

Learning in Community (LinC) Research Report March 2009

Executive Summary

LinC courses are two courses “linked” together that enroll the same cohort of students and are taught collaboratively by faculty of the two different disciplines, along with a Success Coach (usually an Academic Adviser) as part of the course delivery team.

This research examined the effect of LinC courses on student course success, persistence, connection and direction, and faculty experience. Students in LinC courses were more successful in the courses than non-LinC courses by approximately 10% ($p < .01$). The effect was greater for African-American and Hispanic students. Students in LinC courses demonstrated higher persistence in the term immediately following the LinC, with a decline in that effect in the term after that and then another higher persistence in the next two terms. Through focus groups, students reported high engagement and community connection in LinC courses compared to their other classes and cited specific success skills they learned through LinC. In discussion groups, faculty reported that their teaching was enriched through LinC and the LinC courses had high levels of student engagement.

Recommendations include continuing expansion of LinC, particularly in developmental math courses with the appropriate collegewide coordination to support the work. Continued study of LinC courses, particularly the impact on student persistence, is also recommended.

Introduction

Since 1996 Valencia has experimented with several versions of learning communities – two courses “linked” together that enroll the same cohort of students and are taught collaboratively by faculty of the two different disciplines, along with a Success Coach (usually an Academic Adviser) as part of the course delivery team. The Achieving the Dream (AtD) Initiative proposed to expand the learning communities program called Learning in Community (LinC) as one of AtD’s three strategies to “close the gaps” in student achievement. The AtD LinC’s were to involve Student Success, developmental mathematics (Pre-Algebra, Beginning Algebra and Intermediate Algebra), and three other high enrollment gateway courses (Freshman Composition I, U.S. Government, and College Algebra.)

The AtD LinC program was implemented in Fall 2006 with the assumption that participating in the paired course format will help students in two significant ways:

- 1) Improve their chances of success in a course or courses we know to be challenging-- i.e., get them past a hurdle that often derails forward progress
- 2) Provide an experience in which students learn more about themselves and about how to learn-- about metacognition; learning styles; study groups; communication with faculty, advisors, and fellow students; using learning support systems, etc.-- so that the impact of the LinC extends into their future course work and other educational experiences.

The LinC experience is distinct from taking the courses separately in these ways:

- 1) Students have increased access to faculty in the two courses because they have twice as much time with each faculty member than if they took each course separately.
- 2) Students have increase access to an academic advisor because that advisor attends some classes, adds to the course curriculum on advising topics, and is available to students for outside of class advising.
- 3) Faculty and academic advisors teaching the LinC courses have participated in an intensive faculty development program that includes effective strategies for creating an positive learning community, integrating curriculum and assignments, and time to develop their unique integration of their specific courses.

From Fall 2006 through Fall 2008, 2,274 students were enrolled in LinC courses involving the six designated AtD Gateway courses that also involved more than 70 (unduplicated) faculty and Student Affairs professionals. The research findings included in this report are presented to provide a data-informed decision about the future directions for LinC at Valencia Community College.

The research hypotheses were:

1) Student Success

Students who take courses in the LinC format are more successful than those who have never enrolled in a LinC.

2) Student Direction and Connection

Students who take courses in the LinC format develop increased self-direction and connection to college as a result of their LinC experience.

3) Faculty/Staff Development

Faculty and Staff participation in LinC courses promotes professional development and engagement.

Research Questions and Findings:

- 1) Are students who take courses in the LinC format more successful in the courses than those who take the same courses separately?**

Students who took one of the Gateway courses in the LinC format were compared with all students who took one of the Gateway courses in a non-LinC format over the 5-term time period of study (Fall 2006, Spring 2007, Fall 2007, Spring 2008, Fall 2008). The six Gateway courses included were: MAT0012C (Pre-Algebra), MAT0024C (Beginning Algebra), MAT1033C (Intermediate Algebra), MAC1105 (College Algebra), ENC1101 (Freshman Composition) and POS2041 (US Government). The total number of LinC students was 2,274 students. The total number of non-Linc students was 69,388. A

LinC Research Report

chart of the specific LinCs that were offered each term and their enrollment are included in Appendix A. Data on this measure is included in Appendix B.

- 72.6% of LinC students earned a C or better in the Gateway course compared to 62.2% of the non-Linc students. ($p < .01$).
- This is a difference of 11.6%

When examined by the three ethnic/race groups that were the focus of AtD, the following results were found:

- 75.7% of Hispanic LinC students earned a C or better in the Gateway course compared to 63.8% of the Hispanic non-Linc students. ($p < .00$)
- This is a difference of 11.9%
- 67.6% of African-American LinC students earned a C or better in the Gateway course compared to 56.0% of the African-American non-Linc students. ($p < .01$)
- This is a difference of 11.6%
- 73.5% of Caucasian LinC students earned a C or better in the Gateway course compared to 64.0% of the Caucasian non-Linc students. ($p < .00$)
- This is a difference of 9.5%

In the research proposal, it was suggested that withdrawal rates in LinC courses would be lower than non-Linc courses as even unsuccessful students would remain in the course due to the support of the learning community. The research findings supports this hypothesis. This was proposed as a positive outcome in that it provides additional time for students to learn the course material and creates a momentum for future course attempts.

- 12.9% of the LinC students withdrew from the course (W, WP) compared to 19.8% of the non-Linc students. ($p < .01$). This is a difference of 6.9%.
- The difference was greater for was Hispanic students (11% compared to 18.2% ($p < .01$) and African-American students (13.2% compared to 21.4% ($p < .01$))

The difference in course success between LinC and non-Linc students is also available for each of the Gateway courses but is not included in detail in this research report in favor of brevity. In general:

- Across all students, LinC students earned a C or better at higher rates than non-LinC students but the differences were higher in Gateway math courses than in English or Political Science. In particular, MAT0024C and MAC1105 had differences greater than 10% across all groups.
- Hispanic LinC students earned a C or better at higher rates than non-LinC students in all Gateway classes with the difference between 6.6% (MAT0012C) and 20.8% (MAT0024C).

- African-American LinC students showed more variety in course success between LinC and non-Linc. There was a positive difference ranging from 5.6% to 14.9% in POS 2041, MAT0024C, MAC 1105 and MAT0012C. There was a negative difference in ENC1101 and only a slight positive difference in MAT1033C.
- Caucasian LinC students also showed variety in course success between LinC and non-Linc. There was a positive difference ranging from 2.9% to 18.6% in ENC1001, MAT1033C, MAT012C, MAC1102 and MAT0024C. There was a negative difference in POS2041.

Percentage difference in course success rates* between LinC and non-LinC students:

	All students	Hispanic	African-Amer	Caucasian
POS 2041	1.1	5.6	12.7	-5.2
MAT0024C	17.0	10.6	20.8	18.6
MAT0012C	8.8	14.9	6.6	5.9
MAT1033C	13.1	0.3	12.2	5.8
MAC1105	11.3	10.7	10.3	11.0
ENC1101	4.9	-.9	8.9	2.9
SLS 1122	9.5	5.8	13.1	10.5

*Success means earned a C or better in the course

While SLS1122 was not a Gateway course, we looked at the LinC and non-LinC course success since so many LinCs included SLS1122 as the second course in the LinC. For all students and for each ethnic/race group, students who took SLS1122 in the LinC format had higher course success rates than non-LinC students in a range from 5.8% (Hispanic) to 13.1% (African-American).

2) Over time, are students who take courses in the LinC format more successful than those who have never enrolled in a LinC?

To answer this question, we compared the persistence rate from term to term of LinC and non-LinC students for each starting cohort. We then averaged the “first to second term”, “second to third term”, “third to fourth term”, etc. persistence rate for the cohorts that could be included based on the number of terms that had passed since they first started and plotted these averages in a line graph. For the purpose of this analysis, only Fall and Spring terms were included since many students traditionally do not enroll in the Summer term for a variety of reasons. The data charts are included in Appendix C.

- The averaging method indicated that LinC students persisted from the “first term to the second term” at a higher rate of 3.5% than non-LinC students.
- This difference in persistence was smaller in the “second to third term” (1.1%) and then widened again from “third to fourth term” (4.5%) and “fourth to fifth term” but got smaller in the “fifth to sixth” term (1.3%). It should be noted that the “fifth to sixth” term only included the first cohort.
- There was a difference in pattern of persistence between the cohorts that started in the Fall term and those that started in the Spring term. Fall term cohorts had higher persistence rates for LinC students from Fall to Spring (6.4%, 9.2%, 2.5%)

than Spring to Fall cohorts (-0.5%, -0.1%). The effect of the being in a LinC course had a greater positive impact on persistence if the students started the LinC in the Fall term.

- An MDRC controlled study of LinC courses at Kingsborough Community College found that LinC students were 5.6% more likely to be enrolled at any college and 4.9% more likely to be enrolled at a two-year college 3 terms after enrollment in LinC. (This would be comparable to our “third to fourth term” measure of 4.5%.) They found only slightly higher persistence for LinC students prior to that term.
- A longer time frame is needed to better understand the impact of LinC courses on student persistence and how that may vary according to the term in which students started the LinC courses.

3) Do students in LinC sections report increased self-direction and connection to college after their LinC experience?

To answer this question, we conducted focus groups of students who were in the LinC course. Four focus groups were conducted that included 33 students. The interview guidelines and top line report are included in Appendix D.

- Students reported that they learned the following skills through the LinC classes: study skills, comfort with public speaking, organization, how to focus, how to manage time, money and relationships, how to collaborate and work as a team, how to network, more about themselves- the way they think and learn.
- Students reported the following ways in which they increased their connection to the college through LinCs: learned how to use Atlas and WebCT, learned to check Atlas “all of the time”, learned about college resources and how to connect to them, met often with an advisor
- Students reported that they increased their goal direction through exploring majors they were shown by the Success Coach, created an educational plan in Atlas, and the exploration paper in SLS1122 focused their goal direction.
- Compared to their other non-LinC classes, students said that the LinC classes made the courses more comfortable and interactive, they bonded more with the faculty and other students, felt it was easier to ask questions, and the faculty kept the course interesting.
- Students who took general education courses as LinCs said that they did not experience the same level of course integration and collaboration as the students who has LinCs that included SLS1122.
- Given that we only included LinC students in these focus groups, it is difficult to separate what students’ learned through LinCs in terms of connection and goal direction from what is normally included in the SLS1122 curriculum.

4) Do faculty and staff who participate in LinC courses report increased professional growth and engagement?

A discussion group was conducted with 15 faculty who have taught courses in the LinC format. The faculty first responded to three questions individually in writing. The faculty group then held a discussion with the same three questions as prompts. Appendix D contains both reports. The main themes were:

- Changes that faculty reported in their teaching practice since they began teaching LinC courses were increased confidence, more flexibility in course material delivery, an integrated lesson that is hands on, incorporating success skills, more attention to student overall development, involving students more in group work, integration of success skills and engagement in all other classes.
- Comparisons between LinC sections and other course sections were LinC courses were more interactive, more challenging, there was more one on one time with students, review time and student feedback in LinC courses, students are more positive, open, engaged, and loud, closer student relationships in the LinC course, and LinC students thought the class would be easier but it is not.
- Faculty describe LinC courses to a colleague as:
 - “LinC is a wonderful experience for staff and students. The bond that has been built between the students and me within the LinC is undeniable. LinC students have the opportunity to truly build and learn within a communal setting.”
 - “The creative process of meshing my teaching style and approach with a partner whom I respect and have much to learn from.”
 - “My description of LinC is great due to the fact that the students really form a group and a team. I think this program is perfect for students who struggle in college.”
 - “It shows students how subjects are integrated. More like real life situations!”

Cost Efficiency Analysis

During 2008, we participated in a Lumina sponsored study called “Making Opportunity Affordable” along with 12 other colleges. The purpose of the study was to develop a planning model that allows colleges to analyze and project the cost and benefit of implementation of new strategies. Based on the increase in year-to-year persistence of students who enroll in the Student Success course (SLS1122), the resource analysis indicated that an additional 277 students were retained (2006-07) and based on the resource costs of the Student Success program, this yielded an additional estimated \$185,501 after total program costs.

While this full cost benefit analysis was not done with the LinC program, 70% of the LinC courses were the SLS1122 course. In our analysis, the course success rates of students enrolled in the LinC SLS1122 course was 13.1% higher than students in non-LinC SLS1122. A case could be made that the LinC program contributes to the positive effect of the SLS1122 course and the additional resources that it generates based on increased student persistence.

Research Limitations:

The student comparison group is understood to be an imperfect control group in that the students were not assigned to the groups through random assignment but rather by student self-selection.

Methodologies that involve subjects' self-reports provide only indirect evidence of program impact. In addition, due to the nature of qualitative research, those research results may not be generalizable.

To answer the second research question, student performance was compared over time. There are, however, many confounding variables operating on the school environment that could cause success measures associated with students enrolled in LinCs to change over time. Confounding variables that could lead to natural fluctuations in performance from year to year and semester to semester include:

- Local economic conditions that would encourage or discourage community college enrollment, persistence, and retention.
- Admission standards, marketing strategies, and the general competitiveness of other colleges in our service area could affect the mix and caliber of students who attend Valencia.
- Our own marketing strategies and evolving mix of programs offered could also affect the mix of students who choose to attend Valencia.
- Improvements in our college and our community that lead to a better learning environment for the students enrolled at Valencia.

Summary and Recommendations:

Students who enrolled in LinC courses successfully completed the courses at higher rates than students in the same courses that were not LinC'd. This effect was even greater for Hispanic and African-American students, the students of particular focus in the AtD initiative. In addition, students in LinC courses had lower course withdrawal rates indicating that more students completed the course, even if they were not successful. This has been suggested as a positive outcome in that it provides additional time for students to learn the course material, even if they end up having to repeat the course to earn a grade of C or better.

Successful completion of developmental courses is a meaningful measure because research indicates that completion of the developmental course sequence correlates highly with eventual degree completion. It has also been shown to be of value in itself in terms of employability and earning potential (McCabe, 2000).

There were some differences in the higher success rates of LinC students among the six Gateway courses. The greatest difference in LinC vs. non-LinC success rates were in the math courses, particularly the developmental math courses. It should be noted that these were the courses that were the initial AtD LinC courses so the effect may be

influenced by improved implementation of the LinC courses due to more experience. This can be evaluated more fully over time.

Persistence is a meaningful measure because it is a correlate of student success in that students cannot make progress towards degree completion if they do not continue enrollment. It is a measure of momentum towards degree completion. On average, students in LinC courses showed higher persistence than students in non-LinC courses in the next term immediately following the LinC. The differences in persistence were not distinct between the two groups in the term after that, but then LinC students showed increased persistence in the next two terms after that (a full 2.5 years after the LinC experience.) These trends merit further study. The average persistence of all cohorts, also masks, however, the differences in persistence in each cohort which were distinct. Fall term cohorts had a different persistence pattern than Spring term cohorts. Similar to the conclusions of the MDRC study of Kingsborough Community College (Scriviner, et.al., 2008), this measure needs further study over time to identify typical patterns.

Student focus groups with LinC students reflected enthusiasm for the experience of relationship building with faculty and peers. Students described the LinC courses as engaging, good pace and interesting, and felt it was easier to ask questions. Students cited specific academic and life skills that they gained from the LinC courses as well as connections they developed with college resources through the LinC courses. Some of the examples they provided are part of the Student Success course content so it may be related to that content rather than the LinC experience itself.

Faculty discussion groups provided specific examples of improved faculty engagement and professional development through the LinC experience. LinC faculty described specific ways in which their LinC courses were more energetic and engaging which created a supportive learning community for students and themselves as faculty.

Although the cost study model was focused on SLS1122 rather than LinC itself, LinC's contribution to the increase in SLS1122 course success coupled with the high number of LinC courses that include SLS1122 suggests that LinC contributes to the additional resources generated from increase student persistence.

For the purposes of data-supported administrative decisions concerning the continuation or expansion of LinC course offerings, the determination of "meaningful improvement" has been discussed as a balance of statistically significant improvement in target quantitative measures, significant improvement relative to a comparative group, economic efficiency in relationship to difficulty of improving the success of students, reflection on the human impact in terms of the goals of the initiative and the mission of the institution, consideration of faculty /staff perception of benefit versus cost and consideration of student perception of benefit.

Based on these factors, the findings of this research report recommend:

LinC Research Report

- the continuation of the LinC courses as an important strategy to increasing student course success, in particular for Hispanic and African-American students.
- Based on these findings, college resources investment (time, effort, budget) in the four mathematics courses (pre-algebra, beginning algebra, intermediate algebra and college algebra) paired with the student success course is particularly promising.
- Among the AtD strategies, LinC is the most complex to implement due to the number of factors requiring coordination including faculty recruitment and pairing, coordination with academic deans and scheduling, faculty development, student promotion and registration, program support during the course, and assessment. Coordination is required at the campus and collegewide levels.

During the AtD initiative, at most 7% of all First Time in College students experienced a LinC course (2007-08). Given the positive effects of LinCs on students and faculty described in this research report, can we imagine the impact on students if we are able to expand LinCs to 25% of all First Time in College students? The cost analysis study suggests that LinCs that include the SLS1122 course, in particular, provide cost benefits that can help with the costs of the LinC expansion. The promising result of this research study compels us to find the courage and the will to do so.

References

McCabe, R. No one to waste: a report to public decision-makers and community college leaders. American Association of Community Colleges, 2000.

Scriviner, S., Bloom, D., LeBlanc, A., Paxson, C., Rouse, C.E., & Sommo, C. A good start: two-year effects of a freshmen learning community program at Kingsborough Community College. MDRC: New York, March 2008.

Appendix A

Term	Campus	crn1	course1	course name	crn2	course2	course name	enrollment
Fall 2006	EC	14096	MAT0012C	Pre-Algebra	18823	SLS 1122	Student Success	24
		14102	MAT0012C	Pre-Algebra	12734	SLS 1122	Student Success	23
		14171	MAT0024C	Beginning Algebra	12709	SLS 1122	Student Success	23
		13875	MAT1033C	Inter. Algebra	12717	SLS 1122	Student Success	24
	WC	11525	MAT1033C	Inter. Algebra	12755	SLS 1122	Student Success	17
		11506	MAT0024C	Beginning Algebra	18837	SLS 1122	Student Success	24
		19262	MAT0012C	Pre-Algebra	19260	SLS 1122	Student Success	21
		12101	MAT0024C	Beginning Algebra	12341	SLS 1122	Student Success	20
	OC	16645	MAT0024C	Beginning Algebra	12349	SLS 1122	Student Success	22
Spring 2007	EC	21332	MAT0012C	Pre-Algebra	20549	SLS1122	Student Success	19
		21336	MAT0012C	Pre-Algebra	20556	SLS 1122	Student Success	16
		22159	MAT0024C	Beginning Algebra	24570	SLS 1122	Student Success	27
		22232	MAT1033C	Inter. Algebra	24573	SLS 1122	Student Success	19
	WC	20458	MAT0024C	Beginning Algebra	23406	SLS 1122	Student Success	29
		20421	MAT0012C	Pre-Algebra	23916	SLS 1122	Student Success	25
	OC	24998	MAT0024C	Beginning Algebra	23411	SLS 1122	Student Success	13
Fall 2007	EC	13693	MAT0012C	Pre-Algebra	14648	SLS 1122	Student Success	25
		12070	MAT0012C	Pre-Algebra	11380	SLS 1122	Student Success	23
		12088	MAT0024C	Beginning Algebra	14649	SLS 1122	Student Success	27
		11016	MAT1033C	Inter. Algebra	11379	SLS 1122	Student Success	27
		12510	ENC1101	Fresh. Comp. I	14530	POS2041	US Government	28
		10344	ENC1101	Fresh. Comp. I	12752	POS2041	US Government	29
		11807	HUM1020	Intro to Humanities	10351	ENC1101	Fresh. Comp. I	29
		13688	HUM1020	Intro to Humanities	13019	ENC1101	Fresh. Comp. I	28

LinC Research Report

<u>Term</u>	<u>Campus</u>	<u>crn1</u>	<u>course1</u>	<u>course name</u>	<u>crn2</u>	<u>course2</u>	<u>course name</u>	<u>enrollment</u>
		12799	HLP1081	Fitness & Wellness for Life	11366	SLS 1122	Student Success	21
		11030	MAC1105	College Algebra	12564	ENC1101	Fresh. Comp. I	30
	OC	15287	SLS1122	Student Success	15213	MAT0024C	Beginning Algebra	22
		11164	MAT0024C	Beginning Algebra	14663	SLS 1122	Student Success	24
		12414	ENC1101	Fresh. Comp. I	11520	SPC1600	Fund. Of Speech	29
	WC	13938	MAT0012C	Pre-Algebra	13936	SLS 1122	Student Success	24
		10822	MAT0012C	Pre-Algebra	11404	SLS 1122	Student Success	31
		13643	SLS 1122	Student Success	15212	MAT0024C	Beginning Algebra	26
		10638	ENC1101	Fresh. Comp. I	10235	HUM1020	Intro to Humanities	27
		11200	POS2041	US Government	10954	SPC1600	Fund. Of Speech	28
		11405	SLS 1122	Student Success	11202	POS2041	US Government	26
	online	13638	SLS 1122	Student Success	13076	MAT0012C	Pre-Algebra	27
Spring 2008	EC	20499	SLS 1122	Student Success	21185	MAT0012C	Pre-Algebra	24
		20506	SLS 1122	Student Success	21188	MAT0012C	Pre-Algebra	24
		23616	SLS 1122	Student Success	24369	MAT0024C	Beginning Algebra	25
		20501	SLS 1122	Student Success	22000	MAT1033C	Inter. Algebra	20
		20365	POS2041	US Government	20081	ENC1101	Fresh. Comp. I	61
		24136	POS2041	US Government	20076	ENC1101	Fresh. Comp. I	0
		20058	ENC1101	Fresh. Comp. I	25466	HUM1020	Intro to Humanities	17
		20105	ENC1102	Fresh. Comp. II	23832	HUM2232	Renaissance and Baroque	28
		23615	SLS 1122	Student Success	22455	HLP1081	Fitness & Wellness for Life	17
		22303	ENC1101	Fresh. Comp. I	20830	MAC1105	College Algebra	16
	OC	25399	MAT0024C	Beginning Algebra	24955	SLS 1122	Student Success	15
		22947	SLS 1122	Student Success	23937	MAT0024C	Beginning Algebra	21

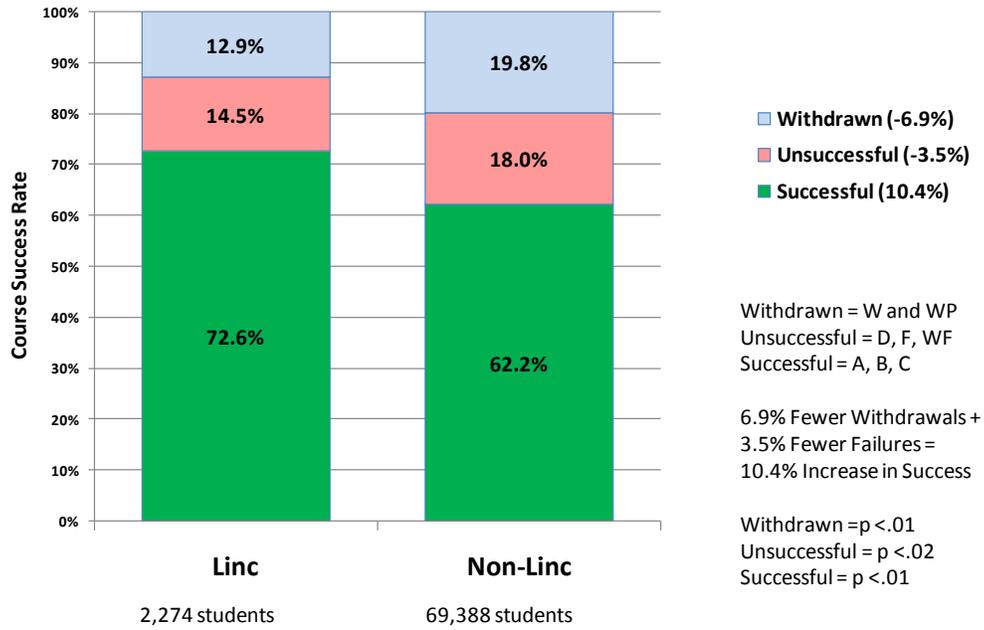
LinC Research Report

<u>Term</u>	<u>Campus</u>	<u>crn1</u>	<u>course1</u>	<u>course name</u>	<u>crn2</u>	<u>course2</u>	<u>course name</u>	<u>enrollment</u>
		21767	SPC1600	Fund. Of Speech	21526	ENC1101	Fresh. Comp. I	25
	WC	23238	SLS 1122	Student Success	20384	MAT0012C	Pre-Algebra	23
		20512	SLS 1122	Student Success	20391	MAT0012C	Pre-Algebra	15
		20418	MAT0024C	Beginning Algebra	22943	SLS 1122	Student Success	28
		21648	SPC1600	Fund. Of Speech	20961	POS2041	US Government	25
		25446	POS2041	US Government	23626	SLS 1122	Student Success	20
	online	23013	MAT0012C	Pre-Algebra	24569	SLS 1122	Student Success	25
Fall 2008	EC	11380	SLS 1122	Student Success	12070	MAT0012C	Pre-Algebra	32
		14649	SLS 1122	Student Success	12088	MAT0024C	Beginning Algebra	31
		11379	SLS 1122	Student Success	11016	MAT1033C	Inter. Algebra	31
		13019	ENC1101	Fresh. Comp. I	13688	HUM1020	Intro to Humanities	30
		11030	MAC1105	College Algebra	12564	ENC1101	Fresh. Comp. I	30
		16330	SLS 1505	Creative Life Skills	11807	HUM1020	Intro to Humanities	29
	OC	15287	SLS 1122	Student Success	15213	MAT0024C	Beginning Algebra	22
		14663	SLS1122	Student Success	11164	MAT0024C	Beginning Algebra	26
		16387	HUM1020	Intro to Humanities	11082	ENC1101	Fresh. Comp. I	32
		11520	SPC1600	Fund. Of Speech	12414	ENC1101	Fresh. Comp. I	24
	WC	16124	SLS 1122	Student Success	10822	MAT0012C	Pre-Algebra	33
		16410	SLS 2930	Student Success	13938	MAT0012C	Pre-Algebra	24
		15212	MAT0024C	Beginning Algebra	13643	SLS 1122	Student Success	30
		14808	SPC1600	Fund. Of Speech	11404	SLS 1122	Student Success	25
		11280	POS2041	US Government	11143	ECO2013	Prin. Of Economics-Macro	38
		11202	POS2041	US Government	11405	SLS 1122	Student Success	28
	online	13076	MAT0012C	Pre-Algebra	13638	SLS 1122	Student Success	25
		16060	MAT0024C	Beginning Algebra	16111	SLS 1122	Student Success	21

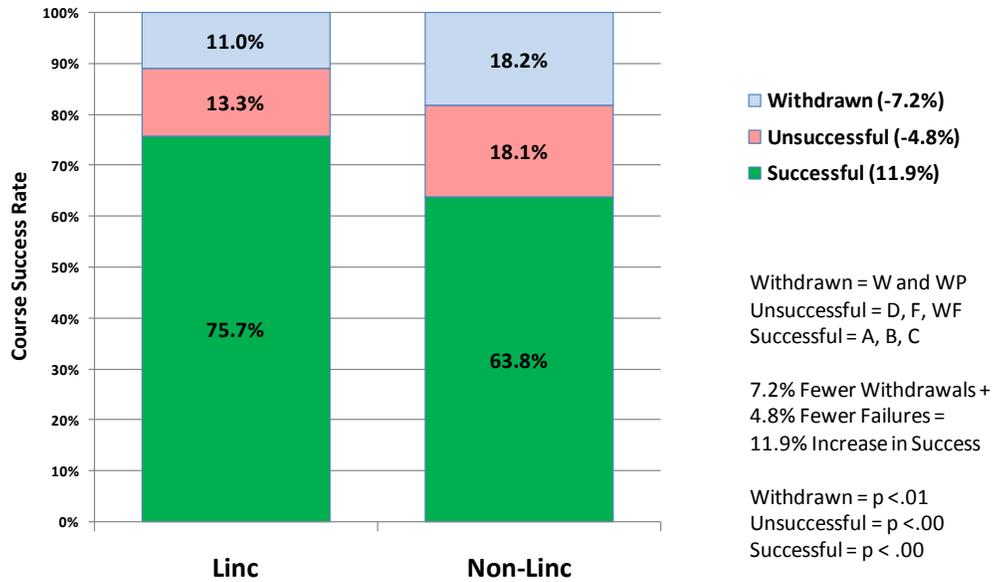
Appendix B

All Students Gateway Course Success Rate

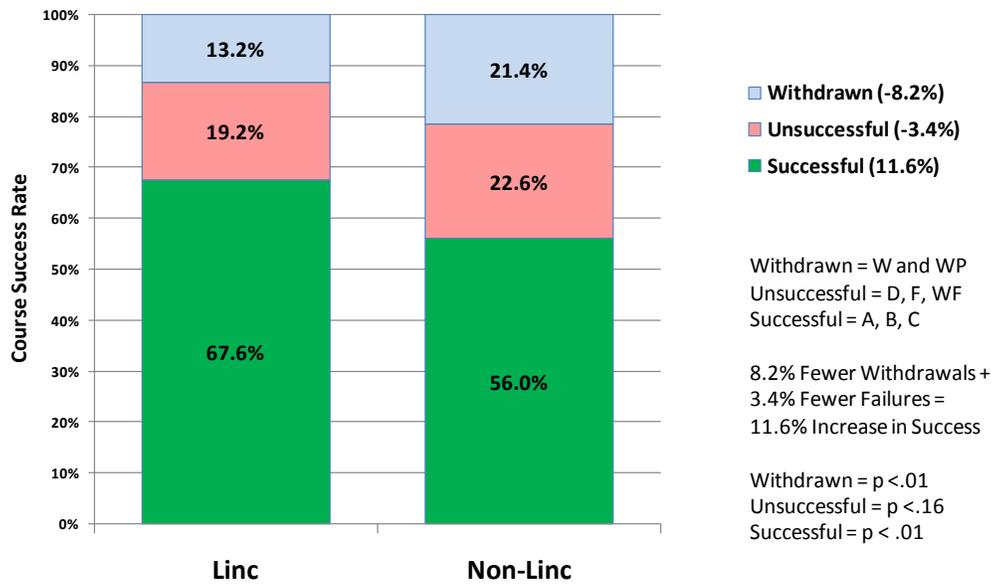
Gateway courses are MAT0012C, MAT0024C, MAT1033C, MAC1105, ENC 1101, POS2041 and SLS1122 (for LinC analysis only)



Hispanic Gateway Course Success Rate



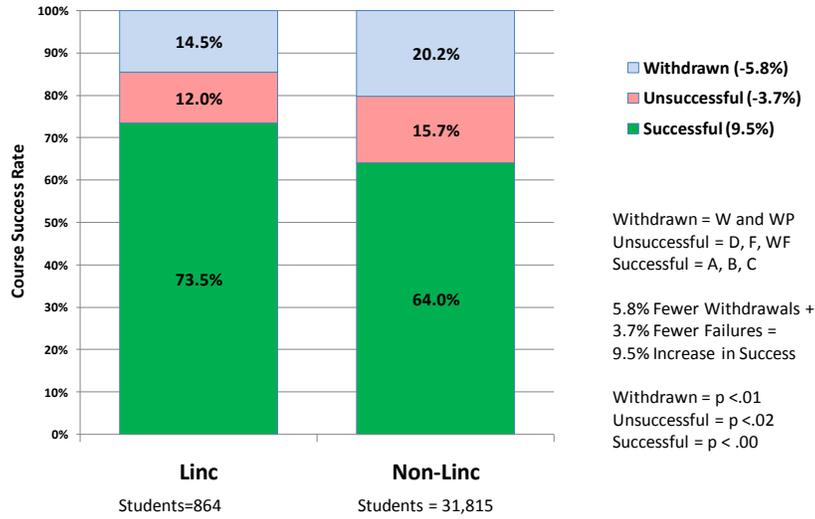
African American Gateway Course Success Rate



LinC Research Report

Caucasian Gateway Course Success Rate

Gateway courses are MAT0012C, MAT0024C, MAT1033C, MAC1105, ENC 1101, POS2041 and SLS1122 (for LinC analysis only)



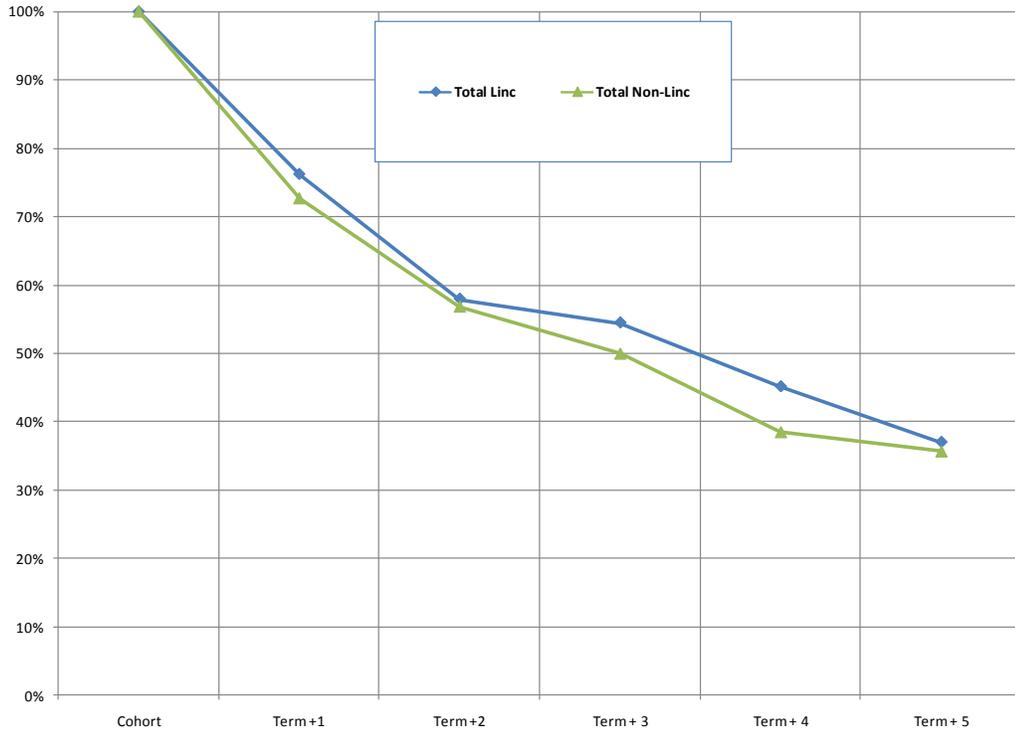
Appendix C

Difference in Retention Term to Term for students in
Linc compared to Non-Linc courses
Fall to Spring to Fall, etc. only (not Summer terms)

	Cohort	Term +1	Term +2	Term + 3	Term + 4	Term + 5
Fall06	0.0%	6.4%	-2.2%	4.0%	-0.8%	1.3%
Spring07	0.0%	-0.5%	1.4%	2.5%	14.1%	
Fall07	0.0%	9.2%	7.6%	7.0%		
Spring08	0.0%	-0.1%	-2.3%			
Fall08	0.0%	2.5%				
Total Difference	100.0%	3.5%	1.1%	4.5%	6.7%	1.3%

LinC Research Report

Major Term to Term Persistence of Student LinC and Non-LinC Cohorts (Fall and Spring terms only)



Appendix D

Valencia Community College Learning in Community Course Discussion Guide

****Note: For moderator's information only –**

Research Questions:

- 1) In what ways, if any, did enrollment in the LinC program increased students' connection to the college and increased goal-direction?
- 2) In what ways, if any, did the LinC classroom experience affect the students' academic, personal, and/or affective development?
- 3) In what ways, if any, did the LinC classroom experience differ from experiences in non-LinC courses?

Introduction:

- Describe
 - Role as moderator – need for frank and honest feedback, information confidential and anonymous, etc.
 - Aspects of the process and facility (set-up, people involved, etc.)
 - Rules of conduct
 - Everybody talks and participates
 - Try not to talk at the same time
 - Keep in mind that I am independent as the moderator
 - I have to follow this guide
 - Respondent Introduction (name, age, and year in school)
- We're here to find out about what influenced you in your decision to go to college and your decision to go to Valencia.

Establishing Context:

- **Their Story**
 - What motivated you to attend college?
 - What were your criteria or what were you looking for in a college?
 - What reservations, if any, did you have about choosing Valencia or other colleges?
 - What ultimately led you to choose Valencia?
 - How prepared did you feel to attend college?
- **Experience with Selection of LinC courses: " I believe that all of you took LinC Learning in Community) courses? "(Verify this with them, clarify what that is in case they don't recognize the name) Notetakers: please take note of how many do not remember taking a LinC course.**
 - When did you first hear about LinC courses?

LinC Research Report

- What did you know about LinC courses before you registered in them?
- What impact, if any, did the LinC courses have on your decision to attend Valencia?
- What expectations, if any, did you have prior to taking the LinC courses?
- What, if anything, did you expect to experience by taking the LinC courses?
- What were the 2 courses you took?
- How did you feel about taking these courses in the LinC format?

Early Experience with LinC courses:

- Think back to the first week of class. You may not remember everything. Try to reflect back to that time.
- What do you remember about how the LinC format was introduced to you by the faculty?
- What, if anything, did you like about the first week of class?
- What, if anything, did you not like about the first week of class?
- How was the first week of class the same as other classes you've taken?
- How was the first week of class different than other classes you've taken?

Experience of the course:

- What, if anything, did you learn in the class?
- What would you say was the most beneficial to you?
- In what ways, if any, did the course change your way of thinking?
- **(If they don't mention it, probe on this along the dimensions of: connection to the college, goal-direction, change in the academic, personal and affective development)**
- What was your experience with the pace of the course? (the amount of time spent on each subject area)

After the course:

- How would you describe the class to a friend?
- What advice would you give to another student who was about to take a LinC course?
- What advice would you give to the faculty who teach LinC courses?

Wrap Up:

(Ask the students to take a few minutes, without you interfering, to write down their thoughts to this question):

- Would you like to take more courses in the LinC format?
- If yes, what courses would you suggest for a LinC?

(After sufficient time to write their answers, inquire what they wrote and probe):

- Why would you make those changes ?

Valencia Community College

Topline Summary of Response

**Learning in Communities (LinC) Students:
Qualitative Discussions with Students**

March 6, 2009

Achieving the Dream Data Team

INTRODUCTION

Valencia Community College is evaluating student reactions about the impact of Learning in Communities (LinC) courses on student learning. Qualitative research was conducted to explore the perceptions about the effectiveness of LinC. Four 90-minute discussions were held with students who enrolled in LinC courses from Fall 2006 to the Spring 2009. The sessions seated 6-10 students each and were held in the Spring of 2009.

The four groups consisted of a total of 33 participants with the following demographic breakdown: xxxxxx. During the recruitment process students were screened for eligibility and variation in demographics. They were informed only that the discussion would be focused on a topic related to education, that participation was voluntary with a monetary compensation of \$50.

Representatives of the Data Team recruited the students from contact data provided by the Office of Institutional Research. Students were selected based on their registration in LinC course section. Contact was made via email and telephone. The sessions were moderated by Roberta Brown, Joyce Romano, Elisha Gonzalez-Bonnewitz, and Maryke Lee. Jenelle Conner and Megan Elder served as the note takers. The following summary was prepared by Roberta Brown using information provided by the moderators and note takers.

Caveat--

The findings presented here are offered on the basis of responses heard from a limited number of students. Qualitative research is directional in nature, intended to uncover and explore issues but not measure their prevalence in the population. Therefore, the findings here are not intended to be projected to the population. Rather, these insights should be considered carefully and in context with other strategic information.

- 1) **In what ways, if any, did the LinC classroom experience differ from experiences in non-LinC courses?**
 - Most of the reactions to the LinC experience were positive. However, differences surfaced based on the following variables:
 - Age: traditional or first-time in college vs. non-traditional or returning
 - Courses: SLS and math vs. other combinations (Gen Ed, etc.)
 - Level of integration and collaboration of subjects and instructors
 - Students who were first-time in college, in the SLS LinCs, and/or had instructors that worked well together were very positive about their experience:
 - More work than other classes but the pace was good and the instructors kept it interesting
 - Bonded with the instructors more than in other classes
 - Felt more comfortable than in other classes
 - Made more friends or bonded with students more than in other classes
 - Felt it was easier to ask questions
 - **One** student had taken it online, however, and was not impressed at all by the experience (found it “blah”) and didn’t like having to take SLS. He was also a non-traditional student.
 - Students who took general education courses as LinC’s described the experience as:
 - Being a lot of hard work
 - Often did not feel the same level of integration and collaboration as described by students in the SLS LinCs
 - Many of these students would have preferred to have taken the classes separately **OR** if they did appreciate the experience still would not be interested in taking another LinC
 - A difference identified by all students was the length of time in class. Most students described it as an element of the experience that they did not like regardless of their overall opinion about LinCs.
 - However, several students appreciated the convenience of the back-to-back scheduling and the fact that the location stayed the same.
- 2) **In what ways, if any, did the LinC classroom experience affect the students’ academic, personal, and/or affective development?**
 - Many students mentioned the following as skills they developed in their LinC classes:
 - Study skills
 - (More) comfort with public speaking
 - Organizational skills
 - How to manage time, money, and relationships
 - How to be a “good student” and focus

- Several students mentioned learning:
 - More about themselves: the way they learn and the way they think
 - How to collaborate and work as a team
 - How to network

- 3) **In what ways, if any, did enrollment in the LinC program increase students' connection to the college and increase goal direction?**
 - Many students mentioned the following ways in which they increased connection to the college:
 - Learned how to use WebCT and ATLAS
 - Trained to check ATLAS “all the time”
 - Learned about scholarships, events and activities going on at Valencia
 - Learned about college resources and how to connect to them
 - Meet often with an advisor
 - Many students mentioned the following as ways in which they increased goal direction:
 - Exploration paper helped focus direction of their goals and prepare for next steps
 - Previously did not have a major but was shown options by the advisor (success coach)
 - Created an educational plan in ATLAS

****Note:** Many of the students that identified ways in which they increased connection and direction were in SLS LinCs. However, ways in which students developed personally, academically, and affectively were described by many students regardless of the type of LinC.

Appendix E

LinC Reflection

Individual

1. **What changes, if any, have you experienced in your teaching practice since you began teaching LinC Courses?**
 - Incorporating more success skills and finding new ways to include study habits as a way to earn points.
 - More confidence.
 - N/A
 - I'll try to make my classes less structured.
 - More flexible in course material delivery.
 - The changes I have experienced are I have learned how to better work in a team due to having a partner. I have grown used to teaching alone. I have learned I need to run ideas through my partner first, in doing so the idea improves.
 - Placed lecture notes on web-page - Brought in more real world experiences.
 - The integrated lesson with a "hands - on" activity.
 - More focused on the creative process and ways that students can engage actively in their own creative.
 - First real collaboration w/ another faculty, ever. More attention to student overall development.
 - I have used this technique in all my classes. I have found I've increased the percentage of students not withdrawing and have raised many of their grades.
 - Accessing my creative energies such that, I utilized skills that were dormant, i.e. Flowcharting for concepts.
 - (Blank)
 - Making my students more involved in group work class inside.
 - Working on becoming more structured and serious.

2. **What comparisons, if any, can be made between your LinC sections to your other sections?**
 - LinC sections are definitely more interactive. Students generally feel much more comfortable asking questions. Also, typically

the LinC class is ahead of schedule and I have more time to cover material thoroughly.

- More one on one time with the students. More student feedback. More review time.
- LinC is a wonderful opportunity for students. - N/A
- The students in the LinC seemed to be more positive and interactive.
- I know the students much better. They come to office hours!
- My LinC section is definitely more active and talkative. They have not just bonded, but hyper bonded. It is great to watch a family being formed. They truly become a family with issues and successes, but at the end they all care about each other and they want each other to succeed.
- More lively discussions - Students worked together well and developed a bond (partnership).
- The students are more engaged in the classroom and with each other. Students study together more.
- Team-teaching makes a huge difference from self-taught sections.
- LinC section is more fun, more relevant for students, more resonant for students. I see students growing and maturing.
- The math section that is LinCed to student success has a better performance record.
- More challenging but the opportunity to see the exponential learning capacity of my students.
- (Blank)
- I have more involvement in my classes. I implement more “Peer to Peer” lectures.
- Student relationships have been closer (in LinC classes) both academically and personally. Students actually want to help one another.

3. How would you describe LinC to a colleague?

- LinC is two Classes back-to-back in the same room team-taught by two instructors. It provides an atmosphere where students get to know each other, themselves, and their instructors better. Particularly with student success as one of the LinC courses, it provides a way to incorporate those skills more directly into the other subject.

- Two classes, two teachers integrated lessons in a two and a half hour time slot.
- LinC is a wonderful experience for staff and students. The bond that has been built between the students and me within the LinC is undeniable. LinC students have the opportunity to truly build and learn within a communal setting.
- The most bestest person in the whole wide world.
- Great!
- My description of LinC is it is great due to the fact the students really form a group and team. I think this program is perfect for student who struggle in college.
- Knowledgeable - Fun and enjoyable.
- A wonderful experience. I have learned so much from my LinC partner.
- The creative process of meshing my teaching style and approach with a partner whom I respect and have much to learn from.
- Awesome partner. Brilliant collaborator. We worked well together - looking forward to deeper integration next semester.
- It shows students how subjects are integrated. More like real life situations!
- This is a well developed, coordinated effort that is instrumental in providing remedial studies that has proven to be a catalyst for successful students at Valencia and 4 yr universities!
- It is the most challenging faculty development experience that I have ever been involved in. Faculty, who are willing to be transparent in their work, should apply.
- LinC is an excellent way to develop as a professor you learn a lot from yourself and your students.
- I had a great partner. It has been a great opportunity to work with another faculty member and share what we know and have yet to learn. I was very fortunate to work with someone who could point out my strengths as well as weaknesses.

LinC Reflection

Group

1. **What changes, if any, have you experienced in your teaching practice since you began teaching LinC Courses?**
 - Flexibility - Strengths
 - Structure - of partner
 - The other's content is becoming part of my own expertise.
 - Big Picture moments - apply to other courses.
 - Mindful of time * catch-up.
 - Looking at content I teach differently... Looking for real world.
 - Less worried about content that is not my own (leave it to professionals).
 - Now integrate SLS in all courses - this has increased retention. Build Community in all classes.
 - All notes are now on-line (learned it from LinC partner) - Faculty front door - all classes.

2. **What comparisons, if any, can be made between your LinC sections to your other sections?**
 - Group Work > Stronger groups.
 - Out of class student connection - study buddies.
 - Louder, more active.
 - More engaged in campus culture (not shy).
 - Will share no inhibition.
 - Our students don't go away. They come to office hours.
 - Students are much more engaged and collaborate more.
 - Applied to.
 - Focus in science classes id misplaced.
 - Reg. sections.

 - LinC students thought it would be easier but it was not.

3. **How would you describe LinC to a colleague?**
 - Rewarding...
 - Excellent learning experience for you as an instructor and what your students are really like.

LinC Research Report

- Students share things with me out side of class... Coach has impact on students - Not Professor.
- Helps students to perform better in college.
- Integration of materials - courses
- Connection between 2 sections and bring it to real world.
- Good - learned a lot from the process and learned from my LinC partner.