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An Analysis of USF Living-Learning Communities

**Office of Institutional Research
and
Office of Living-Learning Communities**

August 26, 2008

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Executive Summary

National research shows the effectiveness of living-learning communities in helping to produce desired student outcomes, including better retention rates, higher academic achievement, and greater student engagement and satisfaction. This study is consistent with that national research and shows the effectiveness of living-learning communities in contributing to desired student outcomes at the University of San Francisco. Specifically, we found that USF students who participated in living-learning communities were more likely than students who did not participate in living-learning communities to:

- Maintain a higher grade point average and receive fewer Ds or Fs during their freshman year
- Complete all courses without a withdrawal during their freshman year
- Complete more units by the end of their freshman year
- Show lower attrition rates from their freshman to their sophomore year
- Report greater engagement with USF as measured by the National Survey of Student Engagement (NSSE), especially on benchmark items related to enriching educational experiences, active and collaborative learning, and positive student-faculty interaction
- Report more time working on campus, engaging in community service, and participating in political and social activities

The results of the study speak to the important role of living-learning communities at USF in enhancing students' academic success, institutional engagement, and persistence.

Background Theory and Research

Vincent Tinto (1993,1996), a professor at Syracuse University, developed a widely used model of why students decide to drop out from college. Students who face identical intellectual and financial obstacles, according to Tinto, can vary enormously in their likelihood to depart based on how well they feel they fit into a particular college environment. Based on this model, there is research to suggest that good peer networks and close friendships have a positive influence on student retention, as does involvement in student activities, clubs, and social events. Based on Tinto's model, living-learning communities, as a stimulus to social integration, have been the focus of research on student retention and graduation. This research demonstrated that students who participated in living-learning communities were more engaged overall, had higher persistence rates, and evidenced greater intellectual development and social development compared with peers who did not participate in living-learning communities. A study (Zhao & Kuh, 2004) of 365 four-year institutions by the Carnegie Foundation for the Advancement of Teaching, and the developers of the National Survey of Student Engagement (NSSE) at Indiana University, found that participating in a living-learning community was positively linked to engagement as well as to student reported-outcomes and overall satisfaction with college.

Methodology

This study will explore the effects of living-learning communities on USF students. It is divided into two sections. The first section highlights the difference in freshmen experiences between those who did or did not participate in a living-learning community during the 2004, 2005, and 2006 academic years. The second part of the report compares the college experience of a broader range of students who completed the National Study of Living-Learning Programs (NSLLP) in 2007. For a detailed description of the different living-learning communities see Appendix A.

The data for the first part of the report is drawn from three freshman cohorts (2004, 2005, and 2006), totaling 2,943 students. Of these, eighty-nine students participated in freshman living-learning communities (LLCs). The data for the second part of the report is drawn from 104 responses to the National Study of Living-Learning Programs (NSLLP), which was administered in 2007 to all students in living-learning communities (including alumni¹ and students in Global Living²), and to a randomly selected sample from USF's non-living-learning community student population.

Research (Gardner, 2008; Barefoot, 2008; Tinto, 1996; Kuh et. al., 2007) shows that the first year experience is crucial in retaining students, thus the first part of the report will focus on freshman living-learning communities. After a brief overview of the demographic composition of the living-learning communities, we will discuss differences

¹ Alumni are students who participated in a living-learning community for one or more years

² The Global Living Community differs from other USF living-learning communities in that it is a themed community and does not involve academic coursework.

in academic achievement between LLC students and Non-LLC students. Prior research indicates that students’ decision to remain or leave a university is based on their total academic and non-academic experience.

To explore the non-academic factors that influence students’ college experience, data from the National Survey of Student Engagement (NSSE) will be analyzed. The NSSE was administered to a random sample of freshmen during their second semester at the university. The goal of the NSSE is to capture students’ engagement in different aspects of university life.

Demographic Description of the Freshmen Living-Learning Communities

The population in the freshmen living-learning communities mirrors the population of USF, with notable exceptions. The percent of Latino/Latina students in the living-learning community is relatively high, when compared to students who did not participate in a living-learning community (20.2% to 13.4 %, respectively). The opposite is true for Asian students: the Asian population represents 22.1% of the non-living-learning community population, but it represents only 14.6% of the living-learning community population (Table 1).

Table 1: Comparison of ethnic composition between students who participated in living-learning communities and those who did not

Ethnic groups	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
African American	4	4.5%	139	4.9%
Asian	13	14.6%	624	22.1%
Hawaiian/ Pacific Islander	0	0.0%	65	2.3%
International	1	1.1%	129	4.6%
Latino/a	18	20.2%	377	13.4%
Multi-ethnic	6	6.7%	113	4.0%
Native American	2	2.2%	30	1.1%
White	36	40.4%	1,120	39.7%
Others/unknown	9	10.1%	223	7.9%
Total	89	100.0%	2,820	100.0%

The gender composition also differs. Whereas the non-living-learning community comprised 32% males and 68% females, the LLC’s were comprised of 18% males and 82% females (Table 2).

Table 2: Comparison of gender composition between students who participated in living-learning communities and those who did not

Gender	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Male	16	18.0%	902	32.0%
Female	73	82.0%	1,918	68.0%
Total	89	100.0%	2,820	100.0%

Living-learning communities also had a larger percent of honors admits or university scholars (27% to 15.2%), as well as first generation students (19.1 to 14.2) when compared to non-LC participants (Tables 3 and 4).

Table 3: Comparison of honors or university scholars who participated in living-learning communities and those who did not

	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Classified as an honor student or university scholar	24	27.0%	428	15.2%
Not classified as an honor student or university scholar	65	73.0%	2,392	84.8%
Total	89	100.0%	2,820	100.0%

Table 4: Comparison of first generation students who participated in living-learning communities and those who did not

	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
First generation students	17	19.1%	403	14.2%
Not first generation students	72	80.9%	2,417	85.7%
Total	89	100.0%	2,820	100.0%

Results

Freshman Students

Students who participate in living-learning communities at USF benefit from this experience academically. On average, LLC participants have a higher GPA at the end of their freshman year, complete more units, are less likely to receive a D or below, and are less likely to withdraw from classes than non-LLC students. These factors are associated with retention at USF. Specifically, students who leave USF are more likely to have a lower GPA, make a D or below, or withdraw from classes during the first year. Students who leave USF are also more likely to have completed a lower number of units by the end of their first year than students who return for their sophomore year.

While students who select a living-learning community enter with a higher average high school GPA than students who do not select a living-learning community (3.61 vs. 3.45, Table 4) this does not, however, account for the higher end-of-first-year GPA of the living-learning community students (3.35 vs. 3.01, Table 5). This can be seen by comparing effect sizes. Effect size measures are used to show the magnitude of the difference between groups. In contrast to measures of statistical significance, effect size calculations are not affected by population size. Although there are different measures of effect size, when comparing treatments, Cohen's Δ is one of the most frequently used

effect size measures. According to Cohen, .20 is considered a small effect size, .50 is considered a medium effect size, and .80 is a considered a large effect size. The difference in High School GPA between LLC and Non-LLC students as measured by Cohen's Δ was .39. The difference between LLC and Non-LLC students by the end of the freshman year was Cohen's $\Delta = .60$.

Table 5: Comparison of High School and College GPA of students who participated as freshmen in a living-learning community to those who did not

	Students in a Living-Learning Community			Students not in a Living-Learning Community			Effect Size	Statistic Sig.
	N	Mean	SD	N	Mean	SD		
HS GPA	89	3.61	.40	2,814	3.45	.42	.39	p < .001
1 st Year USF GPA	89	3.35	.44	2,799	3.01	.67	.60	p < .001

Ethnic difference emerged in our study in terms of GPA. White, Asian, and multi-ethnic students entered with small effect size differences, however, after one year these effect size differences had increased to moderate effect sizes ($\Delta = .75$, $\Delta = .74$, $\Delta = .52$ Table 6). Whereas Latino/Latina students who chose to participate in the living-learning community had a higher entering high school GPA than Latino/Latina students who did not choose to participate in a living-learning community ($\Delta = .43$), by the end of the freshman year, the gap between these two groups had not widened. In contrast, African American students who participated in the living-learning communities had the same entering GPA as African American students who did not participate in living-learning communities. At the end of the freshman year, however, a gap appeared between African American students who did or did not participate in living-learning communities. African American students who participated in LLCs had a higher GPA than those who did not, and Cohen's Δ showed a small to medium effect size $\Delta = .45$.

Table 6: Comparison of High School and College GPA of students who participated as freshmen in a living-learning community to those who did not by ethnicity

Ethnicity		Students in a Living-Learning Community			Students not in a Living-Learning Community			Effect Size
		N	Mean	SD	N	Mean	SD	
White	HS GPA	36	3.60	.43	1,119	3.49	.40	.26
	1 st Year GPA	36	3.51	.27	1,110	3.13	.64	.75
African American	HS GPA	4	3.36	.36	138	3.35	.46	.02
	1 st Year GPA	4	3.06	.65	138	2.74	.76	.45
Latino/a	HS GPA	18	3.58	.27	377	3.44	.37	.43
	1 st Year GPA	18	3.11	.48	376	2.88	.64	.44
Asian	HS GPA	13	3.67	.42	622	3.48	.39	.47
	1 st Year GPA	13	3.36	.42	618	2.95	.66	.74
Multiethnic	HS GPA	6	3.50	.31	113	3.39	.57	.24
	1 st Year GPA	6	3.28	.40	112	3.02	.58	.52

Students who participated in the living-learning communities were less likely to make Ds (5.6% vs. 22.6%, Table 7) or withdraw from classes (16.9% vs. 21.6%, Table 8) during the first year than students who did not participate in the living-learning communities. In addition, students in the LLCs on average took more units during their freshman year than students who did not participate in the LLC's (31.4 vs. 30.03). These factors have been shown to influence attrition rates in previous studies at USF.

Table 7: Comparison of the percent of students in a living-learning community who received a Grade of D or below during their first year to those who did not participate in a living-learning community and received a D or below during their first year

	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
D or below	5	5.6%	637	22.6%
No D or below	84	94.4%	2,183	77.4%
Total	89	100.0%	2,820	100.0%

Table 8: Comparison of students in living-learning communities who withdrew from a class during the first year to those who withdrew and did not participate in a living-learning community

	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Withdrew from class during the first semester	15	16.9%	608	21.6%
Did not withdraw from class during the first semester	74	83.1%	2,212	78.4%
Total	89	100.0%	2,820	100.0%

The first-year attrition rate of the living-learning community students was lower (9% vs. 16.5%, Table 9) than for the non-LLC students.

Table 9: Comparison between non-continuing and continuing students who participated in living-learning communities and those who did not

	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Non-continuing students	8	9.0%	464	16.5%
Continuing students	81	91.0%	2,356	83.5%
Total	89	100.0%	2,820	100.0%

Analysis of NSSE Benchmarks

During the 2004 through 2006 years, 746 freshmen completed the NSSE, including 33 students in a living-learning community. There are five NSSE Benchmarks: (1) *Academic Challenge*, (2) *Active and Collaborative Learning*, (3) *Enriching Educational Experiences*, (4) *Student Interaction with Faculty Members*, and (5) *Supportive Campus Environment*. Three of the benchmarks showed a statistically significant difference between LLC and non-LLC students: *Enriching Educational Experiences*, *Active and Collaborative Learning*, and *Student Interaction with Faculty Members*, (Table 10). *Enriching Educational Experiences* had the largest effect size ($\Delta=1.26$), closely followed by *Active and Collaborative Learning*, ($\Delta=1.21$). Both categories were statistically significant ($p<.001$). The third benchmark that showed statistical significance was *Student Interaction with Faculty Members*, ($p<.05$, $\Delta=.41$). The specific items included in each benchmark are in Appendix B. Based on these data, it appears living-learning communities make a large contribution to active and collaborative learning and provide enriching experiences to students. Additionally, they seem to have a small to moderate positive effect on student-faculty interaction.

Table 10: Comparison of the NSSE Benchmarks of students who participated as freshmen in a living-learning community to those who did not

	Students in a Living-Learning Community			Students not in a Living-Learning Community			Effect Size	Statistical Significance
	N	Mean	SD	N	Mean	SD		
Academic Challenge	31	54.62	9.66	633	56.08	11.42	-.13	n.s.
Active and Collaborative Learning	33	61.58	14.64	727	43.56	15.24	1.21	p < .001
Student Interaction with Faculty Members	32	41.01	18.54	663	33.57	17.33	.41	p < .05
Enriching Educational Experiences	29	41.77	9.18	640	28.26	12.06	1.26	p < .001
Supportive Campus Environment	28	63.89	12.24	635	61.44	17.14	.16	n.s.

NSSE Individual Data

In addition to the general analysis of the NSSE Benchmarks above, an in-depth analysis of specific items was conducted to gain insight into the differences between students who did or did not participate in living-learning communities.

Although the benchmark *Academic Challenge* did not show any statistically significant differences between students who did or did not participate in the LLCs, a statistically significant difference was found in one of the three subsections: course challenge, writing, and higher order thinking skills (Appendix B, Chart 1). Within the subsection higher order thinking skills, the following item was statistically significant (p < .05), “during the current school year, to what extent has your coursework emphasized synthesizing and organizing ideas, information, or experiences into new more complex interpretation and relationship?” As can be seen from the chart below, whereas only 12.5% of the LLC students responded never or sometimes, 22.7% of the non-LLC students responded with never or seldom.

Table 11: Comparison of students who participated in living-learning communities and those who did not on specific NSSE item: “During the current school year, to what extent has your coursework emphasized synthesizing and organizing ideas, information, or experiences into new more complex interpretation and relationships?”

(collapsed categories)	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Never or sometimes	4	12.5%	150	22.73%
Often or very often	28	87.5%	510	77.27%
Total	32	100.00%	660	100.00%

p<.05

The NSSE Benchmark, *Active and Collaborative Learning*, is comprised of subsections by the same name (Appendix B, chart 2). This benchmark had a large effect size ($\Delta=1.21$), and was statistically significant ($p<.001$). All three items of the subcategory active learning were statistically significant (Tables 12-14).

Table 12: Comparison of students who participated in living-learning communities and those who did not on specific NSSE item: “Asked question in class or contributed to class discussion”

(collapsed categories)	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Never or sometimes	8	24.2%	268	36.8%
Often or very often	25	75.8%	460	63.2%
Total	33	100.00%	728	100.00%

p<.05

Table 13: Comparison of students who participated in living-learning communities and those who did not on specific NSSE item: “Made a class presentation”

(collapsed categories)	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Never or sometimes	9	27.3%	403	55.4%
Often or very often	24	72.7%	325	44.6%
Total	33	100.0%	710	100.0%

p<.001

Table 14: Comparison of students who participated in living-learning communities and those who did not on specific NSSE item: “Participated in a community-based project (e.g., service-learning) as part of a regular course”

(collapsed categories)	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Never or sometimes	4	12.5%	607	89.5%
Often or very often	28	87.5%	71	10.5%
Total	32	100.0%	662	100.0%

p<.001

The differences between LLC and non-LLC students are especially striking on this item. Whereas 87.5% of the living-learning community students had participated in a service-learning project by the end of the freshmen year, only 10.7% of the non living-learning students did so. These findings are mirrored repeatedly in other subsections of the NSSE as well as in the NLLP discussed later in this report.

In addition to these three items, which comprise all of the items in the subsection Active Learning, one item in the subsection Collaborative Learning was also statistically significant (p<.001, Table 15).

Table 15: Comparison of students who participated in living-learning communities and those who did not on specific NSSE item: “Worked with classmates OUTSIDE OF CLASS to prepare class assignments”

(collapsed categories)	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Never or sometimes	6	18.2%	467	61.4%
Often or very often	27	81.8%	281	38.6%
Total	33	100.0%	710	100.0%

p<.001

The benchmark *Active and Collaborative Learning* had four out of six items that were statistically significant, the largest percent of items for a NSSE Benchmark.

The NSSE Benchmark, *Enriching Educational Experiences*, is comprised of three subsections (Appendix B, chart 3): varied experience, information technology, and diversity. One item within each of these subsections reached statistical significance. In the subcategory of varied experience, the item that focused on community service and volunteer worked was statistically significant (p<.001, see Table 16).

By the end of the freshman year, 89.3% of the LLC students had participated in community service or volunteer work. In contrast, among the students who were not members of a living-learning community, 31.8% said that they had done volunteer work or provided community service. Although these findings may not be surprising, since service-learning is an integral part of the Martín-Baró Scholars community, the largest of

the freshman living-learning communities; it might be worthwhile to investigate the perceived effect of these experiences on the students, specifically on their decision to remain at USF after their freshman year. This may be especially salient given that 58.1% of the students who did not participate in living-learning communities plan to participate in community service or volunteer work at some point. It is possible that students who come to USF expect these opportunities early in or throughout their college career given our mission, “educating minds and hearts to change the world.” Students coming to USF may anticipate multiple opportunities to engage in service-learning activities during their freshman year.

Table 16: Comparison of students who participated in living-learning communities and those who did not on specific NSSE item: “Have or do you plan to participate in community service or volunteer work?”

	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Have not decided	1	3.6%	51	8.0%
Do not plan to do	0	0.0%	18	2.8%
Plan to do	3	10.7%	372	58.1%
Done	25	89.3%	199	31.1%
Total	28	100.0%	640	100%

p<.001

Within the technology information subsection of the NSSE Benchmark, *Enriching Educational Experiences*, the item that emerged as statistically significant was the use of e-mail to communicate with the instructor, as can be seen from Table 17.

Table 17: Comparison of students who participated in living-learning communities and those who did not on specific NSSE item: “Used e-mail to communicate with an instructor”

(collapsed categories)	Students in a Learning Community		Students not in a Learning Community	
	N	%	N	%
Never or sometimes	0	0%	146	21.50%
Often or very often	32	100%	533	78.50%
Total	32	100%	679	100%

p<.01

Another subsection of the NSSE Benchmark, *Enriching Educational Experiences*, showed statistically significant differences between LLC and non-LLC students and is shown in Table 18 below. Students who participated in LLC were more likely (81.3%) to have serious conversations with students of a different race or ethnicity than non-LLC students (67.4%).

Table 18: Comparison of students who participated in living-learning communities and those who did not on specific NSSE item: “Had serious conversations with students of a different race or ethnicity than your own”

(collapsed categories)	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Never or sometimes	6	18.8%	212	32.6%
Often or very often	26	81.3%	438	67.4%
Total	32	100.0%	650	100.0%

P<.05

The NSSE Benchmark, *Student Interaction with Faculty Members* (Appendix B, chart 4), has two components, course interaction and out-of-class interaction. One item in each of these two section reached statistical significance. Table 19 shows that students in the LLCs were more likely than non-LLC students to strongly agree or agree (78.1% vs. 66.2%) with the statement “How often have you received prompt feedback from your faculty on your academic performance (written or orally)?”

Table 19: Comparison of students who participated in living-learning communities and those who did not on specific NSSE item: “Received prompt written or oral feedback from faculty on your academic performance”

(collapsed categories)	Students in a Living-Learning Community		Students not in a Living-Learning Community	
	N	%	N	%
Never or sometimes	7	21.9%	225	33.8%
Often or very often	25	78.1%	440	66.2%
Total	32	100%	665	100%

*p<.05

In the subcategory out-of-class interaction, the statistically significant item was: “Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)” (Table 20).

Table 20: Comparison of students who participated in living-learning communities and those who did not on specific NSSE item: “Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)”

	Students in a Learning Community		Students not in a Learning Community	
	N	%	N	%
Never	20	62.5%	532	80.1%
Sometimes	4	12.5%	48	7.2%
Often	1	3.1%	17	2.6%
Very often	7	21.9%	67	10.1%
Total	32	100%	664	100%

p.<.05

In the last benchmark, *Supportive Campus Environment*, there seems to be no difference between LLC and non-LLC students. To review the specific items in this benchmark, see Appendix B chart 5.

In addition to the standard items, NSSE provides space for specific items that are of interest to the Jesuit consortium. The items in this section are directly related to the mission, vision, and values of our Jesuit institution. Eight of these items showed a statistically significant difference between students who did or did not participate in living-learning communities and are the focus of the remainder of this section (Table 21).

Table 21: Comparison of students who participated in living-learning communities and those who did not on selected Jesuit consortium items

	Living-Learning Communities		Non-Living-Learning Communities		stat. sig.
	N	%	N	%	
Working Effectively with others					
Very Little/Some	4	14.3%	177	28.4%	p<.05
Quite a bit/Very much	24	85.7%	447	71.6%	
Contributing to the welfare of your community					
Very Little/Some	3	10.7%	240	38.8%	p<.05
Quite a bit/Very much	25	89.3%	378	61.2%	
Devoting effort to help others in need					
Very Little/Some	0	0%	205	36.1%	p<.05
Quite a bit/Very much	24	100%	363	63.9%	
Leading by example					
Very Little/Some	5	20.8%	234	41.2%	p<.05
Quite a bit/Very much	19	79.2%	334	58.8%	
Increasing your awareness of the relationship between global and local issues					
Very Little/Some	4	16.7%	190	32.8%	p<.05
Quite a bit/Very much	20	83.3%	389	67.2%	
Actively working to further social justice					
Very Little/Some	1	4.3%	228	39.5%	p<.001
Quite a bit/Very much	22	95.7%	349	60.5%	
Defining your own values and beliefs					
Very Little/Some	1	4.2%	186	32.3%	p<.05
Quite a bit/Very much	23	95.8%	389	67.7%	
Demonstrating respect for others' differences					
Very Little/Some	1	4.3%	119	20.7%	p<.05
Quite a bit/Very much	22	95.7%	456	79.3%	

Based on the analysis of both the academic data and the NSSE, students' experiences in freshmen living-learning communities differ from the experience of students not living in living-learning communities. Students in freshmen living-learning communities are:

- More actively engaged in the learning process
- More likely to receive higher grades and have a higher GPA at the end of the first year
- More likely to participate in service learning and volunteer activities
- More involved in social justice issue and focused on the needs of others
- Less likely to leave USF

National Study of Living-Learning Programs

The National Study of Living-Learning Programs (NSLLP) is specially designed to ascertain how the experience of living-learning community members differs from the experience of non-living-learning community members. While the population discussed so far was comprised of freshmen in living-learning communities, the population for the NSLLP included all living-learning community students, living-learning community alumni, and members of the themed community, Global Living. The specific focus of the NSLLP is described below.

The NSLLP questionnaire asks several questions regarding student environments and outcomes including:

- Key living-learning environments
- Other college environments
- Student academic and social outcomes
- College experiences of women in science, technology, engineering, and mathematics

The USF Living-Learning Communities (LLC) sample included students of the LLC and one-year alumni (those who successfully completed the previous year in a given LLC), and students who participated in the themed community, Global Living. The control group was randomly selected by the NSLLP from the databank provided by the USF Registrar. This databank included the same variables as the LLC sample and was limited to undergraduates who lived in USF residence halls. The control sample matched the LLC sample as closely as possible and was proportional to the LLC sample. The LLC sample had an overall response rate of 22%; the comparison sample response rate was 16%. Although the response rates were low, we can still identify appreciable differences between the sample populations, which are generally consistent with the findings of the NSSE, thus providing stronger support for the inferences drawn.

The results of the NSLLP among students who did or did not participate in a living-learning community at USF were compared to students in a national sample. In reviewing comparisons with other campuses, it is important to note that there is great variability in terms of defining, implementing, and housing living-learning communities on college campuses. The framework and structure of USF's LLCs are relatively unique: all communities are connected to specific courses, all communities are a year in length, all satisfy Core Curriculum requirements³, and most have faculty-staff leadership teams. By contrast, the NSLLP reports nearly three-fourths of the programs in the national sample do not offer courses for credit and only half have faculty members with direct roles. Finally, half of the living-learning programs in the national study had no required co-curricular component.

³ *with the exception of the Global Living Community*

Demographic description of the respondents and response rates

Of the total population surveyed, 23 students who participated in living-learning communities and 81 students who did not participate in living-learning communities responded to the NSLLP. The members of the living-learning communities were distributed across the first four years of college, with the largest percent of respondents being either sophomores or juniors. By contrast, the comparison groups were comprised primarily of freshmen and sophomores.

Parents' educational levels differed between the two groups. The educational level of the parents of students in the living-learning communities showed a bimodal distribution clustering on the lower and upper end, compared to the parents' educational level of the non-living-learning community members. In terms of income, however, parents of students in the living-learning communities are more likely to be found in the lower to middle income range when compared to parents of the students who did not participate in the living-learning communities. Students in the living-learning community were more likely to receive loans or financial aid in all categories. Only in the area of non-need based scholarships, however, did this difference reach statistical significance. This is consistent with the fact that a relatively large number of university scholars participate in living-learning communities.

Analysis of the Responses to the Survey on National Living-Learning Programs

The areas where multiple items reached statistical significance can be clustered into two areas: "hands-on learning experiences" and "time spent on activities." These areas are conceptually similar to "varied experience", a subsection of the NSSE Benchmark, *Enriching Educational Experiences*. This benchmark showed the largest positive effect size for participants of the living-learning communities when compared to non-participants of living-learning communities. Thus, both sets of data converge, indicating a positive effect in this category, even though the sample populations and the surveys differ in their composition. While some items within categories overlap, such as participating in internship experiences, community service activities, and planning to participate in a culminating senior project, other items expand our understanding of the large variety of experiences participated in by USF's living-learning community members.

The differential responses between the LLC students and non-LLC students on the NSLLP that addressed "hands-on learning experiences" were statistically significant as can be seen from the table 22. The scale for these items went from never (1) to very often (4), and the data on the chart is the mean of the group sample for each item.

Table 22: Comparison of students who participated in living-learning communities and those who did not on the items that comprised the scale of hands-on learning experiences*

	USF LLC's (n=23)	USF Non-LLC's (n=81)	Stat. sig.	National LLC's (n=11,549)	National Non-LLC's (n=10,863)
	Mean Score	Mean Score		Mean Score	Mean Score
Mentoring Experience	1.96	1.55	p<.05	1.64	1.62
Participating in internship experience	1.73	1.15	p<.01	1.27	1.28
Attending presentations by professional in intended field	2.41	1.81	p<.01	2.03	1.99
Visited work settings of professionals in intended field	2.13	1.47	p<.05	1.69	1.69
Worked with outreach to high school students	1.83	1.06	p<.001	1.27	1.24

* scores from 1 (never) to 4 (very often)

Students in USF's living-learning communities were more likely to participate in "hands-on learning experiences" than were non-living-learning community students. For example, students in living-learning communities were "more likely to have attended presentations by professionals in intended field", "visited work setting of professionals in intended field", had "mentoring experiences," or "worked with outreach to high school students" than students who were not in a living-learning community. In interpreting these results, it is important to note that the living-learning community members who responded to the survey contained a larger proportion of juniors and seniors than the comparison group (42.3% vs. 3.3%), which may account for some of the differences.

Another area that showed significant differences between LLC and Non-LLC students in the NLLP report focuses on future activities, which asked participants to indicate which activities they intend to participate in the future. Three items (Table 23) in this section reached statistical significance.

Table 23: Comparison of students who participated in living-learning communities and those who did not on selected items of the section on future activities

	USF LLC's (n=23)	USF Non-LLC's (n=81)	Stat. sig.	National LLC's (n=11,549)	National Non-LLC's (n=10,863)
Community service, volunteer work, service learning,	21.5%	62.4%	p<.01	68.3%	68.2%
Taking a leadership position	57.1%	29.9%	p<.05	36.9%	34.1%
Culminating senior experiences (capstone thesis)	55.6%	26.6%	p<.05	29.1%	25.1%

The percent of LLC students who plan to participate in community service, volunteer work, service learning is comparatively low. In interpreting these data, however, it is important to remember that a large percent of the LLC students already have participated in these activities, as reflected by the NSSE data, and as the next section will show are currently more actively engaged in these activities. Of special interest, more than half of the LLC students indicated that they are planning to take leadership positions (57.1%). Not just is this higher than USF Non-LLC students, but it also exceeds the national LLC average by 20 percentage points. Future plans of more than half of LLC students (55.6%) also include participating in culminating senior experiences. This is 29 percentage points more than the comparison group and also more than the national sample of the living-learning communities.

Another section of the NLLP that is of special interest is the time spent on activities. This section shows how students allocate their time across a variety of activities. For this section, all categories, regardless of statistical significance, will be reported. The scale for this section went from no time spent to 21 or more hours per week. Mean data are reported on Table 24.

Table 24: Time spent on activities between students who participated in living-learning communities and those who did not

	USF LLC's (n=23)	USF Non-LLC's (n=81)	Stat. sig.	National LLC's (n=11,549)	National Non-LLC's (n=10,863)
Attending classes	4.17	4.16	n.s.	4.44	4.40
Study/Doing homework	3.35	3.15	n.s.	3.46	3.34
Fraternity/sorority	1.00	1.12	n.s.	1.23	1.30
Art or music performances/activities	1.89	1.71	n.s.	1.81	1.71
Intramural/club sports	1.23	1.28	n.s.	1.52	1.50
Varsity sports	1.27	1.19	n.s.	1.15	1.23
Student government	1.10	1.04	n.s.	1.16	1.12
Political/social activism	2.24	1.28	p<.001	1.21	1.18
Religious clubs/activities	1.36	1.16	n.s.	1.42	1.40
Ethnic/cross-cultural clubs/activities	1.70	1.20	p<.01	1.21	1.17
Media activities	1.31	1.09	n.s.	1.22	1.22
Work-study or work on-campus	2.83	1.96	p<.05	1.70	1.73
Work off-campus	1.77	1.65	n.s.	1.45	1.51
Community service activities	2.31	1.34	p<.001	1.51	1.43
Others	1.17	1.10	n.s.	1.24	1.23

Students in the living-learning community were more likely to spend time in political/social activism than students who were not part of a living-learning community. This difference was statistically significant (p<.001). Students who participated in living-learning communities also spent more time in ethnic/cross-cultural clubs/activities than students who did not participate in living-learning communities. This difference was statistically significant (p<.01). Consistent with the findings of the NSSE, students in the living-learning community spent more time in community service activities than the non-living learning community members (p<.001). In all three areas noted above, students in USF's living-learning community also exceeded the average of all living-learning communities in the national sample. This finding may reflect USF's core values of advancing "a culture of service that respects and promotes the dignity of every person."

From the data it appears that the student experience in living-learning communities is very different from the experience of students who are not in a living-learning community. Students who participate in living-learning communities are more actively engaged in the learning process, perform better academically, are more involved in service activities, and are less likely to leave USF. Students in the living-learning communities seem to epitomize our goal to educate leaders who will fashion a more humane and just world.

REFERENCES

- Barefoot, B. (2008). Institutional Structures and Strategies for Embedding Civic Engagement in the First College Year. In *First-Year Civic Engagement: Foundations for College, Citizenship and Democracy*. New York: The New York Times.
- Gardner, H. (2008). Action Steps to Move the First-Year Civic Engagement Agenda Forward. In *First-Year Civic Engagement: Foundations for College, Citizenship and Democracy*. New York: The New York Times.
- Kuh, G.D., Cruce, T., Shoup, R., Kinzie, J., & Gouyea, R.M. (2007). *Unmasking the Effects of Student Engagement on College Grades and Persistence*. Paper presented at the annual meeting of the Educational Research Association, Chicago, April 2007.
- National Center for Education Statistics (2006). *The Toolbox Revisited: Paths to Degree Completion from High School Through College*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Pike, G. (2006). The Convergent and Discriminant Validity of NSSE Scalelet Scores. *Journal of College Student Development*, 47 (5), 551-564.
- Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition* (2nd ed.). Chicago: University of Chicago Press.
- Tinto, V. (1996). Reconstructing the First Year of College. *Planning for Higher Education*, 25 (1), 1-6
- Zhao, C-M., & Kuh, G.D. (2004). Adding Value: Learning Communities and Student Engagement. *Research in Higher Education* 45, 115-138.

Appendix A

Descriptions of USF Living-Learning Communities

Each living-learning community at the University of San Francisco has a unique character, history, culture, and legacy. The students in the communities themselves have contributed to the development and sustainability of each. It is important to both value the unique aspects and nuances of every living-learning community and understand the commonalities they share. Fundamentally, USF living-learning communities are defined by three characteristics:

- Students are enrolled in a common set of courses and live in a designated residential setting.
- Dedicated staff and faculty from various campus departments and offices teach and support student learning.
- Connections between living and learning are intentional, interwoven, and sustainable over time.

All the living-learning communities require courses that fulfill at least one core curriculum area and a number of elective units upon successful completion of both semesters. Additionally, each community fulfills the service-learning designation.

Martín-Baró Scholars

The Martín-Baró Scholars community is designed to meet the needs of first-year students. Instruction and related community experiences focus on examining issues of citizenship, social justice, and diversity, using the city of San Francisco. The curriculum provides a creative, integrated approach to writing, speaking, and literature with intentionality around diversity and service-learning. Incorporating student development into the curriculum, the participants not only pursue individual growth but also engage in the challenges of community-building. This year, students will focus their studies on the dimensions of poverty.

Garden Project

The Garden Project is an innovative living-learning community for freshman of any major. Established in response to student interest in how to cope with rapidly changing and interconnected global conditions, the Garden Project creates an opportunity for students to form a tight-knit community to learn about climate change, water rights, food security, and social and economic justice as they relate to food production. The study of community supported agriculture, through historical research, analysis of organic garden

strategies, hands on learning, and field trips, will assist students as they facilitate the design, planning, and implementation of USF's first organic garden.

Esther Madríz Diversity Scholars

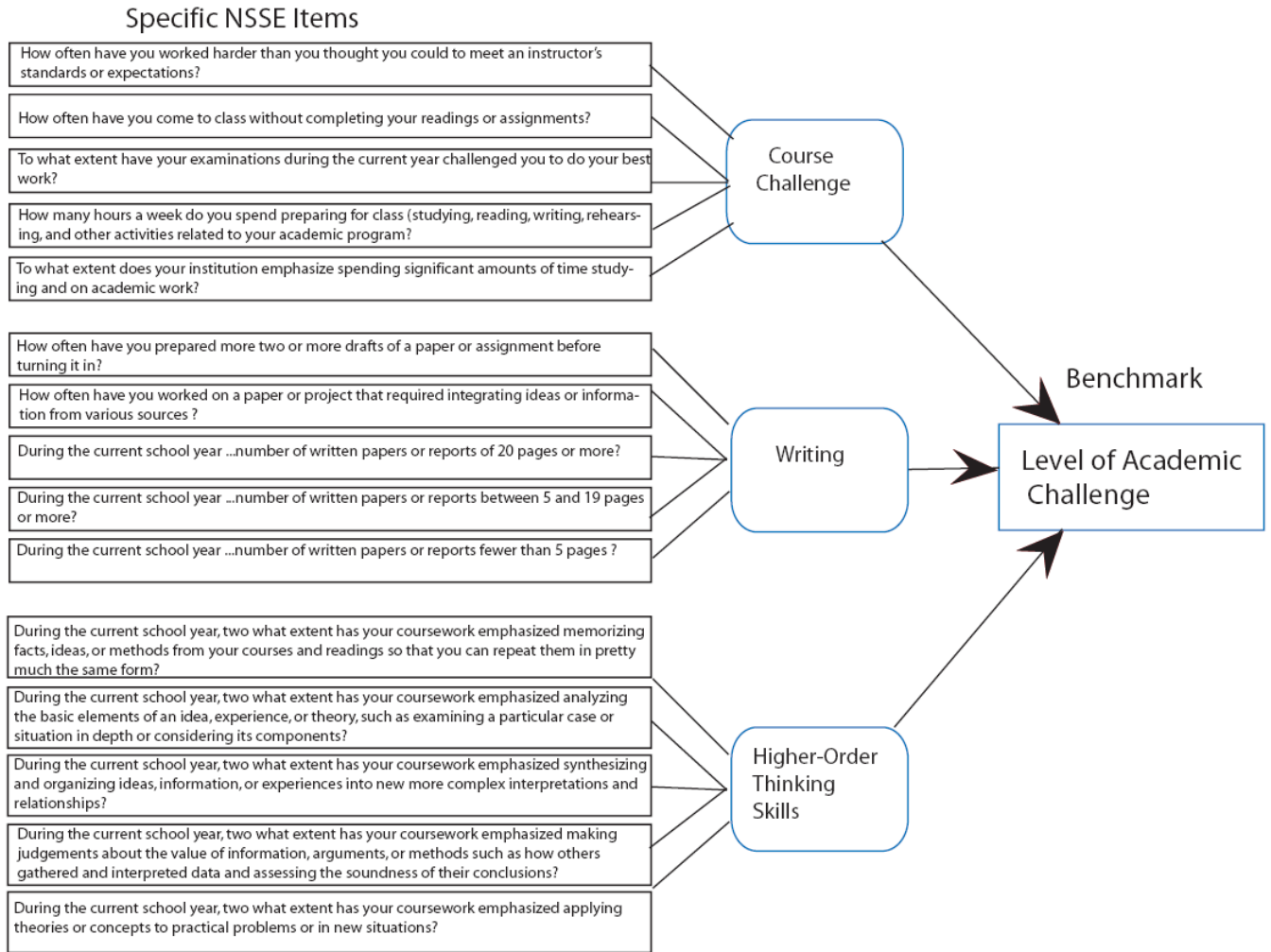
Named after the late Esther Madríz, a beloved professor of sociology at USF, the Esther Madríz Diversity Scholars (EMDS) is a collaborative effort between the Sociology Department and the Office of Multicultural Student Services. In addition to the academic curriculum, the student community participates in retreats, community meetings, and field experiences that bring to life the issues learned in the classroom. The year-long program explores issues of identity, community activism, and social change through its theme of "crossing borders, discovering home."

Erasmus

Over the course of a year, Erasmus students delve deeper into their understanding of the intertextuality of ethics, service, and justice at local and global levels. Students engage themselves as a community in coursework, community living, and involvement in a number of organizations. The community experience allows students to learn theoretical information from the classroom, to discuss this material as a community, and to directly apply information and ideas through various service projects.

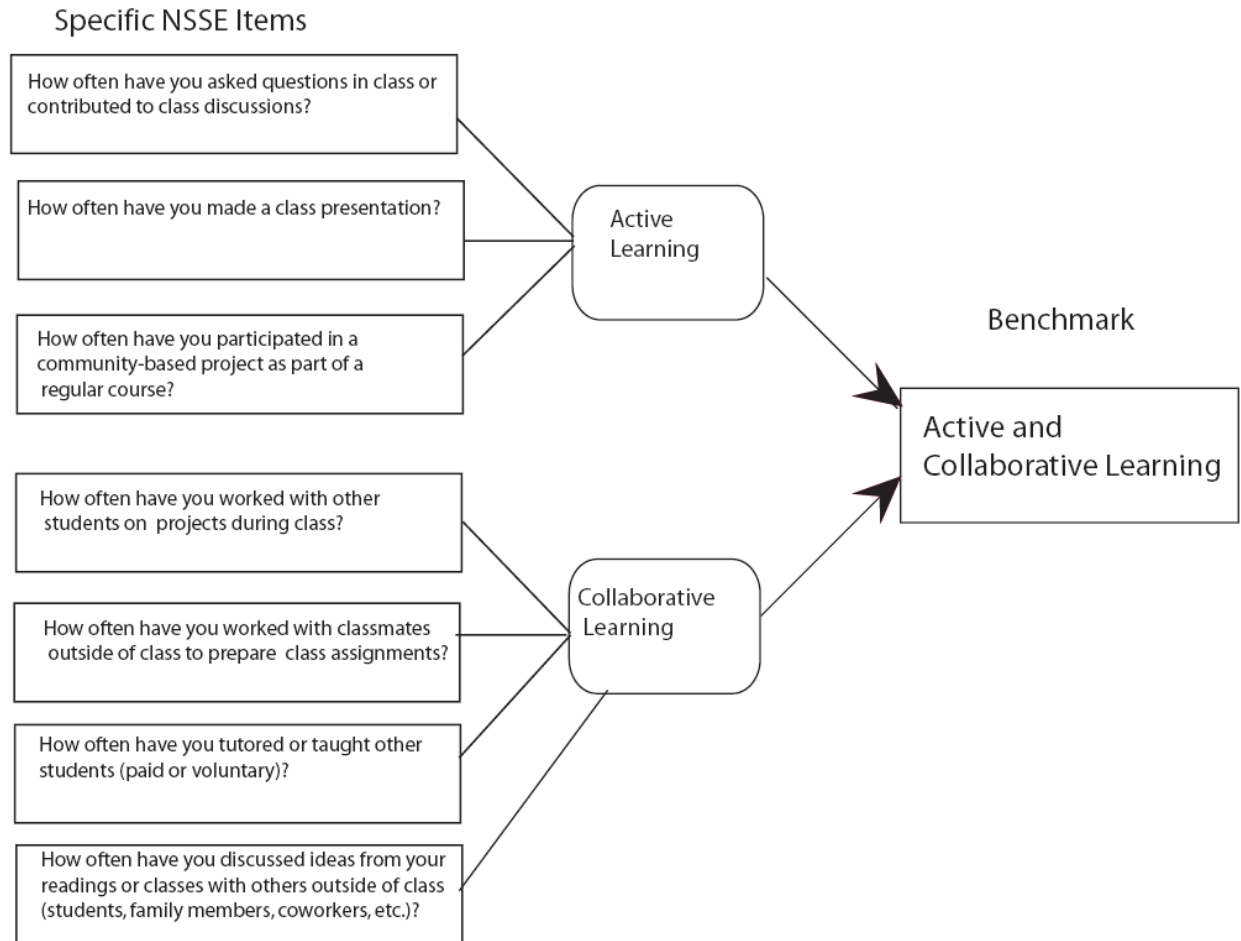
Appendix B

Chart 1: Diagram of the NSSE Benchmark Academic Challenge



Source: Gary R. Pike

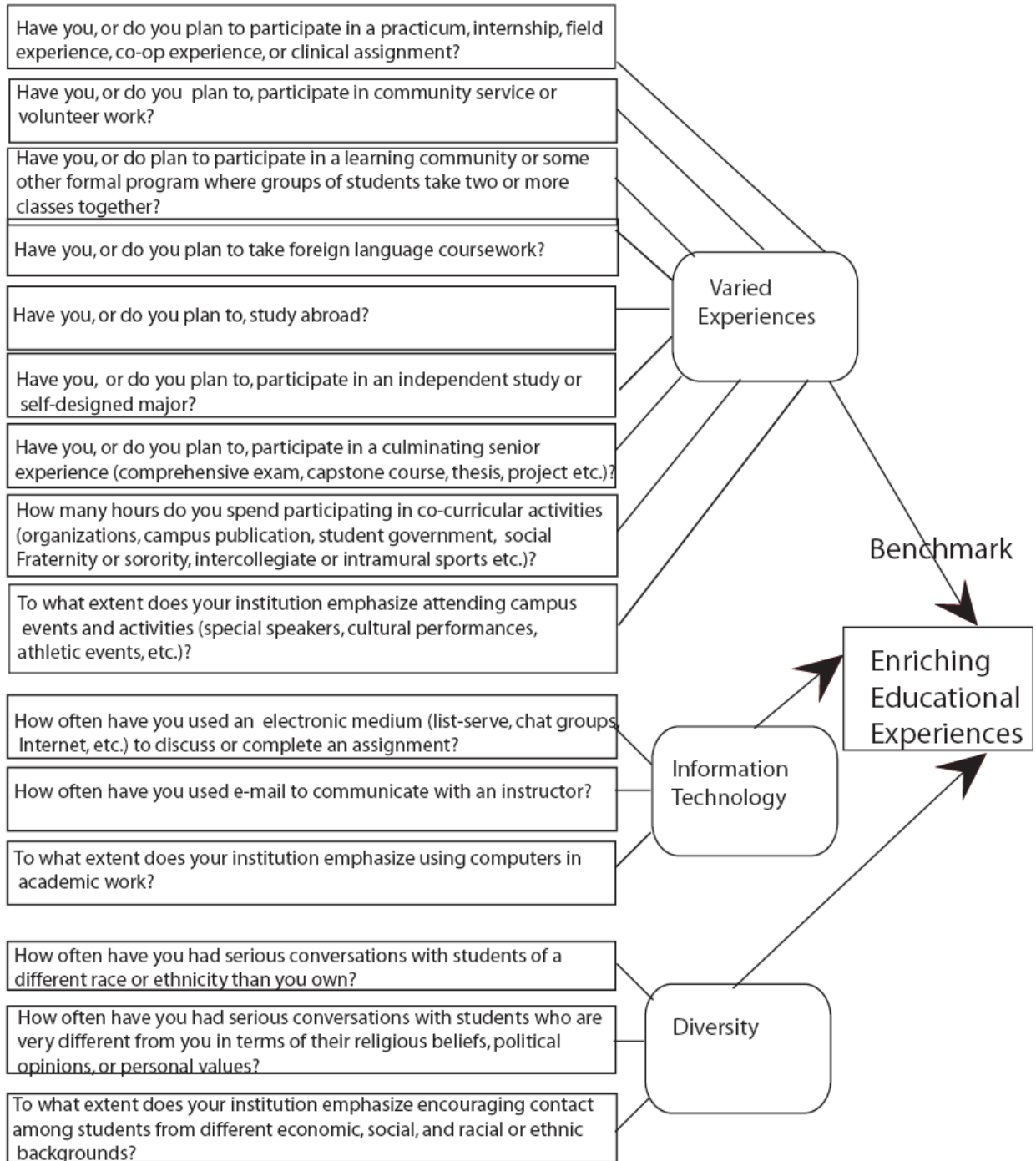
Chart 2: Diagram of the NSSE Benchmark Active and Collaborative Learning



Source: Gary R. Pike

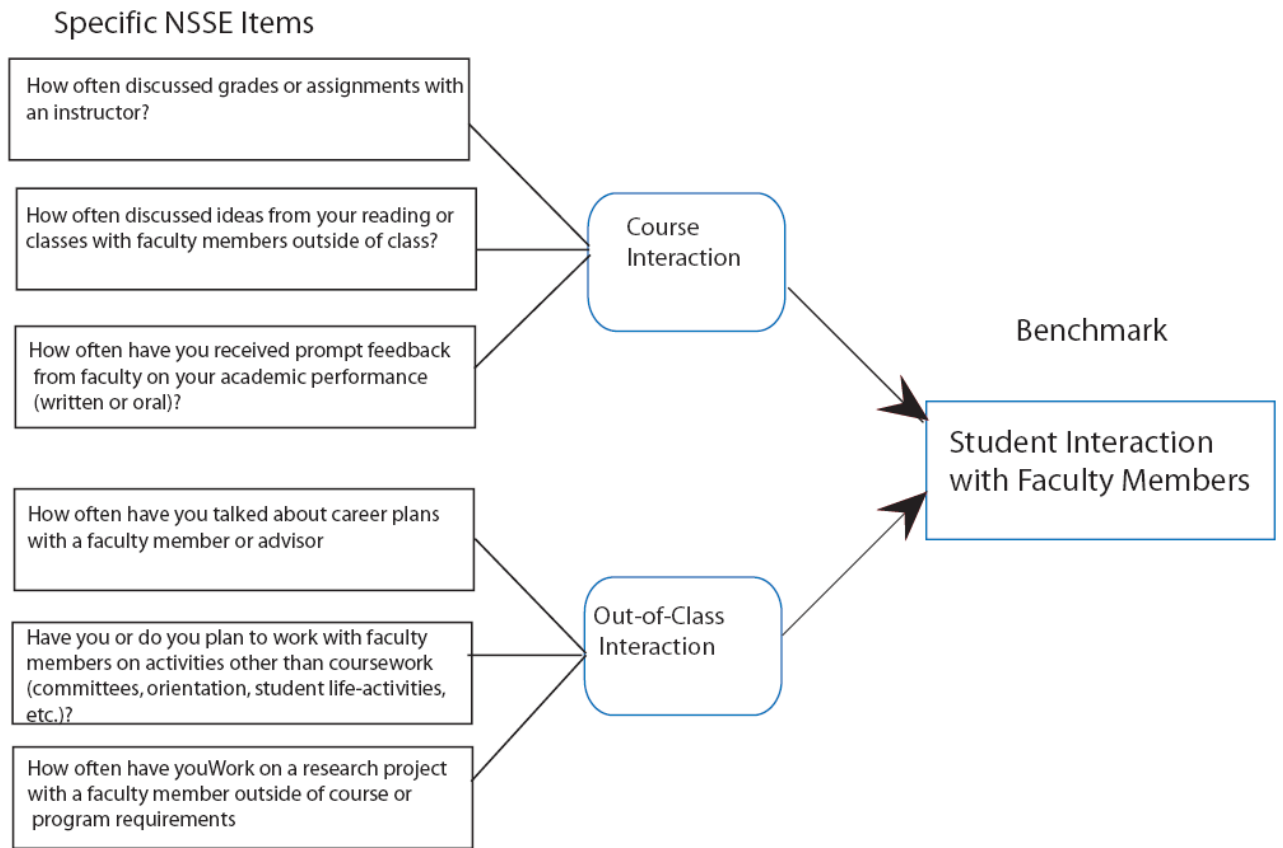
Chart 3: Diagram of the NSSE Benchmark Enriched Experiences

Specific NSSE Items



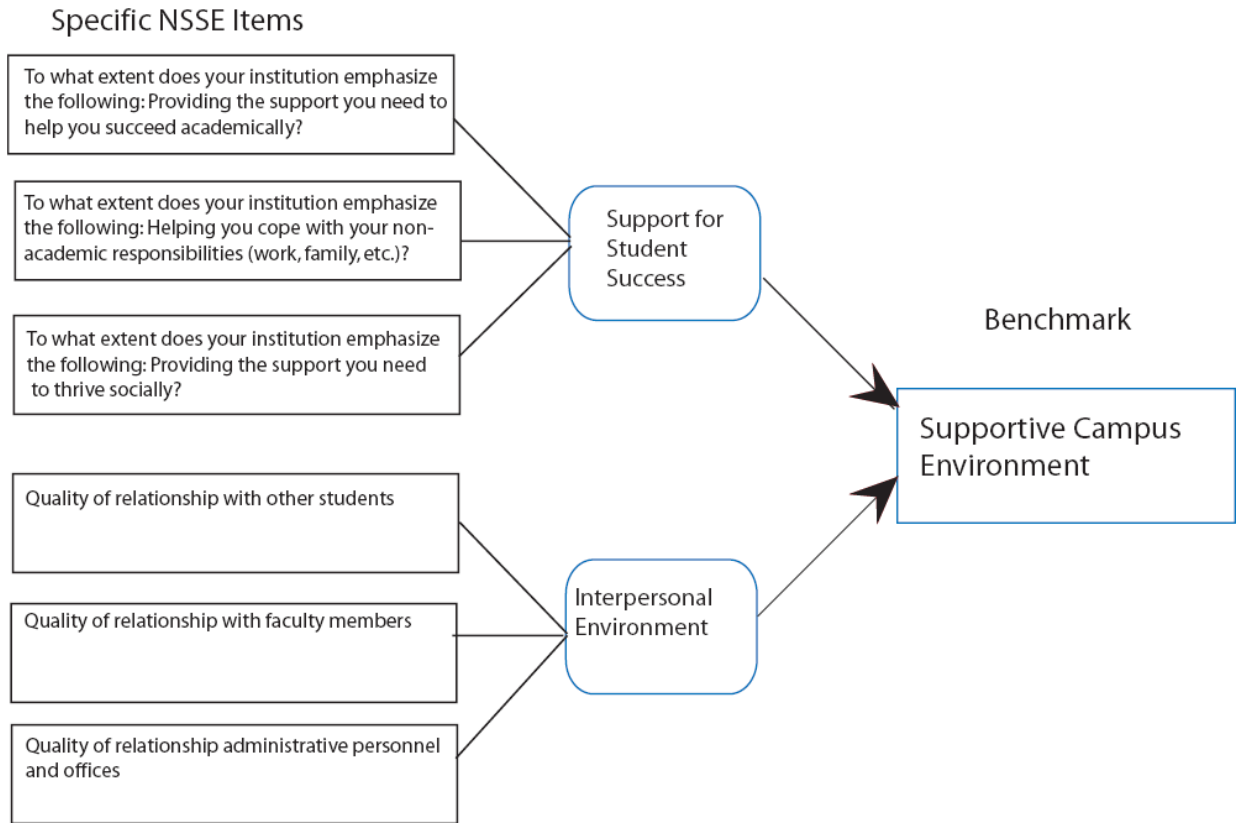
Source: Gary R. Pike

Chart 4: Diagram of the NSSE Benchmark Student Interaction with Faculty



Source: Gary R. Pike

Chart 5: Diagram of the NSSE Benchmark Supportive Campus Environment



Source: Gary R. Pike