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COMPLETE

| Live Link (Web Link) |
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| Monday, February 10, 2020 10:41:27 AM |
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Page 1: For Annual Planning/Program Review Requests AND Off-Cycle Requests

| Q1 Technology Plan Year | 2020-2021 |
|--------------------------------|-------------------------|
| Q2 Title of Request | |
| Laptop Computers | |
| Q3 Location of Request | |
| H-202 | |
| Q4 Department | |
| Chemistry | |
| Q5 Contact Person | |
| Name | Robert Anness |
| Email Address | robert.anness@gcccd.edu |

Q6 DescriptionPlease provide a brief description of the technology/software or technology project and its core goal(s).

This technology request is for 35 laptop computers to be used in our chemistry lab classes. Computer work is built into the laboratory curriculum of several of our chemistry classes. In our general chemistry courses (Chem 141 and Chem 142), several lab experiements rely on Vernier hardware and software that is used to collect and analyze data. Due to the age of our current laptop computers, we are no longer able to upgrade our Verneir software since new versions are not compatible with our old systems. This is already causing glitches to occur more regularly during our lab periods and we expect this to get worse.

Page 2: Proposal Justification

Q7 Please explain how the technology or enhancement supports the strategic plan. Include information on how students will be impacted and/or employees or the college or district overall. Consider whether this would this be a district-wide implementation. Which Strategic Plan priority (or priorities) are supported by this request? To access the Strategic Plan, please click here.

Student Validation and Engagement

Q8 How does the request support the above priorities?

Properly equipping students with the tools that they need is crucial and the computer activities carried out in our chemistry classes promote student engagement. Computer technology is an important component of a modern academic chemistry laboratory and the lack thereof would put us behind many of our peer institutions in this regard.

Q9 Who would this impact? Please select all that apply. **Students**

Q10 What is the number of students or employees impacted per semester?

230

Q11 How would this impact the above group(s)?

If we are without this technology in the classroom our students will not have the opportunity to learn many relevant data collection and analysis skills that are directly applicable to real world applications.

Q12 Does the technology support a state-wide initiative **No** or is it a legal mandate or in support of a legal mandate?

Q13 If yes, please explain how the technology supports a state-wide initiative or is it a legal mandate or in support of a legal mandate?

This technology does not support a state-wide initiative as far as I know, and it is not a legal mandate.

Q14 Please be aware that projects, once approved, are typically scheduled 6 months to a year in advance. Consider the consequences if the technology/software is not implemented, upgraded or renewed. What are the consequences if the technology/software is not implemented/upgraded, or renewed? Examples: Security concerns, loss of FTES, mandates, accreditation, etc.

We have been informed by our main Cuyamaca computer support technician that our chemistry classroom computers are on their last legs, and they are already causing issues in the classroom. Many of the lab experiments built into our curriculum rely on this technology, so we will need the computers replaced as soon as possible. Fairure to upgrade this technology will negatively impact around 230 students per semester.

Q15 What is your preferred time for implementation?

As soon as possible

Q16 Tell us how the data you have supports the implementation of the technology. This can be qualitative or quantitative in the form of surveys, observations, SLO or other assessment data, institutional research data or other reports and data.

SLO assessment in the chemistry program has shown improvement in student success with regard to particular topics when an activelearning component is employed. The chemistry drawing software program ChemDraw is used for active-learning exercises often in our organic chemistry classes at Cuyamaca College. As mentioned previously, Verneir hardware and software is used to enhance student learning by linking their hands-on chemistry experiementation to this technology.

| Q17 How critical is this need in terms of supporting curriculum and services? | 5 |
|---|---|
| Q18 Please attach any supporting data/documentation using the "Upload" button below. | Respondent skipped this question |
| Page 3: COST ANALYSIS | |
| Q19 Is the request for hardware or software? | Hardware |
| Q20 Is the request for new or an upgrade to existing technology? | Upgrade (replacing outdated technology) |
| Q21 Total initial cost of request: This includes hardware an storage, etc. Contact Sherri Braaksma for assistance. Approximately \$60,000. | d software maintenance, licence, taxes, fees, shipping, |
| (https://www.dell.com/en-us/work/shop/dell-laptops-and-notebooks/l | atitude-14-5401-laptop/spd/latitude-14-5401-laptop/s002l540114us) |
| Q22 Funding Source: | General Fund |
| Q23 Please attach quote using the "Upload" button below. | Respondent skipped this question |
| Page 4: Grant Funding Source | |
| Q24 Please specify the grant that will fund the technology you are requesting. | Respondent skipped this question |
| | |

Page 5: Evaluation Plan

2019-20 Technology Request Form

Q25 Evaluationi. How do you plan to evaluate the technology after implementation?

SLO Assessment tools will be used to evaluate student learning with regard to the requested technology. In addition, the students write lab reports for every lab experiment in which computers are employed. These reports each semester provide instructors with valuable information about how the technology is impacting student learning. The data that we collect can help instructors decide if any modifications need to be made regarding how the technology is used in future semesters.

| Page 6: Type of Request | |
|---|----------------------------------|
| Q26 Is this an Off-Cycle Request (e.g., not part of the annual planning/program review process)? | No |
| Page 7: Off-Cycle Requests Only | |
| Q27 What are the exigent circumstances and/or contributing factors that would qualify this request to be eligible for Off-cycle consideration? Please explain why this request cannot wait until the next annual planning cycle. | Respondent skipped this question |
| Page 8: Ready to Submit | |
| Q28 Are you ready to submit your technology request? | Yes |