

TECHNOLOGY NEEDS ASSESSMENT APPLICATION
Fall 2015

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 and Michael Torrez
Program or Service Area:	Chemistry
Division:	Science
Date of Last Program Efficacy:	2011
What rating was given?	continuation
Amount Requested:	\$5, 0000 (for 6 licenses with 3 years maintenance/updates)
Strategic Initiatives Addressed: (See Appendix A: http://tinyurl.com/l5oqoxm)	1.114 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.**

10/20-10/27 emails and 10/27 2:15pm teleconference

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

None

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

Department set of licenses (6) [ChemDraw Prime 15 Perpetual Named User Win](#) for use in lecture prep/lab prep/instruction within classroom or lab as well as online hybrid content augmentation

4. Indicate how the content of the latest Program Efficacy Report and current EMP data support this request. How is the request tied to program planning? (*Reference the page number(s) where the information can be found on Program Efficacy.*)

Student success for both traditional and online hybrid students will increase. 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 an 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 instruction content increasing online student success.

5. Indicate if there is additional information you wish the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, planning, etc.*).

Usage of programs will allow for introduction of multiple software enhanced instructional opportunities including the following examples:

- 1) 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.
- 2) Ease of Implementation of 2-D structures to: 3-D visualization of molecular, pKa, nomenclature, reaction, MSDS information, and other properties.
- 3) Real-time feedback on classroom student exercises as well as online discussion or instruction exercises.

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.*)

6 licenses at a cost of \$500 each with \$ 100 annual maintenance fee for each license for 3 years.
(Total : \$5, 000)

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

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. Previously many extra hours of additional research would be required to present up to date, relevant material of molecules students wish to study. However, using this software, the process can be streamlined. In additions, the generated computer sketches can be cross-references 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. This software will accomplish this goal as well as contribute to discussion/instruction interactions with online students. Current software is outdated and interferes with the student's ability to successfully access and navigate the discussion/instruction content potentially undermining student success.