

Academic Assistance and Tutoring Centers

PROGRAM REVIEW

Leadership Team:

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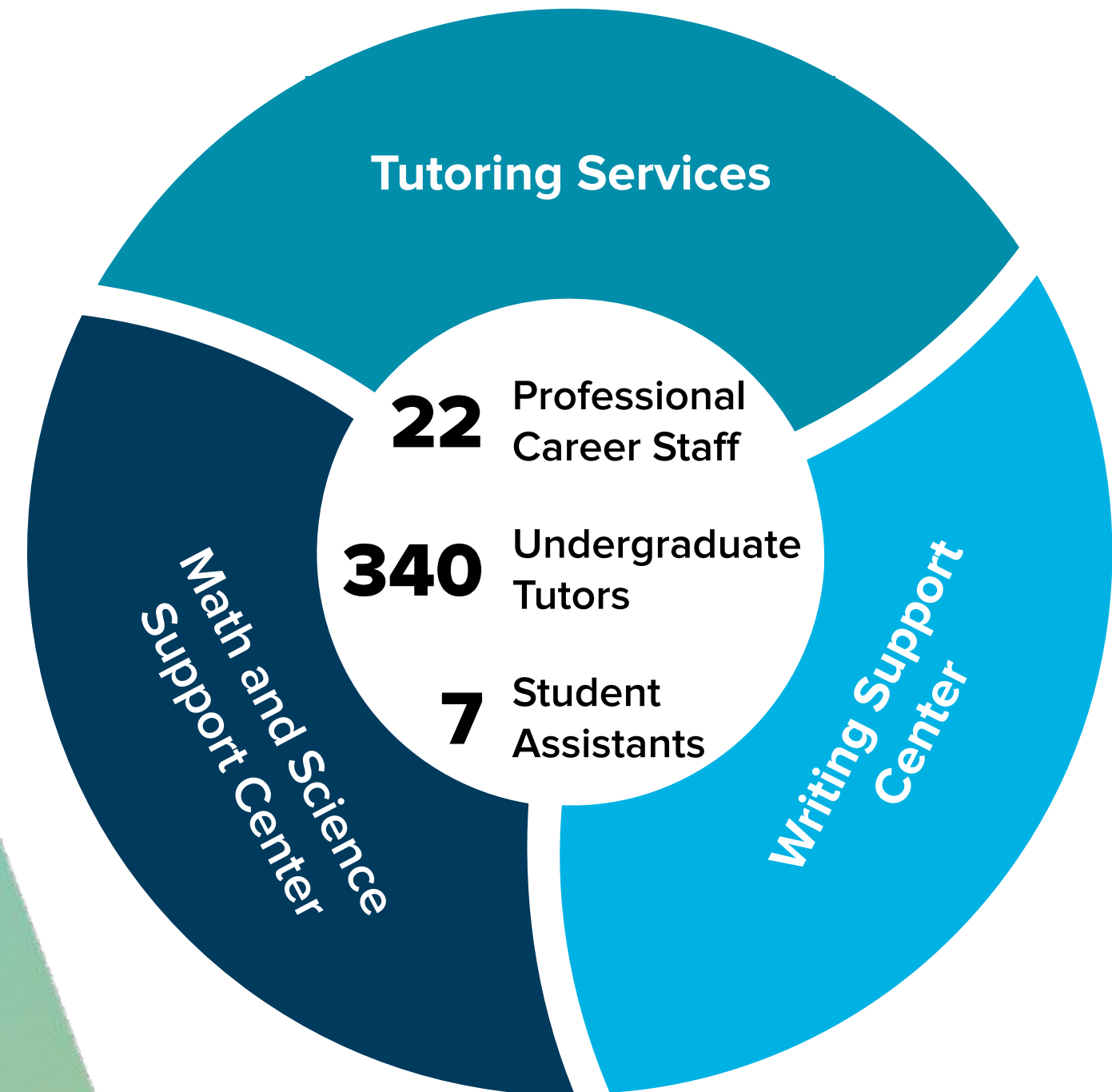
MAY 2021

CORE PURPOSE

The Academic Assistance and Tutoring Centers (AATC) exists to help undergraduate students thrive at UC Davis and beyond. We provide an inclusive and interactive environment where students participate in reinforcing and retaining knowledge in multi-disciplinary writing, math and science through co-curricular academic services provided by both professional staff and peer tutors.

We strive to support students in developing the academic competence and confidence that will empower them to succeed at UC Davis. We meet each student where they are academically so that we can help students do better in their classes.

Academic Assistance and Tutoring Centers



HISTORY of AATC

**Academic Assistance and Tutoring Centers is rooted in
nearly *50 years* of commitment to student success.**

- 1972** Learning Skills Center created in Student Affairs to serve primarily EOP students with additional services for all UC Davis students. Math, chemistry, and writing academic support programs were developed in the Center.
- 1976** 1st STEP Program in the Learning Skills Center launched that included a Mock Trial Program.
- 1982** The Math Diagnostic Testing Project (MDTP) established a UC Davis site. MDTP at UC Davis is funded through the California Academic Partnership Program (CAPP) and the UC and CSU systems to provide a free assessment system to support secondary mathematics educators in California schools.
- 2010** The Learning Skills Center, including the budgets, merged with Student Special Services and was renamed to the Student Academic Success Center (SASC). Programs included were tutoring & academic support, EOP, transfer, reentry, and veterans. Two co-directors were in place to manage two units in the SASC.
- 2012** Student Affairs provided funding to the academic side of the SASC for an International Student Support Program to address academic difficulties of international students. Over 400 students per year enrolled in a 1-unit class taught by academic support staff through the School of Education.
- 2015** International Student Support Program moved to the School of Education and adopted our course curriculum.
- 2016** The academic learning support unit in the SASC took over responsibility for teaching all sections of MAT B, C, and D for the Department of Mathematics.
- 2017** The Writing Studio was launched by AATC to provide students with a place to practice writing.
- 2018** AVC Student Life (Milton Lang) split SASC into 2 units (Academic Assistance and Tutoring Centers and Office of Educational Opportunity and Enrichment Services) with separate org codes and budgets.
- 2019** Drop-in services for math and science moved to the lower level of Shields Library to increase student access.

AATC in STUDENT AFFAIRS

The Academic Assistance and Tutoring Centers work from a framework that values the whole student and considers the student through both the educational and social/political context from which students come to the university. Because of this focus, our work closely aligns with and is supported by our inclusion in the Student Affairs family. Ultimately, we feel that leveraging our collective strength through collaborative partnerships while remaining under Student Affairs leads to the most good for the most students.

- Primarily funded by student fees; SA has historically been able to fund growth for programs in the department
- Within Student Affairs, AATC staff have direct and ongoing access to colleagues and services that address campus climate and how they affect student success academically as well as personally
- AATC is able to move more quickly to adjust services according to trends (demographics, best practices, etc.) because of our immersion in Student Affairs and because of our mission to serve students regardless of what college or major they belong to
- *By existing outside of an academic department structure and without faculty titles, AATC spaces and staff allow students to take risks, like asking questions, without concern or fear about it impacting their grade. This concept of brave/safe spaces is core to Student Affairs.*
- Math Specialists in the AATC are designated by the Math Department to teach all sections of MATB/C/D because of their training around equity and pre-university educational contexts students come from
- Faculty relationships are well established with AATC staff serving on department committees, providing TA training, being thought partners about teaching practice, conducting joint projects to assess student learning, vetting new instructional technology, and even providing input on universal design in teaching.
- ***Our campus relationships thrive because of the backgrounds and experience of AATC staff as Student Affairs practitioners with expertise in an academic discipline***

What Drives AATC SERVICES?

AATC uses multiple strategies and partnerships to help drive our services.

PROFESSIONAL STANDARDS

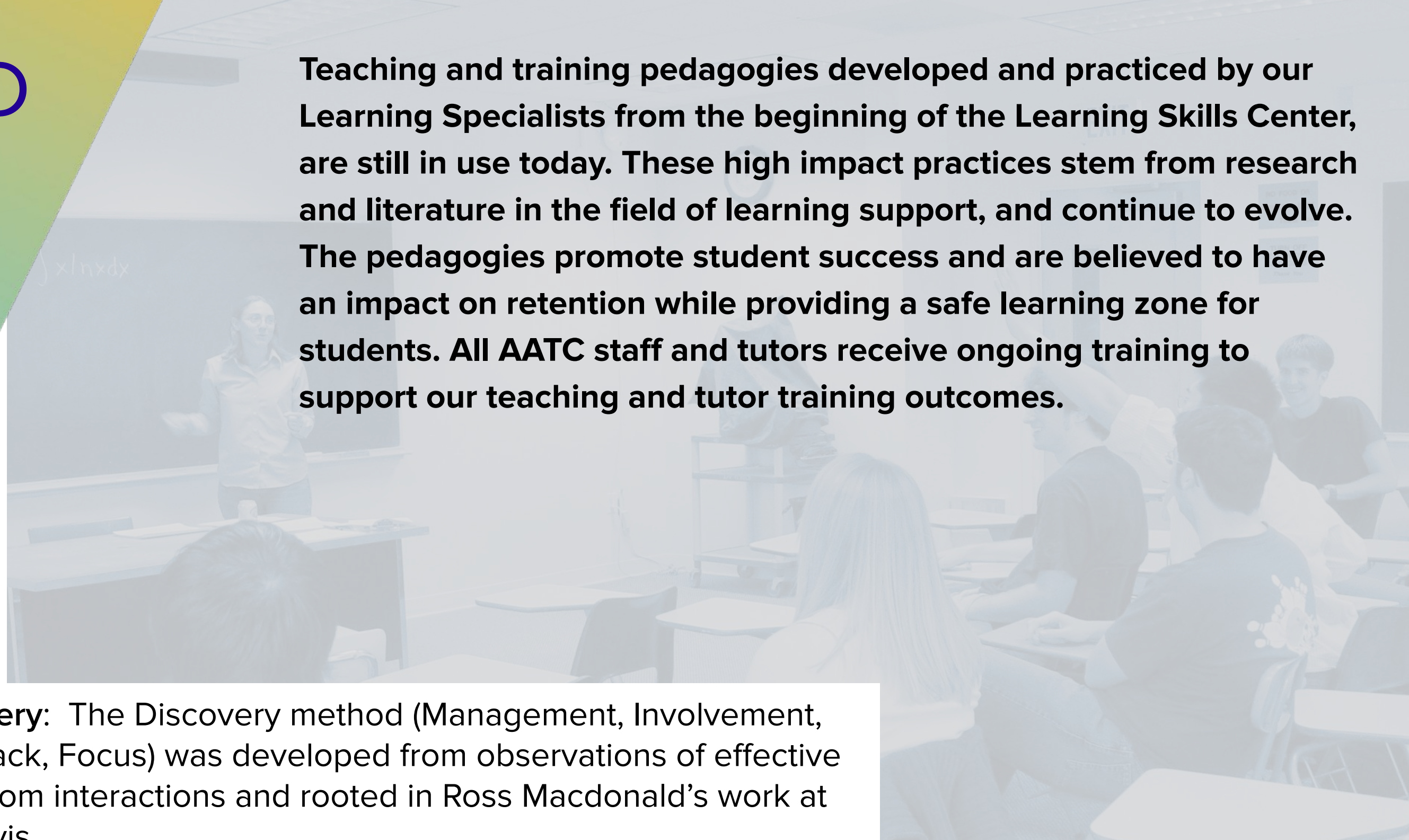
- Industry Standards in Higher Education Learning Support
- Large classes with high D,F,W rates
- Large-enrollment courses that are required for graduation (math, chemistry, physics, writing)
- Yearly Conference Participation (SOTL & SITT, ACTLA, Northern California Writing Centers Assoc., RUME, CMC³, etc.)
- UC Learning Support Project led by the AATC

UC DAVIS CONTEXT AND RESEARCH

- AATC Advisory Committee including Associate Deans, advisors, Student Affairs units, faculty, tutors, and students
- Faculty, TA, and advisor referrals
- Graduate Studies for tutor requirements and wages
- Student Satisfaction Survey & AATC Student Visit Survey
- UC Davis research (students who use AATC drop-in rooms compared to the Calculus Room, Student Affairs Assessment, Center for Educational Effectiveness)
- AATC Research (descriptive statistics with usage patterns, student self-reported grade increase, comparison of course GPA for users versus non-users)

TEACHING AND TRAINING

Teaching and training pedagogies developed and practiced by our Learning Specialists from the beginning of the Learning Skills Center, are still in use today. These high impact practices stem from research and literature in the field of learning support, and continue to evolve. The pedagogies promote student success and are believed to have an impact on retention while providing a safe learning zone for students. All AATC staff and tutors receive ongoing training to support our teaching and tutor training outcomes.



- **Discovery:** The Discovery method (Management, Involvement, Feedback, Focus) was developed from observations of effective classroom interactions and rooted in Ross Macdonald's work at UC Davis.
- **The Big 3:** Further refining the Discovery Method, the Big 3 features in our staff and tutor training program, and is based on three of the most effective literature-supported learning strategies for engagement: Tutor by asking questions, give positive reinforcement, and work through practice problems.

Addressing Misconceptions

MYTH: Academic support (like tutoring) is only used by struggling students or is only used by top performers.

MYTH: AATC only supports first-year classes and Freshman.

MYTH: Faculty have no involvement with AATC.

MYTH: Students get answers or have their essays written for them to shortcut the learning process by using academic support.

FACT: AATC serves a wide range of students, all seeking to do better. Analysis conducted by the Center for Education Effectiveness showed that AATC Math Drop-in serves mostly students in the *murky middle* range of GPAs. Overall, AATC strives to meet students where they are at in any stage of their learning process.

FACT: Over 71% of students using AATC are non-Freshman. AATC supports upper-division courses in biology, chemistry, economics, and statistics as well as writing for any course.

FACT: Specialists in AATC have many direct partnerships with faculty and departments, most notably in mathematics. Math Specialists communicate regularly with instructors, attend lectures, and are welcomed as thought partners in new math department initiatives for calculus. These close relationships also exist with specific faculty in CBS, Librarians, the Writing Across the Curriculum (WAC) team, and other faculty across campus.

FACT: AATC train staff and tutors in techniques to scaffold material, deepen understanding, and provide opportunities for practice. Sometimes students are disappointed when they realize that Tutors and Specialists are going to partner in the learning process, but not just hand out answers or directly revise essays.

Connecting with **FACULTY** and Departments

25% of respondents who attended an individual tutoring appointment say they were referred by their instructor.

38% of respondents who enroll in an AATC course were referred by an instructor.

MAY 2021

CURRICULUM

- Co-classes, workshops, and content reviews all offer students an opportunity to practice and reinforce the content in the associated lecture class. **Problem sets and review materials are developed based on the curriculum established by the academic departments, faculty and instructors.**
- Preparatory course curriculum has been developed to align with the topical area on the placement exams and course sequences for calculus, general chemistry, and introductory physics. This has also been done in coordination with the offerings from Sac City College.
- AATC Lead Tutors connect with faculty in courses served to be liaisons for instructors and the tutors supporting their courses. This allow faculty to have a single point of contact while increasing the coherence between content and methods seen in lecture and those reinforced through AATC services.
- Specialists serve as consultants to the undergraduate curriculum committee in the Department of Mathematics; providing feedback based on observations of student needs.

REFERRALS + OUTREACH

- The AATC provides in-class presentations for over 100 faculty each quarter.
- The AATC Writing Support Services has an ongoing partnership with Dr. Mona Monfared to provide peer writing support in a BIS 102 course.
- In partnership with the Strategic Retention Initiatives and Dr. Marc Facciotti, AATC created a pilot program to support students in BIS2A.
- AATC Specialist receive hundreds of direct referrals from instructors every year.
- AATC Math and Science Specialists participate directly in the Canvas shells for courses served. For faculty who are interested, ongoing feedback is provided throughout the quarter to share insights on topical areas that students are struggling with.
- Several international universities have been interested in our learning support model including universities in German, Japan, and Chile.

Where We Are

AATC Tutoring Locations

Funded by Student Services Fees

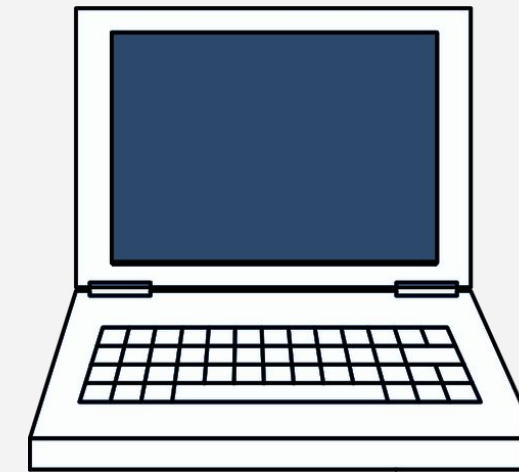
- Dutton Hall
- Writing Studio
- Shields Library
- South Hall
- Sciences Lab Building

AATC Tutoring Funded by Other Sources

- Intercollegiate Athletics
- Residence Halls
- STEP
- LEADR
- Ave B & E
- TRiO
- Mechanical Engineering
- EOP
- Strategic Initiative Centers

AATC Virtual Presence

- Zoom
- OASIS
- Instagram
- Canvas
- YouTube
- Discord
- tutoring.ucdavis.edu




Marketing and Outreach



Tutor Info Night in CCLASS
February 2020

MAY 2021

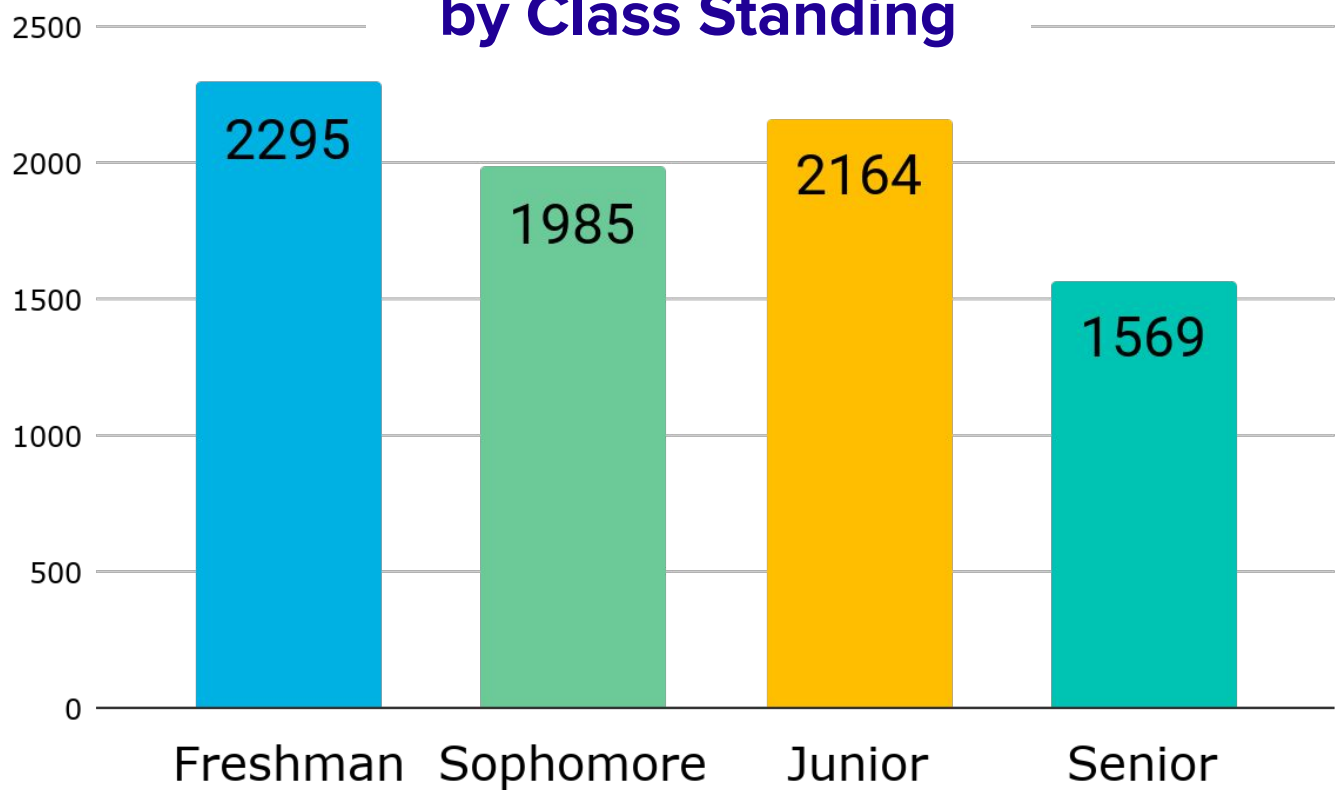
- Hosted **Tutor Info Night** in partnership with CCLASS
- Launched an **AATC Near You** marketing campaign with SAMC
- Created a **tutoring uniform** to help distinguish AATC tutors from other academic support on campus which are not affiliated with AATC (Calculus Rooms in MSB and Earth Science, TA Office Hours, Learning Assistants, etc.)
- Increased social media presence  **@ucdavisaatc**
- Hosted a virtual **Get to Know AATC** event for the campus
- Sent **direct marketing** emails to all students enrolled in courses AATC supports
- Increased **cross promotion** by co-branding with the Strategic Retention Initiatives
- Participated in **yield events** for newly admitted students
- Provided **in-class presentations** in writing experience courses
- Connected with Student Disabilities Center, OSSJA, BASC, ICA, Davis Honors Challenge, advising, and many more programs to develop academic support plans that are referred to the AATC.

Annual Usage Snapshot 2019-2020

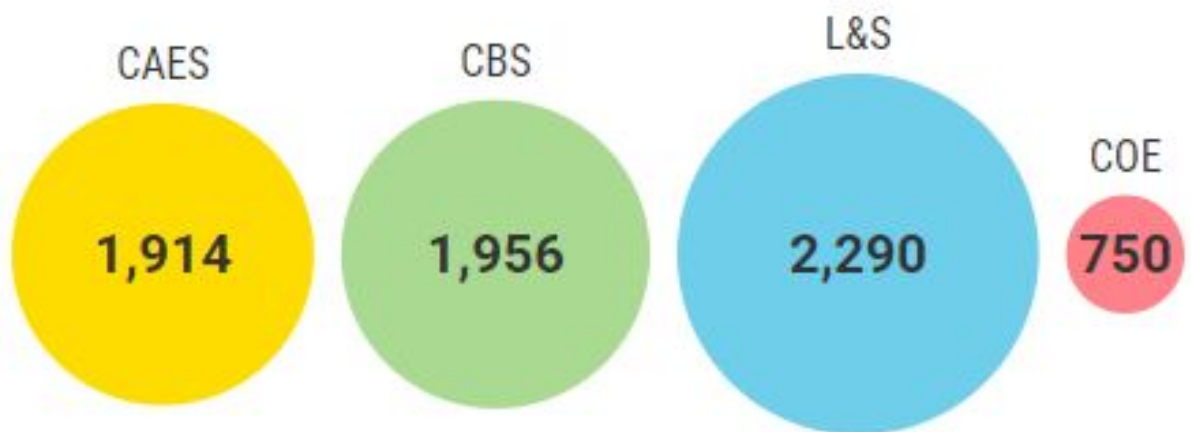
More than **6,800** distinct students were served across all undergraduate colleges, and in every year of study.
Total visits: 62,375

16% of AATC users are transfer students.
(1086 students)

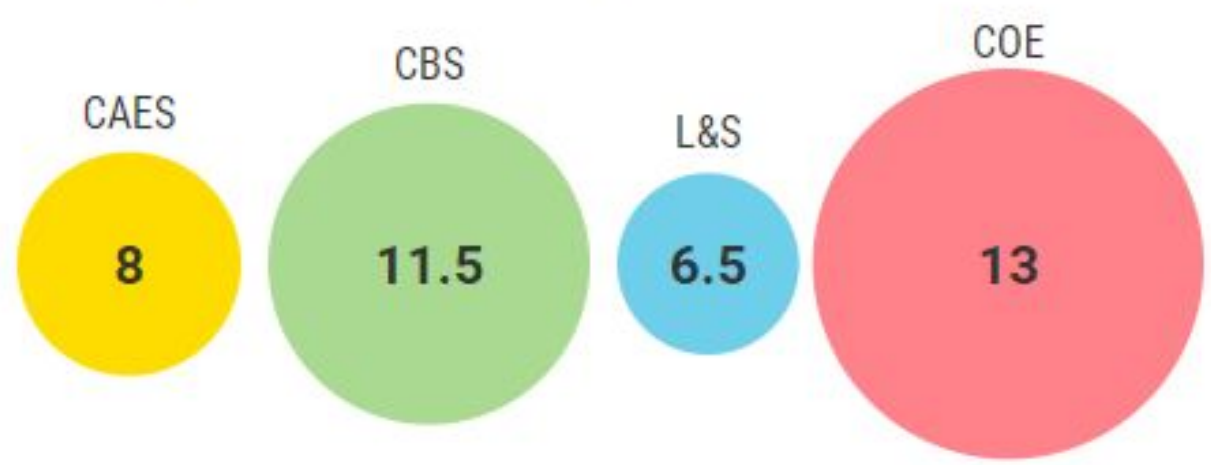
Students Served by Class Standing



Students Served by College

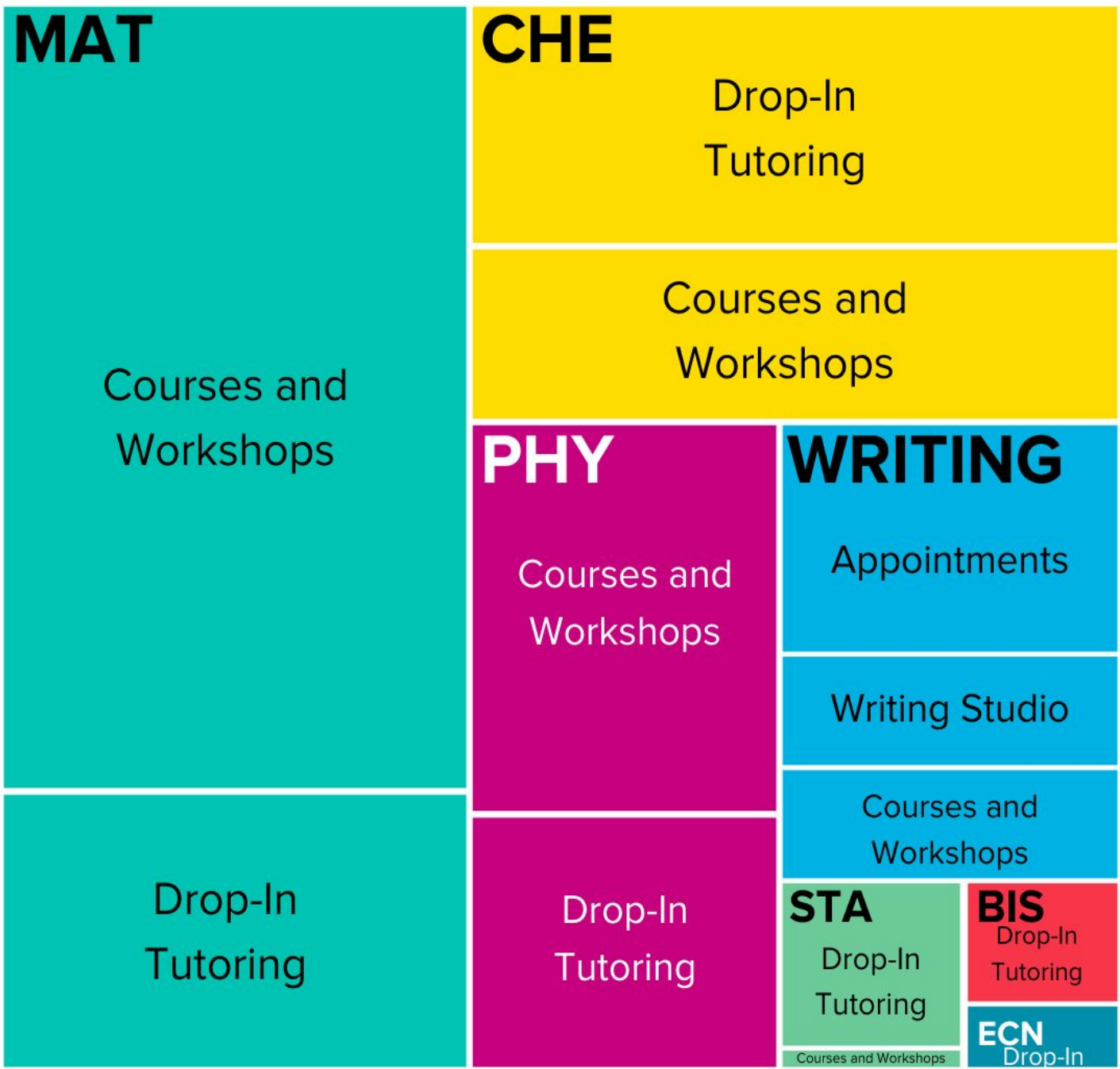


Average Visits per Student (swipes/students served)



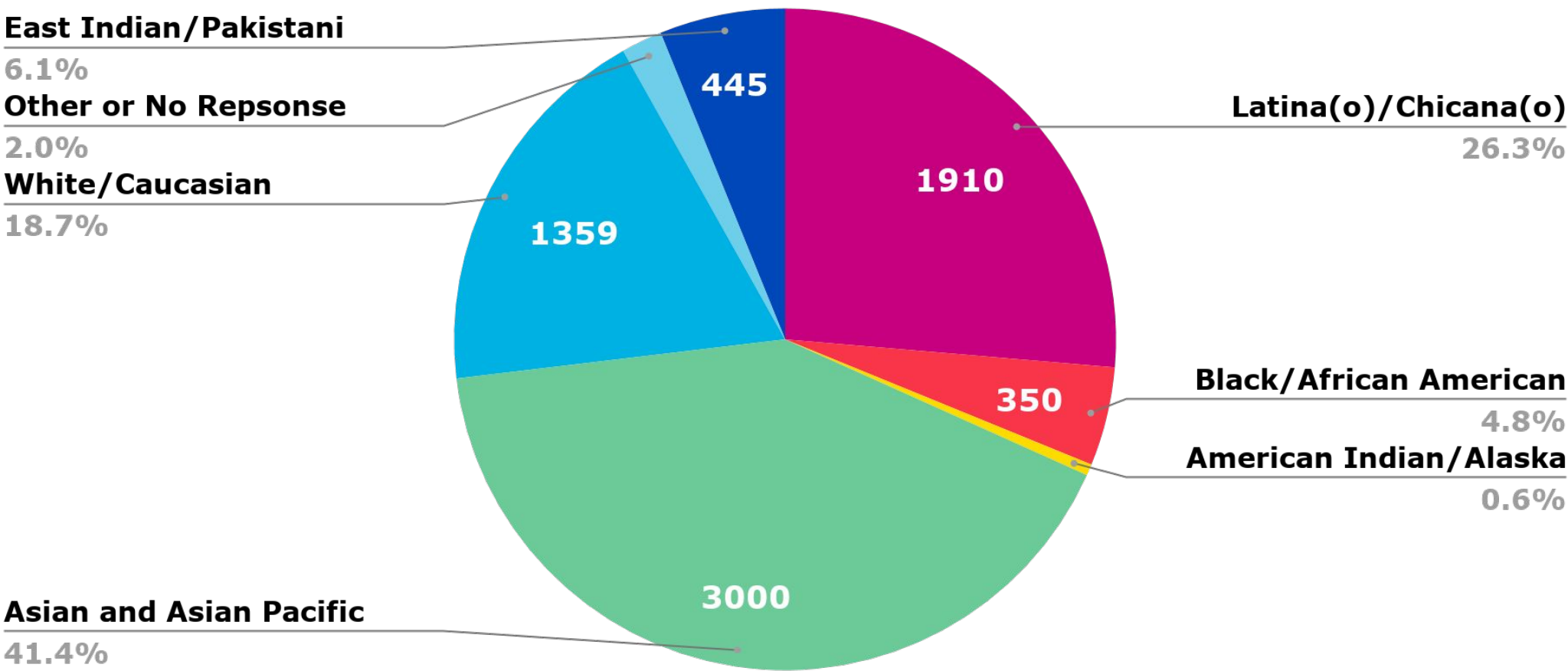
Annual Usage Snapshot 2019-2020

Relative Student Usage By Subject and Service



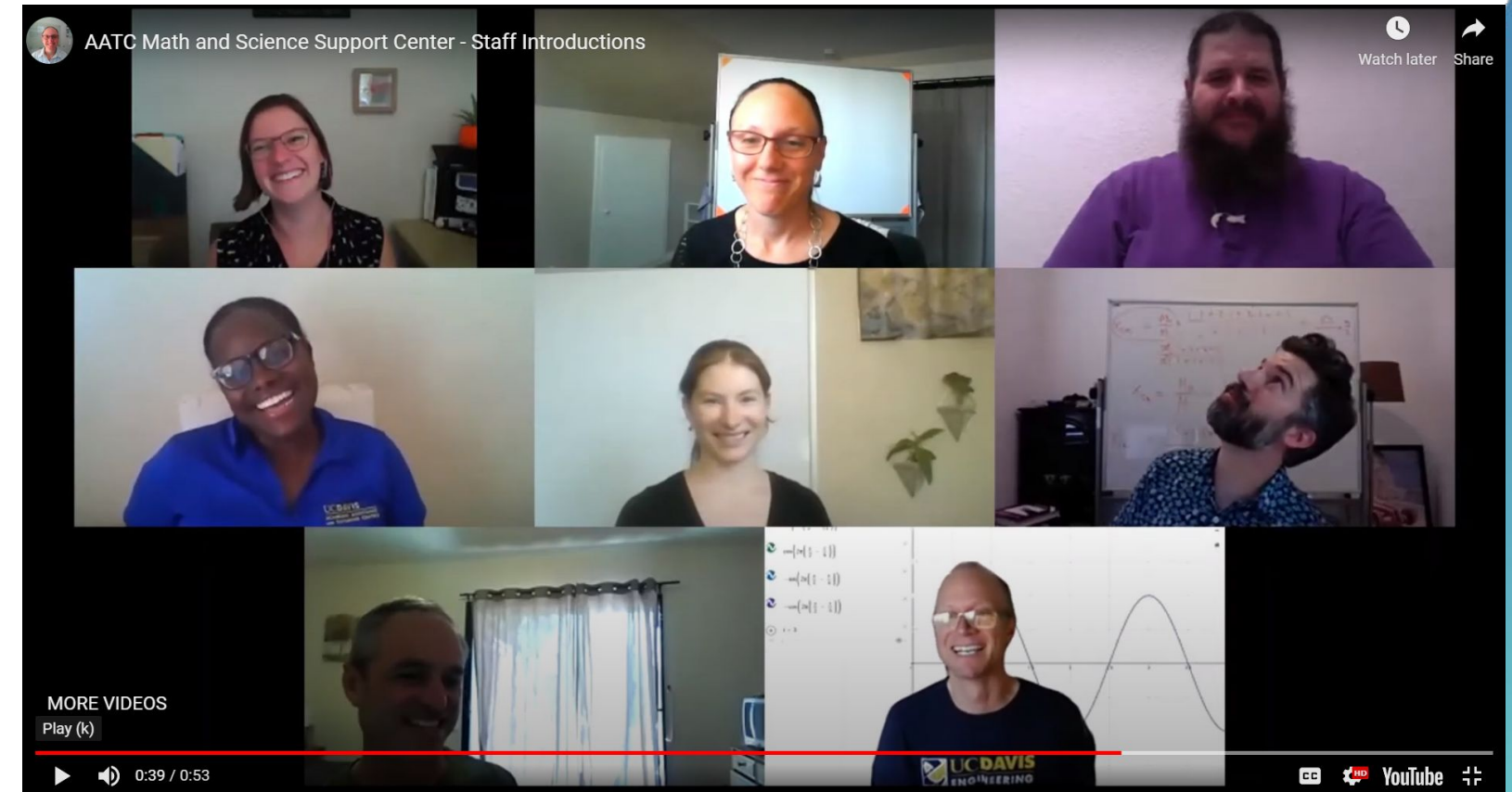
Larger boxes indicate more student usage of the service.

Distinct Students Served Across All AATC Services



Math and Science Support Center

- 8 Professional Staff
- Video Library available 24-7
- Weekly workshops in Precalculus, Calculus, Linear Algebra, Differential Equations, General and Organic Chemistry, Physics, and Statistics
- Preparatory and Concurrent courses (workload units) offered to support students in calculus, chemistry, and physics
- Office hours open to all undergraduate students



Math and Science Support Center

SPECIALISTS

- Professional staff with advanced degrees in STEM subjects and/or secondary teaching credentialed
- Experience teaching including high school, community college, and 4-year universities
- Hired specifically for teaching and tutoring skills as well as demonstrated empathy and equity-minded practice of student affairs practitioners
- Serve as a bridge between faculty/instructors and students as well as connecting them to Student Affairs resources
- Provide direct (teaching and office hours) and indirect (websites, videos, etc.) services to students

COURSES

- Math Specialists teach MATB, MATC, and MATD in service for the Department of Mathematics. These courses build foundational skills for calculus and help to prepare students for the math placement exam. Additionally, sections of WLD910/920, Precalculus, are taught by AATC staff. All of these courses give students workload units, but do not count toward graduation units. No student is required to take these courses or prevented from moving to calculus as a result of not passing these preparatory workload courses.
- CO-Classes are offered in calculus, chemistry, and physics. These courses are not remedial, though they have the course designation of workload, WLD. These courses originally served only EOP students by providing a concurrent enrollment course to reinforce the content from the associated lectures. AATC has been able to open enrollment in these courses for all students, but continues to give priority to EOP, STEP, and programs on campus that serve BIPOC students.
- Specialists work closely with the faculty in the associated lectures for the co-classes to align the expectations, methods, and content. Co-classes give students a smaller setting to ask questions and practice with peers while reviewing foundational skills in context.

Math and Science Support Center

STUDENTS

- More than half of the students enrolled in Pre and Co courses identify as Chicana(o/x), Latina(o/x), or Mexican
- Students report feeling more confident about the subject matter and assignments as a result of the courses
- Students engage with peers in group problems solving and active learning activities
- Students who regularly engage with the Math and Science Specialists self-report an average of 0.5 GPA increase in the course.
- From CSAA data analysis, Chicana(o/x)/Latina(o/x) students who enroll in pre and co-classes have higher retention and are more likely to complete at least 45 units their first year as a result of the services.

OTHER SERVICES

- **Workshops** are similar to co-classes, but students attend without enrolling for workload units. They meet weekly to review course content and gain practice and skills with problem solving techniques in the subject. Workshops are offered for select high-enrollment lower and upper division courses.
- Students have access to individual and group **appointments** with Specialists. Open **office hours** held by AATC Specialists are available in various campus locations including within the Strategic Initiative Centers. All undergraduate students are welcome, regardless of enrollment in an AATC course.
- Each of the Math and Science Specialists maintain **Canvas** shells and **websites** for students in their classes and workshops. They create practice problems, review handouts, short video lessons, and recordings of live sessions. All of these materials can be accessed by students at any time.
- Math and Science Specialists support the **drop-in tutoring** centers working alongside the undergraduate tutors.

Writing Support Center

- Four professional staff and two graduate students
- Online Aggie Grammar Guide plus a curated YouTube channel and Google Drive folder for students 24/7
- One on one appointments with students for writing in any class, any major; we also have scholarship and personal statement appointments
- In-class and partner workshops on writing topics
- New Submit Writing for Feedback service
- The Writing Studio is an open space for students to practice writing and is staffed with tutors and writing specialists.



Writing Support Center

SPECIALISTS

- Professional staff with advanced degrees in education, linguistics, and English. Staff members have each taught college-level composition and other writing courses at UC Davis and other local institutions
- Hired specifically for teaching and tutoring skills as well as demonstrated empathy and equity-minded practice of student affairs practitioners
- Serve as a bridge between instructors and students as well as students and Student Affairs resources
- Serve as mentors for our writing tutors to support their ongoing professional development

COURSES

- Tutor Training: Builds on 30+ years of a writing tutor training program that meets weekly to discuss pedagogy, key assignments appearing in the department, and how to use student affairs resources. Now a 1 unit EDU 98 course that works in partnership with Tutoring Services.
- First Year Seminars: Writing specialists partner with faculty to bring writing skills to the FYS program as co-instructors or guest speakers
- First Year Aggie Connections: Writing Specialists lead connections on topics ranging from video games to grammar games as well as reading for fun and telling your own story to help students learn more about the resources at the University
- Past offerings
 - Co-WLD 57 Course: Created in partnership with Sac City faculty to help students practice timed writing and reading skills
 - Foundations for University Success (International Students EDU 65/98 class): Developed to help international students transition to an American R1 institution; now offered through the School of Education

MAY 2021

Writing Support Center

STUDENTS

- We frequently see student comments like, “[The Writing Tutor or Specialist] was really kind and patient, when we read through my paper and made corrections, I felt easy rather than nervous.”
- Students report feeling more confident about the subject matter and assignments as a result of using the services
- From CSAA data analysis, on average, Asian students who participated in AATC writing services were more likely to increase their cumulative GPA. On average, Asian and Chicano(a/x)/Latino(a/x) students who participated in AATC Writing Specialist activities were more likely to complete 45 units.

OTHER SERVICES

- **Aggie Grammar Guide:** A free online grammar textbook written by the writing specialists as well as tutees who submitted questions or sentences in need of explanation. This website has an international reach as a place to answer and then practice grammar-related questions
- **Submit Writing For Feedback:** An asynchronous opportunity to get feedback on writing from a tutor or specialist that utilizes the same Big 3 techniques that we use in our in-person or Zoom sessions
- **Class visits and presentations:** An opportunity to partner with faculty and TAs to talk about services or go in-depth on a chosen topic
- **Partnership with OSSJA and Shields Library on Avoiding Plagiarism:** Quarterly workshops on the mechanics of citations and how to avoid plagiarism at the University
- **Book Group:** An organization on Aggie Life to promote reading for fun as well as close reading strategies
- **Peer Review Groups:** Organized in partnership with faculty and student affairs colleagues to give students a research-backed approach to revision and commenting on peer drafts

Tutoring Services

- 3 Professional Staff
- 340 Undergraduate Tutors
- 5 Student Assistants
- 12 Head Subject Tutors
- Individual Tutoring Appointments
- Content Review Sessions
- Drop-In Tutoring in Math, Chemistry, Physics, Statistics, Upper Division Biology, and Economics
- Tutor Training Class: Foundations of Tutoring



Tutoring Services

STAFFING

- Team of 3 **professional staff** who administer the program including supervision of over 340 student employees.
- The **Lead Tutor** student position is an experienced tutor who facilitates the recruitment and selection of new tutors.
- **Head Subject Tutors** (HSTs) are experienced tutors who serve as the liaison between instructors of the course and tutors who are supporting the course. Tutors have access to support from the HSTs through office hours, weekly email briefings, and Discord
- Team of 340 undergraduate **Tutors** who are part of the BX bargaining union. Tutors are selected through a rigorous application process which includes GPA verification, an interview, and a mock tutoring session.

SERVICES

- **Drop-in Tutoring** is provided to the campus community and paid for by Student Services Fees. Subjects include: Biology, Chemistry, Economics, Math, Physics, Statistics, and Writing. AATC Drop-in tutoring takes place in several campus locations including Shields Library.
- 1 hour **Individual Appointments** with tutors can be made using the OASIS scheduling system up to 72 hours in advance. Tutoring Services also administers tutoring programs for campus partners who pay for their students to receive ongoing tutoring on a weekly basis with the same tutor each week.
- **Content Reviews** are led by experienced tutors and are similar to the workshops offered by Math and Science Specialists. Content Review Leaders are selected from the most experienced tutors to plan and deliver weekly sessions in alignment with the content covered in the associated lecture. Content Reviews give students a low-stakes environment to ask questions, refine their understanding of material and develop problem solving skills.

Tutoring Services

TRAINING

- Undergraduate Peer Tutors are recruited for demonstrated success in their coursework. From the more than 1700 applications, the best students are selected for an interview. Training is vital and begins during the interview which includes a mock tutoring session. Once hired, new tutors attend a mandatory orientation and must enroll in the one quarter tutor training course which is taught by the Director of Tutoring Services as well as Writing Specialists.
- Foundations in Tutoring focuses on best practices to facilitate tutoring sessions with an emphasis on The Big 3 tutoring strategies (Teach by Asking Questions, Practice Problems, and Positive Reinforcement). The class has a DEI component that teaches tutors how to support students from diverse backgrounds. Tutors learn how to navigate critical campus resources both as students and as tutors including CARE, OSSJA, Student Health and Counseling Services, and online resources.
- Two directors within AATC are certified trainers through the International Center for Supplemental Instruction (SI) in Kansas City. While AATC does not run the traditional SI model, best practices from this program as well as the College Reading and Learning Association (CRLA) certification have been incorporated into the tutor training course.

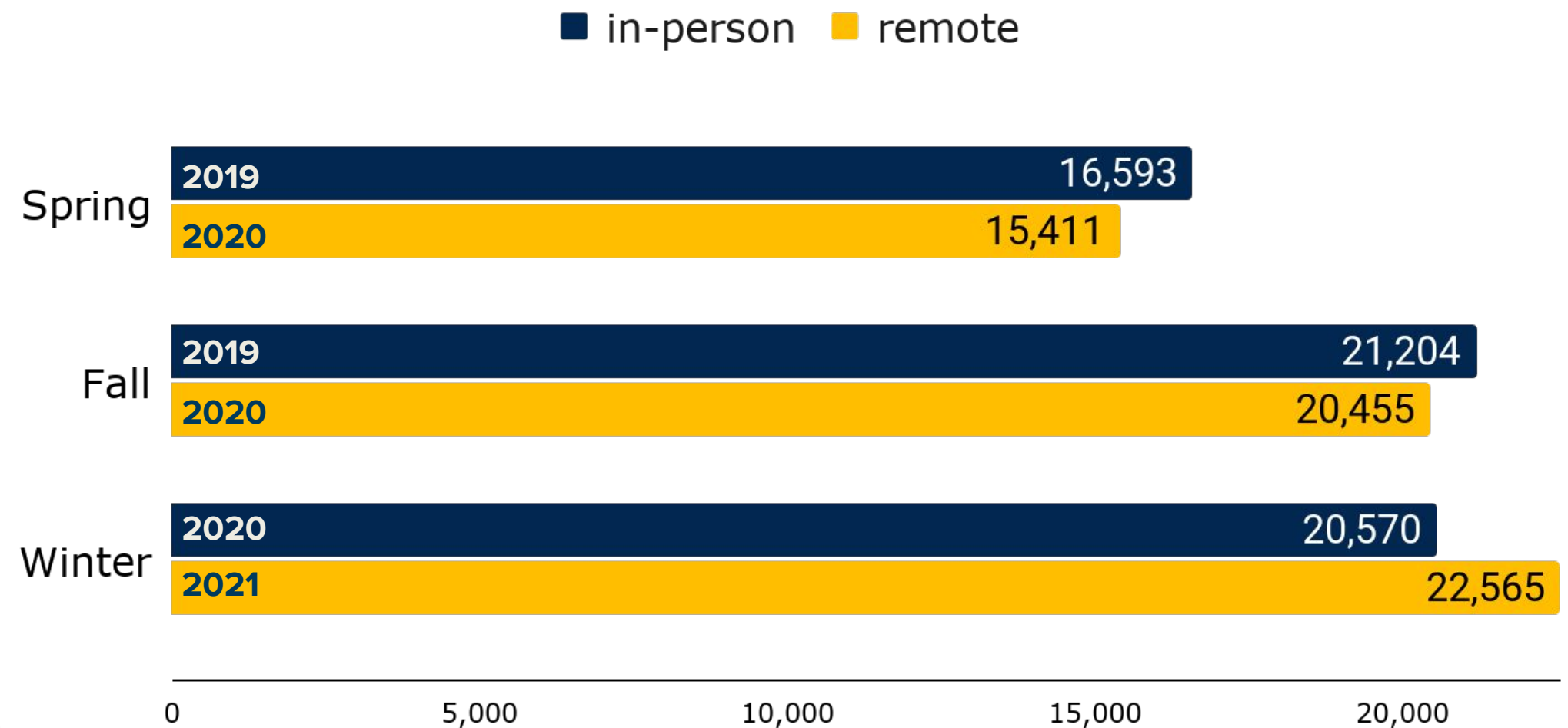
PARTNERS

- AATC Tutoring Services contracts with campus partners to provide them with individual and drop-in tutoring programs. This service includes the recruitment, selection, hiring, supervision, and evaluation of tutors working for programs such as: Intercollegiate Athletics, Campus Housing, EOP, LEADR, TRiO Scholars, Avenue B and Avenue E, the Strategic Retention Initiatives, and Mechanical Engineering.
- From CEE data analysis, AATC Math Tutoring serves more first-gen, low income, and URM students than the Calculus Rooms run by the Department of Mathematics.
- From CSAA data analysis, students who use individual tutoring are more likely to be retained at UC Davis after their first year.

Meeting the Needs of Remote Learners

- Provided individual tutoring appointments through OASIS
- Increased subject availability
- Developed *Submit Writing for Feedback* service
- Implemented a Virtual Front Desk
- Redesigned website layout
- Increased online resources
- Recorded workshops and classes

MAY 2021



AATC saw similar student usage in total visits or swipes comparing fully remote services to the previous year in-person.

Listening to Students

2020 UC Davis Student Satisfaction Survey Results

Overall Rating **4.02**
up from 3.95 in 2019

AATC Student Evaluations and Feedback Survey

AATC has collected 3500 survey responses for student evaluations.

95% of respondents reported that they would recommend AATC resources to their friends.

94% strongly agreed or agreed that they are satisfied with the assistance they receive from AATC.

“I like that the specialists and tutors are very friendly. This is important to me because it gets pretty intimidating to ask people for help on homework or understanding basic concepts.”

“She provided the support and confidence in her students that we often feel are lacking from our professor and TAs.”

“It’s a safe space where I can ask a question without being judged. A lot of patience.”