1. Support Services Report Template

Report Info

Name of the person completing this report: Stephanie Couch
Title of the person completing this report: Executive Director
Supervisor/dean reviewing report: James Houpis
Service: STEM Institute for Education
Division/College: STEM Institute

3. Mandated Service

1.1 Please indicate below if any aspect of the service is legally mandated by any of the following and provide the relevant reference.

- Federal Law: 0
- State Law: 0
- Executive Order: 0
- Title 5: 0
- Campus Policy: 0
- Any other: 0

Provide a brief explanation, if necessary, in < 60 words.

The Institute for STEM Education and its work reflects the vision and goals that faculty, staff and campus leadership have embraced for the campus as a whole and for its work with community partners. Our efforts are not mandated by law or policy, although we follow laws and policy when carrying out our work.

4. Importance of Service

Briefly describe the service in terms of its primary function(s) and purpose(s) using <120 words

Services to faculty, deans, the Institute’s board and campus leadership include: 1) representing the Institute and its work in discussions taking place within numerous local, statewide and national organizations in order to advance CSU East Bay’s recognition as a STEM leader, 2) nurturing relationships, partnerships, and fostering ongoing communication with CSU East Bay’s partners in business and industry, K12 schools, community colleges, the non-profit sector, and in the community at-large, 3) ongoing stewardship of the Gateways East Bay STEM Network - a multi-stakeholder regional effort to address STEM challenges students face as they move from preschool to college, and 4) grant writing, administration and research. 5) Staff members also support campus administration’s engagement with such individuals when appropriate and warranted.

2.1 Who are the primary receivers of this service? (Please enter the percentage of each user group that is relevant)

- Students: 2%
- Faculty: 40%
- Administrators/staff: 25%
- Colleges/departments: 5%
- Academic Senate and/or committees: 1%
- Alumni: 3%
2.2 Please indicate the direct or indirect impact of the service on students for each of the three University Action/Student Impact Areas listed below (for example processing financial aid applications would be direct impact on students while managing utility services would be indirect).

<table>
<thead>
<tr>
<th>Direct Impact on Students</th>
<th>Indirect Impact on Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-college (helping students to enter the system)</td>
<td>✓</td>
</tr>
<tr>
<td>During college (helping students succeed while they are at Cal State East Bay)</td>
<td>✓</td>
</tr>
<tr>
<td>After college (helping students establish meaningful lifework and be socially responsible contributors to society)</td>
<td>✓</td>
</tr>
</tbody>
</table>

Provide a brief narrative (<60 words each) explaining your selection for each area.

<table>
<thead>
<tr>
<th>Pre-college (helping students to enter the system)</th>
<th>Evidence submitted to support the chosen selection (&lt;60 words for each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Institute for STEM Education has participated in three main events (STEM Career Awareness Day, CSU East Bay Education Summit, and Bay Area Science Festival, all three events target elementary, middle, and high school age children.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<th>Evidence submitted to support the chosen selection (&lt;60 words for each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Institute for STEM Education has submitted several grants to help support retention efforts with STEM majors here on campus. Although, we were not funded the Institute has plans to move forward with providing opportunities for STEM students.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>After college (helping students establish meaningful lifework and be socially responsible contributors to society)</th>
<th>Evidence submitted to support the chosen selection (&lt;60 words for each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In partnership with other Institutes and Centers, the Institute for STEM Education is working on developing a plan that would provide opportunities for students to become invested and to connect current students and alums.</td>
<td></td>
</tr>
</tbody>
</table>

2.3 Applying the four choices presented below, please indicate the consequence of NOT having this service on each of the actions in the left hand column.

<table>
<thead>
<tr>
<th>4 - Service provides evidence of direct impact in more than one area</th>
<th>3 - Service provides evidence of direct impact in one area</th>
<th>2 - Service provides evidence of indirect impact in more than one area</th>
<th>1 - Service provides evidence of indirect impact in one area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-college (helping students to enter the system)</td>
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<td></td>
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</table>

Provide a brief narrative (<60 words each) explaining your choice.

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<th>Evidence submitted to support the chosen selection (&lt;60 words for each selection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through Gateways, we are addressing barriers to college access and success all along the</td>
</tr>
</tbody>
</table>
Pre-college (helping students to enter the system)

- Education continuum (PK-20). Efforts include engaging with middle and high school students early and often in ways that strengthen connections and assist with transition from high school to two and four year colleges.

During college (helping students succeed while they are at Cal State East Bay)

- The Institute for STEM Education has submitted a variety of grants including WIDER and STEP to help support students. Although we were not awarded these two grants, the Institute is moving forward with its efforts to track our students and to find better ways to support them.

After college (helping students establish meaningful lifework and be socially responsible contributors to society)

- We've had plans to develop a strategic plan for this effort. Currently, nothing concrete is underway, but the Institute for STEM Education is invested in working with other Institutes and Centers to provide opportunities to connect and support recent alums.

**Link to Scoring Rubric**

### 2.4 Alignment with Shared Strategic Commitments

How does this service contribute to or align with any of the eight Shared Strategic Commitments (SSC) listed below?

<table>
<thead>
<tr>
<th>Reinforce academic quality through open-minded inquiry, innovative teaching, engaged learning, and distinguished scholarship</th>
<th>The Institute for STEM Education is building capacity on campus for research and development regarding innovative teaching practices and related services that improve student learning and persistence in college.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance our inclusive campus, responding to the backgrounds and interests of our diverse community and promoting their academic, professional and personal development</td>
<td>Our regional work with community partners to support student success in STEM college and career pathways includes a focus on the unique needs of students from diverse backgrounds. Many of those who have participated with the STEM Career Awareness Day and CSU East Bay Education Summit are from diverse backgrounds.</td>
</tr>
<tr>
<td>Serve students first, by expanding access and enhancing each student’s educational experience and prospects for success as a graduate and life-long learner</td>
<td>Again, the Gateways East Bay STEM Network, a program of the Institute for STEM Education, has been focusing its efforts at the regional level to increase interest and competencies for all K-14 students. The Institute is also working to promote girls and women in STEM.</td>
</tr>
<tr>
<td>Foster a vibrant community through enriched student services and student life that support student engagement and learning</td>
<td>The Institute is just launching efforts to foster a sense of community and to provide case management services to STEM and STEM teaching majors.</td>
</tr>
<tr>
<td>Contribute to a sustainable planet through our academic programs, university operations, and individual behavior</td>
<td>Some of the program development efforts within the Institute for STEM Education involve sustainability (green energy, water pollution detection, etc.).</td>
</tr>
<tr>
<td>Continuously improve our efficiency, transparency, and accountability while practicing mutual respect, responsiveness, and collaboration across the University</td>
<td>The Institute for STEM Education collaborates with numerous groups on and off campus. For example, we are currently engaged with the Keck/PKAL undergraduate STEM Education Initiative which provides collaboration across campus with STEM and the CSU System. Annual reports, websites and newsletters are used as vehicles for information sharing.</td>
</tr>
<tr>
<td>Support the civic, cultural, and economic life of all communities in the regions we serve through partnerships that promote education and social responsibility</td>
<td>The Institute for STEM Education is invested in working with the community. We have several initiatives, such as the Mathematics Achievement Academies, STEM Career Awareness Days, and the Gateways East Bay STEM Network which all focus on youth and preparing them for the STEM workforce.</td>
</tr>
<tr>
<td>Demonstrate our continuing record of leadership and innovation in higher education, focused on 21st century skills, including science, technology, engineering, and</td>
<td>Institute staff’s knowledge and expertise in STEM policy issues, instructional technologies and school finance are being tapped by area business leaders and elected officials to address California’s implementation of Common Core state academic standards for K12 schools in English Language Arts and mathematics, the Next Generation Science Standards, and efforts to advance the use of new technologies in</td>
</tr>
</tbody>
</table>
2.5 How might the demand for this service change over the next five years? (Please choose one category below).

Likely to increase

Provide a rationale for your choice (assumptions, impact of new policy, etc.) in <120 words.

The growing gap between industry needs in the East Bay region for a highly skilled and diverse STEM workforce and the amount of graduates we are able to produce makes it imperative that we increase our services in order to provide opportunities for students to be successful and to graduate from our institution.

5. Quality of Service

3.1 Do you assess the quality of the service you provide?

Yes

If “Yes”, what benchmarks, best practices or measures of success, either internal or external, do you use to measure service quality (e.g., timeliness, accuracy, adequacy, meeting deadlines, satisfactory completion of assignment, etc.)? Please describe in <120 words. If no, please explain.

All of our work in the Institute for STEM Education is project or grant driven. We report regularly to each funder. Ongoing funding is contingent upon our funders’ perceptions of the quality of our work. Since faculty participation is voluntary, they also validate quality by continuing to engage in our work and by continuing to use our services.

3.2 During the last three years, have you adopted any measures to improve the quality of this service? Please describe in <120 words.

Thus far, we haven’t adopted any measure to more formally assess and improve the quality of services, but we are working on initiatives to track and report on improvements in our enrollment numbers of STEM majors. Currently, 13 percent of total campus undergraduate enrollments is represented in STEM majors. The Institute is working to increase STEM enrollments by 20 percent. The Institute for STEM Education measures feedback from community events such as STEM Career Awareness.

3.3 What idea(s) do you have for improving the quality of this service within existing resources (e.g. development of benchmarks, surveys, feedback, etc.)? Please describe your plan(s) in < 120 words.

The Institute is just beginning its second year of operations. Now that services are up and running, we are in a position to begin benchmarking satisfaction data and can collect information surrounding any potential unmet needs that align with our mission and goals.

3.4 What ideas do you have for improving the quality of the service if additional resources were provided. Please describe your idea(s) in <120 words.

The Institute would like to engage and support students in research and other projects related to improvements in STEM education and the recruitment, retention and graduation rates of STEM majors. We would also like to put a more sophisticated data system in
and the recruitment, retention and graduation rates of STEM majors. We would also like to put a more sophisticated data system in place, and would like to have the staffing required to establish a case management system that supports student recruitment, retention and graduation.

3.5 Do you use any formal or informal process to assess the level of satisfaction of the service users?

No

If yes, describe the process and most recent results in <120 words. If no, please explain.

We are just entering our second year of operations so we have been too busy building capacity to offer services.

3.6 The university recently conducted a customer satisfaction survey for some services (results for this service are attached, if applicable). Do you have any comment or response to the results? Please describe in <120 words.

N/A

3.7 Do you have any formal or informal guidelines for personnel in your department regarding how to treat/interact with receivers of this service?

No

If yes, please describe in <120 words. If no, please explain

Our goal as personnel is to be responsive and to provide quality service for faculty and community partners.

3.8 Does your service have annual goals (targets) of achievement regarding the quality of the service provided?

No

If yes, describe the annual quality goals (targets) and indicate if the service achieved those goals (targets). Please provide evidence, if possible, in <120 words. If no, please explain.

N/A. Goals and deliverables are specific to each grant/fund source. Grant funded efforts align with the broadly worded goals and objectives contained within the Institute’s strategic plan approved by the Academic Senate.

3.9 Does your service have annual goals (targets) of achievement regarding the quantity of service provided?

No

If yes, describe the annual quantity goals (targets) and indicate if the service achieved those goals (targets). Please provide evidence, if possible, in <120 words. If no, please explain.

N/A. Goals and deliverables are specific to each grant/fund source. Grant funded efforts align with the broadly worded goals and objectives contained within the Institute’s strategic plan approved by the Academic Senate.

6. Efficiency of Service (cost effectiveness)
4.1 Using the spreadsheet provided for all employees in your department, please distribute salaries of individuals across all services provided to reach an educated or reasonable estimate of the cost of providing the service.

345008.00

Attach your allocated spreadsheet here.
Planning of Distinction.xlsx

4.2 Using the spreadsheet provided, please distribute your department's annual operating expenses across all services provided to reach an educated or reasonable estimate of the cost of providing the service.

708755

4.3 Using the spreadsheet provided, please distribute the square footage of work space across all services provided to reach an educated or reasonable estimate of the use of this resource.

840

Attach your allocated spreadsheet here.
Planning of Distinction.xlsx

4.4 During the last three years, have you adopted any measures to improve the efficiency (cost effectiveness) of providing this service (e.g. reducing salary costs, operating expenses or use of space, or increased output without increasing cost. Etc.)?

Yes

If yes, please describe the measures in <120 words. If this is a new service introduced over the past three years, please indicate. If no, please explain.

We continue to bring in new grants, distribute highly paid staff across multiple grants, and backfill with less costly staff so that costs of services charged to any one particular grant funded effort are lowered.

4.5 What idea(s) do you have for improving the efficiency (cost effectiveness) of this service within existing resources (e.g. restructuring, merging, outsourcing, ways to cut costs, technology, etc.)? Please describe those ideas in <120 words.

There are no plans beyond those articulated above.

4.6 What idea(s) do you have for improving the efficiency (cost effectiveness) of the service if additional resources were provided. Please describe your idea(s) in <120 words.

We would hire accounting staff and additional administrative staff to establish our own budget tracking systems so that less of the director and program manager's would be spent on administration and grant reporting (i.e. time would be maximized to carry out grant deliverables).
4.7 Do you have any plan(s) to improve the **efficiency** (cost effectiveness) of this service in the next 1-2 years (e.g. reducing costs, increasing productivity, etc.)?

Yes

If yes, please specify whether these plan(s) involve reducing salary costs, operating expenses and/or use of space. Please describe your plan(s) in <120 words. If no, please explain.

Again, hiring accounting staff and additional administrative staff to establish our own budget tracking systems would free up some of the director and program manager’s time. The time could then be available to other grants that would bring in additional funding and would allow fixed costs to be spread across more initiatives.

4.8 Please describe the estimated output for this service for fiscal year 2011-12, quantify if possible (e.g. volume, service tickets resolved, people serviced, appointments, etc.) in <120 words.

N/A

7. Other

5.1 Are you aware of services similar to this one that are being provided by another department at CSU East Bay?

No

If yes, please provide a list of those departments. How are the services described here similar or different? Please describe in <60 words.

5.2 Is there anything unique or distinctive about your service? Please describe what is unique or distinctive in <120 words.

Our work is distinct in the sense that it involves ongoing work and convenings with representatives from all departments and the deans from two of CSUEB’s four colleges (College of Science and the College of Education and Allied Studies). It is also unique because 1) it is primarily grant funded, 2) is a campus-wide initiative, and 3) involves ongoing convenings and collaboration with a wide range of stakeholders across the region (Alameda and Contra Costa counties).

5.3 Are there any additional things about this service that you would like the task group to know? Please describe/explain in <250 words.

The mission of the Institute for STEM Education is to advance STEM teaching and learning in parallel with the rapidly changing knowledge, practices, and needs in STEM fields and disciplines. In addition to preparing students for success in STEM fields and disciplines, the Institute aims to help all students acquire the STEM knowledge required for decision making in their daily lives.

The mission includes research, evaluation and the dissemination of findings (i.e. assessment results and impact data) derived from programs and initiatives affiliated with the Institute. Participating faculty generate a wide-range of data and information related to student achievement in science and mathematics, students’ developing capabilities in technology and engineering, and effective STEM teaching practices and pedagogy. To the extent possible, findings and data derived from the work of Institute participants will
be captured and shared more widely through the use of web based technology resources and tools.

The Institute’s long-term goals are:

1) To provide faculty, students, and staff with support needed for collaborative endeavors aligned with the Institute’s mission and vision.

2) To prepare the STEM workforce and offer opportunities for returning to pursue advanced degrees and certificates.

3) To advance teaching and learning in STEM fields and disciplines in students’ early years, in K12 schools, and in higher education.

4) To establish and continuously engage a community of STEM education supporters, including formal and informal educators, students, representatives from business and industry, and many others in the community at-large.

5) To provide leadership for STEM policies.