

Why Can't They All Just Get Along? Building Collaboration through Learning Communities

Lucy Dodge Carnegia Grant Fall 2003

Contents

Overview and Purpose	1
Learning Communities Benefit Students	1
Learning Communities Benefit Faculty	2
Improved student retention and success	2
Evaluating and Assessing Critical Thinking and Group Dynamics	4
Conclusions	5
Appendix A Group Observation Guidelines	6
Appendix B Structured Observation Methods	7
Appendix C Group Activities and Norms	8
Appendix D Critical Thinking Evaluation	9
Observation Form	9
Notes	10
References	10

Overview and Purpose

Serving as an antidote to interdepartmental isolation, Learning Communities (LCs) provide a vehicle whereby a diverse group of students and faculty can cooperate and collaborate. A blend of logically related disciplines, a learning community (LC) weaves the skills and the assignments of two or more classes together into a unified mosaic of educational objectives. Usually two or more instructors collaborate to create a course syllabus that reflects the objectives of the learning community. Studies suggest that LCs foster and nourish a variety of skills including motivation and self-regulation (Stefanou and Salisbury-Glennon 2001) that, ultimately, will serve students well when they enter the workforce and seek leadership positions. Success at solving problems, confidence at asking percipient questions, and the ability to provide concise, thoughtful answers are skills that may be enhanced through the collaborative environment that LCs seek to encourage. As one San Jose City College student affirmed, "Everyone worked together, and we learned from each other."

Typically the courses linked in a learning community are those in which students are more able to succeed if they study the subjects together and in which one skill reinforces or complements the skills learned in another class or classes. Students enroll in both courses and work on projects that reflect the interwoven objectives of both classes. Both transfer and below-transfer level courses form LCs. For example, LCs at San Jose City College (SJCC) combine courses in the following disciplines:

- Composition Fundamentals and College Reading
- French 1A or Spanish 1A and Getting Started with the Internet
- Journalism and Multimedia
- Math for General Education and Problem Solving and Critical Thinking
- Organic Chemistry and Getting Started with PowerPoint
- Study Skills and Getting Started with Windows

According to recently released studies (Spring 2003 data on Chemistry, Guidance, and Computer Applications LCs), students made progress toward the specified course goals. However, a more detailed analysis will help to identify how rapidly or thoroughly students learned these skills compared with those enrolled in baseline or non-learning community classes. Because many of the LCs are interdisciplinary, learning to ask complex interdisciplinary questions covering, for example, the fields of math and critical thinking, chemistry and the Internet, English and study skills, may be enhanced by participating in a learning community.

Learning Communities Benefit Students

In contrast to a hodgepodge of facts or "a minestrone of information" that does not necessarily constitute knowledge (McFarland, 2002), a learning community structures classes around skills deemed valuable throughout multiple disciplines. Given this reinforcement, students are more likely to perceive the connections among different academic disciplines than if they take separate, non-linked classes. Such is the case in a learning community consisting of Organic Chemistry and Getting Started using the Internet in which students discover how the Internet can facilitate research on recent trends in pharmacology. Contrary to the popular, but highly erroneous, belief that using the Internet is simply a mechanical process of finding and retrieving information, students in this learning community experience the serendipity of discovering heretofore unknown relationships and connections that expand their intellectual horizons.

To prepare students for success in a global multicultural society, SJCC faculty are challenged to teach underprepared students the life skills essential for their success in the highly-competitive work world of Silicon Valley (Dodge & Kendall, 2003). Our experience in isolated classes, in computer labs,

and in learning communities suggests that learning communities provide the most effective structure for fostering students' success. On an anonymous LC assessment, one student wrote, "I would recommend this type of class to anyone coming to college because it helps you adjust to the college environment."

Learning Communities Benefit Faculty

The most impressive benefits in learning and student achievement occur when instructors coordinate efforts to produce a combined syllabus reflecting the unified goals of the learning community (Stefanou & Salisbury-Glennon 2001). This insight suggests that the success of a learning community positively correlates with having instructors work closely together to blend course objectives so that the resulting creation emerges as more than merely the sum of its parts. During this process, faculty members have discovered other successful teaching approaches they can incorporate into their own repertoire of classroom techniques.

As a result of participating in learning communities, faculty often define new roles for themselves that transcend departmental boundaries. Ways to build relationships across disciplines include forging links with writing and ESL classes, advising and counseling students, developing workshops that introduce students and faculty to specialized programs for at-risk students, and establishing uniform grading standards and prerequisites in reading and math for courses at similar levels in different disciplines (Shapiro, 1999). Because these LC groups were content and program-based, they transcended narrow departmental fiefdoms and led to what other researchers have noted happens in such cases, i.e., new leaders developed among the teachers (Henze, 2002). Serving as an antidote to the erosion of inspiration in the workplace, the camaraderie among faculty and staff members helped to alleviate some of the deleterious effects of pervasive budget cuts and staff reduction that occur in academic, governmental, and corporate environments.

Improved Student Retention and Success

San Jose City College, one of the two Community Colleges in the San Jose Evergreen Community College District, serves a diverse student population that reflects the composition of the state of California. The largest minority, Latinos comprise 34% of the population and 30% of the students in the San Jose Evergreen Community College District. African-Americans comprise 6% of the population of the state as well as the students in the College District. Asians comprise 12% of the State's population and 43% of the students in the College District. Whites make up 45% of the state's population and 17% of the students in the College District (Kangas, 2003). 29% of our students are not U.S. citizens, and English is not the primary language of 40% of the students. 45% of the students are "low income" according to the federal definition. 83% of the students attend part-time, and the same percentage have jobs. The 31-49 year old age group makes up the highest percentage of students.

Given this blend of ethnic origins and cultures, SJCC strives to incorporate the diverse student body into the campus main stream. Research has suggested that retaining students (Tinto, 1997) requires an integrated curriculum as well as fostering a sense of belonging or loyalty to a campus, qualities that a learning community naturally fosters.

Figure 1 shows a selection of the Fall 2001 classes at SJCC involved in learning communities, comparable non-learning community courses, and baseline courses. Within each LC (designated as 1, 2, and 3), the table shows the number of students enrolled, the number of students succeeding, and the percentage of students succeeding in each section, each class, and each learning community.

Learning Communities				Comparison Courses					Baseline Courses							
	Fall 2001	#sects	# stdnts	avg	# suc	% suc	Fall 2001	# sects	# stdnts	avg	# suc	% suc	1998-2000	#stdn	#suc	%suc
4	Engl-335-102	1	26	19	14	54%	Engl-335	2	57	29	25	44%	Engl-335	451	221	49%
	Engl-322-102	1	27	19	20	74%	Engl-322	2	55	28	39	71%	Engl-322	407	115	28%
2	Engl-092-104	1	24	18	7	29%	Engl-092	8	176	22	77	44%	Engl-1092	1136	533	47%
2	Engl-102-104	1	25	15	15	60%	Engl-102	4	95	24	59	62%	Engl-102	406	242	60%
	ESL-322-103	1	27	27	15	56%	ESL-322	2	69	35	46	67%	ESL-322	377	212	56%
3	CA-302-102	1	28	28	22	79%	CA-302	1	29	29	17	59%	CA-302	38	25	66%
J	CA-303-102	1	28	28	19	68%	CA-303	1	25	25	12	48%	CA-303	28	20	71%
	CA-306-102	1	28	28	16	57%	CA-306	1	21	21	8	38%	CA-306	15	7	47%
	OVERALL	8	213	27	128	60%	OVERALL	21	527	25	283	54%	OVERALL	2858	1375	48%

Figure 1. Detailed Course Success Rates

"Baseline courses" constituting at least ten years of census data include a range of courses taught at the same times and, if possible, by the same teachers as the learning communities and comparison courses. In the majority of cases, these baseline courses were offered before learning communities became part of the curriculum and, thus, serve as a benchmark against which to compare the results of innovative programs such as learning communities.

As is also the case for the learning communities and the comparison courses, the percentage of students who passed is derived by dividing the number of students enrolled by the number of students who passed the indicated courses with Credit or a grade of C or better (i.e., 2858/1375=48%). The number of students enrolled includes those who completed the course with a passing grade or received a W(withdraw), I(incomplete), NC (no credit), D, or F. At the end of the semester, a higher percentage of the students enrolled in learning communities successfully passed their classes than did the baseline group of students. A Chi-Square test of the frequencies of success among the baseline classes versus the learning community classes was significant at the .01 level (*Chi-Square =25.30, df=7*).

Evaluating and Assessing Critical Thinking and Group Dynamics

Although researchers suggest that learning to think critically enables one to master content in various disciplines, the question remains as to how one accurately assesses these abilities. Various forms ranging from Robert Bales to Morton Deutsch address this issue. However, effective, percipient group participation may be encouraged more by having students themselves complete a simple observation form than by having outside observers analyze a complex set of student behaviors. Toward that end, we have been working with our District Vice-Chancellor of Research and Planning to develop forms that both faculty and students can use to evaluate the critical thinking, problem solving, and group participation skills of students who are enrolled in learning communities at SJCC. The sequence of steps followed in this project include the following:

- 1. **Identify participants in the study:** Students in the Chemistry 12A\CA 305 PowerPoint Learning Community have been observed during the Fall semester. During subsequent semesters, other classes that form Learning Communities will be observed.
- 2. **Develop assessment instruments**: A scoring rubric for group dynamics, based on Bales' task and socioemotional categories, has been used to observe students' group behaviors. This is a simplified form that permits observers to check behavioral characteristics they observe as groups of students discuss their projects. A Critical Thinking rubric based on categories provided by the Center for Critical Thinking and the College Center for Teaching and Learning has been developed and used.
- 3. **Observe sample population behavior**: Volunteer observers record whether or not students participate more in the beginning than at the end of the class. The observers follow a checklist of items related to group participation. Changes in self-assessment are analyzed using pre and post assessment tests. Administrators, faculty, and students have participated in observing and completing the form after they observe students in the Chemistry/PowerPoint LC. A crucial part of this observation process includes having students observe each other thereby inculcating the rubrics used to evaluate group dynamics and critical thinking into their own behavior. During group activities, several students have been selected to observe the behavior of other groups and to record their observations on the Bales observation form.
- 4. **Gather data:** Both anecdotal and quantitative data have been gathered during this study. Each student in the Learning Community is evaluated by observers as to the existence of specific skills, such as giving information, organizing ideas, clarifying ideas, and various types of communication skills that occur during group discussions. At the end of the semester, the students' final presentations are filmed for future reference and purposes of comparison with earlier presentations.
- 5. Analyze video-taped sessions: Class participation is analyzed and observed as a result of videotaped class sessions. To comply with ethical standards requiring informed consent, students sign release forms for the videotaping of the class sessions. Videotaping is as unobtrusive as possible, and occurs at frequent intervals so that students become accustomed, and eventually, unaware, of the videotaping. Observers compare their initial reactions gathered from watching the students with those observed on the videotape.
- 6. **Analyze results:** Using statistical software, a factor analysis will be performed on these results to determine significant relationships between one set of skills and another so as to highlight any relationships between one skill and another. For example, it might be of interest to identify to what degree students who offer information in groups also exhibit critical thinking skills.
- 7. **Produce final report:** The report produced as a result of this study will document both formative and summative evaluation procedures. Intended for teachers as well as students to use, the summary report will show students' progress in the specified group dynamics and critical thinking areas. Summary

information that can be useful in making judgments about a student's achievement will be distributed to faculty involved in each learning community. Participants can use these reports to evaluate whether or not changes in teaching methodologies would produce the desired learning outcomes.

- 8. **Involve faculty in evaluation of results:** Faculty across several disciplines will be involved in this study. At the end of the study, faculty who participated will meet to discuss and evaluate the both the process of evaluation as well as the results. Faculty in several disciplines have been questioned as to the value of this project and are in the process of providing feedback as to the value of this type of assessment.
- 9. Incorporate assessment and collaborative activities into course objectives. Given the recent import of general education requirements that list group activities as one of the objectives, learning communities may illustrate the value of incorporating this goal across all college programs. These general education learning outcomes focus on computer competency, critical analysis, comprehension of written material, information competency, interpersonal skills, oral communication, and working in groups among others. The results of this project's assessment will be distributed on campus bolstered by the knowledge that LCs inherently foster the development of skills identified under the umbrella of general education outcomes that must eventually be added to courses in order to satisfy accreditation standards.

Conclusions

Given the rise in non-traditional instructional methods designed to serve a diverse educational and cultural college student population, LCs provide an ideal platform for combining varied approaches to learning (Jamilah, 2002). Because LCs cluster classes around skills that are useful in various subjects, students are more likely to perceive the relationships or connections among academic disciplines than if they take separate, non-linked classes.

Learning communities move the focus of classroom learning from content-centered and teachercentered to student-centered and learning-centered education (MacGregor, 2002), reinforcing current pedagogical trends. As Matt Volkman, an LC student at San Jose City College, exclaimed, "I never expected to learn as much as I have." In Learning communities, not only the students, but also the faculty, are delighted to learn more than they expected.

Appendix A Group Observation Guidelines

Observing without interfering is an art. Think of yourself as a flashlight. Your purpose is to highlight important information and to capture the critical aspects of the process without changing any of the interactions.

- 1. Do not participate in the group's activities in any way, either by offering help or verbal suggestions, or physical movements. Sit near the group, but not so close that they assume you are part of their group and expect you to make comments.
- 2. Don't make it obvious to the participants that you are watching them. Don't let the group members think you are a part of their group. Don't stare at particular members or try to make eye contact with them as you are recording their actions. Try to record responses of male and female members equally. That is, don't just concentrate on one type of member.
- 3. Try to experience the situation simultaneously both as an insider and outsider. How do you believe a member of the group feels?
- 4. Observe not just actions and interactions within the group, but also the physical environment, what's present in the room, the type of room, and the sequence of actions.
- 5. Try to become aware of what others take for granted, for example, the number of questions each student asks, the kinds of nervous actions or behaviors that occur, or the extent of eye contact among the group members.
- 6. Remember that your purpose is to measure and collect information. Try to use the evaluation tool to the best of your ability. Because room for modification always exists, your suggestions as to how to improve the evaluation techniques are valued.

Appendix B Structured Observation Methods

Description:

In an attempt to identify characteristics group members exhibit, observers often use the classification system Robert Freed Bales developed. Known as Interaction Process Analysis (IPA), this structured coding system classifies group behavior according to socioemotional and task-oriented categories. Socioemotional activities, such as complimenting another person, either sustain or weaken interpersonal relationships within the group. Task activities include behaviors that focus on the problem the group is trying to solve. On the form below, actions numbered 4 through 9 and are concerned with giving and asking for information, opinions, and suggestions. The actions numbered 1, 2, 3, and 10, 11, & 12 are socio-emotional categories that include emotional reactions to comments or suggestions. **Directions:**

As you listen to a group discussion, try to classify the verbal content according to the types of behavior indicated on the form. Then mark the action or behavior as it occurs during the group discussion. For example, if Sara (referred to as A) begins the group discussion by asking, "Should we ask everyone his name?" and John (referred to as B) answers, "Yes," you would place a check beside Behavior 8 in Column A and a check beside Behavior 5 (Gives an opinion to Sara) in Column B. **Group Number or Name:**

Category	Action or Behavior	Α	B	С	D	Ε	F
A. Acts in a	1. Seems friendly						
positive manner							
	2. Laughs, tells stories, or gains group						
	support by acting in a way that lowers						
	tension among group members						
	3. Agrees with group members						
B. Attempts answers	4. Gives a suggestion						
allsweis	5. Gives an opinion						
	6. Gives information or facts						
C. Operations							
C. Questions	7. Asks for information or facts		-			-	
	8. Asks for an opinion					_	
	9. Asks for a suggestion						
D. Negative (and	10. Disagrees with a group member's						
mixed) actions	comments or opinions						
	11. Shows tension by facial						
	expressions, gestures, or comments						
	12. Seems unfriendly, hostile, or						
	antagonistic toward the group		1				

Observer Name or Role (e.g., student, teacher, counselor):_____

Appendix C Group Activities and Norms

The Bales behaviors and actions can be further divided into task activities and social-emotional activities. Task activities include categories 4 through 9 and are concerned with giving and asking for information, opinions, and suggestions. Categories 1,2,3, and 10, 11, 12 are socio-emotional categories.

The Bales' norms for group activities suggest that the majority of acts in a successful encounter are task acts:

Category	Percentage of activities in a normal group encounter
1. Seems friendly	3
2. Dramatizes or acts so as to release tension among	6
group members	
3. Agrees with group members	11
4. Gives suggestions	5
5. Gives opinion	19
6. Gives information	25
7. Asks for information	5
8. Asks for opinion	3
9. Asks for suggestion	1
10. Disagrees	4
11. Shows tension	5
12. Seems unfriendly or antagonistic toward the group	3

The following descriptions of some of the categories may be helpful:

- Seems friendly acts that show group coherence and raise the self-esteem of others and show general affability and agreeableness, gives help, rewards others' behaviors
- Dramatizes acts that release tension, jokes, laughs, and general satisfaction
- Agrees acts that show passive acceptance, understanding, and compliance with the group's behavior
- Gives suggestions provides direction without coercing others into compliance
- Gives opinions states, "I agree," "I believe," "It seems to me," etc.
- Gives information states information that can be objectively and independently confirmed.
- Asks for information asks for evidence that confirms information; asks for orientation information, confirmation, or repetition.
- Asks for opinions asks for analysis and evaluation of information; expresses feelings
- Asks for suggestions acts in a way that solicits directions or guidance; asks for possible ways of action
- Disagrees performs acts that show passive rejection of the group's ideas
- Shows tension performs acts that indicate a plea for help or lack of comfort within the group; withdraws from the group
- Seems unfriendly performs acts that diminish the importance of others and asserts one's own importance at the expense of others; withholds help; shows passive rejection.

Appendix D Critical Thinking Evaluation

As an observer, your purpose is to attempt to evaluate the critical thinking and reflective capabilities of the students. The theory is that as one is able to think critically, one is better able to comprehend complex ideas and tasks. Toward that end, we are attempting to observe the skills of students who participate in learning communities. As you observe each group, mark the number that best characterizes the student's performance. Each number represents a group of critical thinking processes, ranging from 1 to 5.

Category	Description
1	 Expresses illogical statements that aren't based on facts
	✓ Hostility toward other's suggestions
	✓ Lack of appreciation of other's points of view
2	✓ Misinterprets evidence, statements, graphics, questions, etc.
	✓ Ignores obvious alternative points of view
	✓ Ignores reasonable evidence
3	✓ Accurately interprets evidence, statements, graphics, questions, etc.
	\checkmark Analyzes the various points of view of an argument
	✓ Justifies some results or procedures and explains reasons for reaching a
	conclusion.
4	✓ Thoughtfully analyzes and evaluates alternative points of view.
	✓ Compares and contrasts different positions on controversial issues
5	✓ Breaks a problem into parts in order to solve a complex problem
	✓ Draw conclusions based on preliminary evidence
	\checkmark Shows ability to follow through with an action based on logical thought

Group Number:_____Date:_____

Observer's Name or Job Title:

Observation Form

Enter the name or assigned student number. Enter a value from 1 to 5 the first and second time you evaluate the student's critical thinking skills as you watch the group interact.

Name or Student Number	First score	Second score	Difference between first and second scores

Notes

Quotations from San Jose City College students were gathered from written evaluations of LCs during 2001-2002.

References

American Association of Higher Education. http://aahe.org/initiatives/learningcommunities.htm .

Byrne, Candace. (2002). *Simple Approaches to Assessing Collaborative Learning Environments*. Assessment in and of Collaborative Learning: A Handbook of Strategies. Developed and edited by the Washington Center's Evaluation Committee. <u>http://www.evergreen.edu/washcenter/resources/acl/iie.html</u> center web site.

Dodge, Lucy. (2003). Building Academic Skills and Information Competency through Learning Communities. *Educational Technology & Society* 6(3). <u>http://ifets.ieee.org/periodical/6_3/index.html</u>.

Dodge, Lucy & Kendall, Martha. (in press). Learning Communities. CollegeTeaching.

Gabelnick, Faith, MacGregor, Jean, Matthews, Robert S., & Leigh Smith, Barbara. (1990). *Learning Communities: Creating Connections Among Students, Faculty, and Disciplines*. San Francisco: Jossey-Bass.

Henze, Rosemary, Katz, Anne, Norte, Edmundo, Sather, Susan E., & Walker, Ernest. (2003). *Leading for Diversity*. Thousand Oaks, CA: Corwin Press, Inc.

Jamilah, Evelyn. (2002). Nontraditional Students Dominate Undergraduate Enrollments, U.S. Study Finds. *The Chronicle of Higher Education* June 4:4.

Kangas, Jon, Kathleen Budros, & Joyce Yoshioka. (2001). SJECCD Population Data Report from Lapkoff Gobalet Demographic Research, Inc. RR# 3139 distributed through the San Jose Evergreen Community College Office of Research and Planning.

Kangas, Jon & Falcone, Pam. (2002). SJCC F00-F01 LC Success Rates Over Time with Baseline paper distributed through San Jose Evergreen Community College District Office of Research and Planning.

Kangas, Jon & Budros, Kathleen. (2003, October 10). Latino Power. *Trends*. San Jose/Evergreen Community College District. No. 198.

Lapkoff Gobalet Demographic Research. (2001). SJECCD Population Data Report. Research Report #3139 distributed through the San Jose Evergreen Community College District Office of Research and Planning.

McFarland, John. (2002). *Faculty Philippics*. Sacramento, CA: Faculty Association of California Community Colleges.

Shapiro, Nancy S., & Levine, Jodi H. (1999). *Creating Learning Communities*. San Francisco: Jossey-Bass.

Stefanou, C.R., & Salisbury-Glennon, J. D. (2001). Developing Motivation and Cognitive Learning Strategies Through an Undergraduate Learning Community. *Learning Environments Research* 5(1):77-97.

Tinto, V. (1997). Classrooms as Communities: Exploring the Educational Character of Student Persistence. *Journal of Higher Education* 68:6:599-623.

Tinto, V. (2001, October 3-5). Personal Communication; Workshop sponsored by the Bay Area Regional Learning Communities Consortium, Los Altos, California