

Running Head: SUPPLEMENTAL LEARNING

Supplemental Learning (SL) Research Report

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Achieving the Dream Data Team

Valencia Community College

Institutional studies, including the nationwide data compiled and analyzed by the Center for Academic Development at University of Missouri, Kansas City (UMKC) have demonstrated that across institutional types, disciplines, precollege student preparation levels, and ethnic groups, students that participate in Supplemental Instruction (SI) consistently outperform their peers who attempt the same classes without SI (Blanc, DeBuhr & Martin, 1983; Congos & Schoeps, 1993; Kenney, 1989; Lundeberg, 1990; Martin, Arendale, & Associates, 1992, 1994; Martin & Blanc, 1991; National Center for Supplemental Instruction, 1995, 1996; Wolfe, 1987). With UMKC's national model clearly established and its effectiveness repeatedly confirmed, institutions seeking to address special needs have been encouraged to adapt the program model in ways that address those needs (Ramirez, 1997).

Since 1998 Valencia has experimented with several versions of SI or Supplemental Learning (SL) on each of its four campuses. The Achieving the Dream (AtD) Initiative proposed to expand the Supplemental Learning (SL) program as one of the initiative's three strategies to "close the gaps" in student achievement for underprepared and minority students. Course sections with an SL component were implemented to support developmental mathematics (Pre-Algebra, Beginning Algebra and Intermediate Algebra), and three other high enrollment gateway courses (Freshmen Composition I, U.S. Government, and College Algebra).

SL is a learning strategy, based on the SI model, focused on increasing student success in a specific course by training a model student who has been successful in that same course to supplement the instruction provided by the course instructor. The model student or SL leader is available inside and outside of class to help students. The SL

leader acts as a coach for those taking the course, offering advice and encouragement on note taking, test taking, and other study skills and strategies in small-group sessions (SL sessions) held outside of class (Boylan, 1999). The findings of how incorporating the SL component impacts student success will be discussed in this research report.

College-wide Implementation

Implementing and evaluating the SL strategy presented challenges due to the unique environment on each of Valencia's four campuses. For this reason, each campus was allowed to develop the SL program differently in order to accommodate existing programs and in order to ensure that the strategy could be effective. However, college-wide training, guiding principles and coordination have remained consistent. A team attended Supplemental Instruction Supervisor training at the University of Missouri-Kansas City. Based on this training, Valencia used a "train the trainer" model to scale up the program college-wide. This foundational work led to the formation of an SL college-wide team consisting of a College-wide coordinator and Campus Coordinators who manage the implementation of the SL strategy. The following is a description of how SL works on each of Valencia's campuses.

East Campus Implementation. SL leaders are hired based on professor recommendations and an interview. Leaders are considered to be qualified if they have earned an "A" or "B" and are two semesters out from the course they will be leading. New hires must attend a large, 6-hour, group orientation with other new tutors at the start of the term for which they are hired. At the end of the 6-hour orientation, the new hires and the SL veterans meet with the SL coordinator for 2 additional hours to discuss SL specifics and the upcoming semester. Throughout the term, leaders meet with the

coordinator for training and announcements every other week. For scheduling, professors who request a leader (sometimes a specific leader) choose first. Then, the remaining leaders get to choose their SL courses. Often, because of SL leader interest, new professors are recruited. Leaders are paid for and responsible for class time (3 hours), session time (2 hours), and an additional hour spent planning sessions. Prep Math leaders are also paid for assisting during the lab hour. East campus SL leaders hold two 50-minute sessions directly before or after class in “SL Headquarters” or one of two other designated SL rooms in Building 4. The times of sessions are determined based on a class survey in order to capture as many students as possible. Leaders must accomplish a predetermined list of session topics (mostly learning strategies) by the end of the term. Leaders are observed and evaluated each term.

Osceola Campus Implementation. The Osceola SL leaders hold the SL sessions before class, are in the classroom during the class, and hold an SL session after the class. The class schedule is set up to accommodate this structure. The SL leader holds SL sessions in the tutoring center, Math Depot (developmental tutoring center), or in a classroom (preferably in the same class) for about 30 to 45 minutes before and after class. The SL leader will also be in the classroom for 15 minutes before and after class for quick questions and for establishing connections with the students. Throughout the entire semester, the SL process is supported by the Campus Coordinator and ongoing training is conducted through training modules and e-mail through WebCT.

West Campus Implementation. SL Leaders on West apply by getting in touch with the coordinator. The SL leaders are referred by fellow faculty. Usually, the SL leaders are assigned to faculty who recommended them. New SL Leaders are also recruited by

SL Leaders who knew them from SL classes. The coordinator interviews the potential SL leader in his office, verifies that they have taken the SL courses they may be assigned to, and inquires about their study habits and communication skills. All SL Leaders, whether they are new or senior, are required to attend training sessions that occur the week prior to the beginning of the semester. There are two sessions: one two hour session for SL Leaders and another two hours session for SL faculty. Last semester, a single session was organized for all the employees (Lab instructors, staff and faculty) that use the Math and Communication labs on West campus. This event was followed by a 6 hour session with SL Leaders only.

SL Leaders are required to attend all sessions of their SL class except for sessions during which the class is taking a test, unless faculty requires the Leader to take the test as well. SL Leaders distribute their load of SL sessions as they please after first polling the class about the best time for SL sessions. SL sessions may or may not occur right before or after class. SL Leaders are strongly encouraged to "catch" students right before or right after class. They are also encouraged not to schedule sessions during the instructor's office time. Leaders are also encouraged to change their scheduled SL sessions if they notice students are not coming.

In order to discourage one-to-one interaction between SL Leaders and an SL student that would resemble a tutoring session rather than an SL session, SL Leaders are required to limit sessions to one hour if only one person shows up. SL Leaders end their session after one half hour if nobody shows up. SL Leaders keep an attendance log, but are free to organize their SL sessions as they please unless faculty have particular activities devised for SL sessions. Prep Math SL Leaders are not imbedded within

laboratory components, but are invited to hold sessions in the Math lab, so they can monitor groups of students at the computers.

The coordinator meets with SL Leaders once every two weeks for one hour. Depending on the semester, and in order to catch as many SL Leaders as possible, the meeting may occur twice during that week at different time frames. The agenda covers outstanding issues and discussion items. The coordinator tries to visit SL sessions in person throughout the year. Some of the faculty also visit SL sessions.

Winter Park Implementation. On the Winter Park campus, SL is used in MAT 0012 and MAT 0024 day classes. Training is conducted at the beginning of each term, and the coordinator meets twice a month with the SL leaders for discussions and training. We are fortunate that SL's can have their sessions in the same room as the class. They meet twice a week: either an hour before or after class or one-half hour before and one-half hour after.

Hypothesis

Students enrolling in courses with a Supplemental Learning component demonstrate increased success within the course and in future courses.

Research Question

Have students enrolled in courses with a Supplemental Learning demonstrated greater success than students enrolled in courses without Supplemental Learning?

Research Groups

1. Treatment Group: Students enrolled in course sections with an SL component
2. Comparison Group: Students enrolled in courses sections without an SL component

Methodology

In spite of population differences between the treatment and comparison group, the effects of variables such as the economy, other AtD and college initiatives, etc. should be similar. Our research will compare the performance of students in SL courses with the performance of students enrolled in the same courses taught by the same instructors without the SL component. These groups will be examined over time from Spring 2006 to Fall 2008.

Rationale for the Research Methodology

As mentioned, national research studies have consistently found that students participating in Supplemental Instruction outperform their peers that do not participate in SI. Achieving the Dream data collected at the end of each term also substantiates a claim that students that participate in SL sessions outperform their peers in the same courses that do not attend SL sessions (see Appendix A). The AtD data team hypothesized that there may also be some additional academic and developmental benefits for students that are simply enrolled in SL courses. In pursuit of a broader vantage point, employing this methodology allows one to more clearly examine the overall Supplemental Learning experience. It attempts to control for the variability of teaching methodology and experience of instructors by comparing instructors with themselves, with and without Supplemental Learning in their classrooms. This comparison does not critique an individual instructor's performance, but rather allows for a comparison of student performance with and without the SL component in a similar classroom environment. This methodology also allows for reduced bias of student self selection as students may or may not be aware that they have registered for an SL course.

Research Limitations

1. Attendance data is manually reported. While the process has become more efficient and uniform over time, it still relies upon SL leaders to keep track of students attending sessions and to be responsible for reporting that information.
2. Supplemental Learning is a voluntary program. Although students are recruited in a variety of ways to register for SL supported courses, it does not guarantee that they will attend the SL sessions. There are also students that enroll in SL supported courses without being aware of the SL component prior to the first day of attendance.
3. Results from qualitative research from the focus groups may not be generalizable due to the number of participants in a focus group and the nature of qualitative research.
4. Enrollment in an SL section does not guarantee participation in an SL session because students are not required to attend SL sessions on all campuses.
5. Each campus has a different SL coordinator and implements SL according to the needs of its student population.
6. The instructors in the SL sections have varying teaching methodologies, and, therefore, may be providing differing learning environments for their students. The instructors may also have different levels of commitment to and participation in SL.
7. The skills and levels of experience of the SL leaders may vary.

Measures

Quantitative Analysis. The Supplemental Learning (SL) strategy was evaluated by doing a matched pairs analysis comparing the two research groups: sections with SL and sections without SL. This analysis used cumulative Fall, Spring, and Summer data to

analyze trends for each term respectively. Starting with Spring 2006 and continuing through Fall 2008, the following measures for analysis were used:

- Success (earn grade of A, B, or C)
- Unsuccess (earn a grade of D, F, WF)
- Withdrawal (earn a grade other than W or WP)

The analysis was validated by determining the statistical significance of the mean difference between pairs. These measures were also broken down by ethnic group in order to evaluate the success gaps that are part of the Achieving the Dream initiative (African-American, Caucasian, and Hispanic).

Results. In each term, average success rates were higher for SL sections, and average unsuccess and withdrawal rates were lower for SL sections. The statistical significance of the results varied based upon term, course, and ethnicity of student (see Appendix B). However, Fall success rates were significantly different for SL sections (+6% success, $p < .001$; -2.5% unsuccess, $p < .10$; -3.4% withdrawal, $p < .001$) for all ethnicities and all courses with one exception (*). Of particular interest are the results for the targeted populations observed as follows:

- African American students
 - All courses: 10.36% higher ($p=0.029$)
 - Developmental: 8.53% higher (* $p=0.167$)
 - Gateway: 15.65% higher ($p=0.019$)
- Hispanic students
 - All courses: 7.07% higher ($p=0.007$)
 - Developmental: 7.59% higher ($p=0.025$)

- Gateway: 6.65% higher (p=0.099)

An additional quantitative measure, persistence, was also analyzed for the SL and non-SL sections. This measure was tracked by cohort through each subsequent term (excluding the Summer term). The following results were observed:

	Term + 1	Term + 2	Term + 3	Term + 4	Term + 5	Term + 6
Spring 06	8.8%	6.4%	5.3%	5.7%	0.4%	-0.1%
Fall06	2.4%	4.2%	1.1%	3.1%	-0.3%	
Spring07	1.2%	1.3%	1.5%	-0.8%		
Fall07	-0.9%	2.6%	1.9%			
Spring08	2.3%	3.7%				
Fall08	3.2%					
Average Difference	2.8%	3.7%	2.5%	2.7%	0.0%	-0.1%

- On average, students enrolled in the SL sections had higher persistence rates.
- As the size of the cohorts increase, this effect appears to lessen.
- The difference in persistence rates between SL and non-SL students decreases over time.
 - This analysis, however, does not account for graduation.

Student Focus Groups. Four 90-minute discussions (see Appendix C) were held with students who enrolled in a course with Supplemental Learning from Fall 2006 to the Fall of 2008. The sessions seated 9-11 students each and were held in the Spring of 2009. The moderator observed repetition of student feedback indicating saturation; therefore, it was not necessary to hold additional focus groups.

The four groups consisted of a total of 39 participants (19 Female, 20 Male) with the following ethnic breakdown: 15 Caucasian, 9 African American, 7 Hispanic, 2 Middle Eastern, 2 Native American, 2 Other, 1 Brazilian, and 1 Haitian. 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.

Research Questions

- 1) How would students describe the SL experience?
- 2) What are the factors affecting student attendance at SL sessions?
- 3) What are the academic and other supplementary benefits of being in an SL course?

Results

- 1) Overall, students described the SL experience as positive, and felt that attending SL sessions helped their academic performance
- 2) Students that did not attend SL sessions gave two major reasons:
 - o time of session conflicted with work or other courses
 - o felt confident in their own ability and did not need the help
- 3) The following benefits of SL were reported:
 - o learning study skill strategies
 - o awareness of additional resources (CompHouse, SPA, etc.)
 - o increased comfort with in-class participation and instructor interaction

The full length focus group report is attached (see Appendix D).

Summary and Recommendations

As noted, each campus has implemented and developed their Supplemental Learning program in a way that best fits the needs of their student population and works most efficiently with campus elements such as course lab components, room availability, etc. While training, content, and guiding principles remain consistent, these differences in campus implementation and support may make it difficult to scale up Supplemental Learning as a collegewide strategy, and may also contribute to the differences in student participation by campus.

Based upon the quantitative analysis conducted on Supplemental Learning, it appears that the effect of the program as a student success strategy varies depending on term, course, and student ethnicity. It was observed that the most significant effect occurs during the fall semester (+6% success, $p < .001$; -2.5% unsuccess, $p < .10$; -3.4% withdrawal, $p < .001$), regardless of course or student ethnicity. This difference in average success, unsuccess, and withdrawal was statistically significant ($p < .10$) for all instances with one exception (African American students in developmental math SL sections: 8.53% higher, $p = 0.167$). The smaller sample sizes during the Spring and Summer terms may contribute to the absence of statistical significance in the differences observed.

Student feedback about the SL program was overall positive. The focus groups were conducted with three research questions in mind and student feedback provided valuable information for all three questions. Of particular interest, students indicated that a major reason for non-attendance at sessions is scheduling conflict. Consequently, information about the scheduling of SL sessions at the time of registration may increase student participation in the sessions. In consideration of student participation numbers

(see Appendix E) data also suggest that further study is needed on the cost of the program versus student participation.

Student performance and attendance appear higher in developmental math sections, but anecdotal evidence suggests that SL would be an effective component of gateway and other courses. Currently, measures related to SL in the gateway courses are moderately increased in comparison to non-SL sections. This may be related to fewer section offerings, differing levels of administrative support, differing campus implementation, and a shorter length of implementation. Additional research is necessary to determine how to implement SL more effectively in Gateway courses.

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Attachments

- Appendix A: End of Term Data for Supplemental Learning by Attendance
- Appendix B: Table of Results for Matched Pairs Analysis of Academic Success
- Appendix C: Supplemental Learning Focus Group Discussion Guide
- Appendix D: Supplemental Learning Focus Group Topline Report
- Appendix E: Student Participation in Supplemental Learning by Term and Year

Appendix A

Collegewide	SL Course			Non-SL Course			SL attended			SL non-attended			% attendance
	Successful	Total	%	Successful	Total	%	Successful	Total	%	Successful	Total	%	
African American	123	242	51%	830	1637	51%	55	88	63%	68	154	44%	36%
Caucasian	335	510	66%	1429	2456	58%	134	193	69%	201	317	63%	38%
Hispanic	234	361	65%	1352	2294	59%	117	170	69%	117	191	61%	47%
Other	127	192	66%	580	1036	56%	52	72	72%	75	120	63%	38%
Grand Total	819	1305	63%	4191	7423	56%	358	523	68%	461	782	59%	40%

East	SL Course			Non-SL Course			SL attended			SL non-attended			% attendance
	Successful	Total	%	Successful	Total	%	Successful	Total	%	Successful	Total	%	
African American	36	56	64%	256	494	52%	15	22	68%	21	34	62%	39%
Caucasian	150	204	74%	748	1265	59%	63	85	74%	87	119	73%	42%
Hispanic	96	142	68%	561	971	58%	44	67	66%	52	75	69%	47%
Other	39	58	67%	247	420	59%	18	28	64%	21	30	70%	48%
Grand Total	321	460	70%	1812	3150	58%	140	202	69%	181	258	70%	44%

West	SL Course			Non-SL Course			SL attended			SL non-attended			% attendance
	Successful	Total	%	Successful	Total	%	Successful	Total	%	Successful	Total	%	
African American	51	112	46%	449	920	49%	19	32	59%	32	80	40%	29%
Caucasian	70	115	61%	395	736	54%	16	24	67%	54	91	59%	21%
Hispanic	39	62	63%	271	543	50%	9	16	56%	30	46	65%	26%
Other	36	62	58%	209	412	51%	6	10	60%	30	52	58%	16%
Grand Total	196	351	56%	1324	2611	51%	50	82	61%	146	269	54%	23%

Osceola	SL Course			Non-SL Course			SL attended			SL non-attended			% attendance
	Successful	Total	%	Successful	Total	%	Successful	Total	%	Successful	Total	%	
African American	23	38	61%	106	182	58%	15	22	68%	8	16	50%	58%
Caucasian	37	58	64%	213	329	65%	31	45	69%	6	13	46%	78%
Hispanic	86	127	68%	499	740	67%	62	81	77%	24	46	52%	64%
Other	32	41	78%	111	175	63%	21	26	81%	11	15	73%	63%
Grand Total	178	264	67%	929	1426	65%	129	174	74%	49	90	54%	66%

Winter Park	SL Course			Non-SL Course			SL attended			SL non-attended			% attendance
	Successful	Total	%	Successful	Total	%	Successful	Total	%	Successful	Total	%	
African American	13	36	36%	19	41	46%	6	12	50%	7	24	29%	33%
Caucasian	78	133	59%	73	126	58%	24	39	62%	54	94	57%	29%
Hispanic	13	30	43%	21	40	53%	2	6	33%	11	24	46%	20%
Other	20	31	65%	13	29	45%	7	8	88%	13	23	57%	26%
Grand Total	124	230	54%	126	236	53%	39	65	60%	85	165	52%	28%

Appendix B

	Success		Unsuccess		Withdrawal		Instructors (N)	Students (N)	
	Difference	p-value	Difference	p-value	Difference	p-value		SL	Non-SL
All Targeted Courses									
By Ethnicity -- Fall									
AA	10.36%	0.029	-7.75%	0.065	-2.58%	0.484	64	506	797
Hispanic	7.07%	0.007	-4.46%	0.01	-2.68%	0.186	64	941	1530
Caucasian	6.75%	0.004	-2.19%	0.182	-4.61%	0.005	65	1346	2035
All	5.88%	< .001	-2.53%	0.015	-3.40%	0.001	65	3290	5157
By Ethnicity -- Spring									
AA	-1.03%	0.782	2.36%	0.457	-1.31%	0.668	59	555	752
Hispanic	3.44%	0.324	-4.70%	0.151	1.35%	0.658	63	752	1075
Caucasian	4.14%	0.13	-1.55%	0.52	-2.61%	0.142	64	1268	1576
All	3.27%	0.072	-2.52%	0.075	-0.89%	0.431	64	3029	3936
By Ethnicity -- Summer									
AA	8.65%	0.21	-13.43%	0.018	4.66%	0.395	32	206	283
Hispanic	3.62%	0.547	-5.45%	0.321	1.87%	0.804	31	236	299
Caucasian	1.03%	0.853	-4.00%	0.284	3.00%	0.611	33	342	469
All	3.68%	0.202	-3.03%	0.206	-0.58%	0.82	34	966	1232
Developmental Courses Only									
By Ethnicity -- Fall									
AA	8.53%	0.167	-4.83%	0.394	-3.16%	0.353	41	339	406
Hispanic	7.59%	0.025	-3.46%	0.089	-4.07%	0.162	41	571	727
Caucasian	5.37%	0.091	0.61%	0.786	-6.07%	0.015	41	736	805
All	4.95%	0.002	-0.32%	0.793	-4.66%	0.001	41	1894	2223
By Ethnicity -- Spring									
AA	-4.09%	0.372	3.42%	0.374	0.70%	0.838	43	440	495
Hispanic	1.38%	0.753	-5.07%	0.283	3.73%	0.34	42	508	604
Caucasian	3.84%	0.272	0.19%	0.955	-4.07%	0.068	43	787	854
All	3.02%	0.162	-4.51%	0.312	-1.28%	0.314	43	2012	2222
By Ethnicity -- Summer									
AA	10.56%	0.202	-12.05%	0.119	1.34%	0.861	18	129	140
Hispanic	4.11%	0.654	-11.94%	0.213	7.77%	0.52	17	114	125
Caucasian	2.00%	0.792	-8.39%	0.174	6.50%	0.454	18	181	188
All	5.79%	0.137	-5.42%	0.178	-0.37%	0.924	19	506	512
Gateway Courses Only									
By Ethnicity -- Fall									
AA	15.65%	0.019	-14.42%	0.007	-1.11%	0.807	26	167	391
Hispanic	6.56%	0.099	-6.55%	0.031	-0.26%	0.924	27	370	803
Caucasian	7.93%	0.009	-6.96%	0.001	-0.93%	0.61	27	610	1230
All	6.71%	0.004	-6.40%	<.001	-0.52%	0.711	27	1396	2934
By Ethnicity -- Spring									
AA	8.40%	0.19	-2.50%	0.64	-5.85%	0.327	20	115	257
Hispanic	7.64%	0.153	-4.68%	0.156	-2.88%	0.493	25	244	471
Caucasian	5.16%	0.207	-5.56%	0.05	0.48%	0.869	25	481	722
All	3.72%	0.235	-4.00%	0.037	0.12%	0.955	25	1017	1714
By Ethnicity -- Summer									
AA	6.21%	0.61	-15.22%	0.086	11.92%	0.274	14	77	143
Hispanic	3.00%	0.701	2.43%	0.517	-5.28%	0.541	14	122	174
Caucasian	-0.13%	0.988	1.27%	0.731	-1.20%	0.883	15	161	281
All	1.00%	0.822	0.00%	1	-0.87%	0.8	15	460	720

Appendix C

Valencia Community College Supplemental Learning Students Discussion Guide

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

Research Questions:

- 4) How would students describe the SL experience?
- 5) What are the factors affecting student attendance at SL sessions?
- 6) What are the academic and other supplementary benefits of being in an SL course?

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 your experiences here at Valencia.

Establishing Context:

- **Their Story**
 - How long have you been a student at Valencia?
 - What is your major?
 - What are your career/academic goals?
 - How would you describe your overall experience at Valencia?
 - What classes have you really enjoyed? Which classes did you dislike?

Objectives:

- **Decision-making process:**
 - How many of you knew that you were registering for a supplemental learning (SL) course?
 - For students that registered intentionally:
 - How did you hear about SL?
 - Why did you choose to register for the SL course?
 - What did you know about SL? What were your expectations, if any, for the course?
 - For students that registered unintentionally:
 - How did you find out that you had registered for an SL course?

- What feelings, if any, did you have about being in an SL course?
 - What information, if any, were you given about SL at that time? And by whom?
 - What expectations, if any, did you have about the course once you found out what it was?
- **Experience inside the classroom: (Let the students know that you would like to discuss the in classroom component separately from the actual SL sessions outside of class.)**
 - What was your overall experience with SL inside the classroom?
 - Describe the interactions, if any, between the SL leader, the instructor, and the students in the classroom.
 - Describe your interactions, if any, with the instructor of the course before, during and/or after class.
 - What influence, if any, did SL or the SL leader have on your interactions with other students in the course?
- **Experience in the SL sessions:**
 - How many of you attended the SL sessions outside of class?
 - If student did not attend:
 - What were your reasons, if any, for not attending the sessions?
 - If you wanted to attend an SL session, what, if anything, would have assisted you in being able to do so?
 - In what ways, if any, was the SL leader or being in an SL course still beneficial to you?
 - In what ways, if any, were you able to work with your peers outside of class?
 - If a student did attend SL sessions:
 - What reasons, if any, did you have for attending the sessions?
 - Describe your experience in the SL sessions.
 - What was it like to work with the SL leader?
 - Did you feel the SL leader was adequately prepared?
 - What was it like to work with your peers?
 - In what ways, if any, were the SL sessions beneficial for you?
 - In what ways, if any, were the SL sessions not beneficial for you?
 - What strategies and practices used by the SL leader were most effective in helping you?
 - What specific skills, if any, do you think you learned from the SL leader?
 - What, if anything, should be done differently in the SL sessions? Why?
 - What, if anything, should stay the same? Why?

- **Reflection**
 - How many of you intentionally reenrolled in an SL course or looked for another SL course after the first time you took one?
 - What do you think of the Supplemental Learning program now that you have participated in it?
 - Aside from course content, what, if anything, do you think you learned from being in an SL course?
 - Would you consider becoming an SL leader? Why or why not?

- **Wrap Up:** *(Ask the students to take a few minutes, without you interfering, to write down their thoughts to this question):*
 - What advice would you give to a student who's considering taking an SL class? Maybe write down the 3 most important pieces of advice you'd give them.
 - *(After sufficient time to write their answers, inquire what they wrote and probe):*
 - Why would you tell them that?

Appendix D

Valencia Community College

Topline Summary of Response

**Supplemental Learning Students:
Qualitative Discussions with Students**

February 3, 2009
Achieving the Dream Data Team

INTRODUCTION

Valencia Community College is evaluating student reactions about the impact of Supplemental Learning on student learning. Qualitative research was conducted to explore the perceptions about the effectiveness of Supplemental learning. Four 90-minute discussions were held with students who enrolled in a course with Supplemental Learning from Spring 2006 to the Fall 2008. The sessions seated 9-11 students; each and were held in the Spring of 2009.

The four groups consisted of a total of 39 participants (19 Female, 20 Male) with the following ethnic breakdown: 15 Caucasian, 9 African American, 7 Hispanic, 2 Middle Eastern, 2 Native American, 2 Other, 1 Brazilian, and 1 Haitian. 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 course section with a Supplemental Learning component. Contact was made via email and telephone. Nicholas Bekas, conducted the sessions with Jenelle Conner serving as the note taker. The following summary was prepared by Nicholas Bekas 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.

7) How would students describe the SL experience?

- The participants overall described the SL experience positively.
- Negative comments focused on SL leaders who were not available at convenient times, who were not very social, who treated students negatively, or who did not have a grasp of the subject matter. No more than one or two of the focus group participants in each group had negative comments, and there were only a few negative comments overall.
- Only one student knew that they were taking a course with SL.
- Most of the instructors and SL leaders explained how SL worked the first day of class. Some instructors did not explain SL as well as the SL leaders explained their role. One instructor brought in the SL leader midway through the semester.
- The SL leaders scheduled the SL sessions and many gave out contact information so that students could get in touch with them.
- Several students had taken more than one course with SL.
- Most would take another course with an SL, especially in Math.
- Most of the students would like to see the program expanded to all math courses, science courses, and courses with a math component.
- The SL sessions helped their academic performance on quizzes, tests, and class grade.
- The SL sessions improved their understanding of the subject, especially in math.
- The SL leaders mostly just sat in the class like a student and took notes. Some actually participated actively in the class helping

students in small groups. This happened in a few math courses, but in ENC 1101, the SL leader played a more active role in the class.

- In the SL sessions, the SL leader was able to answer specific questions, summarize the topic covered in class that day, provide notes on the topic, and explain concepts, skills, and strategies essential to learning the subject.
- Many of participants felt that the SL leaders were well-trained and new the subject matter. Some of them felt the SL leaders were inadequately trained
- Many students felt the SL leaders could explain the subject matter better than the teacher because they were able to describe the class topics simply and from a student's perspective.
- Interaction and coordination between the SL leader and the course instructor varied. Some students could tell that the instructor and SL leader worked well together and coordinated the topics in the SL sessions. Others said that the SL leader seemed to have no contact with the instructor, and the instructor had no input on the content of the sessions.
- A few participants complained that SL leader did not know the subject well, was of no help, did not organize sessions well, and did not seem to be paying attention in the class.
- The participants felt that the most effective SL leaders had an outgoing personality, good communication skills, and strong grasp of the subjective. The effective SL leaders also consulted the instructor when they did not know how to answer a question or help a student. Patience was most often mentioned at the most important characteristic of a good SL leader.
- Some students felt that the SL sessions improved their interactions with other students inside and outside the classroom.
- Some also reported that having the SL sessions reduced their anxiety about upcoming quizzes and tests, especially in math.
- SL sessions in ENC 1101 were mostly one on one tutoring. In math, it was a mix of one on one and group sessions. In political science, the sessions were mostly conducted in groups.

- Students said classes with SL sections should be advertised more. Some also said that having the SL session schedule in advance could help them in planning their course schedules so that they could attend more sessions.

8) **What are the factors affecting student attendance at SL sessions?**

- There were only two major reasons student did not attend SL sessions:
 - The time of the SL sessions conflicted with their course and work schedules.
 - Students were confident in their ability and did not feel they needed to attend.
- Some students reported that their instructors gave extra credit for attending SL sessions.
- More students attended right before a quiz, test, or exit exam. Many students attended only when it was a chapter or test review.

9) **What are the academic and other supplementary benefits of being in an SL course?**

- Students learned study skill strategies that they would use in other courses. One of the most often mentioned strategy was “chunking.” Students liked having things explained in smaller units, especially in math. Another strategy that was mentioned in all of the groups was peer teaching. Some of the SL leaders in math classes had students go to the board and teach a problem to the group. The student would go to the board and work out a problem for the group, and the SL leader would assist when needed.
- Students were more aware of additional resources like the COMP House and the SPA.
- Students reported that they felt more comfortable asking questions in class and felt more comfortable seeking help from their instructors.

Appendix E

Supplemental Learning Student Participation by Term

	Spring06	Summer06	Fall06	Spring07	Summer07	Fall07	Spring08	Summer08	Fall08
SL	132	52	381	208	89	636	170	99	639
Non-SL	1186	633	4134	1265	646	4879	1386	710	4876
Total	1318	685	4515	1473	735	5515	1556	809	5515

	Spring06	Summer06	Fall06	Spring07	Summer07	Fall07	Spring08	Summer08	Fall08
SL	10.0%	7.6%	8.4%	14.1%	12.1%	11.5%	10.9%	12.2%	11.6%
Non-SL	90.0%	92.4%	91.6%	85.9%	87.9%	88.5%	89.1%	87.8%	88.4%

Supplemental Learning Student Participation by Year

	Yr 05-06	Yr 06-07	Yr07-08	Yr08-09
SL	184	678	905	639
Non-SL	1819	6045	6975	4867
Total	2003	6723	7880	5506

	Yr 05-06	Yr 06-07	Yr07-08	Yr08-09
SL	9.2%	10.1%	11.5%	11.6%
Non-SL	90.8%	89.9%	88.5%	88.4%

**Note: Year 05-06 includes Spring and Summer only. Year 08-09 includes Fall 08 only.