Instructional Program Review- Annual Update Template

Instructional Program

Indicate the type of program: ☐ AA; ☐AS; ☐AA-T; ☒AS-T; ☐Certificate

Program Name: AS-T Biology

Academic Year: 2025-26

Name of Faculty Submitter(s): Dr. Beverly Ranney

Annual Update #1 ☐ #2 ☒

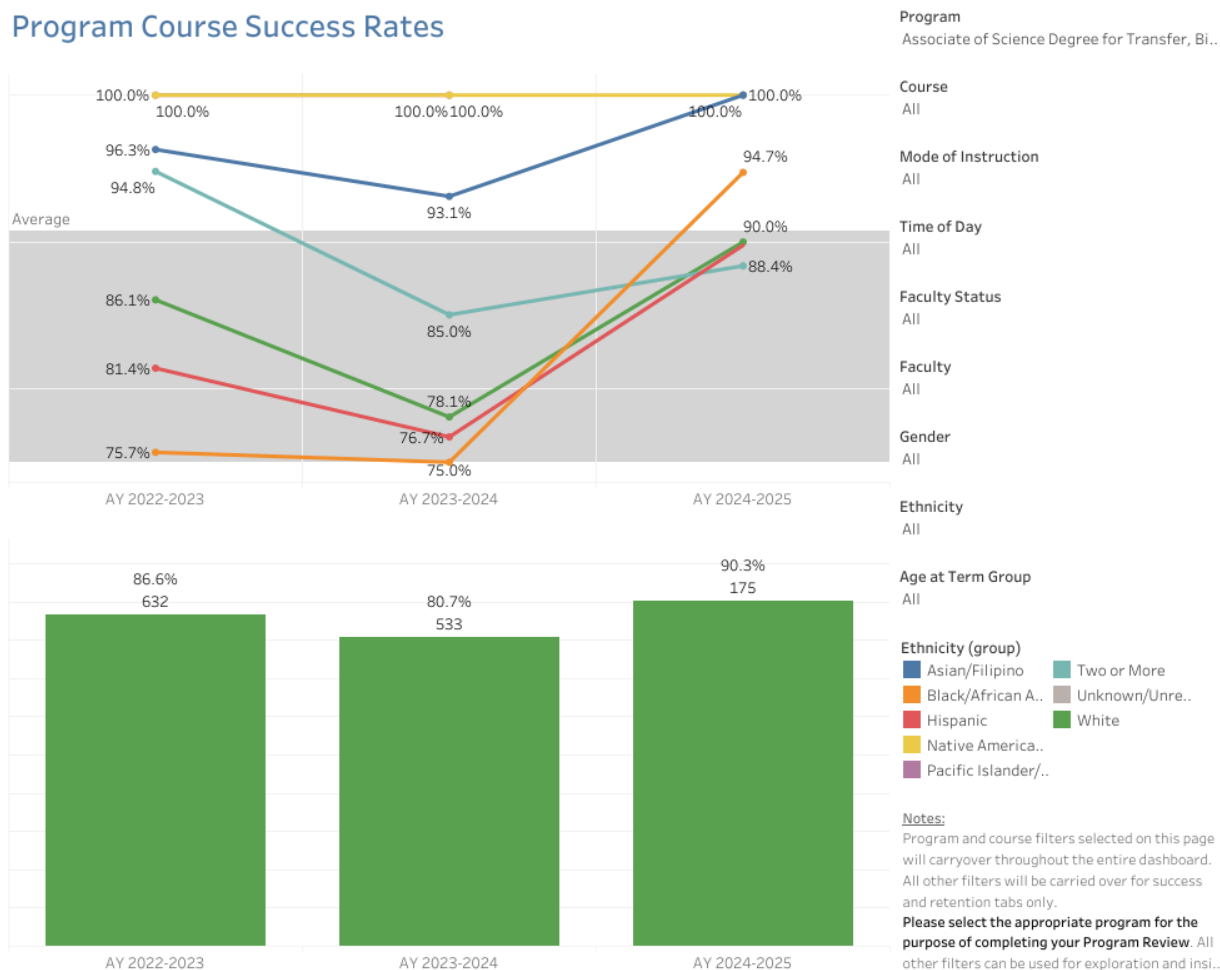*Note: An Annual Update must be submitted each year that a Program Review is not submitted.*

I. Progress on Program Level Outcomes (PLOs) and Student Learning Outcomes (SLOs) Data

A) Summarize the progress made on course level outcomes and assessments (SLOs):
Progress has been steady at remarkably high levels (approximately 92.3% in Fall 2023 and 100% in Spring 2024) for the last semesters for which data is available. The sample size has decreased by an order of magnitude.

B) Please list specific courses or SLOs that were identified for student-centered growth and improvement.
Use the information from Part C of the "Program Learning Outcomes Assessment Data" section of the IPR.
BIOL 20A was identified and has been taught once since the last program update.

1) List the actions identified to help grow or improve those areas.

   With 80% of students successful, no specific actions were identified beyond "finding ways to support disproportionally impacted students."

2) Discuss the progress the program has made on those actions. Include any data used to support progress.

   No progress has been made, our student-centered approach to teaching has resulted in very high student success rates on SLOs.

Instructional Program Review- Annual Update Template

Program Course Success Rates

Program
Associate of Science Degree for Transfer, Bi..

Course
All

Mode of Instruction
All

Time of Day
All

Faculty Status
All

Faculty
All

Gender
All

Ethnicity
All

Age at Term Group
All

Ethnicity (group)
- Asian/Filipino
- Two or More
- Black/African A..
- Unknown/Unre..
- Hispanic
- White
- Native America..
- Pacific Islander/..

Notes:
Program and course filters selected on this page will carryover throughout the entire dashboard. All other filters will be carried over for success and retention tabs only.
Please select the appropriate program for the purpose of completing your Program Review. All other filters can be used for exploration and insi..

C) Please list any actions identified to support equitable outcomes.
Use the information from Part D of the "Program Learning Outcomes Assessment Data" section in the IPR.
Click or tap here to enter text.
1) List the specific student groups the program identified as students they would like to focus their efforts on.
No specific student groups were identified in the Program Review as needing to focus support efforts on, as all students choosing STEM belong in STEM and deserve support. The data also supports that all ethnicities of students are succeeding, with the lowest level of success at 88.4%.
2) Discuss any progress with equitable action within the program and any measures taken to ensure the identified student group(s) would receive appropriate support. Include any data used to support progress.
No equitable action within the program have been taken.

Instructional Program Review- Annual Update Template

D) Describe any other program, course, and/or instructional changes made by your program as a result of the outcomes assessment process.

No changes were made based on the OA process.

E) Reflecting on the responses for B) and C) above, what will you implement for the next assessment cycle?
None

II. Progress Toward Achieving Program Goals, Objectives, and Outcomes
These should be carried forward from your full Program Review (Section III), or from your Annual Update #1, if revised since your full Program Review.

A) **List the 2-3 goals from your Program Review or most recent update.**

1. **GOAL #1**
   Identify funding for lab kits for biology program courses.

2. **GOAL #2**
   Increase by 10% over the next three years the success rates of disproportionally impacted student groups

3. **GOAL #3**
   Click or tap here to enter text.

B) **Have any goals been completed or discontinued?**
If yes, please list the goal and whether it has been completed or discontinued; if discontinued, please explain why.
Yes ☒   No ☐

Goal 1 has been discontinued because the District has chosen to eliminate online options for STEM classes.

C) **Discuss the objectives and related outcomes for each goal.**

1. **GOAL #1 Objective(s) with related Outcome.**
   Click or tap here to enter text.

   - **Discuss any progress toward meeting the goal based on the goal objectives.**
     Click or tap here to enter text.

   - **Briefly explain how you have been measuring the goal and any notable indicators of forward progress.**
     Click or tap here to enter text.

2. **GOAL #2 Objectives with related Outcome.**

Instructional Program Review- Annual Update Template

Increase by 10% over the next three years the success rates of disproportionally impacted student groups.

- **Discuss any progress toward meeting the goal based on the goal objectives.**
  Faculty have been reading and attending webinars on how to address the needs of disproporationally impacted students.

- **Briefly explain how you have been measuring the goal and any notable indicators of forward progress.**
  Forward progress is being noted through the success rates of the program in the PLOs.

3. **GOAL #3 Objectives with related Outcome.**
   Click or tap here to enter text.

   - **Discuss any progress toward meeting the goal based on the goal objectives.**
     Click or tap here to enter text.

   - **Briefly explain how you have been measuring the goal and any notable indicators of forward progress.**
     Click or tap here to enter text.

D) **List any resource you are requesting for each goal.**

1. Goal 1 ☐   Goal 2 ☒   Goal 3 ☐

   Please list the resource and how it relates to the goal.
   Professional development monies; monies needed to attend professional development trainings, workshops, and conferences specific to STEM to increase student success, especially the success of disproportionally impacted student populations. This remains an on-going need.

2. Goal 1 ☐   Goal 2 ☐   Goal 3 ☐

   Please list the resource and how it relates to the goal.
   Click or tap here to enter text.

3. Goal 1 ☐   Goal 2 ☐   Goal 3 ☐

   Please list the resource and how it relates to the goal.
   Click or tap here to enter text.

III.   New Goals (optional)
This section is optional and should be used to replace a completed or discontinued goal OR if a new goal has become necessary for the program.

Instructional Program Review- Annual Update Template

A. NEW GOAL #1
Click or tap here to enter text.

1. Alignment to BCC Strategic Priority *(Select at least one but choose all that apply)*
Choose an item.

Choose an item.

Choose an item.

Choose an item.

2. Relationship to Guided Pathways

☐ Clarify the Path

☐ Entering the Path

☐ Staying on the Path

☐ Support Learning

3. Please list at least one objective for achieving this goal*.*
Click or tap here to enter text.

4. Please list outcome statements for each objective.
Click or tap here to enter text.

5. Briefly explain how you will measure the outcome*.*
Click or tap here to enter text.

6. Please list resources (if any) that will be needed to achieve the goal/outcome*.*
Click or tap here to enter text.

....

B. NEW GOAL #1
Click or tap here to enter text.

1. Alignment to BCC Strategic Priority *(Select at least one but choose all that apply)*
Choose an item.

Choose an item.

Choose an item.

Instructional Program Review- Annual Update Template

Choose an item.

2. Relationship to Guided Pathways

☐　　　Clarify the Path

☐　　　Entering the Path

☐　　　Staying on the Path

☐　　　Support Learning

3. Please list at least one objective for achieving this goal.
   Click or tap here to enter text.

4. Please list outcome statements for each objective.
   Click or tap here to enter text.

5. Briefly explain how you will measure the outcome.
   Click or tap here to enter text.

6. Please list resources (if any) that will be needed to achieve the goal/outcome.
   Click or tap here to enter text.

IV. Resource Requests: What does the program need to meet its goals and objectives?

What does the program need to meet its goals and objectives?
List all resources from Sections II.D and III.6 below.
If there was no room on the template to list all resources being requested for a single goal/objective, you may list additional resource requests here. Also list any resources required to implement planned improvements.

IMPORTANT: A BUDGET ALLOCATION PROPOSAL must be completed and submitted for **EACH** new resource requested.

Goal #	Objective #	Resource Required	Estimated Cost	BAP Required? Yes or No	In No, indicate funding source
2	1	Professional Development funds	$5,000 per faculty	Yes	Click or tap here to enter text.

Instructional Program Review- Annual Update Template

Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Date: 8/11/2025	Originator: Dr. Beverly Ranney
Program or Department Name:	Biology AS-T, Academic Affairs
Dean/Vice President/Supervisor:	Emily Garrison

What are you requesting? (Brief) Funds for faculty to travel to conferences

Amount Requested: $5,000 per faculty ☒ One-time Funding ☐ Ongoing Funding

Funding Source (if known):

REQUEST TYPE:

☐ Personnel/Staffing *Complete Personnel/Staffing section below* ☐ OTHER	☐ Technology Resource *Complete Technology section below*	☐ Facilities Resource *Complete Facilities section below*	☒ Professional Development *Complete Professional Development section below*

PERSONNEL/STAFFING REQUEST

Is the position request for: ☐ Faculty ☐ Classified ☐ Management/Confidential

Is the position requested: ☐ A new classification (Attach *proposed* job description, or *detailed* list of proposed duties)

☐ An existing classification *Official Job Title:*

☐ Full Time ☐ Part Time: Months/Year Hours/Week

Is the position requested:

TECHNOLOGY RESOURCE REQUEST

Indicate the category of the request:

☐ Hardware ☐ Software ☐ Printer/Copier ☐ Network ☐ Audio-Visual ☐ License/Maintenance

Indicate the intended users: ☐ Students ☐ Faculty ☐ Staff ☐ Other

Is training required? ☐ No ☐ Yes Explain:

How will it be secured? ☐ Alarm ☐ Secure Room ☐ Secure Cabinet ☐ Cable/Lock ☐ Password

Have you completed and attached the Technology Assessment Form?

FACILITIES RESOURCE REQUEST

Indicate the intended users: ☐ Students ☐ Faculty ☐ Staff ☐ Other

Is maintenance required? ☐ No ☐ Yes Explain:

PROFESSIONAL DEVELOPMENT REQUEST

Indicate the intended users: ☐ Students ☒ Faculty ☐ Staff ☐ Other

Do other internal areas/departments need to be involved?
☒ No ☐ Yes Explain:

Is technology needed? ☒ No ☐ Yes Explain:

1. Why is the request being made?

> Science faculty are requesting funds to attend conferences in STEM areas (such as the National Association of Biology Teachers and the Association for Biology Laboratory Education) to learn more ways to close equity gaps in our program.

2. a) Where in the Program Review/Annual Update is the request supported? Include the text from the　　　　　　　Program Review AND cite the applicable section number(s).

> This request is supported in Goal 2 of the Program Review, which stems from the Program Learning Assessment Data. Currently, over 80% of our students are successful in the program but there may be equity gaps which should be closed. The faculty believe that all students deserve supports that encourage their success in STEM.

　b) Explain how the request is supported with information gathered from the assessment of outcomes (Student Learning Outcomes, Program Level Outcomes, Service Area Outcomes, or Administrative Unit Outcomes).

> The faculty are requesting money to attend STEM conferences. We have 80% success rate in our program but there are equity gaps. We believe that attending professional development will allow us to better identify and close those equity gaps with appropriate pedagogical supports. Professional development opportunities, such as attending STEM conferences, offer valuable insights into the latest research, teaching strategies, and tools aimed at fostering inclusive and equitable learning environments. By engaging with experts and peers from across the STEM education community, faculty can enhance their ability to identify the specific challenges contributing to these gaps. Conferences often highlight

evidence-based, culturally responsive pedagogical supports, enabling faculty to bring back actionable strategies tailored to the diverse needs of our student body.

☐) How was this included in the Area Goals section of your Program Review? Please cite section/item number and include the text.

This was included in Goal 2 in the Program Review. "Increase by 10% over the next three years the success rates of disproportionally impacted student groups."

3. If this item is approved, what departments or resources are needed, or would be affected, when implementing or developing it, on both a short-term and a long-term basis? Have they been notified? Example: Technology Assessment Form
(This question is not required for Personnel/Staffing requests.)

No departments would be affected.

4. a) How will this resource improve student success or institutional services?

Attending these conferences will empower our faculty to better serve underrepresented students, refine teaching practices, and develop interventions that will help close these equity gaps, ensuring a more inclusive and successful program for all.

b) What data will you gather and analyze to demonstrate that your proposal is meeting this goal(s)?

We will gather and analyze PSLO and course SLO data to demonstrate our proposal is meeting the goal.

5) Describe how your request is aligned with as many of the college's strategic planning documents as applicable. (If the request does not align with a document, indicate N/A.)

Please be specific and provide detail, ensuring a clear correlation between content of referenced document and the request. Cite the section and page numbers where the correlation can be found.

(Follow the links to access each document)

1. Mission Statement

Attending a STEM conference directly aligns with Barstow Community College's mission to provide equitable, accessible, and high-quality education to its diverse student body. Conferences are a rich source of cutting-edge knowledge and innovative pedagogical strategies that can help faculty create more inclusive and effective learning environments. This aligns with the college's focus on serving historically marginalized populations,

including local, military, and distance education students, by equipping instructors with tools to support a wide range of student needs.

Conferences offer faculty opportunities to explore emerging trends in STEM education, particularly those related to addressing equity gaps. By learning new strategies, faculty can enhance their ability to provide holistic student support, improve teaching methods, and ensure that all students—regardless of their background—have clear and diverse pathways to success. These professional development opportunities also help faculty stay current with job skills training, ensuring that degree and certificate programs remain comprehensive and relevant to the globalized workforce.

Furthermore, conferences foster networking with other educators and professionals, which allows faculty to bring back valuable insights that contribute to the development of life-long learning opportunities and critical thinking skills in students. This reinforces the mission to help students succeed not only academically but also in their broader careers and life experiences, preparing them for success in a rapidly changing, interconnected world.

2. [Strategic Priorities](#) / [Strategic Goals](#)

Attending STEM conferences helps faculty innovate to achieve equitable student success by exposing us to the latest research, tools, and pedagogical strategies specifically designed to address educational disparities and promote inclusion.

STEM conferences are a hub for the most recent advancements in teaching methodologies. Faculty can learn about innovative approaches such as active learning, problem-based learning, and culturally responsive teaching, which have been shown to reduce achievement gaps for underrepresented student groups. These practices can be integrated into the classroom to ensure

that diverse learners, including those from marginalized or disadvantaged backgrounds, have better opportunities for success.

Conferences provide access to research and case studies that highlight successful interventions for closing equity gaps. Faculty can explore data-driven techniques for identifying and addressing disparities in student performance, such as targeted support systems, enhanced assessment methods, and personalized learning plans. These insights enable faculty to tailor their teaching to meet the specific needs of students who might otherwise fall behind.

Faculty attending STEM conferences often encounter new resources, tools, and technologies designed to create more inclusive STEM learning environments. These may include adaptive learning technologies, open educational resources (OER), or new digital tools that help overcome barriers to access, especially for distance learners or students with different learning needs. Incorporating these tools into the curriculum can make STEM education more accessible to all students.

Many STEM conferences offer workshops and sessions that focus specifically on equity in education, highlighting strategies that have been effective in closing gaps for underrepresented minorities, women in STEM, and first-generation college students. Faculty can engage with experts in the field, gaining actionable strategies they can apply immediately to their teaching practices to create a more inclusive environment.

Conferences provide opportunities for faculty to network with other educators, researchers, and thought leaders who are also focused on equity in STEM education. These collaborations can lead to new ideas, joint projects, or even grant opportunities to pilot innovative programs that support equity. Engaging with a diverse community of educators often sparks creative solutions that individual faculty members can bring back to their own classrooms.

Through workshops, panels, and presentations that address the challenges faced by historically marginalized groups in STEM, faculty gain a deeper understanding of the systemic barriers these students face. Conferences often offer strategies on how to build more supportive classroom environments, mentor underrepresented students, and develop pathways that increase retention and success rates for these populations. This equips faculty with the knowledge and resources needed to implement changes that directly support equitable outcomes.

Conferences frequently explore the intersectionality of race, gender, socioeconomic status, and other factors that affect student success. By understanding the multiple dimensions that impact student performance, faculty can innovate their teaching methods to be more inclusive, recognizing that different students face different challenges and may require varied forms of support to thrive.

Ongoing professional development, such as attending conferences, ensures that faculty stay at the forefront of educational innovation. This commitment to continuous improvement allows educators to refine their teaching practices over time, making adjustments based on the latest research and techniques that show promise in promoting equitable student success. These iterative improvements contribute to long-term, sustainable change within the institution.

Attending STEM conferences provides faculty with the knowledge, skills, and resources to innovate their teaching practices in ways that support equitable outcomes for all students. By implementing the lessons learned from these conferences, faculty can play a crucial role in

creating more inclusive, supportive, and effective educational environments where every student has the opportunity to succeed, which aligns with Strategic Priority 1.

3. Educational Master Plan

Our request supports the goal of equitable pathways to student completion.

4. Others: Such as Technology Plan , Facilities Master Plan, HR Staffing Plan, Professional Development Plan

ADMINISTRATIVE USE

Administrator: Title:

Comments/Recommendations:

Signature: Date:

Administrator: Title:

Comments/Recommendations:

Unit Priority Ranking: of

BUDGET INFORMATION
(This section MUST be completed)

Budget Program Number: ☐ Restricted   ☐ Unrestricted

Comments regarding Budget Information:

Signature: Date: