

The Ohio LSAMP Alliance

Evaluation Report: Year 9-4 (2021-2022) 2022 Summer Bridge/Early Arrival Programs Survey Results Prepared by **I**nstitutional **R**esearch **C**onsultants, Ltd.¹ January 19, 2023²

EVALUATION SUMMARY

The overall goal of the National Science Foundation's Louis Stokes Alliances for Minority Participation (LSAMP) program is to increase the number of underrepresented minority students who complete degree programs in science, technology, engineering, and mathematics (STEM). The Ohio LSAMP Alliance has consistently offered summer bridge and early arrival programs (EAP) due to the numerous, documented beneficial impacts these programs have on students entering college. Participating students typically gain greater awareness of the academic rigor expected at the collegiate level and the support services available to them. Participation has also been shown to increase student comfort with faculty, improve their math, study and time management skills, help them adjust to campus life and make new friends.

Seven of the 10 Ohio LSAMP Alliance institutions had a summer bridge or EAP in 2022—two community colleges (Columbus State and Sinclair) and five universities (Cleveland State University, Miami University, The Ohio State University, University of Cincinnati, and Wright State University). The two community colleges that did not offer a program (Cincinnati State and Tri-C) were invited to participate at nearby partners (University of Cincinnati and Cleveland State University, respectively). Since Central State University was unable to obtain sufficient funding for summer programming, this partner incorporated comparable activities in its two-session First Year Seminar, a requirement for all STEM majors beginning in fall 2019. This was the first year since 2019 that all locations returned to in-person programming; Ohio State continued some of its components virtually, such as Lunch and Learn sessions, because this format worked especially well for guest speakers.

The Summer Bridge/Early Arrival Program Survey was developed in 2020 by evaluator Dr. Jan Upton with input from The Ohio LSAMP Alliance Director Dr. Dorinda Gallant and staff. Since no changes were made to the instrument, this report highlights, where appropriate, comparative data drawn from the prior two years affected by pandemic restrictions. In 2020, all programs were offered remotely. Although five partners returned to the in-person format in 2021, some students had difficulty with that transition. The two largest programs at Ohio State University (OSU) and the University of Cincinnati (UC) continued with online programming (OSU included some in-person community-building activities).

The survey included demographic questions (gender, race/ethnicity, and parent/sibling college attendance and degree), and asked participating students to report on or rate their experiences in the following areas:

- ✓ How they learned about the summer bridge/EAP
- ✓ Majors and degree aspirations
- ✓ Awareness of resources and supports and if they learned about these in the program
- ✓ Integration into college life and sense of belonging in LSAMP
- ✓ Opinion about the program and its impacts
- ✓ Satisfaction with the summer bridge/EAP

¹ Institutional Research Consultants, Ltd. (IRC) www.irc-evaluation.com is an independent evaluation research firm located in central Ohio.

² LSAMP partners were given an opportunity to review and have input on the October 28, 2022 draft.

The results of the Summer Bridge/EAP Survey, based on quantitative data and open-ended comments from 114 of 141 LSAMP-eligible student respondents (81% response rate), confirmed that the seven programs represented in this report met their objectives and had positive impacts in key domains that bode well for student success. Areas where lower ratings occurred are also highlighted to encourage partners to examine aspects of the programming that may benefit from adjustments in future implementations.

Most students overall (95%) were aware of who their academic advisors were and where on campus to get tutoring in their STEM courses. High percentages knew about campus wellness (94%) and health services (90%). Sinclair CC was an outlier on these two metrics (50% on each, respectively). Most participants at each location also knew about STEM-focused campus clubs and activities (95 - 100%) and where on campus to get tutoring in non-STEM courses (79 - 100%), but only 67 percent of Sinclair CC students reported being aware of these campus resources. Lastly, while 85 to 90 percent of summer bridge participants at the partner sites affirmed they knew where to find workshops and counseling on study skills and career resources or STEM internships, just over half of Sinclair CC students (58% on each, respectively) did so. Most students (82 – 91%) reported learning about these resources and supports during their respective summer bridge/EAP experience.

Concerning social integration, most students felt comfortable asking faculty members for help (97%), collaborating with students different from themselves (96%), comfortable with their academic advisors (95%), and making new friends (93%). The proportion of students who felt anxious about starting college fell to 62 percent (down from 78% last year). Notably, students were least anxious at Cleveland State (43%) and Sinclair (50%). However, the proportion admitting they had to push themselves to reach out to peers remained about the same (70% compared to 72 percent last year) as did those having to push themselves to reach out to faculty and/or staff (64% this year and last).

The partners' summer bridge/EAPs generated a strong sense of belonging amongst participating students across all the summer bridge/EAP programs. Ninety-nine percent agreed that LSAMP activities made them feel included, they felt part of the LSAMP community at their institutions (98%), other LSAMP students accepted them (97%), and they belonged in their institution's LSAMP program (97%).

In terms of overall opinions on their summer bridge/EAP experiences, students affirmed that program participation improved their comfort level at college, made them better prepared to succeed in college (98% on each), gave them a peer network, helped them make friends, and made them more determined to pursue STEM-related careers (97% on each). Ninety-six percent felt more comfortable with STEM faculty and more determined to study a STEM-related field. Most (91-95%) indicated the program helped them form a relationship with at least one faculty member, improve their understanding of degree requirements in their major, increased their awareness of career options, taught them effective study skills, and helped them understand what a research career entails. More students across the board agreed that their respective summer bridge/EAP programs this year prepared them for research, including Cleveland State (91% compared to 73% last year and 91% in 2020) and UC students (86% compared to 75% last year and 87% in 2020). A majority overall (82-89%) concurred the programming engaged them in hands-on STEM activities, and improved their writing, communication and math skills. Notably, a greater proportion of UC students acknowledged the summer bridge benefitted their writing and communication skills this year (93% compared to 65% last year and 80% in 2020).

Impressively, 100 percent of the UC respondents thought the summer bridge programming expanded their awareness of career options not previously considered (a marked improvement over 75% last year and 79% in 2020). Also notable, 72 percent of OSU students confirmed the EAP improved their understanding of degree requirements for their major (an improvement over 67 percent in 2021 and 64 percent in 2020). The impact of the summer bridge on students joining a study group and/or planning to continue meeting with a study group during the academic year was most pronounced on Miami University (89%), UC (86%), and Columbus State CC (83%) students. This result hovered at a little more than half for the other sites (OSU 56%, Sinclair CC 55%, Cleveland State 54%, and Wright State 50%).

Almost all respondents (98%) were satisfied with their summer bridge/early arrival program experience overall and 97 percent indicated satisfaction with course topics. Participants were also pleased with the interaction with and access to faculty and staff and program communications (96% on each, respectively). High percentages liked their program's availability of supplies, books, online resources and other materials (95%), program duration (94%) and timing (93%), and hands-on activities and organization (each 89%). However, UC student ratings of program organization and the daily schedule were notably lower this year (67% on each compared to 86 - 100% for the other partner programs on these metrics). UC students' open-ended comments attributed their dissatisfaction to the program's rigid schedule and lack of flexibility in allowing study time that met the students' needs.

Student suggestions for how their respective programs could be improved centered generally around having less lecture and integrating more collaborative activities, interaction, one-on-one attention, and flexibility in the daily schedule and time allotted for projects and presentations. Recommendations specific to each site's summer bridge/EAP served to further inform the partners' already effective efforts in preparing incoming URM freshmen to achieve success in their STEM pathways.

Survey findings overall provide strong evidence that these programs helped prepare students for their first year of rigorous college-level STEM course work and connected them to campus resources and supports. Student ratings across the board show they valued their respective programs' skills workshops, hands-on labs, introductions to faculty, and exposure to the nature of STEM research. The programs' social aspects helped students gain a sense of belonging to a community and decreased their isolation. They especially liked hearing from student panelists and guest speakers and appreciated one-on-one attention from peer mentors or STEM Peer Teachers (specific to Cleveland State).

The quantitative data and participants' open-ended comments confirm that the well-rounded, robust summer bridge and EAP programs offered by the seven LSAMP partners in 2022 met their overall objectives of increasing students' familiarity and comfort with campus resources and faculty/staff, helping them to form support networks, and improve their STEM-related skills. The Ohio LSAMP Alliance is well positioned for continued success on this multifaceted, challenging endeavor. Further institutionalization of these programs is essential to ensuring that future URM STEM students continue to have access to these opportunities that strengthen college readiness and contribute to positive academic outcomes.