The Washington Student Achievement Council (WSAC) first launched OtterBot in fall 2019 to connect Washington's low-income students and families with critical information in a relevant and accessible way. This chatbot, informed by artificial intelligence (AI), has served nearly 225,000 high school students, parents, and guardians across five academic years—tested first under the duress of a national pandemic, and then by last year's challenging rollout of the new FAFSA.

Only 39% of low-income students—and 52% of all students—in the class of 2022 enrolled in college within a year of high school graduation.[†] Resource-intensive interventions like one-on-one counseling, on-demand support sessions, and early programming on college and career readiness could potentially increase these rates. Unfortunately, school districts are already navigating how to do more with less, and the cost of scaling these interventions exceeds available resources. By serving as an informational conduit with direct access to learners and parents, OtterBot enables counselors to preserve their time for individualized support.

Creating new resources for broad audiences is unlikely to solve this problem, either, since information is most effective when it targets recipients' contexts.[1] We need to disseminate the resources we have more effectively, and OtterBot can do exactly this. The bot provides students and families with digestible and relatable information when and where they need it. And with a direct line to Washington's state financial aid administrator, OtterBot is powerfully positioned to myth-bust inaccurate or outdated information.

131,081
College Bound students and parents received a text message in 2023-24

550,064
messages went out to high school seniors and parents about last year's FAFSA

44%
of OtterBot student users identify as Hispanic/Latino

In this brief, we monitor progress toward leveraging OtterBot as a scaleable strategy for increasing college and financial aid access statewide. We showcase how the College Access Initiatives (CAI) team continuously adapts OtterBot to expand its audience and improve its effectiveness.

In just 5 years, CAI has increased OtterBot's reach by over 1,000%

OtterBot launched in fall 2019 with the goal to increase financial aid awareness among its audience of less than 10,000 high school seniors eligible for the College Bound scholarship. In the time since, CAI has expanded the bot's reach to serve more than 33,000 high school students and 95,000 parents each year.

[†] College Bound eligibility is based on eligibility for free and reduced price lunch (FRPL) when students are in middle school. College enrollment rates pull from ERDC's high school outcomes dashboard.

One-time legislative funding enabled CAI to text 9th and 10th grade students and all high school College Bound parents for the 2024-25 academic year. This expansion is in direct response to students' and families' feedback. In surveys, focus groups, and informal conversations, families shared the importance of getting information about college and financial aid earlier, and preferably as complementary communications to both students and parents.

Figure 1. OtterBot now reaches over 120,000 students and parents each year
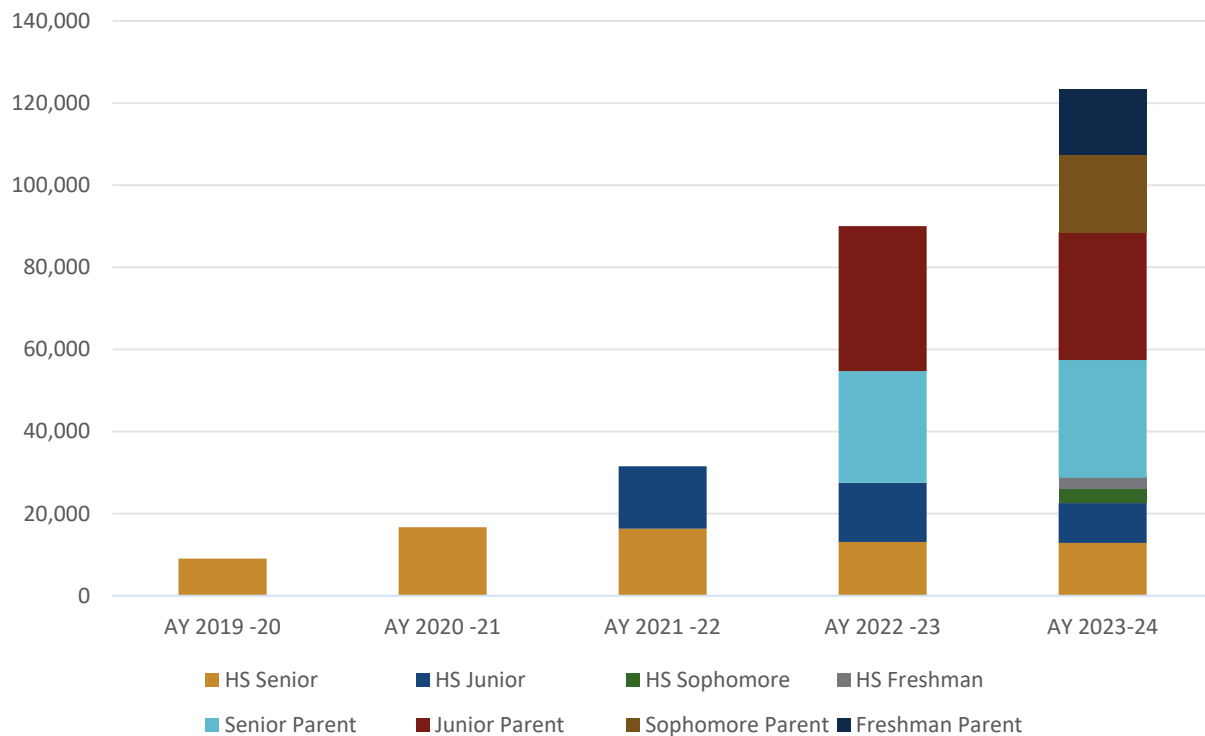
Source: WSAC analysis of OtterBot users

Substantial planning goes into each expansion. Staff design a full year of text message campaigns that align with the new audience's place in the college and financial aid journey. These messages draw on proven behavioral science principles and key college access milestones informed by the CAI team's broad work. For this year's high school freshmen and sophomores, the OtterBot campaigns emphasize understanding career options, building an academic profile, and the basics of College Bound.

CAI mobilized OtterBot to communicate last year's FAFSA challenges

Last year's high school seniors found themselves in the middle of a chaotic transition to a new FAFSA form—full of delays, technical glitches, and formula errors. Recognizing how these challenges might quickly cascade into fewer students submitting an aid application—and thus fewer eligible students receiving aid that makes postsecondary education affordable—CAI staff acted quickly to communicate changes in real time.

Between October 2023 and October 2024, CAI sent frequent updates to high school seniors and parents about the new FAFSA, including information about completing the application, its delayed opening, and ongoing challenges as applications were processed by the US Department of Education.

For the class of 2024, preliminary data showed that College Bound students who were contacted by OtterBot had a FAFSA completion rate 14 percentage points (pp) higher than students who were not contacted, and 6pp higher relative to the statewide FAFSA filing rate of 50%. Even among low-income students, those contacted by OtterBot had a FAFSA completion rate 10pp higher than the state rate for FRPL-eligible students. In a recent survey of College Bound seniors, over 79% of respondents who were familiar with OtterBot indicated that the bot's messages helped them take steps toward filing their financial aid application.[2]

Did you know? WSAC's financial aid experts power OtterBot

OtterBot's knowledge base relies on WSAC's financial aid and college access experts, who commit their time and expertise to ensuring that the bot stays up-to-date. Last year, CAI designed and sent 20 text message campaigns to high school seniors and parents about the FAFSA rollout. OtterBot may be AI-informed, but it will always be human-powered.

Figure 2. 56% of students who were contacted by OtterBot filed the FAFSA last year
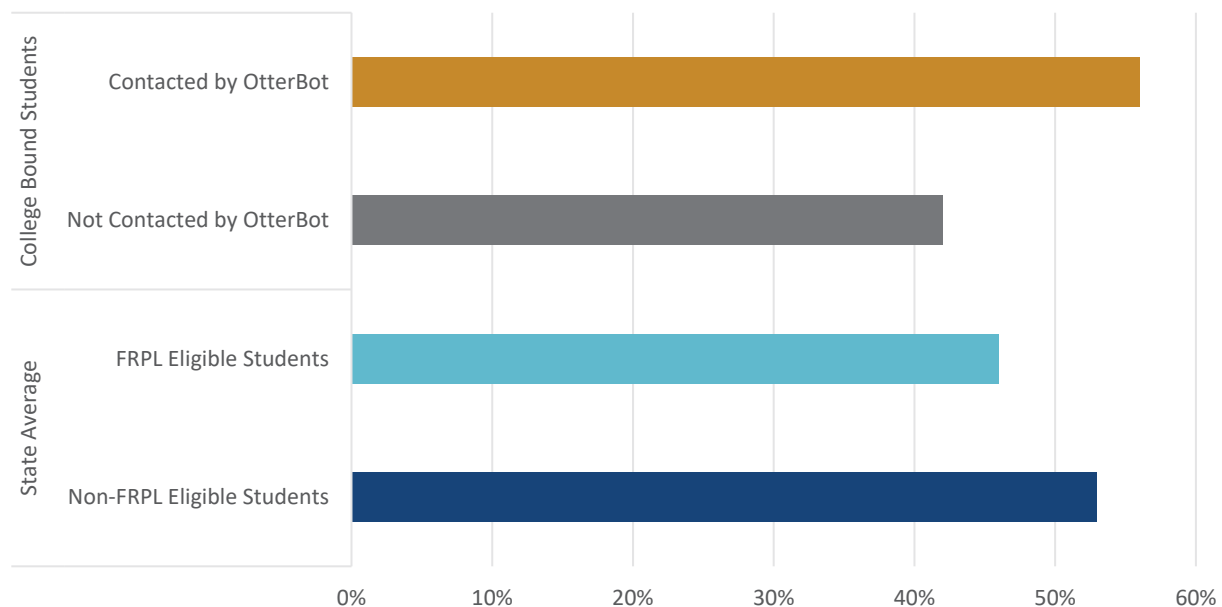
Source: WSAC and MDRC analysis of OtterBot users; WSAC SAP Dashboard

These data points amplify how scaleable, cost-effective strategies might lead to meaningful increases in FAFSA—and WASFA[‡]—filing rates, and by extension, postsecondary enrollment rates statewide. Further research can confirm whether OtterBot users' higher filing rates are attributable to the bot's messaging.

[‡] OtterBot shares information on Washington State's financial aid application (WASFA) as well as state aid opportunities available to Washington residents who are not eligible for federal aid.

CAI uses OtterBot for culturally responsive communication

The population of students who receive College Bound—which is targeted at low-income students—are more likely to represent racially minoritized groups than the overall K-12 population in Washington. When considered alongside the documented differences in educational attainment by race/ethnicity, it becomes clear that leveraging OtterBot as a tool for culturally responsive communication is critical to achieving our statewide goal of a 70% postsecondary attainment rate.

For example, whereas 52% of all students in the class of 2022 enrolled in college within a year of high school graduation, the direct-to-college enrollment rate among students who identified as Hispanic/Latino was only 42%.[3] This difference in enrollment rates is reflective of systemic underinvestment in and exclusion of Hispanic/Latino communities from postsecondary education. It also amplifies the importance of engaging in college and financial aid outreach that honors Hispanic/Latino students' cultural context and directly addresses the systemic barriers that disproportionately affect students in this population.

In this regard, OtterBot is well-positioned. Not only does OtterBot serve a population of students who disproportionately identify as students of color, but over a fifth of College Bound students—the central OtterBot audience—come from families that speak a language that is not English at home.

Figure 3. OtterBot reaches a racially diverse population of students
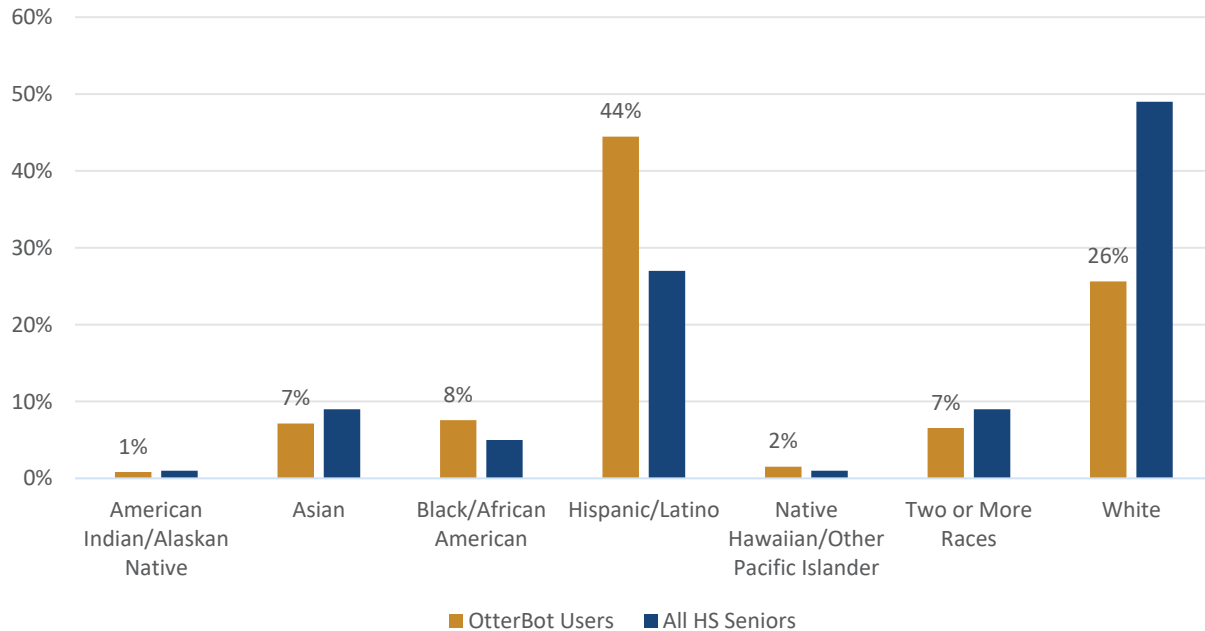
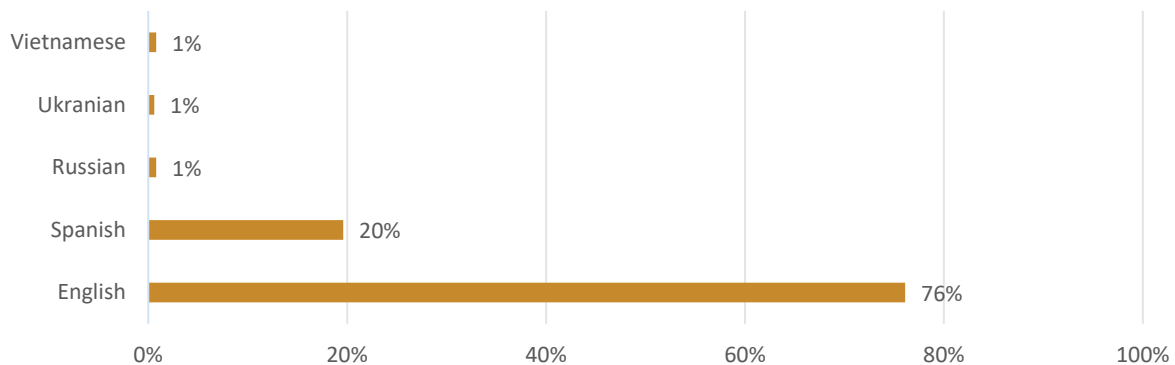*Source: WSAC analysis of OtterBot users and OSPI Report Card – Enrollments File for 2023-24 AY*

Effective outreach requires careful consideration of students' and families' unique needs and contexts. For example, CAI has diligently learned how OtterBot can better support its large audience of Spanish-speaking families. Staff send reminders about the bot's built-in language functionality, and the annual

introduction campaign tells users how to change the default language from English to more than 100 available languages. After Spanish-speaking students and parents/guardians called attention to how cumbersome it can be to switch languages using the built-in commands, staff built new commands that escalate these language change requests for manual adjustment.[4] These actions reflect CAI's ongoing commitment to culturally responsive program design that improves communication with key audiences.

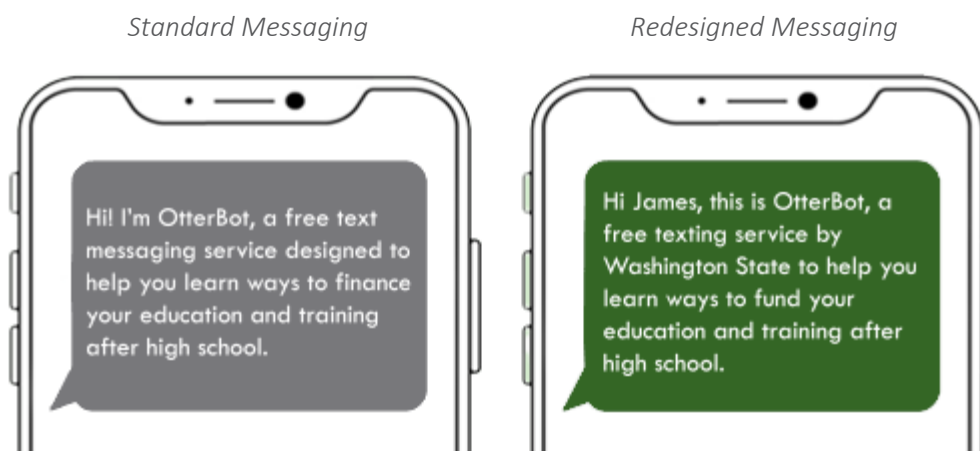**Figure 4. Over 20% of College Bound students speak a language other than English at home**

Source: WSAC analysis of College Bound High School Students

CAI uses research and innovation to craft OtterBot messages

Through focus groups and surveys, WSAC has learned directly from students and parents how trust-building is an essential part of OtterBot's success. This student feedback directly shapes the messages that CAI crafts. Critically, students shared that OtterBot's affiliation with a state agency increases its trustworthiness, whereas certain website links decrease the trustworthiness of messages. In response to this feedback, staff now reiterate OtterBot's state affiliation whenever it makes sense to do so, and crafted messages intentionally avoid using links where the source website is not visible.

Figure 5. OtterBot messages are designed to establish credibility and trust

Standard Messaging

Hi! I'm OtterBot, a free text messaging service designed to help you learn ways to finance your education and training after high school.

Redesigned Messaging

Hi James, this is OtterBot, a free texting service by Washington State to help you learn ways to fund your education and training after high school.

Source: MDRC and WSAC internal report on the OTTERS project

Students and parents also signaled that hearing about OtterBot from a trusted messenger—like their high school counselor or a teacher—has a huge impact on their willingness to use the tool. Based on this feedback, CAI bolstered its outreach to trusted messengers so that they can introduce OtterBot with students as part of existing college and career programming.

CAI uses research and data to improve OtterBot engagement

Over the 2023-24 academic year, WSAC partnered with MDRC in grant-funded research in which the teams tested whether sending text messages designed using behavioral science principles led to meaningful change in students' engagement with OtterBot.[5] For example, behavioral design principles such as loss aversion (i.e., humans tend to experience losses more strongly than gains) and social proof (i.e., humans will copy other humans' behavior) can nudge students to take action.

Figure 6. CAI staff use behavioral science principles to nudge students to file the FAFSA

Loss Aversion   *Social Proof*

Don't miss out! Explore participating schools and programs to make the most of Washington State financial aid https://wsac.wa.gov/sfa-institutions

Dear Brianna, many College Bound students like yourself have already completed their FAFSA!

Source: MDRC and WSAC report on the OTTERS

Designing messages using these principles is now a standard practice for the CAI team. Equally importantly, staff continue to engage in user testing and conduct focus groups that inform how OtterBot messaging campaigns are designed. Furthermore, bot optimizations, such as manually implemented link tracking, provide an avenue for staff to observe which resources are most used. Understanding which resources gain traction helps CAI identify what to amplify and what to improve.

Ongoing OtterBot Optimization to Better Support Students and Families

Alongside modest changes that increase the bot's effectiveness, CAI is also piloting and implementing large-scale changes that expand its reach and influence:
- CAI staff use generative AI to more quickly incorporate accurate information.
- Regionalization allows for customized information that is more likely to yield behavioral changes.
- Expanded contact information ensures more of the state's students and families have access to timely and accurate information about financial aid.

Safely harnessing generative AI to curate OtterBot

OtterBot is not a generative AI chatbot—its messages are powered by the agency's subject matter experts. CAI is, however, identifying ways that OtterBot can become more efficient through the strategic use of embedded generative AI tools.

Recently, the team began expanding the chatbot's repository of questions and answers by providing its knowledge base with trusted and reliable information sources such as the Federal Student Aid website, studentaid.gov; WSAC's agency website; and the College and Career Knowledge e-book that WSAC publishes with partners, among others. The bot's built-in gen AI tool pulls from trusted sources to provide draft messages that staff can then review for accuracy and improve based on the team's design principles.

If a question or topic is not already incorporated into the OtterBot knowledge base, the bot will never provide an AI-generated response on its own; instead, users can request a follow-up with a human. When staff identify key questions that the bot should be able to answer, generative AI provides an avenue to quickly incorporate relevant information from trusted sources. Staff use AI to help OtterBot help more families.

Piloting a localized, partner-informed version of OtterBot

User testing and focus groups consistently surface the potential for OtterBot to scale local outreach activities by providing direct, regionalized support. OtterBot has always been attentive to regional context—for example, using data on financial aid completion status to provide targeted supports to ESDs and school districts. This regionalization pilot improves outreach by working with trusted messengers who are embedded in their communities to increase the visibility and accessibility of the chatbot while also strengthening its legitimacy with students and families.

Successfully customizing OtterBot's messaging through local outreach and engagement involves:
- Developing internal infrastructure to track and share local events with OtterBot users.
- Directly connecting students with trusted community members who can help answer questions.
- Monitoring local students' interactions with OtterBot to help us customize interventions so that they meet partners' regional needs.
- Developing customized trainings for partnership staff on how to access the College Bound portal and use it to update student contact information.

WSAC intends to expand the pilot to additional partners throughout the state. This initial phase provides an opportunity to field test what's required to create a scalable and sustainable approach to regionalizing OtterBot. OtterBot can keep pace with the changes occurring in federal financial aid applications so that district staff don't have to carry this responsibility alone.

Reaching all students through SB 6053 (2024)

In 2024, the Washington Legislature passed Senate Bill 6503, which allows the Office of Superintendent of Public Instruction (OSPI) to share directly with WSAC newly collected contact information for high school students for the purposes of financial aid outreach and college-going information. Even though College

Bound students are automatically enrolled into College Bound via a data exchange with OSPI, this data exchange does not include students' contact information.

Historically, CAI has worked with school and district partners to try to obtain up-to-date contact information for College Bound students and their families. However, this process is time-consuming for school and district staff—as well as CAI staff—and, even at best, yields only a patchwork of contact information.

This legislation offers an incredible opportunity for CAI and OtterBot to expand outreach to Washington's full population of low-income high school students, far beyond the less than half of College Bound students that CAI is currently able to reach. Moreover, the legislation will provide an on-ramp for future outreach campaigns to additional populations for whom postsecondary attainment rates remain well below the statewide goal of 70%.

Implementation of SB 6053 will begin in spring 2025, once OSPI and WSAC formalize a data-sharing agreement that allows for the secure exchange of student contact information. WSAC is optimistic that this new data-sharing will drastically increase the number of students and families OtterBot directly supports each academic year.

About WSAC's College Access Initiatives Division

Members of the College Access Initiatives (CAI) division serve as the state's trusted and reliable subject matter experts on college access and financial aid. CAI provides a statewide infrastructure for increasing postsecondary access and enrollment for students, families, and the communities in which they live. In this infrastructure, CAI seeks to support all Washington high school students in culturally and regionally responsive ways, especially those who are low-income and/or racially minoritized.

CAI is intentionally responsive to ongoing changes in financial aid systems, colleges and training programs, and the communities where learners live. The division has developed strategic college access initiatives across the state, including: creating awareness for the **College Bound** scholarship, utilizing the AI-informed **OtterBot** chatbot to engage students and families about pathways after high school, working with trusted messengers to increase FAFSA/WASFA completion rates with the **12th Year Campaign**, and partnering with other state agencies to support FAFSA completion through **Aim Higher Washington**.

About OtterBot

WSAC's AI-informed chatbot, OtterBot, helps Washington students access and enroll in college by using text messaging to support students and families with the college planning and financial aid application processes. Launched just before the pandemic (November 2019), OtterBot quickly adapted to students' needs during an acute period of upheaval in traditional college outreach system. Since then, OtterBot continues to adapt its outreach and its messaging in response to learners and families' shifting needs.

Where to Find Us

Visit our and watch our How To videos (English | Spanish) to learn more!

If you're a student, text "Hi OtterBot" to 360-928-7281

If you're a parent, text "Hi OtterBot" to 360-634-0354

If you're involved in college access in your professional role or within your community, request CAI's incredible resources—including OtterBot informational posters!—here.

Email our team at collegebound@wsac.wa.gov

Our Partners in OtterBot Outreach

As the state's subject matter expert on financial aid and college access, CAI knows that its power is in its ability to amplify critical messages that enable students to succeed in identifying and pursuing their post-high school graduation plans. Because of this amplifier role, we continuously promote OtterBot as a tool that can help key partners reach audiences who most benefit from timely, accurate information about college and financial aid. OtterBot is a conduit through which we support partners in sharing information on scholarship opportunities, upcoming events and deadlines, as well as real-time updates or changes. We thank our previous and current partners us for trusting us to amplify their messages.

Amazon Future Engineer Scholarship (2022, 2023, 2024)

AmeriCorps (2024)

College Success Foundation/Washington College Access Network (2020, 2021, 2022, 2023, 2024)

Columbia Basin College (2024)

ESD 123 (2021)

Federal Student Aid (2024)

FuturesNW (2021, 2023, 2024)

Get Schooled (2024)

Grays Harbor College (2024)

Green River College (2021)

Independent Colleges of Washington (2024)

Jay Inslee, Governor of Washington (2024)

National Association of College Admission Counseling (2020, 2021)

North Thurston High School (2024)

Pacific Northwest Association for College Admission Counseling (2023, 2024)

Pierce College (2020)

Seattle Public Schools (2020)

Spokane Public Schools (2020)

Swift Student (2020)

Tumwater High School (2020, 2024)

Tumwater School District (2024)

WA Passport to Careers (2021)

Washington Guaranteed Admission Program (2024)

Walla Walla Community College (2021)

Washington State Opportunity Scholarship (2020, 2021, 2022, 2023, 2024)

Washington College Grant Apprenticeships (2020)

College Success Foundation/Washington College Access Network (2020, 2021, 2022, 2023, 2024)

Sources

[1] Carrell, S., & Sacerdote, B. (2017). Why Do College-Going Interventions Work? *American Economic Journal. Applied Economics*, *9*(3), 124–151. https://doi.org/10.1257/app.20150530. Hanauer, K., Sneed, S., & DeBaun, B. (2020). Emergent Learning: Increasing the Impact of Foundation-Driven Strategies to Support College Enrollment and Completion. *The Foundation Review*, *12*(3), 9. https://doi.org/10.9707/1944-5660.1531

[2] WSAC and MDRC analysis of OtterBot users; WSAC SAP Dashboard (https://wsac.wa.gov/sap-dashboard)

[3] See ERDC's dashboard on high school graduate outcomes: https://erdc.wa.gov/publications-and-reports/high-school-graduate-outcomes

[4] Beard, M. (2024, February). Strengthening OtterBot for Improved Financial Aid and Postsecondary Enrollment through the OTTERS Project. https://wsac.wa.gov/sites/default/files/2024.02-OTTERS-Policy-Brief.pdf.

[5] Beard, M. (2024, February). Strengthening OtterBot for Improved Financial Aid and Postsecondary Enrollment through the OTTERS Project. https://wsac.wa.gov/sites/default/files/2024.02-OTTERS-Policy-Brief.pdf

About the Washington Student Achievement Council

The Washington Student Achievement Council is committed to increasing educational opportunities and attainment in Washington. The Council has three main functions:

- Lead statewide strategic planning to increase educational attainment.
- Administer programs that help people access and pay for college.
- Advocate for the economic, social, and civic benefits of higher education.

The Council has ten members. Four members represent each of Washington's major education sectors: four-year public baccalaureates, four-year private colleges, public community and technical colleges, and K-12 public schools. Six are citizen members, including two current students (one graduate student and one undergraduate student).

If you would like copies of this document in an alternative format, please contact the Washington Student Achievement Council at:

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TTY/TDD users may dial 7-1-1 for relay services

WASHINGTON STUDENT ACHIEVEMENT COUNCIL

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