



Strengthening OtterBot for Improved Financial Aid and Postsecondary Enrollment through the OTTERS Project

By Melissa Beard | February 2024

The Optimizing Texting Technology through Engagement Research with Students (OTTERS) Project aims to enhance [OtterBot](#), an interactive chatbot, to boost financial aid applications and postsecondary enrollment for low-income students. The project is a collaboration between the Washington Student Achievement Council (WSAC) and research partner MDRC and is funded by the Capital One Foundation. This policy brief summarizes findings from the first phase of the project and provides recommendations for optimizing OtterBot to better serve its target audience of [College Bound](#) students in Washington State. College Bound students are those who qualify for free or reduced-price lunch in 7th or 8th grade, or are newly eligible in 9th, meet program pledge requirements, and 65 percent of median family income upon graduation.

About OTTERS Research

In Phase 1 of this project, the research team used quantitative and qualitative data collection and analysis to learn more about (1) student usage and engagement with OtterBot; (2) student needs, reactions to OtterBot, and perceived barriers to college; and (3) how OtterBot can be more effective in helping students receive financial aid and access education and training opportunities after high school.

The key data sources:

- Process and journey mapping.
- Administrative data.
- Survey of high school seniors.
- Student and parent focus groups (English and Spanish).

Why this work is important

Enrollment in postsecondary training and education directly from high school has declined since 2019, and only 50 percent of high school graduates statewide enroll in postsecondary institutions directly after high school.¹ Direct enrollment for low-income and BIPOC (Black, Indigenous, and People of Color) students, who are historically marginalized, is even lower than the statewide rate. Washington ranks 47th in Free Application for Federal Student Aid (FAFSA) completion,² leaving over \$50 million in federal student financial aid untapped in 2017. This highlights an opportunity to boost the uptake of generous federal and state financial aid programs that are currently underutilized to make postsecondary training and education more affordable for more Washington students. In particular, the OtterBot population comprises of College Bound students who are more likely to be BIPOC and low-income and have lower rates of postsecondary enrollment and education attainment. OtterBot may be an important tool to address these issues.

¹ "High School Graduate Outcomes Data Dashboard," Education Research and Data Center, accessed February 2023, <https://erdc.wa.gov/data-dashboards/high-school-graduate-outcomes>.

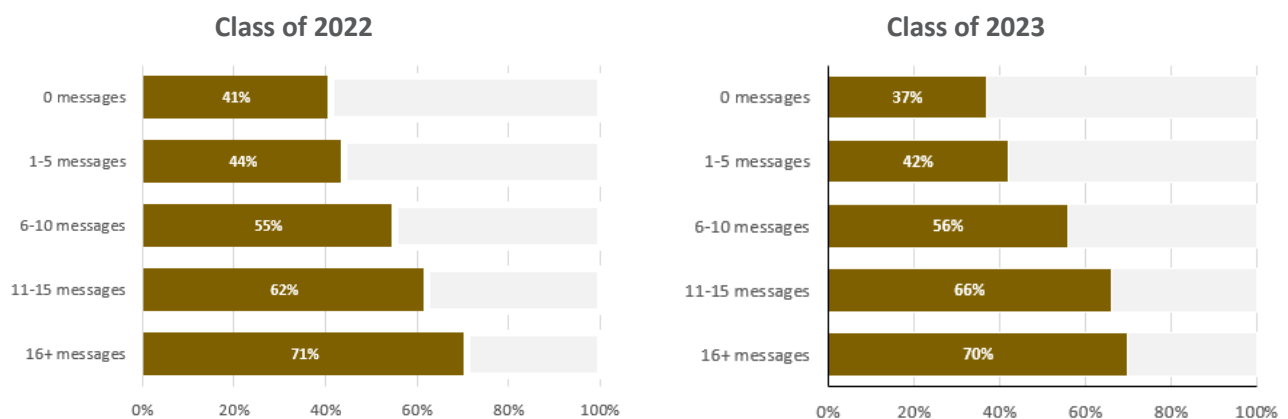
² Hamilton, R., Kwakye, I., Boylan, R. (September 2019). *FAFSA Completion by High School Students: An Environmental Scan of Programs, Gaps, and Opportunities*. Washington Student Achievement Council.

Key Findings

Proactive messaging may demonstrate an increased likelihood of FAFSA completion

To understand the potential benefits of proactive texting outreach, WSAC has looked at financial aid application completions and usage of OtterBot. Figure 1 shows that students who engage more frequently with OtterBot are also more likely to complete financial aid forms. Knowing this, the OTTERS Project is focused on how best to engage more students so they see OtterBot as a resource in postsecondary enrollment and financial aid form completion.

Figure 1. FAFSA Completion Rates by Number of Student Messages Sent to OtterBot



Source: WSAC analysis of Otterbot and College Bound Scholarship data, February 2024

Note: FAFSA completion rates class of 2022 are for the 2022-2023 FAFSA cycle. FAFSA completion rates for the class of 2023 are for the 2023-2024 FAFSA cycle.

Financial considerations are a major factor affecting post-high school plans

- In order to receive financial aid, there are several concrete actions that students need to complete during their senior year.
- OtterBot should guide students through the process needed to secure funding to help them cover the cost of tuition at Washington institutions.
- This guidance would be in the form of text messages from OtterBot urging action and answering direct questions from families to OtterBot.

“I really appreciated having regular check-ins about what I needed to be getting done, combined with all the encouragement for when I was doing well.” – Student

Source: 2021 OtterBot User Satisfaction Survey

Increasing OtterBot's engagement requires tailored outreach strategies

- OtterBot has the capability to translate messages into other languages to meet the needs of multilingual students and parents but the process to do so was cumbersome. Messages should focus on communicating the option to receive translated messages and OtterBot can be changed to make this process easier.
- Disparities exist in how students respond to OtterBot messaging; certain racial/ethnic groups and genders are more likely to engage. Research will look at which messages are related to more student engagement and if there are differences across student groups.
- The opening lines of a text are crucial to getting attention and establishing reliability considering the overwhelming number of text messages students receive from friends and family, along with schools, colleges, and advertisers. Messages should begin with encouraging an action or relaying important information instead of burying this later in the text.

"It was just nice having updates reminding me about how far I should be along every now and again!" – Student

Source: 2021 OtterBot User Satisfaction Survey

Establishing trustworthiness can help OtterBot stand out

- Students are well aware of cybersecurity and scam attempts. They would be more likely to use OtterBot if it were introduced to them by a trusted source, such as their high school counselor or a parent.
- Trust should be built with counselors and parents by communicating how OtterBot can assist families with navigating postsecondary training and education options and financial aid applications.

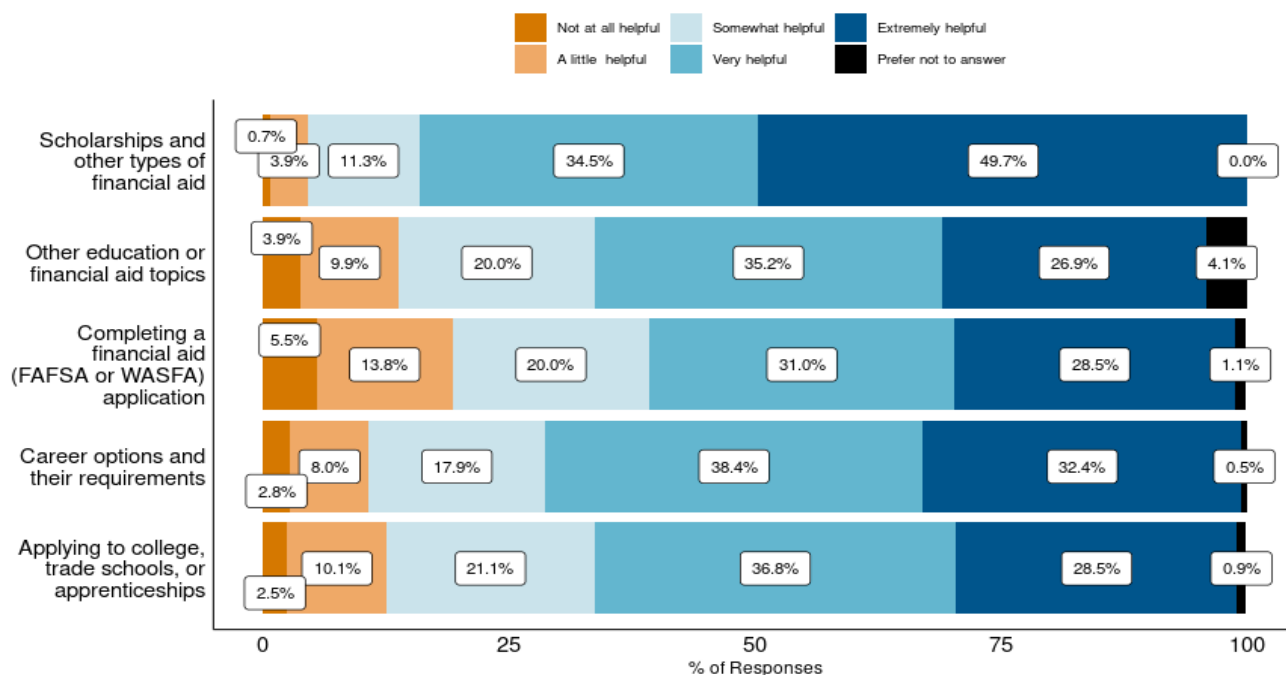
Students and parents have informational needs that OtterBot can support

- In addition to receiving messages about financial aid and postsecondary enrollment, Figure 2 shows other information students and parents would want to see from OtterBot.
- 84 percent of students and parents surveyed said receiving scholarship and other types of financial aid information would be extremely helpful or very helpful.
- 71 percent of students and parents surveyed said receiving information about career options and their requirements would be extremely helpful or very helpful.
- To build trust in the tool, OtterBot should send messages about scholarships, financial aid, and career options prior to senior year.

"OtterBot was very helpful with reminding me of deadlines and I loved that OtterBot felt very personable." – Student

Source: 2021 OtterBot User Satisfaction Survey

Figure 2. Percentage of Students who Expressed Interest in Receiving Additional Information of Various Types



Next Steps to Improve OtterBot and Increase Student Engagement

Given all that we learned during the OTTERS Phase 1 work, we are implementing a series of modifications to optimize the chatbot:

1. **Tailored Campaigns:** The messaging team is creating introductory campaigns tailored for College Bound students and their families by grade, self-reported plans after high school, and GPA.
2. **Engaging Openers:** Messages are using engaging opening lines to capture students' attention.
3. **Message Conciseness:** Messages are concise and readable at the standard communications recommendation.
4. **Bilingual Messages:** Automated translations are being reviewed and improved, and the research team is exploring culturally competent interventions, especially for Hispanic students.
5. **Trusted Intermediaries:** WSAC staff are engaging school counselors and parents as trusted sources to expand OtterBot's reach and credibility.
6. **A/B Testing:** The research team is implement A/B testing of messaging strategies for effectiveness.

Phase 2, also funded by the Capital One Foundation, involves WSAC and MDRC implementing these recommendations, shaping long-term strategy, and conducting additional testing for continuous improvement. This work is expanding beyond seniors with the team creating campaigns focused on freshmen, sophomores, juniors, and parents; emphasizing a comprehensive approach to utilizing messaging to improve financial aid and postsecondary enrollment outcomes.