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Learning Support Centers Program Review

Program Name: **Integrated Science Center**
Program Contact: **Diamond, Kathy**
Academic Year: **2013-2014**
Status: **Submitted**

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1. Description of Center

Provide a brief description of the program and how it supports the college's **College Mission and Diversity Statements**, **Institutional Priorities, 2008-2013**, **5 in 5 College Strategies, Spring 2011**, and other **Institutional Program Planning** as appropriate.

The Integrated Science Center (ISC) in 36-110 provides a study support environment to help CSM students succeed in their science courses, addressing the first Institutional Priority: to improve the academic success of all students (including course completion, retention and persistence), and the second: to promote academic excellence (and improve transfer rates). The ISC consists of two spaces: one large room with 9 tables seating a total of about 45 students, science textbooks, anatomy and geology models, specific course textbooks and supplements, and a faculty desk with a computer; a smaller adjoining room with 20 computers for student research, TBA (to-be-arranged hours) assignments, and printing of course materials. In the larger room students have access to a kitchenette. The ISC resources are targeted to students enrolled in any science course at CSM. This includes Astronomy, Biology, Chemistry, Engineering, Geology, Health Science, Nursing, Oceanography, Paleontology, and Physics. These are all transfer-level courses. The ISC also supports other Math-Science course offerings (Architecture, Dental Assisting, Mathematics). Non-science students are welcome to the ISC, and the log-in choice of classes is not limited to science. However, from student "reasons" given when logging in, 87% of student visits are for science courses (Fall 2013, 8.3% of visits were for Astronomy, 26.6% for Biology, 24.8% for Chemistry, and 24.9% for Physics), plus 6.5% of visits for Math.

Faculty-staffed, the ISC offers a friendly, comfortable atmosphere, accessible to and popular with students. It provides students the opportunity to consult with faculty, work with other students in study groups, or work individually in an academically stimulating environment. The ISC is open Monday-Friday during daytime hours, and hours have expanded since last year, so they are currently 9-4 Monday, 8-4 Tuesday-Thursday and 8-12 Friday. The ISC is available for meetings of student organizations. During summer session the ISC is open Monday-Thursday, 11-1.

Faculty staffing is required for the student hours to be used for course TBA work. The management of the ISC facility, including scheduling, keeping up supplies, assistance with computers and printer, and many other supporting and technical tasks are performed by classified staff at 25%. Program review, assessment of SLOs, attendance of Learning Support Center Committee meetings, and other academic aspects of the ISC are provided by donated time of a Biology faculty.

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2. Student Learning and Center Data

A. Discuss Student Learning Outcomes Assessment

Reflect on recent SLO assessment results for courses and degrees and certificates offered by the program.

SLO assessment demonstrates success overall. SLOs developed in November 2012, in collaboration with all the Learning Support Centers at CSM, were assessed in Spring, 2013. The ISC SLOs are:

1. Students will have knowledge of the ISC's resources, including how to access them.
   1. Students will demonstrate awareness of study strategies for science courses.

    2. Students will express increased optimism about their abilities to pursue science learning.

Assessment was performed using a survey given in the ISC over several weeks in Spring, 2013. There were 104 responses, 11% of the total number of (unique) users for the semester.

- SLO 1: Survey asked if student was able to access the resources needed this semester. Success criterion: 80% yes.

Results: 75% always + 25% usually = 100% yes

- SLO 1: Survey asked if student is familiar with resources in the ISC. Success criterion: 80% yes.

Results: 88.5% yes

- SLO 2: Survey asked if coming to the ISC helped the student develop study strategies for science courses. Success criterion: 75% yes

Results: 82% yes

- SLO 3: Survey asked if coming to the ISC increased student's confidence in succeeding in science courses. Success criterion: 75% yes

Results: 91% yes

B. Center Usage Indicators

1. Review center usage and discuss any differences across demographic variables. Refer to **Planning, Research and Institutional Effectiveness (PRIE) reports**, SARS records, and other data sources as appropriate.

In Spring 2013 there were 9859 visits by 934 different students. In Fall 2013 there were 10,884 visits (the numbers were back up since a slight dip after the opening of the Learning Center). In Fall 2013 the 10,884 visits totaled 9260, an average of 51 minutes per visit, equivalent to one class hour. 87% of the visits were designated for science courses and 6.5% for Math. In Spring 2014 through the first six weeks there have been 4299 visits, also averaging 50 minutes per visit. Thus the ISC users is experiencing constant usage for meaningful study over the course of the semester.

PRIE data for Spring 2013 shows that the percentage of ISC users who were full-time students was higher than the college as a whole. This is not surprising because these students generally spend more time on campus, but it also suggests ISC users are more invested in their programs/majors (or individual classes). 83.3% of ISC users were enrolled in more than 6 units compared to 47.2% of the college.

Measurements of student success (were not reported for Spring 2013; the following is Spring 2012): ISC users showed higher success and retention than the college across most ethic groups, genders and ages: 77.3% success compared to 70.9%; 87.7% retention compared to 84.7%. African American students benefitted dramatically (88.3% compared to 61.8% collegewide); Filipino did not benefit compared to college figures (66.4% versus 69%); Hispanic and Pacific Islander improved substantially (73.9 and 77.8% versus 66.1 and 65.8% respectively). This shows the importance of the ISC to the success of students in general, but especially to most underrepresented ethnic groups. This is because underrepresented groups have lower success rates in science courses than other students. In Biology, for example, age and gender and most ethnic groups fall within the department's 4% difference from the College in success and retention, but Black, Filipino and Hispanic students have at least 10% lower success and retention in Biology than the College overall.

The Learning Support Centers Coordinating Committee is working with the Interim Dean of Academic Support and Learning Technologies Division to improve assessment of all college Learning Support Centers. Recommended actions include assessing and reporting SLOs both Fall and Spring semesters, and using a set of four modes of assessment (PRIE user profile; PRIE satisfaction survey; Best Practices Inventory; Unique assessment in the form of interviews or focus groups). PRIE conducts satisfaction surveys of Learning Support Centers, including the ISC, and ISC SLOs could be embedded in the twice-yearly satisfaction surveys, since it is not possible for the ISC to assess SLOs both semesters due to the absence of more than 24 hours in a day for the faculty donating time for all of the assessment, research and reporting (SLOs and Program Review) for the center. However, the in-house survey reaches a significant number of users (11% Spring 2013) while the on-line PRIE satisfaction survey is lacking in significance due to the small number of respondents (33/934 users in Spring 2013, which is 3.5%). The fourth mode of assessment, unique to the center, is a set of interviews or focus groups. The ISC is charged with performing this during Spring 2014. The faculty donating time for ISC assessment and program review will make an effort to learn more about this mode and perform it in a timely fashion.

2. Discuss any differences in student usage of center across modes of delivery. If applicable, refer to **Delivery Mode Course Comparison**.

Students taking online courses use the ISC for course work. In Fall 2013 127 courses were listed by students using the ISC, 40 of which were science courses, and 87% of visits were for science courses. Among those science courses listed:

Individual sections of courses with multiple sections are not specified in SARS, but some courses have online sections in addition to on-campus sections. This includes Biology 100 and 130. Biology 310 and 184 are exclusively online. All sections of Biology 210, 220 and 260 have online components.

C. Center Efficiency. Is the center efficient in meeting student needs?

Discuss center efficiency, including staffing, hours of operation, tutorial and other services, space utilization, equipment, or technology as appropriate.

Since Fall 2009 the ISC has been staffed by faculty at all times. Management of the ISC facility, scheduling, supplies, assistance with computers and printer, and many other supporting and technical tasks are performed by classified staff at 25%. A Biology faculty donates time for the following ISC responsibilities: attendance at Learning Support Center Coordinating Committee (LSC3) meetings; preparation, analysis and TracDat reporting on ISC surveys for SLO assessment; Program Review research and preparation.

The ideal hours of the ISC are M-F 8-5, assuming other student support centers are open evenings and Saturdays. In 2012-2013 the ISC hours were 9-4 Monday-Wednesday, 9-2 Thursday and 9-11 Friday. The hours have improved and Spring 2014 the ISC is open 9-4 Monday, 8-4 Tuesday-Thursday and 8-12 Friday. The majority of staffing hours depend on faculty willing to do office hours in the ISC instead of their offices, and obviously faculty have limited availability much of the day due to class time. Many faculty are paid to work in the ISC. Full-time faculty work hourly on a "one-for-one" basis: one hour unpaid for each hour paid; adjunct faculty also work "one-for-one" though they cannot be paid for hours in excessive of adjunct load limit. Adjuncts are automatically paid for one office hour for each 3 classroom hours. It would benefit students if adjuncts held their office hours in the ISC. Only about half of the full-time and adjunct instructors in the sciences hold office hours in the ISC, many not realizing how rewarding the experience is for both students and themselves. In Spring 2013 15 faculty worked in the ISC: 9 full-timers and 6 adjuncts. Spring 2014 there are 17 faculty working in the ISC: 9 full-timers and 8 adjuncts. There has been some success with recruiting faculty at Math-Science Division meetings and by email.

Since the Learning Center has established a tutor training program the ISC does not engage in formal or informal tutoring by students. It would be very beneficial and convenient for science students if there were an increase in the number of science tutors and if Learning Center science tutors could spend some of their hours in the ISC.

The ISC cycles during the day between being filled to capacity (about 65 students) and occupied by a dozen or fewer students. There are often flurries of students printing course materials and large study groups for particular classes. The 20 computers serve the needs of the students for study and printing. There is no waiting for computers. At the beginning of the Fall 2013 semester the 21 (20 student and one faculty) computers in the ISC were all replaced with new ones. Plans to transfer printing to an automated system using Pinnacle, the company that provides printing in the Learning Center, are going forward. Some new equipment is required and plans for installing and setting up the printing operation during Summer 2014 will get the printing system up and running in Fall 2014.

There is a severe shortage of power outlets for student computers in the ISC. Students who bring their own computers to the ISC have no place to plug in power cords. There are only a few outlets in the room and it is hazardous to run power cords across the floor. The original construction of the ISC somehow overlooked standards of outlet placement, perhaps due to the three walls of windows in the design of the space. A solution to this shortage is highly desirable, possibly with floor-mounted outlets or several stationary tables with built-in outlets, as in lab benches in lab classrooms.

3. Additional Factors

Discuss additional factors as applicable that impact the center, including changes in student populations, state-wide initiatives, transfer requirements, advisory committee recommendations, legal mandates, workforce development and employment opportunities, community needs. See **Institutional Research** as needed.

The main issue for the ISC is faculty staffing. Budget constraints that prevent hiring of all needed full-time faculty and payment to adjunct and full-time faculty for additional hours keep the center from operating a full day schedule Monday-Friday. At least the College Learning

Center has tutors and evening hours. If the Learning Center had Saturday hours and more science tutors it would fill further gaps. Since TBA hours require faculty it does not seem that the Learning Center can be used instead of the ISC for science class TBA hours. Continuous student demand and usage plus information and requests from science faculty identify resource needs of the students, including hours of operation of the ISC.

The ISC seriously needs increased staff hours, since primary responsibility of current staff is support of the Astronomy department. An additional 25% staff (instructional aide which could be shared with a 25% staff for the Math Resource Center, for a total 50% position) will greatly enhance efficiency of the ISC operations and allow faculty to focus more on student needs. In addition the ISC has an almost desperate need for paid faculty hours to do the academic jobs: attend LSC3 meetings and participate in decisions and planning; develop and perform SLO assessment and other assessment means newly established by the new Student Success Division; write annual Program Review, all of which are currently done by donated time of a Biology faculty member (who is overextended doing scheduling and program review for Biology). This latter 25% faculty hours is crucial to deal with the increasing and constantly evolving academic requirements of accreditation.

4. Planning

Note: For centers that serve a single department, a portion of the information included in a departmental program review may be referred to or inserted here.

A. Results of Plans and Actions

Describe results, including measurable outcomes, from plans and actions in recent program reviews.

In the 2013 program review of the ISC the following action steps were identified:

1-Actively participate as part of the Learning Support Centers Coordinating Committee, a network of student support centers at the college, to maximize the ability of all centers to serve student needs. The committee will strategize to align hours of operation, computer and technology resources, staffing, and other services to create comprehensive learning support network for all students.

2-Conduct regular SLO assessment and review PRIE data to evaluate success of the center.

3-Ensure that the ISC is open at least from 9-4 Monday-Friday, that textbooks for courses are available, that computers are able to support course assignments, including TBA work, and that faculty are present for academic assistance.

Results:

1-The LSC3 has become a successful collaboration and planning body supporting the work of the various college learning support centers, including the ISC. In Spring 2014 the college established a new Division, of Academic Support and Learning Technologies, with an interim Dean. This position includes overseeing the LSC3, thus the college is strongly promoting coordination and accountability among the learning support centers, especially with regard to assessment and program review.

2-SLO assessment was performed in Spring 2013 and will be done again in Spring 2014. The LSC3 determined that SLO assessment should be performed in both Fall and Spring semesters, and additional means of assessment are now required by the Student Success Division, but the understaffing of the ISC made this unfeasible in 2013-2014. It will continue to be impossible without increased staffing of the ISC. All assessment and program review is done by donated time from a very busy full-time faculty.

3-ISC hours have improved quite a bit from Spring 2013 (9-4 Monday-Wednesday, 9-2 Thursday and 9-11 Friday) to Spring 2014 (9-4 Monday, 8-4 Tuesday-Thursday and 8-12 Friday). The Learning Center provides textbooks for many classes, and demand in the ISC has decreased. A complete set of new computers was installed in Fall 2013. A couple more faculty (17 versus 15) are doing office hours in the ISC Spring 2014 compared to Spring 2013. Still, less than half of full-time faculty do their office hours in the ISC.

B. Center Vision

What is the program's vision for sustaining and improving student learning and success during the *next six years*? Make connections to the

College Mission and Diversity Statements, **Institutional Priorities, 2008-2013**, and other **Institutional Program Planning** as appropriate. Address trends in the SLO assessment results and student usage and data noted in Section 2.

[**Note:** Specific plans to be implemented in the *next year* should be entered in Section 4C.]

The ISC will actively participate as part of a network of student support centers at the college. Over the next three years, the Learning Support Centers Coordinating Committee, as a standing committee of the Academic Senate, will continue its regular meetings to maximize the ability of all centers to serve student needs. The committee will strategize to align hours of operation, computer and technology resources, staffing, and other services to create comprehensive learning support network for all students. The combined work of the ISC and other learning support centers serves four Institutional priorities: 1: improve the academic success of all students (completion, retention, persistence), by increasing student participation in academic support services and improving such services; 2: promote academic excellence (improve transfer rates), by offering study opportunities and faculty consultation in a supportive environment; 4: promote integrated planning, fiscal stability and the efficient use of resources (support decision making in institutional planning that is informed by evidence, research and use of outcome measures), by basing decisions on data from all learning support centers; 5: enhance institutional dialogue (improve campus-wide communication), by the collaboration between the learning support centers.

SLO assessment, ISC usage data, and PRIE data clearly show the importance of the ISC to students, especially students taking at least 6 units and enrolled in transfer-level courses. 900-1000 different students using the ISC each semester represents a substantial proportion of the college's student body. Over the next three years the ISC's goal will be to ensure that the center is open at least from 8-4 Monday-Friday, that computers are able to support course assignments, including TBA work, and that faculty are present for academic assistance.

Vital to the continued participation of the ISC in LSC3, assessment of SLOs, program review, management and planning of the ISC is the hiring of a 25% staff and 25% faculty. The donated hours of both the current 25% staff and full-time faculty are constantly a drain on each of their workdays, and in order to fulfill all their other responsibilities it is not possible to perform assessment both Fall and Spring semesters and introduce additional means of assessment as required of accreditation review.

1. To guide future faculty and staff development initiatives, describe the professional enrichment activities that would be most effective in carrying out the program's vision to improve student learning and success.

Centers faculty and staff welcome the opportunity to participate in the Academic Senate Reading Apprenticeship initiative and other academic or support services activities, such as those associated with CSM Cares, the college's mental health grant.

2. To guide future collaboration across student services, learning support centers, and instructional programs, describe the interactions that would help the program to improve student success.

Participation in LSC3. The committee's work in the past year has improved coordination of the many centers on campus and has led to increased responsibilities of each learning support center. The LSC3 will continue to work as a unit to discover how we might better serve students, including making sure at least the Learning Center is open at times when individual support centers are not: late afternoons, evenings and Saturdays. This idea needs further investigation especially with respect to increased funding for staff and faculty assignments and the logistics of collecting SARS data for TBA. It may be useful for more learning support centers to shift away from SARS to Accudemia. The ISC will be investigating this shift over the next year. Continued cooperation between all the centers through the coordinating committee will make sure student needs are addressed.

An important goal for the coming year and future years for the ISC is reliable staffing by faculty, to ensure it can be open 8-4, and additional staff support for better management of assessment, reporting and planning.

Examination of data clearly indicates that students from across the college are accessing the resources of the ISC. Therefore, over the next three years, the center needs to enter into discussions about collaborating with other divisions and departments on support of all students in the ISC.

3. To guide the **Institutional Planning Budget Committee** (IPBC) in long-range planning, identify any major changes in resource needs anticipated during the next three years. Examples: faculty retirements, equipment obsolescence, space allocation.

Equipment and Technology

Instructional Materials

Classified Staff

The ISC needs a 25% staff (instructional aide) in addition to the current 25%, plus 25% faculty hours (this could be adjunct faculty paid for non-classroom hours). Management of the ISC in general, assessment each semester, managing student assistants, monitoring log-ins, checking out texts, assisting students with computer use, and providing transition coverage between in-coming and out-going faculty, overwhelm the current level of staffing in the ISC.

Student Assistant

Facilities

The ISC needs multiple additional, accessible 110 outlets to support student computer use and remove the hazard of cords running through the room (across the floor).

C. Plans and Actions to Improve Student Success

Prioritize the plans to be carried out next year to sustain and improve student success. Briefly describe each plan and how it supports the **Institutional Priorities, 2008-2013**. For each plan, list actions and measurable outcomes. (Plans may extend beyond a single year.)

Plan 1

Title:

Add 25% Staff (instructional aide) + 25% faculty hours (adjunct special rate hours)

Description

The ISC seriously needs increased staff hours, since primary responsibility of current staff is support of the Astronomy department. An additional 25% staff (instructional aide which could be shared with a 25% staff for the Math Resource Center, for a total 50% position) will greatly enhance efficiency of the ISC operations and allow faculty to focus more on student needs. In addition the ISC has an almost desperate need for paid faculty hours to do the academic jobs: attend LSC3 meetings and participate in decisions and planning; develop and perform SLO assessment and other assessment means newly established by the new Student Success Division; write annual Program Review, all of which are currently done by donated time of a Biology faculty member (who is overextended doing scheduling and program review for Biology). This latter 25% faculty hours is crucial to deal with the increasing and constantly evolving academic requirements of accreditation.

Action(s)	Completion Date	Measurable Outcome(s)
Hire 25% staff + 25% faculty positions to increase staff from current 25% level to 75%.	Fall 2014	Increased efficiency of the ISC, including student survey participation, increased student satisfaction with ISC resources and increased staffing by faculty to fulfill ISC weekly hours.

Plan 2

Title:

Faculty Participation

Description

Greater faculty participation in the ISC is needed to address the first and second Institutional Priorities: to improve the academic success of all students (including course completion, retention and persistence), and the second: to promote academic excellence (and improve transfer rates). Thus a constant goal is to encourage more involvement of Math-Science Division Faculty in the ISC. There is a relatively small number of faculty who support the ISC by working in it. The goal is to encourage faculty whose students use the ISC to spend hours in the ISC. Some students who may be hesitant to visit faculty in their offices find it comfortable to consult with the same faculty in the ISC. Since the ISC is part of the Science building and requires staffing by science faculty, the more faculty involved in staffing the ISC the more it will be able to serve student needs. Strategies to engage more science faculty in the working and planning of the ISC need to be developed.

Action(s)	Completion Date	Measurable Outcome(s)
Share ISC program review, especially usage data, with Math-Science faculty, showing the number of students in each science course who use the ISC and suggesting faculty whose students use the ISC should consider doing office hours in the ISC.	Ongoing	Increased faculty scheduling in ISC and more complete coverage of ISC hours.
Add 25% staff (instructional aide) + 25% faculty hours to ISC for management of everyday operations, so faculty are more inclined to conduct office hours in the ISC.	Fall 2014	Increased compliance with college standards and accreditation requirements, increased effectiveness of ISC in promoting student success.

Plan 3

Title:

Assessment

Description

The Learning Support Centers Coordinating Committee is working with the Interim Dean of Academic Support and Learning Technologies Division to improve assessment of all college Learning Support Centers. Recommended actions include assessing and reporting SLOs both Fall and Spring semesters, and using a set of four modes of assessment (PRIE user profile; PRIE satisfaction survey; Best Practices Inventory; Unique assessment in the form of interviews or focus groups). PRIE conducts satisfaction surveys of Learning Support Centers, including the ISC, and ISC SLOs could be embedded in the twice-yearly satisfaction surveys, since it is not possible for the ISC to assess SLOs both semesters due to the absence of more than 24 hours in a day for the faculty donating time for all of the assessment, research and reporting (SLOs and Program Review) for the center. However, the in-house survey reaches a significant number of users (11% Spring 2013) while the on-line PRIE satisfaction survey is lacking in significance due to the small number of respondents (33/934 users in Spring 2013, which is 3.5%). The fourth mode of assessment, unique to the center, is a set of interviews or focus groups. The ISC is charged with performing this during Spring 2014. The faculty donating time for ISC assessment and program review will make an effort to learn more about this mode and perform it in a timely fashion.

Action(s)	Completion Date	Measurable Outcome(s)
Assess SLOs both Fall and Spring semesters; use additional modes of assessment, including PRIE user profiles both semesters, best practices inventory and interviews or focus groups specific to the ISC. Implementation will depend on hiring additional 25% + 25% staff and faculty to administer and analyze assessment modes.	Fall, 2014	More complete understanding of ISC service results and comparison of learning support centers, so successful practices in one center may be modeled in others.

Plan 4

Title:
Power outlets

Description
There is a severe shortage of power outlets for student computers in the ISC. Students who bring their own computers to the ISC have no place to plug in power cords. There are only a few outlets in the room and it is hazardous to run power cords across the floor. The original construction of the ISC somehow overlooked standards of outlet placement, perhaps due to the three walls of windows in the design of the space. A solution to this shortage is highly desirable, possibly with floor-mounted outlets or several stationary tables with built-in outlets, as in lab benches in lab classrooms.

Action(s)	Completion Date	Measurable Outcome(s)
Rewire ISC for safe outlet (110) availability throughout the main room	Choose Year or Semester/Year	Increased efficiency and safety; student survey results should show increased satisfaction with ISC resources and increased usage.

5. Resource Requests

Itemized Resource Requests

List the resources needed for ongoing program operation and to implement the plans listed above.

Equipment and Technology

Description	Cost

Instructional Materials

Description	Cost

Classified Staff

Description	Cost
Hire 25% staff (instructional aide) + 25% faculty hours to increase staff from current 25% level to 75%.	Cost

Student Assistant

Description	Cost

Facilities

For immediate or routine facilities requests, submit a CSM Facility Project Request Form.

Description	Cost
Need multiple additional, accessible 110 outlets to support student computer use and remove the hazard of cords running through the room (across the floor).	Cost

6. Program Maintenance

A. Course Outline Updates

Review the **course outline update record**. List the courses that will be updated in the next academic year. For each course that will be updated, provide a faculty contact and the planned submission month. See the **Committee on Instruction website** for **course submission instructions**. Contact your division's **COI representatives** if you have questions about submission deadlines.

Courses to be updated	Faculty contact	Submission month

B. Website Review

Review the program's website(s) annually and update as needed.

Faculty contact(s)		Date of next review/updat
	Faculty contact(s)	Date of next review/update
Dean Drumheller		Spring 2014

C. SLO Assessment Contacts

Faculty contact(s)	Date of next review/update
Faculty contact(s)	Date of next review/update
Kathy Diamond	Spring 2014