a wide range of backgrounds and abilities. Considering the potential gender implications of mentorship programs, the program should focus on recruiting both men and women, and look for diverse volunteers who may speak languages similar to the ESOL population. Mentorships are shown to be more effective if the mentee has a positive role model who looks like them (Bayer, et al., 2013).

Once the partnership is secure and there are interested high schools and staff, the ESOL office will need to develop training protocols for GMU volunteer mentors. This can be done in a slide deck or virtual presentation that can be recorded and given to current and future volunteers prior to beginning the program, potentially based on the training practices at AU. Some things to include in the training would be successful mentorship principles, cultural inclusion training, and a basic curriculum overview. To address mentorship principles, the training should include the importance of a strength-based approach to motivate students, developing a supportive and friendly relationship between the volunteer and student, and building a long-lasting bond (US Department of Education, 2007). To address cultural inclusion, it will be helpful to address the demographics of the students in FCPS and stress the importance of learning from the ESOL students' experiences, not just bringing in their own. While the ESOL office can provide an overview of the curriculum and key things to consider, the classroom teachers may be able to prepare volunteers individually through communication before the first volunteer session.

Program Facilitation

Once the program is ready to begin, the ESOL office will act as a liaison between GMU and high schools, but most of the work will be done at the individual classroom level. Teachers and administrators from each high school will coordinate with the GMU volunteers to determine the best block of time to come into the school. Based on the availability of volunteers and student or teacher need, this could be during the school day or after school. Volunteers will work with students on their school and homework, have discussions about general high school concerns, and serve as an older role model for students to talk to each week.

In the pilot stage of the program, it will be important to track student success and volunteer engagement. To understand volunteer and teacher engagement and experience with the program, it will be necessary to send out surveys to check-in at least once per semester. The survey would ask about their satisfaction with the current program and what could be improved. To understand student success, administrators and counselors can track attendance, behavior, and classroom performance-all indicators of graduation rates-to see if the influence of the mentorship program has an effect on ESOL students. The ESOL office can interpret the data from both the surveys and data collection to determine whether the program should be expanded.

Considerations

The most significant risk for the mentorship program is the number and quality of volunteers from GMU. It is possible that there will not be enough interest, especially at the beginning of the program, to support the number of ESOL students in the schools. This is something to consider, but can be mitigated through sustained outreach and communication with leaders at GMU. If there are not enough volunteers for each student to be paired individually, the volunteers can work in small groups or with students who need the most assistance that day. Teachers will need to be flexible until the program is firmly established. In addition to the number of volunteers, it is important to understand the guidelines for outside visitors at each high school and be prepared to communicate guidelines with GMU students.

Conclusion

The graduation rate for English learners in FCPS is lower than that of surrounding counties, negatively impacting the community and individual students and families. High school graduates are more likely to have higher-paying jobs and be able to support themselves and their families in the long run. If FCPS takes no additional action, the 20.5 percentage point gap between English learners and all students will likely only get worse as a result of the Covid-19 pandemic. While FCPS is working to address graduation rates more generally, the most promising course of action to mitigate graduation rates for English learners specifically could be a mentorship program with volunteers from George Mason University. This has the potential to be an equitable and effective way to provide individualized support to English learners, promoting academic achievement and positive social and emotional behavior. Though initial coordination may be difficult, the potential overall impact for English learners makes it beneficial. This is not the only program that could be implemented, but it is a low-cost way to make a difference in students' lives.

References

Alliance for Excellent Education. (2015). The Graduation Effect. http://impact.all4ed.org/

Anchorage School District. (2021). Anchorage School District. Retrieved from https://www.asdk12.org/domain/1254

American Institutes for Research. (2016). What Will ESSA Mean for English Learners? American Institutes for Research. Retrieved from https://www.air.org/resource/what-will-essa-mean-english-learners

Balfanz, R., Hall, D., Verstraete, P., Walker, F., Hancock, M., Liljengren, J., Waltmeyer, M., Muskauski, L., Madden, T. (2019). *Indicators and Interventions: A Practical Manual for Early Warning Systems. Johns Hopkins University School of Education.* Retrieved from http://new.every1graduates.org/wp-content/uploads/2020/06/20190918_EGC_EWSManual_Final2.pdf

Ballotpedia. (2019). Medicaid Spending in Virginia. Ballotpedia. Retrieved from https://ballotpedia.org/Medicaid_spending_in_Virginia

Barrow, L., & Markman-Pithers, L. (2016). Supporting Young English Learners in the United States. *The Future of Children*, 26(2), 159–183. Retrieved from https://files.eric.ed.gov/fulltext/EJ1118555.pdf

Bayer, A., Grossman, J.B., Dubois, D.L. (2013). School-Based Mentoring Programs: Using Volunteers to Improve the Academic Outcomes of Underserved Students. MDRC. Retrieved from https://www.mdrc.org/sites/default/files/School-Based%20Mentoring_Programs.pdf

Belfield, C.R. & Levin, H.M. (2007). The Price We Pay: Economic and Social Consequences of Inadequate Education. *Brookings Institution Press.* Retrieved from https://www.brookings.edu/book/the-price-we-pay/

Breslow, J. (2012, September 21). By The Numbers: Dropping out of High School. PBS Frontline. Retrieved from https://www.pbs.org/wgbh/frontline/article/by-the-numbers-dropping-out-of-high-school/

Brown, S. & McVee, C. (2012). Across the Stage: Doing What it Takes to Help Every Student Graduate from High School. American Federation of Teachers Innovation Fund. Retrieved from https://www.aft.org/sites/default/files/if_acrossthestagegradsupportmanualace.pdf

Bruce, M., Bridgeland, J., Fox, J.H., & Balfanz, R. (2011). The Use of Early Warning Indicator and Intervention Systems to Build a Grad Nation. Retrieved from https://files.eric.ed.gov/fulltext/ED526421.pdf

Bruce, M. & Bridgeland, J. (2014). The Mentoring Effect: Young People's Perspectives on the Outcomes and Availability of Mentoring. Civic Enterprises. Retrieved from https://www.mentoring.org/wp-content/uploads/2019/11/The_Mentoring_Effect_Full_Report.pdf

Bureau of Labor Statistics. (2019). The Economics Daily: Median weekly earnings. US Department of Labor. Retrieved from https://www.bls.gov/opub/ted/2019/median-weekly-earnings-606-for-high-school-dropouts-1559-for-advanced-degree-holders.html

Callahan, R. M. (2005). Tracking and High School English Learners: Limiting Opportunity to Learn. *American Educational Research Journal*, 42(2), 305–328. Retrieved from https://www.semanticscholar.org/paper/Tracking-and-High-School-English-Learners%3A-Limiting-Callahan/315714dd706fad3a7d0443b98061539a48ef9b9d

Cosman, B. (2014, April 28). The High School Graduation Rate is Great, Unless You're Poor. *The Atlantic.* Retrieved from https://www.theatlantic.com/national/archive/2014/04/the-high-school-graduation-rate-is-great-unless-youre-poor/361321/

DC Reads. (2021). American University. Retrieved April 15, 2021 from https://www.american.edu/ocl/volunteer/dc-reads-tutor.cfm

DuBois, D.L., Portillo, N. , Rhodes, J. E., Silverthorn, N., & Valentine, J.C. (2011). How Effective Are Mentoring Programs for Youth? A Systematic Assessment of the Evidence. *Association for Psychological Science.* Retrieved on March 28, 2021 from https://www.rhodeslab.org/files/DuBoisetalMeta.pdf

Fairfax County Government. (2020). Demographics. https://www.fairfaxcounty.gov/demographics/fairfax-county-general-overview

Fairfax County Public Schools [FCPS]. (2021). About FCPS. https://www.fcps.edu/about-fcps

Fairfax County Public Schools. (2021). Budget Documents. https://www.fcps.edu/about-fcps/budget/budget-documents

Faria, A.-M., Sorensen, N., Heppen, J., Bowdon, J., Taylor, S., Eisner, R., & Foster, S. (2017). Getting students on track for graduation: Impacts of the Early Warning Intervention and Monitoring System after one year (REL 2017–272). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved from http://ies. ed.gov/ncee/edlabs.

Genao, S. (2015). Utilizing Data to Combat Absenteeism and Decrease Dropout

Rates. *Education and Urban Society*, 47(4), 463–475. https://doi.org/10.1177/0013124513497790

Guerra, J. (2015, June 7). In Detroit, Lots Of Options For Turning Fs Into Cs. *NPR*. Retrieved from https://www.npr.org/sections/ed/2015/06/07/411784177/in-detroit-lots-of-options-for-turning-fs-into-cs

GW SmartDC. (2021). George Washington University. Retrieved April 15, 2021 from https://serve.gwu.edu/gw-smartdc

Gwynne, J., Pareja, A. S., Allensworth, E., Ehrlich, S.(2012). What Matters for Staying On-Track and Graduating in Chicago Public Schools: A Focus on English Language Learners. UChicago Consortium on School Research. Retrieved from https://consortium.uchicago.edu/publications/what-matters-staying-track-and-graduating-chicago-public-schools-focus-english-language

Henderson, A. & Mapp, K. (2002). A New Wave of Evidence: The Impact of School, Family, and Community Connections on Student Achievement. *National Center for Family and Community Connections within Schools.* Retrieved from https://sedl.org/connections/resources/evidence.pdf

Johnson, A. (2019). The Effects of English Learner Classification on High School Graduation and College Attendance. *AERA Open*, 5(2), 2332858419850801. https://doi.org/10.1177/2332858419850801

Johnson, Valerie, L., Simon, P., & Mun, E.-Y. (2014). A Peer-Led High School Transition Program Increases Graduation Rates Among Latino Males. *Journal of Educational Research*, 107(3), 186–196. https://doi.org/10.1080/00220671.2013.788991

Koedel, C. (2008). Teacher quality and dropout outcomes in a large, urban school district. *Journal of Urban Economics,* 64(3), 560–572. https://doi.org/10.1016/j.jue.2008.06.004

Latham, S., Scott, M., & Koball, H. (18 August, 2016). Dropping Out, Clocking In, and Falling Behind: What Happens to Youth Who Work and Drop Out? *Urban Institute.* https://www.urban.org/research/publication/dropping-out-clocking-and-falling-behind-what-happens-youth-who-work-and-drop-out

Mason Gives Back. (2021) Mason Gives Back - George Mason University. http://masongivesback.onmason.com/

McCallumore, K. M., & Sparapani, E. F. (2010). The Importance of the Ninth Grade on High School Graduation Rates and Student Success in High School. Education, 130(3), 447–456.

Melville, K. (2006). Learning to Finish. University of Richmond Pew Partnership for Civic Change. http://www.civicchange.org/pdf/dropout_overview.pdf

Messacar, D., & Oreopoulos, P. (2013). Staying in School: A Proposal for Raising High-School Graduation Rates. *Issues in Science and Technology*, 29(2), 55–61. Retrieved from https://issues.org/derek/

Mulhern, C. (2020). Beyond Teachers: Estimating Individual Guidance Counselors' Effect on Graduation. Retrieved from http://papers.cmulhern.com/Counselors_Mulhern.pdf

Natanson, H. (24 November, 2020). "Failing grades spike in Virginia's largest school system as online learning gap emerges nationwide." *The Washington Post*. Retrieved from https://www.washingtonpost.com/local/education/fairfax-schools-more-failing-grades/2020/11/24/1ac2412e-2e34-11eb-96c2-aac3f162215d_story.html

National Center for Education Statistics (2020, May). Public High School Graduation Rates. https://nces.ed.gov/programs/coe/indicator_coi.asp

O'Cummings, M., & Therriault, S. B. (n.d.). From Accountability to Prevention: Early Warning Systems Put Data to Work for Struggling Students. Retrieved from https://files.eric.ed.gov/fulltext/ED576665.pdf

Parise, L.M., Corrin W., Granito K., Haider, Z., Somers, M.A., and Cerna, O. (April 2017). Two Years of Case Management: Final Findings from the Communities in Schools Random Assignment Evaluation. MDRC. Retrieved from https://www.communitiesinschools.org/media/filer_public/02/7a/027a17d1-e68c-4157-a434-e20d6704aead/cis_case_management_study_full_report_public.pdf

Pinkus, L. (2008). Using Early-Warning Data to Improve Graduation Rates: Closing Cracks in the Education System. *Alliance for Excellent Education.* Retrieved from https://all4ed.org/wp-content/uploads/EWI.pdf

Ratts, M. & Greenleaf, A.T. (2018). Multicultural and Social Justice Competencies: A Leadership Framework for Professional School Counselors. *Professional School Counseling.* Volume 21(1b): 1-9.

Rumberger, R. (2013). Poverty and High School Dropouts. *American Psychological Association.* https://www.apa.org/pi/ses/resources/indicator/2013/05/poverty-dropouts

Sugarman, J. (2019). The Unintended Consequences for English Learners of Using the Four-Year Graduation Rate for School Accountability. *Migration Policy Institute.*

Retrieved from www.migrationpolicy.org/ELGradRates-FINALWEB

Tarasawa, B. & Waggoner, J. (2015) Increasing parental involvement of English Language Learner families: What the research says, *Journal of Children and Poverty*, 21:2, 129-134, DOI: 10.1080/10796126.2015.1058243

Townsend, L., Flisher, A. J., & King, G. (2007). A systematic review of the relationship between high school dropout and substance use. *Clinical child and family psychology review*, 10(4), 295–317. https://doi.org/10.1007/s10567-007-0023-7

Umansky, I. M. (2016). To Be or Not to Be EL: An Examination of the Impact of Classifying Students as English Learners. *Educational Evaluation and Policy Analysis*, 38(4), 714–737. Retrieved from https://journals.sagepub.com/doi/10.3102/0162373716664802

Urban Institute. (2020). State and Local Finance Initiative. Urban Institute: Cross Center Initiatives. Retrieved from https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/public-welfare-expenditures#:~:text=As%20such%2C%20while%20state%20and,per%20capita%20spending%20was%20%245%2C649

United States Department of Education. (February 2007). Putting Youth Development Principles To Work in Mentoring Programs. Education Northwest. Retrieved from https://educationnorthwest.org/sites/default/files/resources/factsheet14.pdf

United States Department of Education (2016). Issue Brief: Early Warning Systems—September 2016. Retrieved from https://www2.ed.gov/rschstat/eval/high-school/early-warning-systems-brief.pdf

US Department of Education. (2019). Academic Performance and Outcomes for English Learners. Retrieved from https://www2.ed.gov/datastory/el-outcomes/index.html

Virginia Department of Corrections. (2018). Financial Annual Report. VADOC. Retrieved from https://vadoc.virginia.gov/media/1203/vadoc-financial-annual-mis-report-2018.pdf

Virginia Department of Education. (2020). Standard Diploma: Minimum Course Credits. Retrieved from http://www.doe.virginia.gov/instruction/graduation/standard.shtml

Virginia Department of Education [VDOE]. (2020). School Quality Profiles. Retrieved from https://schoolquality.virginia.gov/download-data

Appendix A: Cost Analysis Assumptions

Assumptions:
I used salary data from the salary scale data on the FCPS website (FCPS, 2021). I then calculated the hourly rate assuming teachers and counselors worked 194 days per year, 8 hours per day and principals, directors of student services, and ESOL department specialists worked 260 days per year, 8 hours per day.

Salary:

Position	Low	High	Low Hourly Rate	High Hourly Rate
Teacher	$50,000	$104,269	$28.67	$59.79
Counselor	$52,000	$78,000	$33.51	$50.26
Principal	$120,622	$167,002	$57.99	$80.29
Director of Student Services	$96,497	$133,602	$46.39	$64.23
ESOL Dept	$75,940	$124,207	$36.51	$59.71

Number of Positions:

Position	Numbers
Teacher	Depends on number involved per school, multiplied by 26 high schools
Counselor	232 total, across 26 high schools
Principal	1 per high school, 26 total
Director of Student Services	1 per high school, 26 total
ESOL Dept	1 person

Appendix B: Cost Evaluation

Alternative 2: Counselor Professional Development

	Hours	Assumptions
Counselor	18	2 hours per month, 9 months
High School Principal	27	3 hours per month, 27 hours per year
Dir. Student Services	27	3 hours per month, 27 hours per year
ESOL Dept	124	(development=20 hours, maintenance=2 hours per week)

	Low/person	Low (total)	High/person	High (total)
Counselors	$603.09	$139,917.53	$904.64	$209,876.29
Principals	$1,565.77	$40,709.93	$2,167.81	$56,363.18
Student Services	$1,252.61	$ 32,567.74	$1,734.26	$45,090.68
ESOL Dept	$4,527.19	$4,527.19	$7,404.65	$7,404.65
Total Cost		$217,722.38		$318,734.79

Alternative 3: EWS Implementation Teams

	Hours	Assumptions
Teacher	36	4 hours per month/9 months; 2 teachers per school
Counselor	36	4 hours per month/9 months
High School Principal	36	4 hours per month/9 months
Dir. Student Services	36	4 hours per month/9 months
ESOL Dept	72	Planning and training: 20 hours + 52 hours to train each school (2 per school)

	Low/person	Low (total)	High/person	High (total)
Teacher	$1,032.11	$53,669.72	$2,152.34	$111,921.77
Counselors	$1,032	$239,449.54	$1,809.28	$419,752.58
Principals	$1,670.14	$43,423.65	$2,312.34	$60,120.90
Student Services	$1,314.35	$34,173.00	$2,149.74	$55,893.15
ESOL Dept	$2,628.69	$2,628.69	$4,299.47	$4,299.47
Total Cost		$373,344.61		$651,987.87

Alternative 4: Partnership with George Mason

	Hours	Assumptions
Teacher	72	2 hours per week/36 weeks
High School Principal	18	2 hours per month/9 months
ESOL Dept	200	Planning and training: 20 hours initial + 5 hours per week/36 weeks

Time:

	Low/person	Low (total)	High/person	High (total)
Teacher	$2,064.22	$107,339.45	$4,304.68	$223,843.54
Principal	$1,043.84	$27,139.95	$1,445.21	$37,575.45
ESOL Dept	$7,301.92	$7,301.92	$11,942.98	$11,942.98
Total		$141,781.32		$273,361.97