Welcome. Dear Chabot Community Member,

Welcome to Fall 2023 Program and Area Review! PAR is on a three-year cycle (Fall 2021 is the comprehensive review and planning year; Fall 2022 and Fall 2023 are annual update years). This is the second "Update Year" in which you will need to reflect on aspects of your own PAR submissions and the overarching campus trends from the Fall 2021 Comprehensive PAR and Fall 2022 Update PAR Years. Please collaborate with your dean/manager to receive feedback before entering your PAR responses here (and for resource requests, enter into **Cognito**).

Thanks,
The Program and Area Review Committee

*Please remember that Qualtrics is not a collaboration tool and partial responses can get lost. You should only enter your PAR into Qualtrics once you have finished the steps of collaborating with your program/area teammates and/or your Dean/manager and have a final draft.

Is your PAR ready to submit as a final draft?

- ⦿ Yes
- ◯ No

Q2. Background Information

Q3. Name of Your Program/Discipline/Area/Service, Division, and Organization Unit

Name of Program, Discipline, Area or Service	Engineering ⌄
Division	Science and Mathematics ⌄
Organizational Unit	Academic Services ⌄

Q4. If you selected "Not Listed" in the previous question, please enter your Program/Discipline/Area/Service name here

This question was not displayed to the respondent.

Q5. Name(s) of the person or people who contributed to this review:

Daniel Quigley Tess Weathers Safiyyah Forbes

Q6. Which PAR Template (word template) did you fill out?

*Please check this <u>list</u> to make sure that you filled out the correct template.

⦿ Academic Programs
◯ Student/Admin Services/Office of the President

Q7. Campus-Wide Issues

Q38. Reflections on Annual Priority Progress in Academic Year 2022-23

Context: The Planning and Resource Allocation Committee (PRAC) establishes **Annual Planning Priorities** based on collegewide trends in PAR responses, experiences from grant and categorical fund managers, and issues raised in PRAC. In brief, the planning priorities for 2022-2023 were to:
1) Develop support networks to link students to Pathway Success Team members and services;
2) Expand Chabot's connection to the external community to expand students' access to basic needs support and work-based learning opportunities and careers; and
3) Improve student interfaces (e.g., marketing, website redesign, virtual ways for students to access services).

Question: What progress did you see in any of these annual planning priorities?

Engineering started the ENGR/PHYS Student Success Team. This helped establish networks to link to our Pathway Success Team members and services. Through this we were able to identify bottlenecks, rewrite curriculum/certificates/degrees, determine scheduling norms for students to take recommended courses during year 1, year 2, and year 3, and create a Guided Pathway to earn an AS degree in engineering in 3 years. Through the ENGR/PHYS team, we were able to set up basic needs support in mathematics, physics, chemistry, and engineering courses through embedded learning assistants in the classroom, tutoring, and supplemental workshops. Utilizing the HSI STEM grant, we were also able to establish WBL workshops, research opportunities, connection to industry through field trips and guest speakers, and open lab hours for students to have access to lab materials outside of class. This also led to working with Work Study and LAEP to have paid research and assistant opportunities as well as internship opportunities. Through this WBL outreach we were able to connect to our surrounding industries such as PCC Structurals, ALOM, Van Mulder, Oro Loma, FBI, Humboldt Instruments, Stanford National Accelerator Lab, BART, UC Berkeley EECS Dept, RSA+, Livermore National Labs, Berkeley National Labs, Sandia National Labs, WJE & Associates, Lam Research, Dome Construction, Siemens, Apple, and NASA. We also incorporated WBL students participating in RC car competition, Video Game design, and SMUD Solar Regatta. This has also led to the creation of a STEM internship course and to update the STEM 1 course which will establish the WBL activities for students, even when the grant funding expires. This creates a pathway for students to explore STEM projects and activities. We improved student interfaces by updating the STEM website with instructor biographies, Engineering interest video, and maintaining connection to high school partners through Summer Bridge. Engineering flyers, course plans, and brochures were also created and sent throughout campus and made available during orientation, gladiator days, counselor breakfasts, and other events that were held throughout the year. Another marketing strategy was utilizing the Chabot email list to advertise STEM WBL activities throughout the year. This year, we would like to include advertisements on the main banner stream on the homepage of Chabot College.

Q39. **Question:** If you could advise college decision makers how to make better or more efficient progress on any of these annual planning priorities, what would you say?

Pathway Success Team Support Networks *Embed support into courses that have lower success rates than the college average. Don't wait for faculty to ask, as many choose not to due to the difficult and unclear process of filling out forms and requests. **Create similar schedules across sections to make it easier for STEM Center and Learning connections to support courses, this will allow reviews, check ins, and workshops more impactful. For instance, MTH 21 could have the same content each week. **Create learning cohorts for students with similar starting points, majors, and transfer universities to take the same courses each semester. This will create learning communities and will make it easier for targeted support, scheduling of classes, and more predictable enrollments each semester Basic needs and Work Based Learning *Expand Career Center to incorporate additional resources, activities, internships, and collaboration with industry partners **Expand MESA to a more college wide experience ***Create a free shuttle to and from BART Stations ****Free food and other resources available daily Student Interfaces *Reach out to disciplines to help them market their programs. **Create photo shoots for classes to use in marketing materials ***Advertise programs equitably on the Chabot Website ****Update website regularly with up to date information *****Clearly show job prospects for each major ******Show transfer requirements for each major *******Expand dual and concurrent enrollment with high schools ********Award certificates and degrees automatically to students

Q8. **Context:** For 2023-24, PRAC put forward <u>seven recommendations</u> for consideration based on their analysis of the <u>Fall 2022 Program and Area Synthesis Statement</u> and the <u>Mission Critical Priorities</u> in the Ed

Master Plan, experiences from grant and categorical fund managers, and the 2022-23 President's College Planning Initiatives.

Question: How important do you believe it is to address the following issues to support Chabot in carrying out our mission? Please drag the response options and order them from most important (1) to least important (7).

Dedicate resources for implementation impending mandates, such as Cal-GETC, AB705/1705, etc.	**1**
Scale successful practices from grants, categorical endeavors, and learning communities	**2**
Build an accountability structure for recommendations that have college-wide scope to ensure continuous improvement	**3**
Access and implement post-pandemic college policies and procedures to respond to the needs of students and employees	**4**
Affirm and improve program and area review resource requests to reduce inappropriate or duplicate resource requests	**5**
Improve fluency with business and HR processes	**6**
Improve student access from application to registration	**7**

Q9. **Question:** If you believe there is an important issue to address to carry out the college mission that is NOT mentioned in the previous list, please describe below (optional).

> Make it easier to get things done. Provide feedback of when paperwork is approved or where it is in the approval process, such as timesheets, pafs, requisitions, and other forms. Streamline processes to get approved and move toward a system where everything is easy to submit and is accessible to see where it is in the "pipeline" of approval.

Q10. **Reflections on Goals Established in Fall 2021 PAR**

Q11. **Context:** In Fall 2021 PAR (the last comprehensive PAR year), after reflecting on data, you established program/area goals to support continuous program improvement and/or the college mission. This spreadsheet lists the goals that you first established in Fall 2021 and updated or confirmed in Fall 2022.

Question: Keeping in mind, you only have one year left in this PAR cycle to accomplish these goals, please take a look at your goals to determine:

- 🔘 All goals are still relevant and nothing needs to be changed or added.
- ⭕ All goals are still relevant, but I would like to add an additional goal. (Please fill in your new goal, so we can update the spreadsheet.)

- ⭕ Some goals are relevant and some need to be changed. (Please explain below, so we can update your goals in the spreadsheet.)

[text box]

○ None of our goals are still relevant. We need to update all of them. (Please provide us with your new goals, so we can update your goals in the spreadsheet.)

[text box]

Q12. **Context:** You established goals in Fall 2021 and presumably are well underway in working on these goals. You will be asked to report on the outcomes of these goals in the first year (Fall 2024) of the next comprehensive PAR cycle (PARs submitted in Fall 2024-Fall 2026).

Question: What are the statuses of your program's/area's goals right now?

○ All goals are achieved.

○ Some goals are achieved and some are in progress.

◉ All goals are in progress.

○ Some goals are in progress and some are not started.

○ No goals are started because... (please explain in text box below).

[text box]

Q13. **Context:** To assess how well you are doing with respect to meeting your program's/area's goals, you included and/or updated **expected goal outputs and outcomes** in your Fall 2021 and Fall 2022 PARs.

"Outputs" are direct short-term results like # of students served, workshops held, etc. Longer-term goals might also have expected *outcomes*. "Outcomes" are longer-term results, like course success rates or degrees earned. Goals are often measured by whether "outputs" or "outcomes" are achieved. The Office of Research, Planning and Institutional Effectiveness (ORPIE) posts a variety of data for programs/areas to assess goal "outcomes": enrollments and success rates, enrollment management, success rates of online vs hybrid vs face-face-classes, degree and certificate awards, and more. To request additional data for goal assessment, please fill out a research request form by Friday September 22, 2023. ORPIE will process requests in the order received. ORPIE will let you know whether they have the requested data and/or how your program/area could collect your own.

Question: So far, what is going well regarding completing your program's/area's goals? Please include reflections on achievement of outputs or outcomes.

Goal 1- Increase PLTW courses offered at high school level and advertise/engage with surrounding high schools districts. Over the past year, we have engaged with over 20 classroom visits, had over 60 students attend summer bridge in engineering, started the process to update articulation agreements and contacted high schools for a Design Competition. We plan on applying for an NSF grant in Dec 2023 to help high schools start or expand their PLTW courses offered and will increase articulation agreements and dual enrollment. Goal 2- Increase engineering awards earned. This year, we drastically changed our engineering certificates and degrees to make it easier for most engineering majors to earn a certificate each year and transfer with an AS degree. Although we have seen an increase in awards given the past two years, we believe that these changes will drastically increase awards given from approximately 15 per year to 60 per year. We have seen an increase in Work Based Learning by offering research and project opportunities as well as guest speakers and field trips. Goal 3- Increase Chabot articulation with transfer universities. We have increased our articulation to San Jose State University and UC Berkeley by adding/updating MTT 70, ENGR 15, 16, 40, and 85

Q37. **Question:** What are some challenges regarding completing your program's/area's goals? Please include reflections on challenges with producing outputs or outcomes so far.

Goal 1- Challenges for increasing PLTW programs to high schools are limited funding and teachers interested or available to teach these courses. Many do not have an engineering background. It's also difficult to know how to set up dual enrollment and make sure students who qualify actually earn the credit. Other challenges include increasing African American students and women to finish the engineering program and transfer to a university. Although they are substantially lower in entry level engineering courses compared with the college, we have found that almost none continue on to 2nd and 3rd year engineering courses. Multiple barriers including student readiness, imposter syndrome, and general discouragement from counseling, peers, clubs, families, and society in general. Reaching students earlier in elementary and middle school will help. Also advertising and marketing to show that African American students and women also belong in the engineering program will help as well. Goal 2- Prior to Fall 2023, degree/certificate requirements seemed to always include an additional course that many students would not or could not take with overloaded schedules. Multiple barriers have been removed in Fall 2023 to allow more students to earn degrees and certificates. Goal 3- Universities seem to be a whack a mole game where one class is articulated with a CSU or UC and then another requirement is added or we lose articulation with another course. Also, there is a large amount of variation in requirements from university to university and by each major. Some universities want students to take their engineering course, others have requirements that we can't offer due to low enrollments

Q14. **Student Learning Outcomes (SLOs) and Program Learning Outcomes (PLOs)**

Q41. **Context:** Assessment for SLOs and PLOs happens at varying times of year on a five-year cycle. SLO and PLO assessments are submitted in CurricUNET/META. Please take a look at the SLO Completion Report* and the PLO Completion Report* to answer the questions below. If you have any questions about how to find your prior assessments, please email the co-chairs of Outcomes and Assessment Committee Julie Coan (jcoan@chabotcollege.edu) and Safiyyah Forbes (sforbes@chabotcollege.edu), or the curriculum specialist Meray Aghyarian (maghyarian@Chabotcollege.edu).

Q15. **Question:** Is the assessment for all SLOs in your program up to date?

◉ Yes

◯ Almost. We just need to assess SLOs in 1-3 courses. (Please fill in courses due for SLO assessments and the date you plan to complete those.)

◯ No. We have to assess SLOs in 4 or more courses. (Please fill in courses in need of SLO assessments and the date you plan to complete those.)

[Text input box]

Q16. **Question:** Has your program completed a PLO assessment in the last five years?

⦿ Yes

◯ No. Please explain why and include when you will complete the updated PLO assessment.

[Text input box]

Q17. **Context:** Chabot strives to continually improve how we serve students and the community (assessment and continuous improvement are also requirements for accreditation). In your SLO assessments in CurricUNET/META, you are asked: "Based on assessment results, what actions might your discipline take to improve student learning?" Similarly, in the prior PLO assessments you were asked to describe "recommended changes/actions," and in the updated PLO assessments you are asked, "What are you planning to start doing, stop doing or change in order to continuously improve your program?" In the comprehensive PAR year (not this update year), you will be asked to report back on how your actions to improve SLOs and PLOs impacted student learning. In this update year, we are simply reminding you that your actions and plans to improve student learning, based on SLO/PLO assessment results, should be underway.

If you want to see how you responded to these SLO/PLO continuous improvement questions:
 • Go to the [SLO Completion Report](#) and the [PLO Completion Report](#).
 • Look up your program by division, subject, and program name. There will be a hyperlinked "x" in the column for the year in which you submitted your SLO/PLO assessments.
 • Click on the "x" and you can look up what you submitted as plans for SLO and PLO continual improvements (i.e., your responses to the questions on actions to improve student learning and continuously improve your program).

If you have any questions about how to find your prior assessments, please email the curriculum specialist Meray Aghyarian (maghyarian@chabotcollege.edu).

Question: Please check one of the following boxes to describe how your discipline is doing with regards to plans/actions for improving student learning based on SLO/PLO assessment data.

◯ Great! We have made significant progress in implementing our plans to improve student learning and our program.

⦿ Good. We have started some actions, but we still have work to do.

◯ Not so good. We haven't started yet. Please fill in your plans to address below. (Example fictitious response: "Based on our SLO assessment in Fall 2021, we decided we wanted to build lessons specifically geared towards boosting students' scientific writing skills. But with Covid-19 hitting and having to constantly pivot with online and face-to-face modalities, we just haven't had time to work on the lesson plan. In our discipline meeting this December, we will

invite all full-time faculty, part-time faculty and our Dean and we will put together a team to work on the lesson plan.")

Q18. **Service Area Outcomes (SAOs)**

This question was not displayed to the respondent.

Q19. **Context:** At least two Service Area Outcomes (SAOs) should be assessed once every five years. Please take a look at the SAO 2022 Assessment Update Spreadsheet to answer the following.

Question: Please check the statement that best describes your program's/area's SAO assessments.

This question was not displayed to the respondent.

Q20. From Goals and SLO/PLO/SAO Continuous Improvement Plans to Resource Requests

Q21. **Context:** The basis for Chabot's resource allocation process is grounded in reflections on: 1) PAR goals, 2) plans for improving student learning that are grounded in SLO and PLO assessment results, and 3) SAO assessment results. Please consider what augmentations or new resources might be needed to achieve: 1) your PAR goals, 2) plans to improve student learning, and/or 3) reach SAOs.

Question: Which of your PAR goals, plans for improving student learning, and/or plans for reaching SAOs will need augmented or new resources?
**Note you will still need to enter resource requests into Cognito after submitting your PAR on Qualtrics.

Need additional lab and storage spaces.

Q22. **Optional: Campus-wide Reflection on Current Issues**
This optional section of the update-year PAR contains question(s) on current issues impacting our campus.

Q40. **Question:** Though slowly improving, Chabot's enrollment is far from reaching pre-COVID-pandemic levels. This impacts our funding. What are your thoughts on how we should respond? (e.g., ensuring smooth

process for students from application to enrollment, mass retention campaign, mass marketing, planning for a smaller college, providing in-person/hybrid/hyflex course instruction and service delivery, other?)

> Post covid, AB 705, AB 1705 and general stress of surviving in the Bay Area has added multiple barriers to student enrollment, student success, and student confidence to pursue their educational goals. Many students need to focus on supporting themselves and their family. Many students also can find jobs that do not require college degrees and still make $20 - 30 per hour. Many jobs requiring an education do not pay much more than this rate. Also, competition with other colleges has become greater because students are offered free tuition and online classes. Here are a couple of strategies that I believe will help increase enrollment and retain students: Implement free college for all students Make it easier for students to get to campus, i.e. shuttle from BART Stations to Chabot Offer more hybrid, hy-flex, and online courses. At least one section per year in this modality Offer student jobs on campus Coordinate with local industries to incentivize employers to hire Chabot students Increase the number of certificates offered. If a program is a 2 year program offer at least one COA. If it's a 3 year program offer at least two COA's Coordinate with High Schools to offer more dual enrollment. Encourage more collaboration between Chabot and HS Faculty Offer more summer bridge programs starting in elementary through high school Some faculty are causing students to go elsewhere, whether poor teaching methods or personality conflicts. Implement a system to encourage faculty to teach other courses and rotate faculty members teaching those courses.

Q43. **Question:** As you know, President Cooks assumed the role of Chabot's 10th College President on August 1, 2023. If your program/area could tell President Cooks one thing he needs to know about your program/area, what would it be?

> Engineering is arguably one of the most challenging majors to complete requirements and transfer to a university. Though the courses are difficult, it is also one where the transfer requirements change significantly from school to school and by different sub-disciplines. Most engineering programs are also impacted, so students cannot just take the course requirements for their desired school, but usually need to have one or two back up schools, which often leads to an additional 1 - 2 semesters of classes they need to take. Students also have to take 15-17 units per semester to transfer in 3 years. It is also one of the few programs where an AS-T cannot be written, as it was purposely left out of the state law. Most students take over 100 units before transferring and can earn an AS degree in Engineering, Physics, and Mathematics before transferring, but most do not because of the additional GE requirements needed for an AS degree. Students simply do not have time in their schedules to take that one additional GE course. With the new SCFF, engineering students are funded at a much lower rate because of these barriers. On the state level, I would encourage laws to be enacted so an engineering major has one set of requirements to UC's and CSU's and an AS-T be created for engineering.

Q24. Thank you for completing the annual update questions for the Fall 2023 PAR! **But WAIT!! You might not be quite done yet...**

Resource Requests: Have you completed all your resource requests? If not, go to the [Resource Requests Form](#) to add or update requests for: contracts and services, equipment; facilities; human resources; professional development, travel and conferences; supplies and software; or technology.

Location Data

Location: (39.5139, -119.9833)

Source: GeoIP Estimation