Task Force on Student Engagement:
Report and Recommendations

San José State University
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Task Force Charge

From 2002-2011 San José State University conducted a “Longitudinal Analysis: Comparing SJSU to Other Institutions Using NSSE Data, Essential Learning Outcomes, and High-Impact Practices,” which compiled results from the National Survey of Student Engagement (NSSE) and the Student Learning Catalog (SLIC) in order to track SJSU student involvement in practices correlated with high levels of learning and academic success. The study compares the results from SJSU with those of other CSUs, institutions in its Carnegie class, and NSSE national averages.

During the same timeframe, SJSU conducted the Student Needs and Priorities Survey (SNAPS), designed by the California State University’s Chancellor’s Office to assess student experience and measure factors that help or hinder educational goals.

Both studies are mandated by the CSU and yield important and interesting information to be studied carefully and contextually. To this end, a Task Force on Student Engagement will examine the salient findings of both surveys, discuss them widely with campus stakeholders, and offer recommendations that will help the university assess, support and strengthen its campus culture of student engagement and academic achievement.

This Task Force on Student Engagement will consist of five to seven SJSU faculty members, one staff member and one student, selected to represent a range of disciplines and experience. It will meet regularly and consult broadly with campus stakeholders, including students, faculty, administrators, staff, and members of the Academic Senate and Senate committees focused on areas of student learning, engagement and success. Task Force members will read the current literature widely and examine other CSU campuses with alternative approaches to undergraduate education and experience. From these discussions, analyses and experiences, the Task Force is expected to deliver a summary of its findings and recommendations by the end of Spring 2013.

Task Force members will be selected in consultation with Academic Senate Executive Committee and the Provost’s Academic Affairs Leadership Team. There will be opportunities for faculty, students, staff and administrators to participate in campus meetings and selected focus groups. I hope you will join us in providing feedback as we review our campus data and take steps to further understanding and enhancing our students’ experiences and engagement.

Ellen Junn, Provost, San José State University
Task Force on Student Engagement: Summary of Recommendations

Following its review of the “Longitudinal Analysis: Comparing SJSU to Other Institutions Using NSSE Data, Essential Learning Outcomes, and High-Impact Practices from 2002-2011” and “Student Needs and Priorities Survey (August 2012),” consultation with campus stakeholders, survey of relevant literature and best practices, and independent data analysis, the Task Force recommends the following:

**Foster a Campus Culture of High-Impact Teaching and Learning**

1. Use the Center for Faculty Development to heighten awareness of high-impact practices (HIPs) that support student engagement and success, and share best practices from courses and departments already using them;
2. Heighten students’ awareness of HIPs to help them better understand the aims and outcomes of their own learning experiences;

**Encourage Data-Driven Decisions about Curriculum, Teaching, and Learning**

1. Strengthen informational pipeline and create greater two-way communication between the Office of Institutional Effectiveness and Analytics and teaching faculty;
2. Strengthen the results of next NSSE studies by increasing response rate and including transfer students;
3. Build measurable outcomes into curriculum decisions;

**Enlist Faculty, Departments and Programs in Revision of SJSU Curriculum to Strengthen Specific High-Impact Practices in which SJSU Currently Lags:**

1. **Common Intellectual Experience**
   Engage faculty and departments broadly in constructing transdisciplinary pathways that connect and organize general education requirements into coherent and meaningful themes;

2. **First-Year Experience**
   Broaden opportunities for students to enroll in FYE courses by expanding existing FYEs and developing new FYEs across the curriculum with the help of faculty and departmental incentives, workshops, and sustained support;

3. **Culminating Senior Experience**
   Encourage departments and programs to offer culminating experiences that meet specified outcomes through a range of options: capstone courses, culminating experiences (such as projects or theses), or last-year experiences (courses that reflect on college experience and prepare for post-college life plans);

4. **Writing**
   Integrate writing-intensive courses with other general education offerings, particularly those emphasizing high-impact practices (HIPs), such as shared thematic pathways, first year experiences and culminating experiences; review, support and coordinate Writing Across the Curriculum; pursue greater continuity and consistency in writing faculty;

5. **Undergraduate Research**
   Create college-level undergraduate research centers to expand student research opportunities; support and recognize faculty supervision of undergraduate research.
Recommendations from the Task Force on Student Engagement (SJSU)

The Task Force on Student Engagement was formed in Autumn, 2012, by Provost Ellen Junn in order to study and offer recommendations based on two recent reports, "Longitudinal Analysis: Comparing SJSU to Other Institutions Using NSSE Data, Essential Learning Outcomes, and High-Impact Practices from 2002-2011" and “Student Needs and Priorities Survey (August 2012)," both released by the Office of Institutional Effectiveness and Analytics in the summer of 2012. Seeking to assess student engagement at SJSU, the reports collate student scores on two surveys (NSSE, the National Survey of Student Engagement, and SNAPS) with evidence of students’ exposure to a number of High-Impact Practices (HIPs) that have been strongly linked to student engagement; they also compare SJSU’s results with scores from the NSSE average and from peer institutions in CSU and within SJSU’s Carnegie Classification (Master’s-granting Comprehensives). With these studies as its central focus, the Task Force drew together faculty, staff, and one student, who were recommended by the Provost’s Academic Affairs Leadership Team (AALT) on the strength of their demonstrated commitment to undergraduate education and engagement. It met throughout the spring semester, 2013, consulting broadly with representatives from the Office of Institutional Effectiveness and Analytics, Undergraduate Studies, Student Academic Success Services, Center for Faculty Development, Peer Connections, and the CSU Office of the Chancellor.¹

Student engagement forms the underpinning of academic success, and considerable research has sought to understand and support it. While recognizing the great diversity of institutions and their students, this research has made it possible to identify a set of practices (named by George D. Kuh “High-Impact Practices”) that strongly correlates to student engagement, retention and graduation. Many of these High-Impact Practices (HIPs) are already known to educators who have observed their own students’ progress, and they confirm the importance of several common elements that have come to identify quality undergraduate education: a strong, dedicated program that introduces first-year students to the expectations of college-level work; an institutional commitment to effective writing and communication, starting in the first year and extending throughout and across the disciplines; meaningful engagement with important questions and topics that transcend boundaries between majors and schools; a sense of interconnection within a strong intellectual community characterized by collaborative and integrative thinking; active and hands-on experience through civic engagement and service learning, original research, practica and internships that transform classroom learning into real-world knowledge; and the opportunity to integrate and take ownership of the diverse strands of an educational journey through a culminating final-year experience.

Taken together, the High-Impact Practices define what it means to be an educated person for our time: as well as mastering the deep and focused disciplinary knowledge represented by a

¹We are grateful to John Briggs, Dennis Jaehne, Melissa Lombardo, Ken O'Donnell, Maureen Scharberg, Amy Strage, Sutee Sujitparapitaya and Helina Yilma for their invaluable consultation and advice.
major, students must develop a range of interdisciplinary and personal capacities that include creativity, imagination, breadth, resilience, and initiative. The experiences that foster such capacities make higher education transformative, offering students not simply narrow training for a single job but preparation for a lifetime of learning, meaningful work, leadership, and citizenship. Importantly, they validate forms of learning that are fueled, but not contained, by the classroom, and that require the strong support and collaboration of faculty, staff, and administrators driven by a shared commitment to their students. Student success, the High-Impact Practices suggest, is not just an outcome, but a culture that must pervade an entire campus. If every university unit, department, program and division recognized student success to be its most important and driving purpose, which functions would it strengthen, and which would it change?

The need for a campus-wide commitment to student success, retention and graduation has never been more urgently felt. However, the current funding climate shadesto complex withucpt andd paradox. On the one hand, legislators underscore the importance of retention and graduation by seeking to build these into the CSU funding model; on the other hand, the systematic defunding of public higher education has left institutions with scant resources to support their pursuit of these important goals. Given the present fiscal realities, it is important that SJSU identify, strengthen and renew the effective HIPs that are currently occurring on campus. Looking forward, SJSU should also target HIPs that could be implemented within the current budget environment without imposing additional unit requirements onto students’ schedules. Recognizing the importance of campus-wide support for HIPs and the need for their implementation across the curriculum, the Task Force offers the following recommendations in the hope that they can spark a broad and deep conversation about our students’ needs within a realistic assessment of institutional resources; such necessary self-reflection must lead to strategic, coordinated and unified action.

Three points frame our recommendations: first, San José State excels in many areas of student engagement and learning, and countless faculty members are currently employing High-Impact Practices in their classes and programs. In the reports, students express their appreciation of faculty in the high scores they award to “quality of instruction” and “courses that stimulate intellectual-interpersonal growth” in the SNAPS (iii). However, given SJSU’s decentralized culture, many of those practices have gone unnoted within the university community—including by the students whose participation in them is surveyed by the reports themselves. One of our overall recommendations, then, is to strengthen mechanisms by which faculty can stay current on research into high-impact teaching practices in their disciplines, share their own successful teaching practices on campus (particularly those involving HIPs and other student-centered pedagogies) and identify HIPs to students in order to encourage self-reflective and metacognitive classroom and learning experiences.

Second, given the strong commitment to undergraduate education shared by SJSU faculty, as well as their historic responsibility for the university curriculum, any successful renewal of teaching and learning must involve a high level of faculty participation, contribution, and vision. These are called for both during the planning stages of any new curriculum development efforts
and during the ongoing implementation of that curriculum, through the university-wide committees already dedicated to this area, such as the Board of General Studies (BOGS) and the Academic Senate’s Curriculum and Research Committee, and through curriculum committees in the schools and departments. SJSU faculty members are already busy with many campus commitments, but responsibility for the university curriculum is surely one at the highest level of importance. This understanding infuses this report.

Third, the Office of Institutional Effectiveness and Analytics (IEA) makes an invaluable contribution to the level of our knowledge about student success, but its findings are not widely publicized among, or closely followed by, the faculty and staff who are responsible for translating such information into concrete practices in the classroom, curriculum, or co-curriculum. We will conclude by recommending a stronger informational pipeline that will allow greater two-way communication between IEA and faculty and staff, to allow a more effective transfer of vital information that will strengthen and invigorate a campus culture of research-based teaching and learning.

Summary: SJSU offers a number of high-impact teaching and learning practices, and we have been able to establish a positive correlation between these and students' graduation rates (see Appendix A). While these practices’ effectiveness is clear, their current availability is limited; indeed, the “Longitudinal Study” places SJSU behind its peers in the CSU, Carnegie Class, and NSSE National average in students’ participation in High-Impact Practices (table 4, construct 5). Our analysis of the two reports helped direct our focus to five specific practices that deserve special attention. Following Kuh’s terminology and definitions, these are: 1. common intellectual experiences; 2. first-year experiences; 3. senior culminating experiences; 4. writing-intensive courses; and 5. undergraduate research. In addition, the reports helped us to identify several areas that require further investigation and analysis, which we will detail at the end of this report.

1. Common Intellectual Experience refers to a broad, general education program that is organized in coherent and meaningful pathways or clusters and brings students together in cohorts around common educational concerns and themes that transcend the major. In the “Longitudinal Study,” students asked to rate the extent to which they have acquired “a broad general education” ranked SJSU below peer institutions in the CSU, Carnegie Class, and NSSE National average [C5B]. Corroborating this finding, students in our focus group shared a belief that many SJSU students approach general education requirements less as rewarding avenues toward achieving a broad, liberal education and more as a series of hurdles to jump or empty boxes to check before moving on to the more important work of the major.

These findings confirm our impression that students may not perceive or pursue intellectual coherence in SJSU’s general education program. Individual courses may be stars, but the curriculum should map constellations that give those individual stars an order and place. To be sure, today’s students face a number of real-world pressures that may challenge the traditional, liberal ideal of education for breadth: but we are encouraged by the example of other general education curricula that successfully update the goal of “a broad general education” while providing strong integrative elements. We are especially inspired by general education
programs that are organized around thematic pathways, such as Chico State’s, which manifests what George Kuh describes as “a vertically organized general education program that includes advanced integrative studies and/or required participation in a learning community” that can “combine broad themes—e.g., technology and society, global interdependence—with a variety of curricular and co-curricular options for students” (Kuh, 9). The success of SJSU’s existing integrative programs such as the Humanities Honors program indicates to us that, if adopted on a broader scale around topics that faculty and students find compelling and intellectually meaningful, thematic clusters or pathways of courses could enjoy similar success and extend their educational benefits and energy to a broader range of students than currently experience them.²

An integrated general education program such as we envision will be most effective if it emerges from a common vision that is generated and shared by the faculty with the strong support of the administration. As an initial stage in its development, an office with faculty representation (like BOGS, whose members are elected by the colleges) could articulate the value of this common intellectual experience through general education and solicit proposals for transdisciplinary constellations of integrated general education offerings. Their themes should bring individual departments’ general education courses into meaningful conversation with those of other departments and colleges. To be successful, these clusters or pathways will initially require course development support in the form of funding, course relief, and adequate administrative support during their implementation. Following the successful examples of other institutions, we are convinced that this effort will not succeed unless it is undertaken with both institutional support and faculty leadership.³ If departments recognize that meaningful constellations of general education courses do not threaten enrollments but may instead make their offerings more meaningful and attractive to students, this vigorous and campus-wide discussion about the topics, areas and questions for shared intellectual experiences should energize and synthesize SJSU’s general education program.

2. First-Year Experience: A great deal of research supports the need for programs that help first-year students transition to college-level work and build skills, community and engagement (Howard & Jones; Sidle & McReynolds; Polansky & Horan; Davies & Casey; Lau; Knight; Hernandez; Gilbert).⁴ The SNAPS report identifies areas of weakness in student engagement at

2“The Humanities Honors Program has been recognized as the single best lower division program for student retention and timely graduation on campus, according to university data gathered over the years” by the Office of Institutional Effectiveness and Analytics at SJSU: for data on the program’s promotion of retention and student success, see the IAE’s Academic Support Program Dashboards: http://iea.sjsu.edu/Reports/dashboards/SupportProgs/default.cfm and http://www.sjsu.edu/hum/honors/ .

3The National Resource Center for Learning Communities at the Washington Center for Improving the Quality of Undergraduate Education provides resources and guidance for the development of integrative curricula: http://www.evergreen.edu/washingtoncenter/.

4Our understanding of the FYE is consistent with the University of South Carolina’s Center for the First-Year Experience and Students in Transition, which aims “to help new students make a successful transition . . . , foster a sense of belonging, promote engagement in the curricular and co-curricular life of the university, articulate to students the expectations of the University
SJSU that we believe could be effectively addressed through stronger First-Year Experience programs, such as low student responses to the questions “If choosing a university again, I would choose this one,” and “I would recommend this university to others” (12-13). These findings are corroborated by even weaker responses in SJSU’s 2011 NSSE report, in which students evaluated their “entire educational experience” and agreed that they would “go to the same institution” again at significantly lower levels than their peers in the CSU, Carnegie class, and NSSE national average (9). The students in our focus group stressed that a large, urban campus like SJSU can be alienating and intimidating for first-year students, and they emphasized the need to help entering students build community and navigate the institution as the conditions for a positive college experience. Together with other HIPs (like integrated general education programs that generate common intellectual experiences and culminating senior experiences), we believe that targeted First-Year Experience programs would meet these needs, by strengthening students’ sense of community and giving them the skills and sense of accomplishment that will promote their ongoing success.

SJSU has already developed and assessed First-Year Experience programs; one of the most successful and enduring is “Success in Science” (Science 2), which consists of a large lecture and smaller activity sections of 25 students. In addition to the academic content area, students are introduced to a variety of university-level skills that help them transition successfully into college. Science 2 students demonstrate higher retention rates than their peers, particularly among first-generation students. The “Longitudinal Analysis” and SNAPS, along with the program’s own successful history, convince us that the Science 2 model should be expanded in order to benefit an even greater number of students than it currently does. A first step could be simply to expand the size of Science 2 and open up additional activity sections. Since the course already offers participants many of the experiences surveyed by the NSSE and SNAPS instruments in their first year, an expansion of the course would increase the number of students exposed to them and, in so doing, improve the indicators of student success that these instruments measure. A longer-range recommendation would be to extend the Science 2 model to other academic areas, ideally allowing each school to develop its own program on the same model. Experience recommends the following as conditions for programmatic success: first, coordination and adequate institutional support for the course(s) and professional development and training for involved faculty; second, significant participation by faculty members who are committed to meeting the specific needs of first-year students; third, regular communication among faculty to ensure coherence of goals and methods and to share lessons and best practices. SJSU currently offers guidelines, learning objectives and a process for approving FYEs, but we urge further attention to barriers (including inadequate incentive structures) that hinder the expansion of FYEs across colleges and departments.

3. Culminating Senior Experience: While many individual programs require capstone and culminating projects of their majors, SJSU was rated considerably lower than its peers in the and its faculty, help students develop and apply critical thinking skills, and help students clarify their purpose, meaning, and direction” (http://www.sc.edu/univ101/courses/).

CSU, Carnegie Class, and the NSSE national average in student participation in capstones (C5J). This result is echoed in SJSU’s 2011 NSSE results, which also rank SJSU behind all three groups in “culminating senior experience (capstone course, senior project or thesis, etc)” (6). In addition, respondents to the SNAPS survey rate SJSU especially low on helping them “meet the goals [they] expected to achieve” (13), which indicate low levels of satisfaction in the cumulative experience of college and its ability to prepare them for their future.

The committee is aware that the Undergraduate Studies Committee is focusing attention on capstones and generating lists of options for culminating experiences as well as developing guidelines. With them, this committee strongly recommends the expansion of capstones and cumulative experiences across the colleges.

Capstones or culminating experiences have four major functions (Bailey, Oliver & Townsend; Lizzio & Wilson; Redmond). First, they can consolidate and extend previous learning and provide students with opportunities for thoughtful reflection in regards to discipline-specific, real-world issues. Second, they play a critical role in helping students develop their professional identity and make a successful transition to full-time employment. Third, they can be used to ensure that students have achieved both professional skills and personal capacities that support success in their lives beyond the university. And fourth, they allow departments to demonstrate students’ substantial work in their major, while enabling students to synthesize their intellectual experiences at SJSU within an integrative framework.

While several degree programs offer successful capstones, culminating projects and senior seminars at SJSU, greater attention is needed to develop best practices across the university for these senior experiences (in part one of the goals of the Undergraduate Studies committee) and to make these experiences salient and valuable to students. Some students in our focus group were unaware of capstones in their own majors, but they recognized their value, once so identified, as opportunities for culminating and reflective experiences.

"Culminating Experiences" are recognized as a High-Impact Practice, but, as the examples of other universities demonstrate, they can take a wide variety of forms, including formal capstone courses, seminars, independent projects supervised by faculty, projects developed across several courses, and supervised internships (van Acker & Bailey). Thus SJSU’s departments should exercise flexibility as they develop coursework and programs that best fit the goals of their respective disciplines.

A novel program that could complement and potentially facilitate the expansion of capstones in the major is a Last-Year Experience course. While many colleges and universities understand the value of a concerted First-Year Experience (FYE), very few have developed a parallel program for the final year—what we might call an LYE (though Oregon State’s Last-Year Experience and UCLA’s new Capstone program both offer parallel approaches). Just as the First-Year Experience is designed to help first-year students transition from high school (or community college) to college, the Last-Year Experience could facilitate graduating students’ transition from college into the workforce and post-collegiate life. At campuses where graduation
is often delayed to the sixth year and beyond by competing work and life demands, a Last-Year Experience could also help students achieve the satisfaction of achievement and closure, preparing them to graduate into proud and happy alumni.

A Last-Year Experience such as we envision could provide an opportunity for students to bring together and coalesce their college experience; it would represent their last, and lasting, experience of community; and it would integrate a number of campus University Learning Outcomes (particularly writing and oral communication) that would send our graduates into the world with the levels of preparation that we expect of them. So conceived, the course could take the tone of the “last lecture,” encouraging students to explore and perceive the relevance of their studies to the ongoing search for meaning in their lives.

A substantive focus on culminating experiences will be most effective if there is campus-wide support for a range of options within the various degree programs. Implementation of this recommendation will require the university to develop clear and specific guidelines for senior culminating experiences as well as provide for best practice in these courses; to offer professional development as well as curriculum development support to faculty and departments; and, after their institution, to raise their visibility among students, faculty and staff, through both departmental advising and campus-wide events. Thus we recommend that colleges and departments work with Undergraduate Studies to develop guidelines and investigate how best to integrate these culminating experiences into the curriculum, so that every SJSU student exits our university with a rich, intellectual experience that provides a bridge between prior learning and future careers.

4. Writing: While there is some evidence of overall improvement in writing at SJSU, the data from the reports are inconsistent and contradictory, indicating the need for a more consistent and reliable research method in the future. For the time being, the data seem to indicate that our institution is at a transition period that requires sustained attention to writing across the university.

Although SJSU already asks students to complete significant amounts of writing in several parts of the curriculum and maintains offices responsible for overseeing these writing requirements, a strong need exists for better coordination among departments in order to maintain consistency of expectations and standards. In a review of SJSU’s writing programs conducted in 2011, Linda Adler-Kassner and Chris M. Anson recommend that the university “hire a new, tenured faculty member—an expert in college-level writing—to begin creating a center for writing that will bring together leaders of the several writing components and initiatives at SJSU for purposes of strategic planning, curricular reform, and research” (3) They further “recommend that an additional Director of Writing Across the Curriculum be hired to join the newly established center for campus writing” who would coordinate the 100W system, for which they

6The next time SJSU administers NSSE, we recommend applying the "Experiences with Writing" topical module, which targets quality, and not just quantity, of writing assignments.

7The recent decision to adopt the eText Everyday Writer as a common guide for students represents a positive step toward achieving such consistency.
find "urgent need for support," given major "discrepancies in the kinds and numbers of 100W courses offered in different departments, their approaches to writing, and their attempts to assess students' growth" (16).

Additionally, just as we recommend that our required GE courses be more vertically integrated and thematically organized to provide our students a "common intellectual experience," we also propose, as a trial effort, bringing some lower-division writing courses (from 1A and 1B) into the pathways to provide students space for reflection on and integration of the various strands of their learning. There are different ways this can be accomplished: for example, a topical theme could be chosen each year to reflect pressing social or educational issues, or writing courses could be organized around themes that cut across disciplinary boundaries (such as sustainability, globalization, diasporic studies, migration) and link diverse areas of study.

Currently SJSU Studies courses already emphasize writing. While the 2011 National Survey of Student Engagement Executive Summary reports that SJSU students "write more papers between five and ten pages in length than their peers at other CSUs," the data indicate inconsistencies across the courses, and we recommend that these requirements be more systematically assessed, analyzed and supported.

Given the fundamental nature of writing for our students’ undergraduate education and future in the workforce, it is critical that writing-intensive courses provide continuity and consistency in faculty. According to a recommendation by the CCCC (the Conference on College Composition and Communication), “The percentage of part-time instructors in writing programs should not exceed what is necessary to meet unexpected increases in enrollment. When more than 10 percent of a department’s course sections are taught by part-time faculty, the department should reconsider its hiring practices.” For writing instruction to be effective across campus, we must provide the resources necessary to support qualified faculty members to deliver it. Given the current fiscal climate, we recommend that faculty teaching these courses be provided with at least full-time status and multiple year contracts in order to insure continuity and stability. We also recognize the immediate need to increase the number of tenure/tenure track faculty in order to achieve a critical balance of faculty who can participate in the governance, development and required activities of the writing programs. Additionally, all instructors teaching writing courses should be encouraged to take full and regular advantage of professional development opportunities. When the economic conditions improve, some of these lines should then be converted to become more permanent tenure-track positions.

Our final recommendation is to encourage all colleges to infuse diverse writing practices throughout the curriculum, from first year to final year, to reflect the importance of writing in students’ undergraduate education and post-baccalaureate and professional lives.

5. Undergraduate Research: As George Kuh reports, engaging undergraduates directly in original research serves “to involve students with actively contested questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from working to answer important questions” (10). SJSU has enjoyed successes in this area: for example,
students in the Department of Communication Studies participate in a Bay Area-wide undergraduate research network that culminates in a symposium, while Math students in the Center for Applied Mathematics, Computation and Statistics (CAMCOS) are able to conduct original mathematical research to solve real-world problems under the sponsorship of professionals in the field. Such successes demonstrate the appeal and importance of research to SJSU’s gifted and motivated students.

However, the “Longitudinal Analysis” indicates that undergraduate research is not widespread on campus; in fact, SJSU scored significantly lower in this area than its peers in the CSU and Carnegie Class (C5F). That score may reflect conditions that will take long and concerted effort to address: for example, the ratio of tenure and tenure-track faculty to lecturers affects the likelihood that students will come into contact with, or obtain mentorship from, faculty who are active researchers themselves. Nonetheless, several other CSU campuses have made undergraduate research a priority in ways that demonstrate its benefits for both students and faculty. As Elizabeth L. Ambos, CSU’s Assistant Vice Chancellor for Research Initiatives and Partnerships, writes, a strong culture of undergraduate research will “present deliberate and well-reasoned connections between student achievement in undergraduate research and the need for extensive faculty research and scholarly practice,” making a fresh case for “why faculty time for research should be protected and fostered in teaching institutions” (COEUR, 47).

Undergraduate researchers are more than junior research assistants to faculty: they should be encouraged to develop and follow their own research interests and to build research teams and intellectual communities together (COEUR, 13). The Council on Undergraduate Research (CUR) stresses several conditions that are necessary to a strong culture of undergraduate research, which include administrative support (including a dedicated undergraduate research program office); faculty credit for supervising undergraduate research (including in tenure and promotion); and research-supportive curricula (integrated progressively, from first-year to capstone experiences), which emphasize problem-based and writing-intensive instruction (COEUR).

In order to strengthen SJSU’s culture of undergraduate research, we recommend the following steps: first, students should be made aware of the importance of research in creating new knowledge, including the rich terrain of research in which their own professors are involved. Second, we recommend a strengthening of institutional support of undergraduate research. In addition to research grants to students—which have already had a positive effect in stimulating undergraduate involvement—we recommend a systematic strengthening of departmental honors programs as ideal sites in which to foster original undergraduate research, aided by the designation of a director of undergraduate research for each college, who could disseminate information about faculty research projects and encourage students to seek out appropriate guidance for individual research projects. Finally, faculty will not be able to engage in the satisfying but time-intensive direction of undergraduate research without adequate recognition.

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and support. Where the university’s current RTP guidelines encourage the separation of research and teaching, we recommend a formal recognition of undergraduate research mentorship as a special category that counts toward both, and that plays a unique role in fulfilling the CSU mission as an institution that encourages active learning and continuous discovery through the integration of teaching and research.

**Foster a Campus Culture of High-Impact Teaching and Learning:** Recognizing that many of our students will not recognize a High-Impact Practice unless deliberately informed that they are participating in one—and that many of SJSU’s most effective faculty employ high-impact pedagogies without using the AAC&U’s terminology to name them—we recommend a campus-wide effort to share research and pedagogies around HIPs. The literature on HIPs should be inescapable, both for faculty and for students. Other campuses have developed vibrant teaching-learning communities that bring together faculty and students, along with staff and administrators (Werder): we recommend that SJSU seek new models that will enable faculty and students to talk and share ideas about the teaching and learning practices that bring them together.

**Encourage Data-Driven Decisions about Curriculum, Teaching, and Learning:**
The two studies that formed the focus of our Task Force offered data that are rich and suggestive; they also left a number of important questions unanswered, due to uneven sample sizes from year to year. Furthermore, the absence of transfer students from the samples meant that the studies did not adequately represent the SJSU student body. Studies that measure student progress from first- to final year assume a traditional college trajectory that does not hold for SJSU students, any more than it does for the majority of US college students today. Therefore, we offer the following recommendations as this important work continues.

First, institutional commitment is required in order to produce reliable sample sizes. NSSE offers recommendations for increasing response rates that we endorse: offering modest incentives for student participation, for example, will yield larger response rates. Surveys can also be administered by email, with follow-up, or in class, either of which might be expected to yield larger responses.⁹

Second, any meaningful survey must include transfer students. NSSE offers the option of addressing transfers; given the importance of these students in our student body, we strongly recommend that they be included.

Third, there is a need for greater thoroughness and clarity in establishing what is being studied, and to what ends. For example, in the “Longitudinal Analysis” the questions that are intended to study “teamwork” (and are presented as such in the executive summary) in fact only ask students to assess the quality of their relationships with faculty—a valuable data point, to be sure, but one only tangentially related to “teamwork.” We recommend a two-phase process for

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⁹The NSSE website includes recommendations about administering the survey and the range of options that it allows: see [http://nsse.iub.edu/html/administering.cfm](http://nsse.iub.edu/html/administering.cfm)
increasing the validity and reliability of the data received from NSSE and SNAPS. First, prior to
the next implementation of the NSSE at SJSU, a systematic review of the survey and the
individual items is necessary to improve face and construct validity. Second, after
implementation, it would be worthwhile to conduct our own quantitative data analysis on the
items to determine how to yield the most productive evidence toward improving student success
and engagement.

Finally, given the importance of institutional research to the work of faculty, we recommend a
more robust structure through which the Office of Institutional Effectiveness and Analytics can
involve the faculty in its work and communicate its important findings to the departments. First,
we recommend that the Office develop stronger mechanisms for publicizing and disseminating
reports (such as the NSSE, the “Longitudinal Study” and SNAPS themselves) to the
departments and faculty: a regular and widely-shared newsletter, for example, could alert
stakeholders to the IEA’s important resources and findings. Second, we recommend that the
Institutional Data Management Council reserve spaces for faculty members, who could facilitate
these communications efforts. And finally, we recommend that the IEA develop clear strategic
objectives to guide its data analyses that prioritize SJSU’s student success mission, to whose
realization the IEA is vital.

With this final recommendation, we return to the point that has informed and guided our work:
that the success of SJSU’s students depends on the full participation of a campus community
that is strongly united around this central goal. We hope that this report can help us draw closer
to meeting it.
Works cited


Frazier, Stefan. 2011. Writing Programs Self-Study. San José State University.


Appendix A: Correlation of High Impact Practices and Student Success at SJSU

Although there is a great deal of literature linking high impact practices (HIPs) to measures of student success (Kuh) and to graduation rates at CSU campuses in particular (Huber), what remains to be done includes scaling up HIPs at the university- or even CSU-scale. One of the persistent criticisms of the work to date is that the positive correlations may just be a by-product of self-selection. In other words, participation in HIPs is largely optional at most campuses, and the students who are motivated enough to participate in them are ones who would have graduated anyway (O'Donnell). Although there has been some early research suggesting there is more going on, the resource-intensiveness of most HIPs requires careful consideration of the expected benefits and costs before wide-scale implementation.

A pseudo longitudinal analysis performed at SJSU with the NSSE SLIC data shows that SJSU students trail students at other CSUs, our Carnegie class institutions, as well as the NSSE national averages in HIP participation. However, at SJSU in particular, participation in learning communities, diversity and global learning, service learning, and internships have all increased in the period from 2002 - 2011. During the same period, participation in common intellectual experiences, collaborative assignments, and undergraduate research have remained the same. Participation in writing intensive courses was the only HIP found to have decreased during this period (Briggs, 2012). In conclusion, although participation in HIPs as a whole appears to be increasing at SJSU, we are still behind other institutions in our class.

Two independent studies were undertaken to explore the impact of HIPs on the SJSU campus. Although student success is more broadly defined, these studies will focus on graduation rates. The first is a preliminary study of required HIPs in undergraduate degree programs at SJSU. The second is an in-depth analysis of the self-reported HIP participation from the NSSE-SLIC data and correlations to graduation rates.

Required HIPs Study

In the study of required HIPs, the following data were assembled: a) undergraduate programs at SJSU, b) number of units in each program, c) HIPs required, elective, or optional in program, d) number of freshmen entering program, and e) 6- and 8-year graduation rates. For a) undergraduate programs and b) number of units, the information was obtained from the current SJSU catalog. For c) HIPs required, personal contacts involved in academic advising in select programs were queried via email. The required HIPs were not obtained for every program, but some programs from each college at SJSU were included. Additional assumptions used include the following: COB major was broken down by concentration; writing-intensiveness was assumed for all programs due to a campus-wide 100W requirement; the only first-year experience counted was Science 2; core classes in majors were not considered common intellectual experiences; and required courses on research methodology were counted as undergraduate research. For d) number of freshmen and e) graduation rates, these were
copied from the SJSU IEA website and computed as the average of the F02, F03, and F04 cohorts by final major.

Programs with fewer than 10 students on average per cohort were excluded in this analysis because their graduation rates were too highly variable and of insufficient resolution. The programs that met the minimum size requirement and provided HIP information for this analysis were the following:

- COS: Biology, Chemistry
- CASA: Nutrition, Social Work, Health Science, Hospitality, Justice Studies
- H&A: Art History, English, World Languages,
- COSS: Environmental Studies, History, Political Science, Psychology, Sociology
- Ed: ChAD

There are statistically significant and positive correlations between the number of required HIPs and graduation rates in the SJSU programs studied. The Pearson’s correlation coefficient between the number of required HIPs in a program and their 6-year graduation rate is $r = 0.416$, with $p = 0.014$. The Pearson’s correlation coefficient between the number of required HIPs and the 8-year graduation rate is $r = 0.526$, with $p = 0.001$. This result provides evidence that requiring HIPs in programs does improve graduation rates for all students, and that previous findings were not just a by-product of self-selection.

The number of required HIPs for programs in this sample varied from 1 to 6. The average graduation rates of programs per number of required HIPs are graphed in Figure 1. As shown on this figure, as more HIPs are required by UG programs, the higher the average graduation rates tend to be. The exception is the one program at SJSU in this study with one required HIP and fairly high graduation rates.

The limitations of this study include the following: (1) Data were not obtained for all SJSU UG programs. We had a limited contact list and were at the mercy of those who chose to respond to our request for information. (2) Transfer student success is not included in this analysis. We only looked at native student graduation rates and HIPs in four-year programs. (3) Similarly, graduate programs are not included in this analysis. (4) Also, programs that admit students after lower division study were not included (e.g. Nursing, Occupational Therapy). (5) The analysis omitted programs with fewer than 10 entering freshmen averaged per year during the F02, F03, and F04 cohorts, due to the reasons stated previously. However, it is possible that different correlations exist for this group. (6) Other factors not studied might also influence graduation rates, such as number of units, certain HIPs in particular, and elective or optional HIPs in a program.
Figure 1. Average Graduation Rate of UG Programs at SJSU, Categorized by the Number of HIPs Required of the Degree Program. (Average graduation rate is calculated as averages from F02, F03, and F04 cohorts by final major.)

Further Analysis of Self-Reported HIP Participation

Further analysis was performed by SJSU Institutional Effectiveness and Analytics with students’ self-reported participation in HIP activities in the NSSE 2011 survey. In this survey, 290 respondents were seniors as of Spring 2011. Since that time, 223 of them have graduated. 43 students were still enrolled and in good standing as of Fall 2012. 24 students had dropped out as of Fall 2012 (determined if not graduated and not enrolled). Of the 24 students who had dropped out, 19 were in good standing, and 5 were on probation or were disqualified.

The seniors were asked if they had participated or were planning to participate in various HIP activities before they graduate. A multiple regression analysis was then run to see if there were particular HIPs that were predictors of students graduating, remaining enrolled, or dropping out.

The analysis suggested that internships could lead to students having graduated (beta = -.394, Sig = .031), and surprisingly, that study abroad could lead to students not graduating (beta = .367, Sig = .058). Furthermore, collaborative assignments could lead to fewer dropouts (beta = -.675, Sig = .056) and again, study abroad could lead to more dropouts (beta = .771, Sig = .015).
These results will not be interpreted beyond what is reported above. The sample size is quite small compared to our senior population, and it is unclear if it is representative. Furthermore, the dropout population was determined based on non-enrollment in Fall 2012 - it is possible that those students were taking a semester off instead. Lastly, students may lack awareness that some of their activities were indeed HIPs (e.g. capstones, FYEs, etc...), and thus the reported participation may be underrepresented.

Conclusions
The following bullets summarize the conclusions from this work:

● The number of required HIPs in four-year UG programs is positively correlated with 6- and 8-year graduation rates at SJSU, for programs with between 1-6 required HIPs. This result provides evidence that increasing the number of required HIPs in a program benefits all students by increasing graduation rates.

● Some very preliminary analysis suggest that internships, study abroad, and collaborative assignments might have special influence on students graduating or not dropping out in comparison with the other HIPs.

Future Work
There are several areas of future work regarding HIPs suggested by this preliminary investigation:

● The correlation coefficients between HIPs and graduation rates could be recalculated accounting for typical predictors of student success, including high school GPA or SAT score, ethnicity, and economic status. It is possible that the composition of students is not uniform from program to program.

● The number of required HIPs in each program could be tracked along with other information required for program planning moving forward.