

Research Brief

HSI Title III STEM Pathways Grant Learning Community Evaluations, Spring 2014

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Purpose of Brief

This brief illustrates the results of the Spring 2014 HSI STEM Learning Community (LC) evaluations.

Summary of Findings

- 90% of respondents either agreed or strongly agreed that they were satisfied with their LC and would recommend another student to join a LC.
- 97% of respondents stated that being in a LC helped them see connections among their classes and helped them feel comfortable asking questions and making contributions in class discussions.
- Many respondents loosely defined a LC as courses whose curriculum is linked together to improve student learning.
- A common topic among comments was positive statements regarding the faculty teaching the LCs.
- Some statements include:
 - I liked the relationships I had with other students that were in my math and chemistry class; it helped with study groups.
 - Fail one, Fail both.
 - My teacher made it the best!! My favorite class this semester.
 - If possible, I wish to continue with same instructors and students in future calculus/physics learning communities.

Overview

In response to the third deficit identified in the HSI STEM Grant (Students entering CHC have insufficient mathematics, technological and conceptual science skills), Crafton Hills College (CHC) developed a learning community (LC) program as an alternative learning strategy. LCs link together courses or coursework so students find greater coherence in what they are learning and greater interaction with faculty and peers. In an effort to continuously improve student success, students provided evaluations in the following LCs offered under the HSI STEM Grant in the 2013-2014:

- GEOL-100-92, MATH-090-92, and CHC-090-92
- CHEM-101-91 and MATH-095-91
- PHYSIC-250-90, MATH-250-90, and LRC-900X4-90

Table 1 illustrates the response rate for each section. The overall response rate of the STEM LC evaluation survey was 70%.

Table 1. Response rate for STEM LC evaluation surveys

Learning Community	#	Ν	%
GEOL-100-92, MATH-090-92, and CHC-090-92	5	8	62.5
CHEM-101-91 and MATH-095-91	14	22	63.6
PHYSIC-250-90, MATH-250-90, and LRC-900X4-90	14	17	82.4
Total	33	47	70.2

Note: #' is the number of responses, 'N' is the number of students earning a grade on record (GOR¹) in the section, and '%' is the number of responses divided by the total number of students earning a GOR in the section.

Methodology

In conjunction with the STEM Alternative Learning Strategies Coordinator, the Office of Institutional Effectiveness, Research, and Planning developed a onepage paper survey to measure students' perceptions of the LC program. The evaluations were distributed in the final week of the courses. Respondents were asked to identify the LC in which they participated. Respondents were then presented with a series of Likert-scale questions to measure their level of agreement with statements regarding various program components. Responses were ranked where Strongly Agree = 5, Agree = 4, Disagree = 3, Strongly Disagree = 2, and Not Applicable = 1. Lastly, respondents were presented with four open-ended questions for additional comments.

Findings

Table 2 (on page 2) displays respondents' level of agreement with various statements regarding the HSI STEM LCs. Over 90% of respondents either agreed or strongly agreed that they were satisfied with their LC and would recommend another student to join a LC. Approximately 97% of respondents stated that being in a LC helped them see connections among their classes and helped them feel comfortable asking questions and making contributions in class discussions.

¹ GOR is a grade earned in the course of A, B, C, D, F, P, NP, CR, NC or I

Table 2. Respondents' level of agreement with statements regarding various LC program components.

Statement	Strongly Agree		Agree		Disagree		Strongly Disagree	
	#	%	#	%	#	%	#	%
I am satisfied with my Learning Community experience	18	54.5	12	36.4	3	9.1	0	0.0
I would recommend joining a Learning Community to other students	18	54.5	12	36.4	2	6.1	1	3.0
Participating in a Learning Community helped me develop connections with faculty and staff	10	30.3	22	66.7	1	3.0	0	0.0
Participating in a Learning Community helped me develop connections with other students	18	54.5	13	39.4	2	6.1	0	0.0
Being part of a Learning Community made me feel more supported in my coursework	15	46.9	14	43.8	3	9.4	0	0.0
Being part of a Learning Community made me feel more supported in my choice to go to college	12	41.4	12	41.4	5	17.2	0	0.0
Being in a Learning Community has helped me see connections among my classes (for example, learning in one class supported or expanded on what I learned in another class).	18	58.1	12	38.7	1	3.2	0	0.0
Being in a Learning Community helped me to feel comfortable asking questions and making contributions in class discussions	19	57.6	13	39.4	1	3.0	0	0.0
The instructors in my Learning Community planned assignments together	16	48.5	15	45.5	2	6.1	0	0.0
I worked with other students in my Learning Community outside of class	11	35.5	15	48.4	4	12.9	1	3.2

Note: 'Not Applicable' responses were excluded from the table above.

Below are responses provided to four open-ended questions. Responses have been edited to remove names. Many respondents loosely defined a LC as courses whose curriculum is linked together to improve student learning. A common topic among comments was positive statements regarding the faculty teaching the LCs.

7: What is a Learning Community?

- 2 Classes linked together
- A class linked together and we share two classes.
- A class that helps you learn how to study better and succeed.
- A class that is linked to another
- A combination of the two classes that work with each other to support course work.
- A community made to teach in a specific way to help the student.
- A community of students taking the same classes together.
- A group meant to help students solve problems together.
- A group of classes with a few similar topics
- A group of people in similar classes.
- A group of student bodies and teachers that work together to improve in school.
- A group of students that have committed to learning a subject together as a group, with emphasis on teambuilding and coordination.
- A learning community is a well thought out class with certain goals and objectives to do and learn from. Most are common use, life decisions that you make everywhere.
- A set of classes and or people that work together.
- Combination of a few classes to save time while not sacrificing learning potential.

- An opportunity to have the same group of people in a group of classes. This allows students to become more comfortable asking questions and allows the professors to have a better understanding of the students' strong points and weaknesses.
- Classes linked together; which benefits the students
- Combine two similar complimentary courses to improve the experience of both.
- Group of students taking classes together with the professors working together.
- Group of students taking joint courses together.
- Joint classes.
- Putting two classes together, using and putting into practice knowledge acquired in both classes at the same time.
- Teachers who help you become a better student.
- To help first time students make decisions about college center.
- To help students interact with other students and get to know the staff.
- Two classes that have joined together to correspond with each other
- Two linked classes.
- When classes work together to help students in their respective class.
- Where we can all come and help one another with class work.

8: What did you like best about participating in a Learning Community?

- All the same students
- Bonds with fellow learning community students.
- Both teachers seemed to communicate and plan
- Change wasn't bad, I was happy to have classes link but the experience itself was not really well prepared.
- Class discussions.
- Doing all the chemistry labs
- Everything
- Everything was fine.
- Gave me insight on a 5 year "No change" course class.
- Getting extra help along the way and getting to know the other students.
- Getting to understand how some things within science strongly relate to another field.
- Got to know other students better and worked with them
- Got to work with the same students.
- Having classroom discussions.
- Having the connections between math and chemistry
- I enjoyed the challenge of taking on two individually challenging courses at the same time.
- I like our discussions we had in this class.
- I liked the fact that you were with the same group of students for 2 classes.

9: What would you change about this Learning Community?

- "Mandatory" SI sessions, felt pressured to always be present for SI meetings.
- Continuity of instructors from one semester to another.
- Don't change; Keep [our professor] for Physics 251
- Fail one, Fail both.
- I can't think of anything personally.
- Instructor or maybe neater work.
- Less homework
- Longer class period for physics.
- Make sure all students cheer up on grades.

- I liked the group of students and both of the professors. [Our professors] seem to work well together and both work really hard to help students.
- I liked the relationships I had with other students that were in my math and chemistry class; it helped with study groups.
- I liked the small class size and seeing them daily. Great support.
- It was good to finish both classes at the same time especially with two great teachers.
- Participating in group debates. They're so much fun and accelerating.
- That I was able to get the classes I needed
- The comfortable learning.
- The connection with other students.
- The discussions in the CHC class.
- The opportunity to take multiple courses with the same group of students.
- The student bonding.
- The teachers and how the material from both classes intertwined
- The teachers.
- Tied the classes together
- When the Calculus and Physics directly related.
- More classes together.
- More from chemistry professor- Make support like
 [our professor]
- More meeting with counselors
- More participation.
- More time to get help with homework we don't understand.
- Seemed to work well for me, and I have no complaints.
- The way it was designed it. The coordination of the teachers.

10: If you have any other comments you want to share, please write them here:

- [Our professor] is the best professor I've ever had.
- I do not think it is right to just stop the learning community and just have us join the other section due to the planning and knowledge are not the same.
- I think that it would be better if both classes be taught by the same teacher.
- I would greatly prefer to have our current professors in the next section.
- If possible, I wish to continue with same instructors and students in future calculus/physics learning communities.
- [Our professors] are great teachers. Keep them.

- [Our professor] made a difficult subject more enjoyable by providing examples easier to relate to as well as energy and passion toward the subject.
- My teacher made it the best!! My favorite class this semester.
- [Our professor] made Physics 250 easier. Loved the environment.
- Well, at some point we were learning stuff in physics we hadn't covered in calculus. Maybe I wasn't able to adapt with the learning style of the instructors. Writing is everywhere and sometimes hard to follow.