

FACILITIES NEEDS ASSESSMENT APPLICATION
Fall 2016

Name of Person Submitting Request:	Sheri Lillard
Program or Service Area:	Chemistry
Division:	Science
Date of Last Program Efficacy:	2016
What rating was given?	Continuation
Type of Facility Requested:	Temporary “desks”
Amount Requested (if available):	~ \$20,000 (?)
Strategic Initiatives Addressed: (See http://www.valleycollege.edu/about-sbvc/office-of-president/college_planning_documents/documents/strategic-plan-report-working-doc-8-25-15-2.pdf)	2.5.1 Student success (completions, including transfer and degrees)

NOTE: To facilitate ranking by the committee, submit separate requests for each project; however, multiple items can be submitted as one request if it is required that the projects are packaged together.

It is suggested that you meet with Robert Jenkins – Director, Facilities, Maintenance, & Operations - prior to submitting a Facilities Needs Request. 909-384-8662 or rjenkins@sbccd.cc.ca.us.

Capital Improvement Repair

Are there alternative funding sources? (for example, Department, Budget, Perkins, Grants, etc.)

Yes NO

If yes, what are they? _____

1. Provide a rationale for your request. (Explain, in detail, the need for this project.)

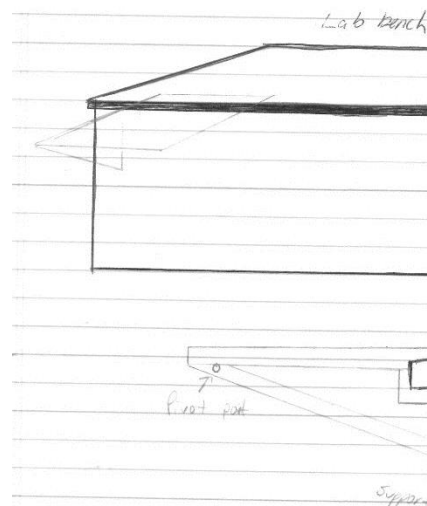
Constructing temporary writing surfaces. Necessary to help improve student success and minimize safety hazards. We moved into the Physical Science building during Summer 2011, and have been fully occupied beginning with the 2011-2012 academic year. Only the organic laboratory (PS 310) was designed with the lab benches having openings for students’ knees when they sit on the lab stool. All other labs have no place for the students’ knees. This request is to construct a removable “desk”, consisting of a support that clamps to the lab bench, and a small writing surface, that students can opt to use. This arrangement would allow the students to sit facing the front of the class (thus have space for their knees), instead of sideways against the lab drawers (and use the lab bench for their writing space).

This construction is something that does NOT need to be contracted out. Our campus facilities/maintenance workers have the expertise and equipment to be able to design and construct these temporary desks, thus dramatically saving on cost.

Rough sketch of the design (next page). Our apologies for the hand-drawn sketch, but this gives some idea of the removable design that we envision. The writing surface and the bracket

should be constructed out of stainless steel, for long-term durability and prevention of corrosion from chemicals in the lab environment.

The bottom figure shows how the bracket would be designed, using a clamp that would attach to the lab bench. The top sketch shows the extension of the writing surface beyond the lab bench. Clearly, proper design of this need would be done when funding is approved. The diagram, hopefully, makes clearer what it is being requested.



2. 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.*)

2016-2017 EMP: Increase number of science majors and STEM degrees, and improve student success. In order to make efficient use of laboratory time, many instructors do some lecturing in the lab rooms (PS 312, 315, 316, and 318) for CHEM 101, 150, and 151. Remarkably, these rooms were not designed with space for a human being's knees, as the laboratory drawers occupy 100% of the vertical surface next to where the students sit and face the lab bench. During a lab experiment, students generally stand, so this is not an issue. However, our instructors strive to make efficient use of all lab time, which is usually a 3-hr block of time. If an instructor needs to lecture for some or all of a 3-hr lab period, the students experience discomfort (with their knees right up against the lab drawers and combination locks, and could be construed as a safety issue) and distraction (with the discomfort, they become distracted and learning and student success are impaired). Most labs require at least 15 min of pre-lab lecture, even for those experiments predicted to take the entire lab time. In other words, some degree of lecturing generally takes place.

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

Quality of Instruction. We potentially will see a decrease in quality of instruction, if students are not able to focus when an instructor is required to lecture in a laboratory room. This in turn, could lead to a decrease in student success. One of our department goals is to improve student success, and we believe this option will help us to achieve this goal.

4. What are the consequences of not funding this facilities request?

Most importantly, quality of instruction and student success will suffer, because we will have no choice but to have students sit with their knees against the hard surface of the lab drawers and combination locks. It could potentially lead to a safety issue, in cases where extended periods of lecture time are needed in the lab rooms.