

TECHNOLOGY NEEDS ASSESSMENT APPLICATION
Fall 2018

Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Sheri Lillard
Program or Service Area:	Architecture
Division:	Science
Date of Last Program Efficacy:	Spring 2015
What rating was given?	Continuation (Spring 2018 Conditional 2-yr review)
Amount Requested:	\$1,100 (\$975 + tax)
Strategic Initiatives Addressed:	Increase student success. Strategic Directions + Goals

Replacement Growth

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

Meeting (phone) with Rick Hrdlicka and Sheri Lillard: 10/16/2018 at 9:00 a.m.

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No.

3. What technology-based equipment or software are you requesting?

Rhino software, version 6 (30-user lab)

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

As indicated in the 2017-2018 EMP, a challenge and a goal is to strengthen articulation agreements with universities such as Cal Poly. We are working on major revisions to our curriculum in order to achieve this goal. A critical component of this curriculum revision is ensuring that students gain lecture and laboratory experience in 3 types of drafting software, prior to transferring: AutoCAD, Building Information Modeling (e.g., Revit software), and 3D design (Rhino software). In fact, all three types of software instruction are necessary for us to achieve articulation with Cal Poly Pomona, as they offer specific courses for each of the three types of software programs. Strengthening articulation and offering industry-standard 3D computer-aided drafting is expected to increase FTES, as students will have an additional opportunity to learn modern software. Students who take our courses have been transferring without receiving a degree in recent years. We expect that this improvement to technology will contribute to students earning a certificate or degree before transferring to the 4-year institutions.

5. Indicate any additional information you want the committee to consider *(for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.)*.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

\$975 for a 30-user lab (permanent) license; version 6.

7. What are the consequences of not funding this request?

Articulation and student success will suffer. Strong articulation agreements with transfer institutions such as Cal Poly Pomona include courses based on computer-aided design (CAD), using 3 types of software. Two of these (Revit and AutoCAD) are available for free to educational institutions. The third, Rhino, must be purchased. We are currently revising the curriculum to include introductory and advanced instruction in all 3 types of software. Not having Rhino will impede articulation and will not provide the students with the experience they need with 3D drafting, when they transfer or enter the workforce.

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Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	TATIANA VASQUEZ
Program or Service Area:	BIOLOGY
Division:	SCIENCE
Date of Last Program Efficacy:	Spring 2017
What rating was given?	Continuation
Amount Requested:	\$419.99
Strategic Initiatives Addressed:	Goal 1, Access Strategic Directions + Goals Goal 2, Student Success

Replacement Growth

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

September 25 2018

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

Not applicable.

3. What technology-based equipment or software are you requesting?

Ink-Jet Printer EPSON and Pigmented black ink.

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

This technology-based equipment supports the needs of the current skill-based training in the Biology major courses in which students learn museum curation practices, catalog local vegetation and invertebrates of Southern California, and archive specimens in the department’s zoological and botanical collections. As a result, students must include biological records via special labeling that must keep content for a lifetime (with the use of pigmented ink). Our Program Efficacy report (pp. 18-19) demonstrates the wide diversity of employment opportunities that our Biology students have today. But they must be ready with various technical skills. The EMP data for AS Biol degrees (p. 1) demonstrate our commitment to leading the students’ career pathways. According to the Efficacy Team Analysis and Feedback (p. 4), “the department has many strengths which are utilized to support the goals and objectives of the department” and “these strengths support the greater college community...”

In the recent academic year, there have been increases in all of the measures of the EMP (p. 1) such as FTES (up by 6.12% and by 10.30% since 2013-2014), and the number of sections (up by 5.09% and by 15.9% since 2013-2014). Some of this growth has been realized in the Biology major program. The Department’s goals are aligned with this technology-based equipment because it demonstrates our ability to increase student success through student engagement and maintain and create new partnerships (EMP p. 2) (e.g., US Forest Service, Rancho Santa Ana Botanical Garden, and Big Bear

Pebble Plain Committee) for the benefit of our community. The Efficacy Team Analysis and Feedback (*planning p. 4*) states “the department has identified trends at the local, regional, state, and national levels that may have an impact on enrollment.”

5. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

In Biology courses in which the outdoor classroom has been implemented, student success rates range between 70-77% (B.O.R.G Data Cubes). Science courses are typically perceived to make gains in the lab, but in the life sciences the lecture and lab spaces are actually outside. A study published in *Bioscience (At a Crossroads: The Nature of Natural History in the Twenty-First Century, Apr 2016)*, reveals that early-career scientists benefit greatly when exposed to “opportunities to gain desired skills” and “opportunities for exposure to natural areas and environments.”

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

399.99 for ink-jet printer

20.00 black ink

The department instructional supply budget would be allocated for the ink supplies costs and maintenance.

7. What are the consequences of not funding this request?

- Eliminate experiential learning approach from the courses in the Biology major and Independent Study as specimens will not be growing without having a museum appropriate labeling and printing process.
- Eliminate opportunities for students to gain job skills and job access.
- Reduce opportunities for students and faculty to collaborate with outside agencies (e.g., US Forest Service, RSABG, Big Bear Pebble Plain Committee)

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Name of Person Submitting Request:	Rick Hrdlicka
Program or Service Area:	Campus Technology Resources
Division:	Administrative Services
Date of Last Program Efficacy:	2015-2016
What rating was given?	Continuation
Amount Requested:	\$250,000
Strategic Initiatives Addressed:	Provide Exceptional Facilities. Increase Access
Strategic Directions + Goals	

Replacement Growth

1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.

10/19/18

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No.

3. What technology-based equipment or software are you requesting?

Replace 10 Polycom systems used to communicate with the Big Bear Campus.

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

Our program efficacy report identifies the challenge of addressing the aging technology infrastructure in older buildings.

5. Indicate any additional information you want the committee to consider *(for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.)*.

The current Polycom systems are aging and do not allow connection to any alternate systems. Replacing it with a system that is more generic in nature would allow for connections to students in remote locations in locations other than Big Bear. Also the equipment in Big Bear and many of our classrooms are quite old.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

10 alternative systems to Polycom. Not yet specified. \$25k each \$250,000 total.

7. What are the consequences of not funding this request?

Possible cancellation of classes in Big Bear.

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Name of Person Submitting Request:	Rick Hrdlicka
Program or Service Area:	Campus Technology Resources
Division:	Administrative Services
Date of Last Program Efficacy:	2015-2016
What rating was given?	Continuation
Amount Requested:	\$60,000
Strategic Initiatives Addressed:	Provide Exceptional Facilities. Strategic Directions + Goals

Replacement Growth

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

9/17/2018

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No.

3. What technology-based equipment or software are you requesting?

Purchase and install electric projector screens in 25 classrooms. We will target the rooms that have the greatest need first. This will be the second phase of a multiphase project.

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

Our program efficacy report identifies the challenge of addressing the aging technology infrastructure in older buildings.

5. Indicate any additional information you want the committee to consider *(for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.)*.

We have had issues with manual screens. They tend to fail because users must raise and lower them. We have had some users that are not able to lower and raise the screens themselves. This would allow them to push a button and lower or raise the screen.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

Screens	1500 each
Installation	900 each
Total per screen	\$2400

25 Screens @ \$2400.00 for a total of \$60,000
CTS would cover ongoing costs from its budget.

7. What are the consequences of not funding this request?

We will still need to cover malfunctioning screens as they fail.

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Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Michael Torrez
Program or Service Area:	Chemistry
Division:	Science
Date of Last Program Efficacy:	Spring 2016
What rating was given?	Continuation
Amount Requested:	\$5,000 (for 8 academic licenses-at \$520.00 each plus tax)
Strategic Initiatives Addressed: Strategic Directions + Goals	.114. Make better use of web content for online and traditional courses 2.6/2.6.1. Increase student success for both traditional and online (hybrid) students

Replacement Growth

1. **You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

Phone meeting with Rick Hrdlicka; 10/19/2018 at 3:45 P.M.

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No.

3. What technology-based equipment or software are you requesting?

Department set of licenses (8) [ChemDraw Prime Perpetual Named User Win](#) for use in lecture prep/lab prep/instruction within classroom or lab as well as online hybrid content augmentation. We are currently using outdated versions (several years) or shareware, which do not have spectral capabilities (see explanation below about this requirement for courses). these are additional licenses needed from last year's request. We were previously only able to purchase (3) licenses due to a quote error and are requesting an additional (8) so that all Faculty who teach CHEM 104/105/212/213 have this software.

4. Indicate how the content of the department/program's latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. (*Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.*)

Under SP16 Efficacy report: **Pattern of Service** in offering classes to serve the community (p.8): it states: "The program offers an online-hybrid Chem104 class each semester for transfer nursing majors. In addition, a new one semester General, Organic and Biological Chemistry course designed specifically for the requirements of allied health majors, CHEM 105 [is now being offered]". As indicated in the EMP under **Improve student success**, the different organic chemistry classroom and laboratory techniques discussed are difficult (if not impossible) to put into action if we do not have the visual aids and tools offered by this software to implement into our courses. This software is NECESSARY for organic chemistry; it draws chemical structures and generates simulated spectroscopic data based on chemical structure. Both features are **necessary** for quizzes/exams/problem-sets in CHEM 213 and structure-

drawing is **necessary** for quizzes/exams/problem-sets in CHEM 212, 104, 105, 101, and 150. Student success for both traditional classes such as the new CHEM 105 and online hybrid CHEM 104 will increase due to the effective teaching material the software will allow us to implement. The software will allow for easy access to web content in the classroom by allowing molecules that will be studied to be created, cross-checked and referenced in real-time with other molecules in on-line chemistry databases. This will enhance student learning thereby enhancing student success. In addition, the software will allow instructors to meet demands of online coursework required for online hybrid chemistry students through the software's robust online web utilities further enhancing existing discussion and increasing online student success.

5. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

1. The tools are NECESSARY for preparing tests and problem-sets for organic chemistry.
2. Validation and correction of student nomenclature in time-sensitive lecture and laboratory settings. Software can allow for prediction of issues or critical errors that might otherwise be missed until after the assignment is completed.
3. Ease of Implementation of 2-D structures to: 3-D visualization of molecular, pKa, nomenclature, reaction, MSDS information, and other properties.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

\$5,000 for 8 perpetual licenses at estimated \$520.00 for each perpetual ChemDraw license. Note: this does not include tax or upgrade costs which is why price was rounded up to accommodate inflation of price.

7. What are the consequences of not funding this request?

Instructors will not be able to include molecular structures for reactions, synthesis, or nomenclature for CHEM 101, 104, 105, 150, 212, and 213 or be able to provide NMR spectra in CHEM 213. **These topics are part of the course outlines of record.** In addition, students require constant interaction in conceptual learning and problem solving of chemistry related material. This requires instructors to incorporate state of the art molecular sketching with key names, properties, and reactions for the molecules studied in a timely fashion that students can learn from. Using this software, the process can be streamlined. In addition, the generated sketches can be cross-referenced with online databases for various lecture and lab assignments to help students in the learning process. This software is especially critical for online hybrid student classes where online material for discussion and instruction needs to be constructed and formatted in a way suitable for easy, streamlined access by online students. Current software is outdated and interferes with the student's ability to successfully access and navigate the discussion and instruction content, potentially undermining student success.

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Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Sheri Lillard & Carol Jones
Program or Service Area:	Chemistry
Division:	Science
Date of Last Program Efficacy:	Spring 2016
What rating was given?	Continuation
Amount Requested:	\$6,150.00 (Surface Pro or equivalent - purchase 3 portable laptops with digital inking ability - \$2,050 each)
Strategic Initiatives Addressed:	2. Promote Student Success Strategic Directions + Goals 6. Provide Exceptional Facilities

Replacement Growth

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

Phone meeting with Sheri Lillard & Rick Hrdlicka; 10/16/2018 at 9:00 a.m.

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No

3. What technology-based equipment or software are you requesting?

Three sets of touch screen systems (Surface Pro computer or comparable product), as well as the external keyboards and five digital pens (one per device plus two extra), for use by various chemistry faculty (on a checkout bases) that would benefit from this technology within classrooms and laboratories that have limited whiteboard space.

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. (*Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.*)

The Chemistry/Physical Science 2017-2018 EMP “Goals” are to “improve student success” and to “increase the number of science and engineering majors...”. Over the last few years (2013-2018) the Chemistry success rates have been 54-60%; the chemistry department continues to seek innovative ideas to improve student success (EMP, action plan). The Surface Pro will allow for a more interactive lecturing experience. Screen capture technology can be used to record processes that students often want to view repeatedly (such as arrow pushing mechanisms, complex organic structure modifications, problem-solving strategies, etc.). These devices allow a digital pen to digitally “ink” PowerPoint or PDF and can easily zoom in/out to give the instructor a larger canvas in which to connect major points in complex problems. We can also cover more complex material without worrying about the time lag needed to redraw structures. Feedback from students that have an instructor that uses a Surface Pro have all been positive. Allied health and engineering majors find this method of instruction easier to follow and more fitting with current technology to help them compete in this modern workforce.

5. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

1. Our current technology and whiteboard space in laboratories and classroom is not as advantageous to the advancement of our students' ability to learn compared to neighboring campuses. Other campuses like RCC and UCR have newer lecture halls with a large whiteboard space and more advanced technology to assist in an instructors' ability to affectively teach. At RCC, all the chemistry lecture rooms have plenty of whiteboard space as well as built-in tablets that are attached to the classroom computers which allow instructors to use a digital pen to digitally ink the screen. Feedback from students indicates that this technology is of great benefit to their understanding as well as making it easier for students to follow along working math-related problems.
2. This technology makes learning more interactive, keeps students more engaged and therefore is expected to increase success rates. The success rates at RCC for the 2014/2015 school year (most current data they had available) for introductory chemistry, general chemistry, GOB course, and organic chemistry were 57%, 73%, 72%, and 77% respectively (Dr. Leo Truttman, Dept. Chair of Chemistry, RCC), whereas the same courses at SBVC have between 54-60% student success rates for 2012-2017. We have a similar population of students as RCC and it is likely that this technology will help our students to better learn such basic skills as note-taking as they learn how easily a lecture slide can be manipulated.
3. This new technology will allow instructors the ability to manipulate their lecture slides and handouts in a way that can be instantly saved and allow screen capture of lecture material, such as recording the steps of a reaction so that the video of the problem can be posted online for later viewing.
4. Many concepts in chemistry are complex and students have given positive feedback that have had instructors that have used Surface Pros for lecture. It makes notetaking more understandable and eliminates the loss of time caused when a student asks about material that has already been covered. In current lecture formats, the instructor would have to rewrite the information again, whereas with this technology the instructor can go back to the previous digitally "inked" slide and discuss the answer and make adjustments as needed.
5. The images are clearly visible and the ink colors are vibrant, eliminating student struggles to read the whiteboard when old dry erase markers are used.

Previous to use of this new technology, with the current computers in the classrooms instructors have been projecting an image that becomes distorted when the screen is raised to project onto the whiteboard and wall (image displays over whiteboard screen split section as well as onto the wall itself) in order to show the problem solving technology for work problems or reaction mechanisms using the whiteboard and the image projected from the LCD projector at the same time.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

*Touch screen system or Surface PC or equivalent device (3 at a projected cost of \$1350 each + tax {estimate based on Microsoft Surface Pro – 12.3" – Core i5 7300U – 8 GB RAM -256 GB SSD})
*Keyboards with trackpad (\$160 each plus tax) {estimate based on Microsoft Surface Pro Signature Type Cover – keyboard – with trackpad}; *Microsoft Surface Pen – stylus – Bluetooth 4.0 -platinum (5 at \$100 each + tax) – we want extra digital pens in the event the pen is lost.; *Mini DisplayPort to VGA Adapter (5 at ~\$35 each); *Laptop cases (3 at ~\$100 each); *Extra power cords (2 at ~\$80 each)

7. What are the consequences of not funding this request?

Success Rates will likely remain around 54-60% for chemistry courses without funding this technology. Students require constant interaction in conceptual learning and problem solving in chemistry and will struggle more often to understand concepts without this interactive media.

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Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Carol Jones
Program or Service Area:	Science
Division:	Science
Date of Last Program Efficacy:	Spring 2016
What rating was given?	Continuation
Amount Requested:	\$43,000 - \$55,501 (~\$8,600-\$11,100 per lab room - 1 vs 2 projectors per room) – to modernize the equipment in Chemistry lab rooms PS-310, 312, 315, 316 & 318
Strategic Initiatives Addressed: Strategic Directions + Goals	2. Promote Student Success 6. Provide Exceptional Facilities

Replacement Growth

1. **You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

Phone meeting with Sheri Lillard & Rick Hrdlicka; 10/16/2018 at 9:00 a.m.

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No (per discussion with Bob and Rick).

3. What technology-based equipment or software are you requesting?

We would like one new LCD projector, mounting equipment and one new motorized projector screens for each chemistry lab room (PS-318, PS-316, PS-315, PS-312, & PS-310) to replace or complement the current projector and screen in this room. We will also need cables, a switchboard display and other accessories that are needed to make this modification possible. {PS-310 is of highest priority}

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

The Chemistry/Physical Science 2015-1016 EMP “Goals” are to “continue to improve student success” and to “increase the number of science and engineering majors to affect the economic viability of the region”. Over the last few years (2012-2017) the Chemistry success rates have been about 54-60%, we are seeking innovative ideas to improve student success (EMP, action plan). The modifications to the laboratories will allow for a more interactive lecturing experience which often occurs in lab due to time constraints. The current lab setup has one large screen that completely prevents instructors from using the whiteboard and projector at the same time. Adding a new screen and projector to a new location will allow use of the whiteboard while the projector is also in use. This would allow instructors more freedom of how to show material without having to choose one media source or waste 2-3 minutes each time they want to switch between different technologies. The current setup prevents the use of the whiteboard if the LCD projector is in use.

5. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

1. Our LCD projectors & computers in the chemistry lab rooms were installed in 2011, they are due for replacement. We would like to improve the layout and technology in these rooms.
2. We need new screens because the old screens are embedded within the ceiling and cannot easily be moved to a new location that does not block the whiteboard.
3. Our current technology and whiteboard space in the chemistry laboratories is not as advantageous to the advancement of our students' ability to learn compared to neighboring campuses and other departments on this campus. Other campuses like RCC and UCR have newer lecture halls with a large whiteboard space and more advanced technology to assist an instructors' ability to teach. At RCC, all the chemistry lab rooms have plenty of whiteboard space as well as an LCD projector and screen that allows the instructor to use the projector at the same time as the whiteboard. Lecture and lab rooms in the HLS building here at SBVC have also been modified to make the whiteboard space accessible while using the LCD projectors.
4. The success rates at RCC for the 2014/2015 school year (most current data available) for introductory chemistry, general chemistry, GOB course, and organic chemistry were 57%, 73%, 72%, and 77% respectively (Dr. Leo Truttman, Dept. Chair of Chemistry, RCC), whereas the same courses at SBVC have between 54-60% student success rates for 2012-2018. We have a similar population of students as RCC and it is likely that these updates will help our students succeed.
5. With the current projectors in the chemistry lab rooms the image becomes distorted when instructors must move up the screen to use the whiteboard behind it. (The image is now distorted over the whiteboard split section as well onto the wall.) By installing a new screen and new LCD projector instructors can now use the whiteboard and projector at the same time! Having the ability to have the whiteboard available for use while using the projector screen will allow instructors the ability to manipulate their lecturing format to maximize student learning and understanding.
6. Some instructors have used a rolling whiteboard to gain additional board space in laboratories but this is proving to be a safety issue as the legs of the rolling whiteboards can easily be tripping hazards in the lab room. Additionally, the rolling whiteboards have occasionally been accidentally placed in front of a lab's safety shower – making them a safety hazard preventing students and faculty from rapid access to the shower in the event of an acid spill or fire on one's body. This lab modification makes learning more interactive, keeps students more engaged and therefore is expected to increase success rates.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

Touch panel (5 at \$127.60 each); Control Processor Switcher (5 at \$2894.20 each); LCD projector (5-10 at \$1738.00 each: we can keep the location of the old projector and add an additional projector if funds are available) ; Screens (5 at \$273.00); 24' Monitors (5 at \$239); Various other devices/cables/mounting equipment, etc. that are also needed (\$5,650-\$6,600); tax and 20% contingency (\$9,822-\$12,676)

7. What are the consequences of not funding this request?

Success Rates will likely remain around 54-60% for chemistry courses without funding of this classroom modification. Students require constant interaction in conceptual learning and problem solving of chemistry and related topics for effective learning and will struggle more often to understand concepts without the interactive nature of this media.

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Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Jessy Lemieux
Program or Service Area:	Chemistry
Division:	Science
Date of Last Program Efficacy:	Spring 2016
What rating was given?	Continuation
Amount Requested:	\$23,039.44 to modernize the equipment (LCD projectors and add new screens) in PS-228
Strategic Initiatives Addressed: Strategic Directions + Goals	2. Promote Student Success 6. Provide Exceptional Facilities

Replacement Growth (both)

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

Phone meeting with Sheri Lillard & Rick Hrdlicka; 10/16/2018 at 9:00 a.m.

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No (per discussion with both Bob and Rick).

3. What technology-based equipment or software are you requesting?

Two new LCD projectors, mounting equipment and two new motorized projector screens for PS-228 to replace (or complement) the current projector and screen in PS-228. We will also need cables, a switchboard display and other accessories that are needed to make this modification possible.

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. (*Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.*)

Our 2017-2018 EMP “Goals” are to “improve student success” and to “increase the number of science and engineering majors”. Over the last few years (2012-2018) the Chemistry success rates have been about 54-60%, the chemistry department seeks innovative ideas to improve student success (EMP, action plan). The modifications to the classroom will allow for a more interactive lecturing experience. The current set up has one large screen that almost completely prevents instructors from using the whiteboard while the screen is down. The new split screens will allow instructors to use different technologies at the same time (one screen for the computer (PC or laptop) to show PowerPoint slides or videos from the Internet, etc. and the other screen for the document camera to show a molecular model, a demonstration, how to use the advanced features on a scientific calculator, to write out and solve problems, etc.) or the option of using only one screen, freeing up the other side to use the whiteboard space. Instructors would be allowed more freedom of how to show material to students without having to choose one media source or waste 2-3 minutes of time each time they want to switch between different technologies. Freeing up whiteboard space is also of major importance in the sciences (a

single word problem or reaction mechanism may require the use of multiple whiteboards) and the current setup prevents use of most of the white board if the LCD projector is in use.

5. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

1. Our LCD projector & computer in PS-228 were installed in 2011, they are due for replacement. We would like to take this opportunity to improve the layout and technology in this room.
2. Our current technology and whiteboard space in PS-228 is not as advantageous to the advancement of our students' ability to learn compared to neighboring campuses. Other campuses like RCC and UCR have newer lecture halls with a large whiteboard space and more advanced technology to assist in an instructors' ability to affectively teach. At UCR, for example, one of the main lecture halls has three separate projectors and screens and an entire wall of whiteboard space. This technology allows for the use of one projector for the document camera, one for a laptop and one for the computer in the classroom allowing the instructor to have no time lag between showing a) a demonstration under the document camera, b) going over a PowerPoint slides on a laptop, c) using the PC to show any videos or blackboard/Canvas issues (etc.) and d) using the whiteboard. The ability to use multiple technologies at once is of huge benefit to students and allows for far more effective use of limited class time. With this technology, instructors do not have to choose between lecturing options or deal with the several minute time lag that exists when switching between technologies. At RCC, all the chemistry lecture rooms have plenty of whiteboard space as well as built-in tablets that are attached to the classroom computer which allow instructors to digitally ink the screen – which is of great benefit to the students' understanding of course material.
3. Having the ability to use two different screens at one time will allow instructors the ability to manipulate their lecturing format to maximize student learning. This update will make learning more interactive, keeps students more engaged, and therefore is expected to increase success rates. The success rates at RCC for the 2014/2015 school year (most current data they had available) for introductory chemistry, general chemistry, GOB course, and organic chemistry were 57%, 73%, 72%, and 77% respectively (Dr. Leo Truttman, Dept. Chair of Chemistry, RCC), whereas the same courses at SBVC have between 54-60% student success rates for 2012-2018. We have a similar population of students and this modification will likely help our students succeed.
4. With the current projector in the classroom, instructors have been projecting an image that becomes distorted when instructors move up the screen to use the whiteboard behind it. With two projectors and screens in the room – instructors can keep one screen down and use the other to show the problem-solving process on the other screen (using the document camera) or on the now available whiteboard space that is no longer blocked by the other screen.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

Touchpanel (\$1,618); Crosspoint Presentation Switcher (\$6,606); Two LCD projectors (\$3,476) 24' Monitor (\$239); Motorized screens (\$3,000); Two Projector mounts and power (\$1,000); Various other equipment/cables/etc. that are also needed (\$1,850); tax and 20% contingency (\$5262)

7. What are the consequences of not funding this request?

Success Rates will likely remain around 54-60% for chemistry courses without funding of this classroom modification. Students require constant interaction in conceptual learning and problem solving of chemistry and related topics for effective learning. This classroom modification makes learning more interactive, eliminates the current frustration with teaching in this room, keeps students more engaged and therefore is expected to increase success rates.

TECHNOLOGY NEEDS ASSESSMENT APPLICATION
Fall 2018

Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Paul Dennis
Program or Service Area:	Criminal Justice – Police Science
Division:	VSOC
Date of Last Program Efficacy:	2017-2018
What rating was given?	Continuation
Amount Requested:	3,000
Strategic Initiatives Addressed: Strategic Directions + Goals	Our program’s EMP reveals the continuation of student population increasing due to the demand of law enforcement

Replacement Growth

1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.

Thursday, November 11, 2018 at 2:10 p.m.

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

Not applicable

3. What technology-based equipment or software are you requesting?

two laptops

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

Under promoting professional development our efficacy team reported, “sworn peace officers require to participate in regular professional development to maintain certification. They participate on a task force, which meets quarterly to analyze policies, procedures, and technology to improve school safety. All instructors complete a 40-hour POST certificate program.” Our program requires continued training through POST in which requires a laptop computer. Approximately 4 to 5 POST consortiums a year.

5. Indicate any additional information you want the committee to consider *(for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.)*.

Peace Officer Standards Training conference require laptop computer for practical training on EDI course certifications.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. *(for example, Department, Budget, Perkins, Grants, etc.)*

3,000 for two laptop computers. Maintenance would be the update in computer programs i.e. Word, PowerPoint, Excel etc. We have no alternative funding resources.

7. What are the consequences of not funding this request?

The consequence would be to use a personal laptop or request a loaner laptop.

TECHNOLOGY NEEDS ASSESSMENT APPLICATION
Fall 2018

Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Paul Dennis
Program or Service Area:	Criminal Justice – Police Science
Division:	VSOC
Date of Last Program Efficacy:	2017-2018
What rating was given?	Continuation
Amount Requested:	3,000
Strategic Initiatives Addressed: Strategic Directions + Goals	Goal 2: Promote Student Success Goal 4: Maintain leadership & Promote Professional Development

Replacement Growth

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

Thursday, November 11, 2018 at 2:10 p.m.

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

Not applicable

3. What technology-based equipment or software are you requesting?

two laptops

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

Our program’s EMP reveals the continuation of student population increasing due to the demand of law enforcement. In our Efficacy Report the efficacy team reported, “sworn peace officers are required to participate in regular professional development to maintain certification. They participate on a task force, which meets quarterly to analyze policies, procedures, and technology to improve school safety. All instructors complete a 40-hour POST certificate program.” Our program requires continued training through POST which requires laptop computers. Our faculty and staff attend approximately 4 to 5 POST consortiums a year. The continuation of faculty and staff training is vital to the program and student success.

5. Indicate any additional information you want the committee to consider *(for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.)*.

Peace Officer Standards Training conference require laptop computer for practical training on EDI course certifications. POST Test Administration and Security Policy requirements have strict security protocols. POST intentions is to promote staff integrity in handling of secure material. Purchasing two laptop for the use of our Academy only will ensure we meet POST security policies.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

3,000 for two laptop computers. Maintenance would be the update in computer programs i.e. Word, PowerPoint, Excel etc. We have no alternative funding resources.

7. What are the consequences of not funding this request?

One consequence would be a risk in security breach. Our other options would be to use our personal laptops or request a loaner laptop.

TECHNOLOGY NEEDS ASSESSMENT APPLICATION
Fall 2018

Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Diane Hunter & Joe Notarangelo
Program or Service Area:	English Department
Division:	Arts & Humanities
Date of Last Program Efficacy:	Spring 2017
What rating was given?	Continuation
Amount Requested:	\$54,874.52
Strategic Initiatives Addressed:	1&2
	Strategic Directions + Goals

Replacement Growth

1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.

Two meetings:
 First with Diane Hunter on: Sept. 17, 2018 11-12 in Rick’s office.
 Second with Joe Notarangelo on: Oct. 8, 2018, 2:00 p.m.

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No

3. What technology-based equipment or software are you requesting?

We would like to outfit 4 classrooms that are utilized by English Department instructors with 28 laptops per classroom. All Basic Skills students and all English faculty will immediately be impacted by the availability of laptops for use in the classroom. The use of Word Online will be helpful to students who would otherwise utilize library computers but might not save their work after they get a printout, and the use of Google Docs access will dovetail perfectly with the storage/app access capabilities of the SBVC SID login and is familiar to all local students coming from Google-supported school districts.

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

Comply with AB705 **strategic initiatives 1 & 2:**

- The passage of AB705 allows Basic Skills students who formerly assessed into English 914 or English 015 to enroll into college-level classes (Freshman Composition). Based upon recent enrollment figures, **this translates into 800-1000 additional students enrolling in English 101 each semester who assess into Basic Skills classes, or in other words, courses 1-2 levels more difficult than their assessed skills level.** The English Department will implement English 101 co-requisite courses for these students to provide the additional support necessary to succeed in a class 1-2 levels higher than their assessed level.
 - The types of supplemental instruction inherent to these co-requisite courses include a significant amount of time in which students work on the research, drafting, and revision

process during class time. All of these activities will require continuous access to word processing programs and the internet.

- Having computers in the classroom will enable faculty to better support students in research and internet literacy—both of which are integral components of English 101—and will allow for more thorough assessments of research that are otherwise difficult to assess except for final products such as research papers.
- A number of recent Pew Research Center reports point to a much starker digital divide for low-income Americans and for Latinx and African Americans than does SBVC’s Campus Climate Surveys. By expanding computer-based learning for all Basic Skills students who pass through the English Department *en route* to their careers and/or other goals, we can help bridge that digital divide. For reference, we include titles and links to three Pew Research Center reports under Section 5 (see Additional Information).¹
- The fulfillment of this funding request would also align with key elements of the Strategic Directions and Goals in the 2017 Comprehensive Master Plan for San Bernardino Valley College such as “improv[ing] access to technology” and promoting student success by “increas[ing] the percentage of students who succeed in basic skills courses.” Additionally, because laptop labs equipped with Chromebooks that use Word Online require less hard drive storage space than traditional computers or laptops, this funding request is cost-efficient compared to regular computer labs and will “maintain fiscal and environmental responsibilities” while “provid[ing] exemplary technology and support.” Included in the cost is a minimal \$5 per laptop recycling fee and a manufacturer’s 3-year extended warranty which ensures that any software/hardware issues that are not resolved by CTS will be serviced by the manufacturer within one business day.
- The installation of co-requisite courses in place of basic skills courses to help underprepared students succeed in English 101 seems to be the recommended course of action of V.P. Long and Dean Weiss per an email forwarded to the English Department. See Section 5 (Additional Information) for details.²

5. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

¹Additional student success data related to section 4:

- “Smartphones help blacks, Hispanics bridge some – but not all – digital gaps with whites” (August 2017)
 - <http://www.pewresearch.org/fact-tank/2017/08/31/smartphones-help-blacks-hispanics-bridge-some-but-not-all-digital-gaps-with-whites/>
- “Digital divide persists even as lower-income Americans make gains in tech adoption” (March 2017)
 - <http://www.pewresearch.org/fact-tank/2017/03/22/digital-divide-persists-even-as-lower-income-americans-make-gains-in-tech-adoption/>

²The implementation of co-requisite courses in place of basic skills courses to supplement underprepared students in 101 seems to be the preferred solution of VP Long and Dean Weiss per an email entitled “Case Closed on Traditional Remediation,” sent to the English Department on Tuesday, September 04, 2018 8:42 AM.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

Item	Qty.	Unit Price	Ext. Price
Dell Compact Charging Cart	4	\$1,381.55	\$5,526.20
Dell Chromebook 13 3380 – 13.3”	112	\$301.02	\$33,714.24

Dell Next Bus.-Day Onsite Service	112	\$72.35	\$8,103.20
Google Chrome Mgmt. Console	112	\$27	\$3,024.00
Recycling fee	112	\$5	\$560
Sales tax			\$3,946.88
Total			\$54,874.52

7. What are the consequences of not funding this request?

The probable result will be a substantial decrease in student success rates in approximately half the English sections of upcoming semesters. Fundamentally: the passing of Ca. Senate Bill AB705 places almost every incoming SBVC student into Freshman Composition whether they are prepared or not, *and* it allows every student to select Freshman Composition, regardless of assessment results or counselor recommendations. The SBVC English Department is addressing these underprepared students' needs by requiring a co-requisite that allows for concurrent writing basic skills development with the Freshman Comp. curriculum. Logically, this curriculum and pedagogy require continual hands-on access to writing technology (word processing programs and internet access for research and student support) to improve writing and research skills. This is how students are required to write BOTH in academia AND their jobs.

TECHNOLOGY NEEDS ASSESSMENT APPLICATION
Fall 2018

Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Lucas Cuny
Program or Service Area:	RTVF/IEMA
Division:	HUM
Date of Last Program Efficacy:	2017
What rating was given?	Continuation
Amount Requested:	\$27,300
Strategic Initiatives Addressed: Strategic Directions + Goals	Increase Access and Student Success

Replacement Growth

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

08/30/2018

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No

3. What technology-based equipment or software are you requesting?

Replace all PCs in our lab room with iMacs

4. Indicate how the content of the department/program's latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

Each of our three areas (radio, television, and film) includes capstone projects that require students to use skills learned in prior classes. Every year faculty review the projects and revise requirements based on new technology (e.g., new editing software, new distribution means in the Internet, etc.) to help students keep pace with the evolving media industry.

In laboratory classes, evaluation is project-based so students demonstrate technology (e.g., computer/camera) skills as well as critical thinking skills as writers, producers, directors, and other crew members. Students need up-to-date computers to meet this goal.

The program will add a new software component and hardware, DaVinci Resolve Color Correction, via Perkins grant that requires the upgrade of hardware and software to run. DaVinci is an industry standard technology and hardware. The program also needs to match the technology of KVCR where many of students transition to for internships and careers. As of this coming fiscal year KVCR will transition to all Macs

5. Indicate any additional information you want the committee to consider *(for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.)*.

In discussions with program advisory board members from Fotokem, a large post production company, they affirmed that most if not all post production facilities in the region are Mac based. Having the Macs puts our students in direct correlation with industry standards. Also, KVCR where many of our students gain their first professional experience will transfer over to all Mac use by 2019. Macs also do not on average need to be replaced as frequently as the PCs in our program. This per my research with

our campus IT department. Also, Macs last longer and need to be replaced less often than PCs. Finally, all the CSUs that our students can transfer too with the AS-T degree are also Mac based programs.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

Per Rick Hrdlicka, to replace each computer his department can budget up to \$1250. Each iMac which Rick Hrdlicka recommends costs \$2300. The lab currently consists of 26 work stations. The \$27,300 covers the additional expense per computer.

7. What are the consequences of not funding this request?

Students will work on hardware that does not match industry standards as well as other film and media programs that they may transfer too after completing a degree here at Valley. Also, it may affect future enrollment as many of our feeder programs from high schools are using Macs and student may choose other institutions such RCC and Chaffey who are all Mac based.

TECHNOLOGY NEEDS ASSESSMENT APPLICATION
Fall 2018

Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Sana Massad
Program or Service Area:	Nursing
Division:	Science
Date of Last Program Efficacy:	March, 2016
What rating was given?	Conditional
Amount Requested:	10 computers= 15000
Strategic Initiatives Addressed:	Students Success = accredited Program Strategic Directions + Goals

Replacement Growth

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

Met with **Rick Hrdlicka – Director of Campus Technology Services on 10/19/18 @ 1100**

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

Nursing is requesting an addition of 10 computers (added to the computer lab (currently, the department has 40 computers). The 10 computers are needed upon moving the computer lab from HLS #130 to HLS room #132 as the new proposed computer lab location. There will be a total of 50 computers

3. What technology-based equipment or software are you requesting?

Folded down desks with 10 computers

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. (*Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.*)

To have the state of the art technology/equipment that supports student learning/Success for the discipline (EMP 2017-2018). With increase enrollment our classes are bigger. Preparing our students to succeed with integrating up to date technology (as recommended by the Board of Registered Nursing accreditation agency) into the health care nursing programs, we need to provide more computers to accommodate the societal /community needs. Classes are larger and the demands to increase the number of computer in the computer lab is crucial.

5. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

Students are invited to take the Admission HESI exam before admission into the program. This is part of the required criteria with the Point System used to admit students into the nursing program. HESI exams are given after the end of every class and two computer labs are needed for some classes to give these exams to the entire class. The exit HESI exams are helpful in determining student success for taking the NCLEX exam. This requires additional faculty and it is difficult to arrange both computer labs at the same time.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

As Per discussion with Mr. **Hrdlicka each computer will cost \$1500 (total of 10)= \$15,000**

7. What are the consequences of not funding this request?

Inability to grow effectively. We have received an increase in the amount of students accepted with the Enrollment & Growth Grant and we will not be able to successfully support their learning for the discipline

TECHNOLOGY NEEDS ASSESSMENT APPLICATION
Fall 2018

Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Michael Lysak
Program or Service Area:	Physics/Astronomy/Engineering
Division:	Science
Date of Last Program Efficacy:	Spring/Fall 2016
What rating was given?	Continuation
Amount Requested:	\$70,000
Strategic Initiatives Addressed: Strategic Directions + Goals	Student Success; Communication, Culture, & Climate

Replacement Growth

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

Meeting on 10/17/17 at 8:30am by phone, and subsequent e-mail contacts 10/18-10/20/17

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No

3. What technology-based equipment or software are you requesting?

A New Planetarium Dome Projection System

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. *(Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.)*

According to the EMP for Physics/Astronomy, some of the program goals/challenges/action plans are: to hire a new Planetarium specialist to maintain the Planetarium programs and community outreach activities; hiring a replacement Planetarium specialist will maintain or increase the present student success and retention rates. The Physics/Astronomy 2016 Program Efficacy document states (pg. 28) that “Planetarium shows have been presented throughout each academic year for the general public, for elementary and secondary school programs, for various SBVC physical sciences classes, for various SBVC groups/programs/organizations, and for special outside groups/programs. For the past four years, from September 2011-May 2015, the average combined yearly audience of the Planetarium shows has been approximately 3858 with an average yearly income of \$3726; the department plans to continue this most valuable outreach program. Following the public shows, the N.A. Richardson Observatory has also been opened to provide views of the Moon and planets, with an average yearly total of approximately 250 people attending the viewings. This is the oldest observatory in the valley and contains a very historic telescope. The planetarium has participated in and presented shows for many of the “Science Day” activities, and will continue to do so. The planetarium instrument was professionally serviced recently to ensure its successful, continued operation for both academic and public outreach purposes.

Given the myriad services that the Planetarium provides under the guidance of the Planetarium Specialist, it is clear that the Planetarium is clearly a most valuable academic resource, it provides vital community outreach activities, and it is of paramount importance to the academic programs at SBVC and to the local community. However, according to the retired Planetarium Specialist and the Physics Lab Tech, we need upgraded technology in the Planetarium Audio-Visual show presentation technology to include both the image projection system and the sound system. Further, since the Physics/Astronomy department program has rapidly grown and expanded, if the department is to maintain quality instruction, to successfully plan for future enrollment increases, and to meet the continuing need of the Planetarium programs and services for our college classes as well as for other various academic and community outreach activities, we must replace the outdated Planetarium Audio-Visual equipment.

5. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

According to the retired Planetarium Specialist and the Physics Lab Tech, we need upgraded technology in the Planetarium Audio-Visual show presentation technology to include both the image projection system and the sound system; these upgrades are needed to support our Astronomy program, Planetarium presentations, and other classroom experiences. Presently, the Planetarium is using 15-30 year-old slide projectors, run by 15-year old computers with 20-year-old software designed to run slide projectors, an obsolete technology. The present audio system is using amplifiers which are 40 years old (some equipment from 1977), and some audio equipment at least 20 years old. During presentations, because of the advanced age and the near dilapidated state of the audio-visual equipment, the Planetarium Specialist often has needed to make quick, last-minute repairs on either the slide projectors and/or the sound system; further, since most of the equipment is so outdated, replacement parts are unavailable, and the Planetarium Specialist has needed to swap out parts of damaged equipment with some of the other, non-functioning spares.

The laser projectors of the New Planetarium Dome Projection System will provide low maintenance, no lamps required, and will last for several years, which, in the long term, is more cost-effective than a system with LCD lamp bulbs for four projectors that cost \$300-450 each; if one bulb fails and/or dims (a typical bulb lifetime is 1-2 years), one would need to replace them all.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

A New Planetarium Dome Projection System \$70,000; This includes a High-End Laser Projector (6000 lumens), Lenses, Vioso Micro-Server, Installation, and Training

7. What are the consequences of not funding this request?

As stated earlier, since all of the Planetarium audio-visual equipment is very outdated, and running presently in varying states of near-disrepair, we need upgraded technology in the Planetarium Audio-Visual show presentation technology to include both the image projection system and the sound system; these upgrades are needed to support our Astronomy program, academic and outreach Planetarium presentations, and other classroom experiences. In light of increasing numbers of Physics/Astronomy lecture and lab sections, without proper support from resources such as provided by the Planetarium Specialist, high quality instruction for our students would not be possible, and such lack of support stifles successful attempts of program growth, development and expansion, and negatively impacts enrollments, and, ultimately, productivity.

The department will soon be hiring a replacement for the retired Planetarium specialist, and this individual will need to be able to train and work with high-quality, upgraded audio-visual equipment, and not the present audio-visual equipment which is barely functional.

TECHNOLOGY NEEDS ASSESSMENT APPLICATION
Fall 2018

Technology: Programs should list the technology needed to provide ongoing service or instruction, and an approximate cost of the request. *Technology that is listed in this category will be forwarded to Campus Technology Services to evaluate through their own processes.*

Name of Person Submitting Request:	Sandra Moore and James Dulgeroff
Program or Service Area:	Psychology and Economics
Division:	Social Science, Human Development, and Kinesiology
Date of Last Program Efficacy:	Spring 2017
What rating was given?	Continuation
Amount Requested:	\$6,000.00 for SPSS software licensing
Strategic Initiatives Addressed: Strategic Directions + Goals	Goal 1: Increase Access, Goal 2: Promote Student Success

Replacement

Growth

- 1. You are required to meet with Rick Hrdlicka – Director of Campus Technology Services prior to submitting a Technology Needs Request. 909-384-8656 or rhrdlicka@sbccd.cc.ca.us. Please provide the date and time of your meeting.**

The meeting was conducted via email on Sept 17, 2018

2. Projects that require modification to Buildings or Rooms will require a Facilities Need Request. Will this project require facilities changes?

No.

3. What technology-based equipment or software are you requesting?

SPSS statistical software. This is a request for continued funding for this software.

4. Indicate how the content of the department/program’s latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. (*Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.*)

Psychology and Economics students need to know statistical software for most Economics classes and for PSYCH 105 (Statistics) and PSYCH 201 (Research Methods). The Psychology EMP sheet notes under “progress from last year’s action plan” that to support teaching Statistics (PSYCH 105) and Research Methods (PSYCH 201), the technology request from last year provided copies of SPSS for the computers in GYM 140 and the library computers. Program Goals for this year include continuing the funding for SPSS statistical software.

SPSS is being requested again because it is the most widely used program in the social sciences. Without the software, the students will not have the experience doing the data analysis that is expected when they transfer. Also noted on the Psychology EMP is the increase in the Psychology transfer degree rates. As these rates continue to increase, so will the need to teach using SPSS. The SPSS software gives instructors the opportunity to demonstrate different aspects of statistical analysis to students using the most common software in the social sciences. Instructor use will be expanded with this continuation as the psychology department would be able to train instructors on how to use and teach SPSS in their classes.

5. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

The student population in the Psychology Department reflects the diversity of students at SBVC in that Campus demographic data from Fall 2014 to Fall 2015, indicates that approximately 77% of the students attending SBVC are Black and Hispanic (Efficacy Report, p. 4). According to 2011 U.S. Census poverty rates in San Bernardino city: (<http://quickfacts.census.gov/qfd/states/06/0665000.html>),

the per capita money income for 2007-2011 was \$15,762 and persons living below the poverty level in 2007-2011 was 28.6%. SBVC students may have smartphones, but smartphones do not have the ability to run the sophisticated data analysis programs such as SPSS that is needed for Statistics, Research Methods, and other SSHDPE Division courses (ECON) requiring data analysis. Students will be able to learn how to input data and conduct statistical analyses along with their instructors using the software. Access and continued Student Success will be met by having this software.

Additionally, according to IBM, most colleges already use their SPSS software:

- 80 percent of all U.S. colleges and universities
- All Ivy League schools
- All 25 of Forbes 2009 America's Top Best Colleges
- 97 percent of Forbes 2009 America's 100 Best Public Colleges
- 95 percent of Forbes 2009 America's 100 Best Private Colleges
- 9 out of the Top 10 Online Colleges

Both CSUSB and UCR use the SPSS software for their statically and research courses. Most psychology majors at SBVC have the goal of transferring to CSUSB, where they will be expected to know how to use SPSS in their upper division psychology courses.

6. Provide a complete itemized list of the initial cost, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources. (*for example, Department, Budget, Perkins, Grants, etc.*)

There are no alternative funding sources.

Ongoing costs would be \$6,000 to continue to use the software (we will get a better deal to continue).

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7. What are the consequences of not funding this request?

If this request is not funded, the Strategic Initiative Goals of Increased Access and Promoting Student Success will not be met in terms of course success and transfer rates. This software will help students learn how to input and analyze data which will enhance their learning in courses required for degree and certificate programs. Without using SPSS in our psychology and economics courses, students will not have the experience they need to succeed after transfer.