

Report on the Progress and Findings of the AY 2013-14 SJSU Graduate Program Learning Outcomes Initiative

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I. Overview of the Initiative

This report summarizes the work to date on the AY 2013-14 Graduate Program Learning Outcomes Initiative. Under the leadership of AVP Pam Stacks and Associate Dean David Bruck, the project was designed to address four primary questions:

1. *Do all SJSU graduate degree programs have program learning outcomes, are they being used in program planning and assessment, and are they publicly available?*
2. *To what degree do the graduate program learning outcomes correspond to the newly adopted university learning goals for all students?*
3. *Are there areas within the university learning goals that are not universally reflected in the graduate program outcomes and, as such, may not apply to all SJSU graduate students?*
4. *Do graduate programs make unique contributions to student learning that are not reflected in the university learning goals?*

Our approach was strengths-based and informed by the principles of appreciative inquiry. Our timeframe was shaped by the WASC Steering Committee expectation that all SJSU programs, undergraduate and graduate, align with the University Learning Goals that help identify and ensure the meaning, quality, and integrity of our degrees.

Our first step was articulation of a set of principles that would guide the process (see attached). Our scope and timing were influenced by the need to provide evidence-based contributions to the WASC Institutional Review Report, in progress during the academic year and due to be submitted in August 2014. However, we were also cognizant of the opportunity this initiative could ignite if the graduate advisors became interested and intrigued by an analytical process that they experienced as meaningful, practical, and respectful of program and disciplinary differences. Beginning with guiding principles enabled us to think through our true purpose and priorities before we engaged the program personnel. That turned out to be a very good investment.

The Graduate PLO Initiative was led by Kathleen Roe, Professor of Public Health and 2012-13 WASC Faculty Chair, in close association with David Bruck, Associate Dean of Graduate Studies & Research. Sharan Johal, MPH student, provided expert technical assistance as the graduate assistant. Professors Winifred Schultz-Krohn (*Occupational Therapy Department, Academic Senator*), Gilles Muller (*Chair, Chemistry Department*), and Shannon Bros-Seeman (*Graduate Advisor, Department of Biological Sciences, former Chair of the University Curriculum & Research Committee*) provided helpful consultation and participation in the WASC Institutional Review Steering Committee. Dialogue about the Initiative's strategy and its emerging findings was a primary focus of the fall and spring Graduate Advisors Meetings, each one attended by over 70 program leaders.

This report summarizes the methods of the Initiative, followed by themes and observations resulting from the process to date. Although this assignment was not meant as a GS&R process evaluation, process points were evident as we worked with the leadership, program advisors, and, in some cases, department chairs and school directors. These observations are organized as process recommendations at the end of each major section. Recommendations are made with full understanding that some are beyond the scope of the initiative. They are offered merely as observations from an "inside outsider" perspective and only from the vantage point of this project. The report concludes with suggestions for next steps for the Graduate PLO Initiative.

II. Summary of the Methods of the Graduate PLO Initiative

- A. Selected Graduate Programs.** Seventy distinct graduate programs were identified from the larger set of “graduate programs” identified on several university lists (GS&R, GAPE, CSU Mentor). Inclusion criteria included (1) a graduate degree upon successful completion of the course of study, (2) expected program outcomes associated with that course of study, and (3) program open for admission in AY 2014-15. Exclusion criteria included (1) programs closed or closing out in AY 2014-15, (2) programs on hiatus pending approval of substantive revisions planned or in process, (3) concentrations that did not have additional program learning outcomes beyond those of the broader degree program, and (4) graduate-level certificates, credentials, or other forms of study offered by SJSU. Both general session and special session programs were considered on the basis of these criteria.
- B. Program Learning Outcomes.** Graduate advisors were asked to provide us with their program learning outcomes. We did not make any changes to the submissions on our own. Programs that did not have PLOs were encouraged to make that a priority with their colleagues. This message was also delivered by the College Assessment Facilitators. As a result, all 70 programs now have program learning outcomes. As anticipated from the diversity of graduate programs, the thoroughness of program personnel varied as did the PLO breadth, depth, specificity, number, quality, and content.
- C. University Learning Goals.** We mapped the graduate PLOs to the Learning Goals for All Students (ULGs) adopted by the SJSU Academic Senate during AY 2013-14. Although we initially mapped PLOs to the 10 sub-goals, we found that the more informative mapping was one level up – the five broad goals for all students: (1) specialized knowledge, (2) broad integrative knowledge, (3) intellectual skills, (4) applied knowledge, and (5) social and global responsibilities.
- D. Mapping Process.** The graduate advisors were offered the choice to crosswalk their PLOs to the University Learning Goals themselves or have us draft the map and return it to them for review and revision as needed. Approximately 30% of the graduate advisors did the mapping themselves or with faculty colleagues; our team mapped the remaining 70% and then finalized the maps after consultation with the graduate advisor. Upon review of the complete set of cross-walked program learning outcomes and University Learning Goals, our team identified a few places in which existing PLOs appeared to address additional university goals despite not having been recognized by the graduate advisors. In these cases, the graduate advisor was personally contacted to approve the addition to his or her ULG-PLO map.
- E. Posting the Graduate PLOs.** In spring 2014, the graduate advisors were encouraged to make their PLOs visible and easily accessible on their department websites. In early June, we checked the 70 program websites to see if the PLOs were posted or linked to the homepages. If the link was not there (or not easily found), we communicated with the graduate advisor to encourage posting and identify any barriers or challenges to making the PLOs visible and easily accessible to all interested viewers.

III. Overall Observations, Themes, and Recommendations

A. Graduate Programs

- 1. The number of graduate programs changes each year.** Key drivers in AY 2013-14 included (1) administrative encouragement of new special session graduate programs, (2) administrative realignment within and across colleges resulting in programs under new management and the creation or elimination of concentrations, (3) department strategic planning that resulted in the closing or plans to close some graduate programs, with some

temporarily being taken “off the books” during redesign, and (4) the planned opening of admissions for new or reconfigured programs.

2. **It can be difficult to identify the exact number of SJSU graduate programs** at any point due to the changes above that occur throughout the academic year. A list of graduate programs, current in the fall, may already be outdated by spring. Because GS&R must be informed of all new and all terminating programs, it would follow that it would be easy to keep track of the number and identity of graduate programs on campus. However, several factors complicate this determination. Programs with limited faculty and low enrollments may suspend a master's degree major without terminating it, as mentioned in the previous paragraph. In this way, it can be revived at a later time without a new program proposal and without the need for the array of university approvals and Chancellor's Office approval. Theater Arts, Recreation, and Technology and Aviation are in this state.
3. **Graduate advisor appointments are fluid, even within an academic year.** The person serving as graduate advisor may change during the semester or over the summer, as departmental roles change, faculty go on sabbatical, etc. This leaves a fair number of graduate advisors who may not be fully “in the loop,” especially if they are fulfilling only a single semester obligation or are simply new to the position. This can also lead to key information slipping through the cracks as coordinators transition. Summer is a particularly fluid period, with several department chairs serving as graduate coordinators until faculty return in the fall.
4. **The three “official” program lists – CSU Mentor, GS&R, and GAPE – have slight but sometimes important inconsistencies** based on their different concerns and data points (*i.e.*, applications for admission, program oversight, and admissions and fulfillment of candidacy and graduation requirements, respectively). There are also minor errors on some of the lists (*e.g.*, CSU Mentor lists Spanish in the College of Social Science rather than in Humanities and the Arts), and contact information may change after the lists become active. While these inconsistencies are minor, they slow down and confound efforts to understand exactly how many graduate programs we have at any given time and where they stand in the process of assessing their educational effectiveness.
5. **Programs are called different things in different places.** What the program is informally called vs. the name of the approved degree program can vary (*e.g.*, *MA in Counselor Education* vs. *MA in Education with a Concentration in Counselor Education*). Again, this is not a serious problem, just another factor that contributes to operating with a “soft” number of active graduate programs. This becomes problematic when programs slip under the radar in the confusion and emphases are incorrectly counted as distinct programs.
6. **There are various models for the relationship between regular session and special session design of the same degree program.** Most graduate degrees offered both on campus (state-support) and in a distance (self-support) mode have a single set of program learning objectives; the differences are only in instructional format, location, and/or program length (*e.g.*, the MBA, MPH, MLIS, MSEE, MSSE, and MSCE degree programs). Another program (*e.g.*, Occupational Therapy) offers the same degree in both formats but with different educational objectives, PLOs, and admissions' criteria. These differences are not discernible solely from the official lists of graduate programs.
7. **Doctoral programs operate beyond some of the norms established for master's programs.** This was most notable regarding program learning outcomes, which were found embedded in documents held by the program directors and not publicly accessible. Doctoral program directors were unaware of the PLO initiative and had not participated in the Graduate Advisors Meetings.

- 8. The graduate advisors are responsive, committed, and engaging.** Our contact with all of them, including the doctoral program directors, always resulted in fast response, positive action, and frequent expressions of gratitude for our interest and support of their programs, their workload, and their intentions. They work hard throughout the year, often accomplishing administrative tasks during uncompensated winter and summer breaks. Even during a challenging year at the university, to a person they were gracious and a pleasure with whom to work.

Departments have responded to concerns about enrollment and revenue as well as to requests from students and encouragement by our university president by proposing an array of advanced certificate programs. At this point, 18 certificate programs have been approved with four others in the approval process. They occur in every one of our seven academic colleges and range from regular session programs to special session programs, postbaccalaureate to post-master's. They provide the students with a placement indicating specialized expertise that often makes them unique from those earning only the master's degree. They can serve as a stimulus to applicants to enter the full-fledged master's program, thus aiding enrollment. Post-master's certificate programs serve a vital function to those needing continuing education credits in their fields of employment.

B. Recommendations

- 1. Continue the positive and respectful approach to managing GS&R that was so obviously appreciated by program advisors.** The advisors clearly respect and appreciate the GS&R leadership.
- 2. Pam Stacks and David Bruck are university leaders who communicate inclusion, respect, and genuine interest in the programs.** This is an asset worthy of recognition and investment, for it paves the way for innovation and buy-in among key constituents on projects of significance to the university overall.
- 3. Continue proactive outreach to the programs each semester** in order to anticipate changes in program leadership, update contact lists, and share news of program/personnel changes among the GS&R community.
- 4. Proactively include the doctoral program directors** as appropriate in outreach and activities – and expectations – of graduate advisors.
- 5. Continue individual or group outreach when coordinators change,** even for a semester, so that momentum is not lost on key priorities (such as the PLO Initiative). Note that all new advisors are contacted by GS&R and asked to join the Grad Advisors Google Group; they are also contacted by GAPE, which offers oral and written guidance and training in the online admissions system.
- 6. Continue the Grad Advisors Meetings every semester.** The meetings are well attended, congenial, and informative. Lunch clearly sets the tone for a warm exchange, and well organized agendas communicate respect for participants' time and attention. These meetings were a very useful venue for introducing the PLO Initiative, answering questions, and generating interest in the project.
- 7. Promote GS&R as the resource it is** for graduate program policy, planning, promotion, assessment, and continuous quality improvement. How to accomplish that with the extremely limited resources and manpower of GS&R beyond the current email reminders and announcements is unknown..
- 8. Consider more active program-oriented resource support and promotion.** The GS&R and GAPE websites are well organized and rich in resources for research and graduate program policies and procedures. They could also be a place for showcasing the graduate programs:

best practices, innovative program ideas, highlights of the Graduate Advisors Meetings, program and advisor snapshots, and the PLO Initiative.

9. **Use the GS&R website as a resource for the PLO Initiative.** Regular updates, examples, resources, and FAQs could all help graduate advisors understand and engage with the Initiative and their peers, not only on the specific PLO activities of the moment but also on the broader issues of the meaning, quality, and integrity of our degrees. The College of Business accreditation website (<http://www.sjsu.edu/cobaccreditation/>) and electronic newsletters (<http://www.sjsu.edu/cobaccreditation/docs/AccreditationBulletinIssue1.pdf>, <http://www.sjsu.edu/cobaccreditation/docs/Accreditation%20Bulletin%20Issue%204.pdf>) are excellent examples of this kind of community organization and technical support.

C. Program Websites

1. **While the SJSU website is getting better, there is great variety in how the graduate programs are presented.** Some are up to date and well organized, others have only minimal information, and a few are seriously out of date. This is important to the PLO Initiative as, ideally, PLOs should be visible and easily accessed from each graduate program website.
2. **Web support seems to be a problem for many departments.** Programs with adequate staff support for website updates either already have their PLOs posted and easy to access or were able to respond within a few hours to our suggestion that the PLOs be easily accessed through their program website. By contrast, other graduate coordinators indicated that their PLOs were ready to be posted but they could not be displayed on the web due to limited web-support resources.
3. **Program learning outcomes are accessible online for slightly more than 80% of the 70 graduate programs (57 of 70). However, most of these postings are to the university assessment site in the Undergraduate Studies site, without a link on the program home page.** With the non-intuitive URL of <http://www.sjsu.edu/ugs/faculty/programrecords/>, the graduate PLOs can be hard to find.
4. **There is variation in the labeling of the link from program websites to their PLOs.** This makes it more challenging to find or compare PLOs when searching across sites, even when the PLOs are there.
5. **Remnants of previous PLO documents appear when searching the SJSU website for specific programs.** They are often outdated and now separated from the program sites, yet they can appear during a search using the program name and “learning outcomes” as key words. This causes further confusion when trying to identify the PLOs for a given program.
6. **Oversight of websites is done but not systematically.** David Bruck began a detailed review of all graduate matters on departmental websites a few years ago. It revealed many instances of outdated forms, inaccurate information (in light of policy changes that had occurred in previous years), routing recommendations to wrong offices, insufficient notice to students of department policies, and blind links. Time constraints prevented continued review, but it is a practice that should be done periodically across all programs.

D. Recommendations

1. **A formal communication from the GS&R leadership to all graduate programs, copied to department chairs and school directors, expressing the need for all program websites to have a link to the PLOs that is easily found and accessed.** There are several models for what could be linked depending on program preference and progress – a simple listing of the PLOs (*e.g.*, Chemical Engineering), a document that maps PLOs to the university learning goals (*e.g.*, Meteorology), or a document that matches PLOs with course learning objectives

or key curricular milestones (*e.g.*, Archives & Records Administration) are variations among the SJSU graduate programs.

- 2. The link label should be the same – “Graduate Program Outcomes” - across all programs.** This is the most common link label and best reflects what the PLO Initiative and the Office of Assessment are looking for (although PLOs are not always what are found there!).
- 3. Support should be made available to programs that cannot get the PLOs posted with current resources.** It is probably less than one day’s work to create the links and post the documents for all programs needing help. Deployment of resources from another unit for one day could make this happen and would be a grand gesture to program leaders who are feeling overwhelmed and under-resourced.

IV. Graduate Program Learning Outcomes

A. The PLOs

- 1. All SJSU graduate programs have program learning outcomes.** This was not the case a year ago and represents significant work within academic units. Some PLOs are being revised as a result of university program planning or new interest among graduate faculty – an indication of growing interest and engagement in the final assessment step of “closing the loop.”
- 2. PLOs are in various stages of development and use.** Using the “comprehensiveness” domain of the WASC Program Learning Outcomes Rubric as a guide, most graduate PLOs appear to be between “emerging,” “developed,” and “highly developed;” only a few appear to be in the “initial” stage. The most comprehensive PLOs are often found in programs that have gone through recent professional accreditation (*e.g.*, College of Business, Doctorate in Nursing Practice, Public Health) or SJSU Program Planning (*e.g.*, Civil Engineering, Environmental Studies, Child & Adolescent Development).
- 3. Some departments have one set of PLOs for both undergraduate and graduate programs.** When queried, program advisors indicate that the curricula operate on different levels, with the undergraduate programs developing introductory knowledge and skills and graduate programs developing more advanced and specialized knowledge as well as skills for leadership and research. Examples of academic units with a single set of PLOs include the Biological Sciences, Journalism & Mass Communications, and Child & Adolescent Development.
- 4. Some departments have a set of program outcomes for all students and then break out additional PLOs specific to their undergraduate and graduate degrees.** Examples of this approach include Physics and Linguistics.
- 5. Some programs have a single set of PLOs for both their MA and MS degree programs.** Programs taking this approach include Chemistry and the Biological Sciences.
- 6. Most graduate programs that offer concentrations do not have concentration-specific PLOs.** One of the few programs that adds a learning outcome to reflect the specialization of the concentration is the MA in History (5 PLOs for the MA degree) and the MA in History with a Concentration in History Education (an additional PLO).
- 7. PLOs are called many things.** Some programs call them “program learning outcomes,” but they are also referred to as “program learning objectives” (Justice Studies), “program educational objectives” (Civil Engineering), “masters outcomes” (Nursing), “graduate program objectives” (Biomedical Engineering), “program educational objectives” (Civil Engineering), “learning objectives” (Electrical Engineering), “student learning objectives” (Communications Studies), “core competencies” (MARA and MLIS in the School of Information), and “student outcomes” (Industrial and Systems Engineering)! Each of these

terms substitutes for “program learning outcomes” in more than just the programs listed above. A range of terms is to be expected among programs as diverse as ours; however, the diversity of terms obscures a more worrisome range in the level and nature of learning as a result of graduate study.

- 8. The number of graduate program learning outcomes ranges from 2 to 15, with 50% of all programs having 5-7 distinct PLOs.** Approximately 20% of graduate programs have 2-4 PLOs. One program (Mathematics) has only two; three programs (Meteorology, Computer Science, and Statistics) have three. At the other end of the spectrum, 14% of programs have 8-10 PLOs (*e.g.*, Public Health, Mexican American Studies, Industrial & Systems Engineering, Linguistics), and 16% have 11-15 (including Human & Ergonomic Factors, Journalism & Mass Communications, Public Administration, and Archives and Records Administration). An interesting exercise for graduate advisors might be a discussion of an ideal or sufficient number of PLOs to communicate a degree of high quality and integrity, particularly in a competitive or skeptical environment. But the diversity of programs undoubtedly will preclude a consensus on this issue despite the interest in the discussion.
- 9. There are significant differences in the degree of specificity of the graduate PLOs.** Some programs have very specific PLOs (*e.g.*, English “Students will demonstrate a reading knowledge of at least one foreign language;” Journalism & Mass Communications “Understand and apply the principles and laws of freedom of speech and the press, including the right to dissent, to monitor and criticize power, and to assemble and petition for redress of grievances”). Some programs group more specific outcomes under different domains (*e.g.*, Clinical Psychology has two outcomes under its “*interventions and evidence-based applications*” domain: *1.1 Students will demonstrate breadth of knowledge of a variety of psychotherapy theories and in-depth knowledge of one chosen theory of intervention*, and *1.2 Students will demonstrate knowledge of empirically supported clinical interventions and evidence ability to select treatments for individual clients given this literature*). Other programs express program learning outcomes in broader terms (Taxation “*Appreciate multi-jurisdictional tax issues;*” Aerospace Engineering “*ability to perform research and work independently to solve open-ended problems in aerospace engineering*”). And some program PLOs are very broad (Mathematics “*ability to communicate mathematics effectively*”). This diversity is an expected function of differences in disciplinary language, professional expectations, and department cultures. It can also reflect a reluctance to break down large or general outcomes into smaller or more focused ones that would require individual assessment, even though the assessment would be more specific, more revealing, and more useful. There is probably a minimum degree of specificity that would communicate the meaning of the degree to a wide range of audiences and allow a focused assessment process to ensure graduate degree quality and integrity (see B1 and B2 below). Searching for this sweet spot could be a very interesting and meaningful participatory activity for the graduate programs. It could also be met with resistance from an overworked faculty.
- 10. Our PLOs use a wide range of verbs, but few reflect the high levels of cognitive learning likely occurring at the graduate level.** A random selection of six programs suggests that the most commonly used PLO verb is “*apply,*” which falls in the mid-range of most learning taxonomies. Among the 29 PLOs from the six randomly chosen programs, over 30% were at the basic learning level (“*articulate,*” “*understand*”) or presented without verbs at all (“*breadth of knowledge,*” “*technical skills,*” “*lifelong learning skills*”). While these PLOs may go on to describe complex concepts (*i.e.*, “*interdisciplinary perspectives,*” “*integrative knowledge,*” “*transformative social change*”), they do not present the most compelling case for the high level learning achieved by the end of a graduate program.

- 11. Few of our PLOs are expressed at a level high enough to qualify as “developed” or “highly developed” on the “assessable” domain of the WASC Program Learning Outcomes Rubric.** According to the WASC rubric, “developed” PLOs describe how students can demonstrate that which has been learned (*e.g., Graduates can write reports in APA style*). While this phrasing has not been a focus of SJSU’s program outcome guidance to date, it is useful to know that this is the way of the future and to see how close – or far – we are from an emerging set of criteria. We point out that other than the Assessment Director, the WASC liaison, and a handful of other campus personnel, assessment is still poorly understood. The taxonomy is neither well publicized nor explained, and the concept of a “quantifiable learning outcome” is nebulous. Programs have faithfully designated outcomes without being educated on their deficiencies.

B. Recommendations

- 1. Engage the graduate advisors in a discussion of how comprehensive a program’s PLOs should be to adequately express the meaning of the degree.** This could be done at a Graduate Advisors Meeting or a special workshop series. A WASC guest could introduce the Program Learning Outcomes Rubric, and the advisors could self-assess and discuss their own program’s status as initial, emerging, developed, or highly developed. Resources could then be provided (GS&R website, program examples, voluntary workshops) with the long-term goal of moving all programs to at least the “developed” category.
- 2. Engage the graduate advisors in a peer exchange regarding PLO number and specificity.** In contrast to the comprehensiveness criteria above, PLO number and specificity do not (yet) have a standard or evaluative rubric. Programs could learn from each other some of the considerations, benefits, and limitations of their own PLO number and specificity combinations, revising them as needed to best reflect the meaning and quality of their degrees. There will be resistance from program leaders who feel that more PLOs means more work without more resources. However, with only 5-7 PLOs as the most common (and often fully adequate) number of graduate program PLOs, the invitation to revisit the number and specificity of a program’s PLOs may not be too threatening.
- 3. Engage the graduate advisors in a focused discussion, moving towards informed consensus, regarding the need for additional program outcomes within a particular area of study.** For example, should there be distinct differences between the program outcomes of an MA and MS degree in the same field? Should concentrations have their own “concentration outcomes” to distinguish the meaning of the concentration from that of the general degree? Does a single set of program outcomes for undergraduate and graduate programs communicate the integrity of the graduate degree? These are important questions that may well be taken up by policy bodies within the university. Graduate advisors can be encouraged to engage proactively in the discussion among themselves and with their colleagues within and outside of their own programs and departments. The GS&R leadership can take an active role in helping to move the group to a consensus informed by both SJSU perspectives, best practices in higher education, and a growing appreciation for WASC expectations.
- 4. Engage the graduate advisors and other key constituents in a critical self-assessment of the degree to which the language of their PLOs effectively communicates the complexity of learning in their programs.** Several taxonomies exist for scaling learning outcomes from lower level (*know, understand*) to mid-level (*apply*) to higher level learning (*analyze, synthesize, evaluate, create*). The suggestion that the highest level achieved by many SJSU graduate students is only the mid-level *apply* seems worthy of deeper analysis and a participatory process for learning how to either challenge our students to higher levels of learning or write our PLOs to more accurately express the quality of learning in our graduate programs. The Lumina Degree Profile’s articulation of graduate-level learning outcomes

would be the ultimate, albeit challenging, standard to apply to a critical review of our graduate PLOs. Structured and facilitated properly, this could be an exciting and engaging process.

5. **Develop a process for recording changes to PLOs in real time.** There is currently no standard process for what programs should do when they revise or change their PLOs. Some post the changes to the university assessment website or hand them off to the college assessment facilitator. Some make the changes on their program websites, whereas some wait until the next brochure printing or website redesign. As a result, interesting program developments are not widely or immediately shared, GS&R is unaware of important changes at the program level, and discrepancies emerge between posted and practical PLOs. A set of steps and regular reminders would help keep the several sources of PLO information up to date in real time.

C. PLOs, Assessment, and Program Planning

1. **The current SJSU program planning process clearly contributes to PLO development and a new attention to closing the loop by including assessment of program outcomes.** Study of the AY 2013-14 program planning documents (self-studies, committee reviews, letters to the provost) demonstrates a new engagement around “what it all means” to have completed a degree program’s course of study. Furthermore, a recurring focus of the commitments and priorities negotiated at the end of the review addresses some aspect of closing the loop (AKA using assessment data to improve program outcomes). This epiphenomenal outcome leads to an interested, already involved, and ready-to-be-organized cohort of program leaders who will be thinking, a lot, about PLOs each year.
2. **The talent and resources SJSU has devoted to assessment over time and particularly in AY 2013-14 have made real contributions to the development, accessibility, and assessment of program outcomes, including those at the graduate level.** A culture of assessment has been steadily growing over the past decade, but significant leaps forward were achieved during the past academic year. The organization and contents of the assessment website (www.sjsu.edu/ugs/faculty/programs) were invaluable in the PLO initiative and will continue to be a source of data and inspiration as we move to the next phase of exploring and assessing the meaning of our graduate degrees.
3. **There are subtle but important differences in focus, timeline, and requirements regarding program outcomes between Program Planning and Assessment and the GS&R PLO Initiative.** Program planning and assessment is required, structured, specific, formulaic, on a calendar, high stakes, and encompassing all levels of an academic unit. The PLO Initiative is more conceptual and exploratory, with a longer and more open timeframe, and focused on celebrating what is unique about graduate programs in the university portfolio. The importance and potential of these differences became clear to the PLO Initiative leadership only near the end of the year, but they open up new avenues of inquiry and new ways to frame a strengths-based, peer-engaged discussion among graduate program leaders that can be less regulatory and more conceptual in the year(s) ahead. If framed and facilitated properly, GS&R can make a unique and exemplary contribution to the university’s ongoing development of a culture of assessment through its ability to work more conceptually and dialogically with the graduate program leaders.
4. **Graduate program advisors are seldom the departmental assessment coordinator, and in some cases, the two do not coordinate closely.** Some graduate advisors expressed confusion or basic lack of knowledge about what their departmental assessment coordinator was doing or posting regarding the graduate program; others thought they “*didn’t need to worry about the PLOs because the assessment coordinator took care of that.*” Lack of communication often led to confusion and even frustration within academic units

about who is responsible for what, including developing, vetting, and posting the graduate PLOs.

D. Recommendations

1. **GS&R can proactively explore key themes and priorities resulting from the AY 2013-14 program planning decisions and then use those themes as content for AY 2014-15 Graduate Advisors Meetings.** Program planning is a very inwardly focused experience (albeit requiring considerable attention to context and input from external stakeholders). Committing to a course of action when the faculty is exhausted from the self-study experience is necessary but often challenging. GS&R can fill a unique and supportive role for graduate program leaders by providing a broader peer context, a forum for discussion, and practical resources for tackling program improvement commitments made in the final stage of program planning, particularly regarding program-level assessment. Of course, providing practical resources would also require a commitment by the university to fund those resources.
2. **Close coordination between GS&R and the Director of Assessment can guarantee that PLOs posted to the assessment website are also linked to the program or department website.** This may require little more than consistent messaging or adding this step to annual assessment protocols; the result will be greater consistency between the two sites.
3. **Attention should be paid each year to making sure that departmental assessment coordinators and graduate advisors (if they are not the same person) orient to each other's priorities, deadlines, and resources.** Consistent messaging between the Office of Assessment and GS&R is the place to start, followed up with friendly reminders in Graduate Advisor Meetings and electronic communication.

V. Graduate Program Learning Outcomes and the University Learning Goals for All Students

A. Broad alignment between the graduate PLOs and University Learning Goals

1. **Most graduate program PLOs (85%) directly address (map to) all five University Learning Goals for all students.**
2. **The PLOs of almost all graduate programs directly map to at least four of the five university learning goals.** As currently written, the outcomes of each graduate program directly support *ULG #2: Broad Integrative Knowledge* and *ULG #3: Intellectual Skills*. *ULG #1: Specialized Knowledge* is either specified as a program outcome or assumed by the requirements for admission to the graduate degree program. Most programs address *ULG #4: Applied Knowledge*, and many specifically address *ULG #5: Social and Global Responsibilities*.
3. **Mapping at the broad goal level is more appropriate and informative than mapping graduate PLOs to the more granular ULG sub-goals.** At the sub-goal level, wording becomes very important and specific and thus harder to reconcile with the language and focus of graduate PLOs. While this difficulty may characterize the undergraduate level too, the five broad goals address domains of learning, which provide a more natural bridge between preliminary and preparatory undergraduate outcomes and the higher level, more specialized graduate program outcomes. The broad goals facilitate all boats in the fleet going in the same direction but with freedom to define themselves as appropriate to their level, discipline, and faculty vision.
4. **Program leaders that found PLO alignment with the University Learning Goals are using that finding to describe and define their programs.** Review of the most recent program planning reports suggests that programs whose PLOs mapped well to the University Learning Goals have included their alignment maps in their department self-studies.

Similarly, several graduate advisors have requested our maps to include in their annual assessment reports. It appears that program leaders are realizing the value added of alignment with the University Learning Goals!

B. Alignment Issues

1. **ULG #1: Specialized Knowledge is often implied as prerequisite for admission to a graduate program and not necessarily specified in a graduate PLO.** When that is assumed, all graduate programs meet this goal for all students. However, if the goal must be specifically stated as a program learning outcome, the percentage addressing this goal that way drops significantly. The clarifying language after the goal ("*depth of knowledge required for a degree, as identified by its program learning outcomes*") seems to open the door for this goal to be assumed to be met for graduate programs. It is inconceivable that a graduate program of any sort would fail to provide specialized knowledge; in fact, this is true of a program at any level. The lack of inclusion in the PLO set results, therefore, from a sentiment of avoiding stating the obvious.
2. **ULG #2a: Mastery in each step of an investigative, creative, or practical project is not reflected in all graduate PLOs.** Similar to the previous situation, it is hard to imagine that graduate education would not include some level of systematic work. Most likely, investigative, creative, or practical work that is being developed in the graduate programs is just not always articulated as a program outcome. All graduate programs are required to have a culminating experience that entails a high level, synthetic application of knowledge and skills gained; the steps leading to that work are a focus of every graduate program. Thus encouragement to bring that work to the level of a PLO (expected of all students and assessable) would likely result in full support of this sub-goal.
3. **ULG #2b: Understanding of the implications of results or findings from a particular work in a societal context is also not reflected in all graduate PLOs.** Again, it is hard to imagine a graduate program that does not address implications of findings. Like the other sub-goal for *Broad Integrative Knowledge* (ULG #2a above), it may be relatively simple to encourage program leaders to add this dimension to their program outcomes if it is already included and assessable in their graduate curriculum.
4. **ULG 4: Applied Knowledge is not reflected at all in a few graduate program PLOs unless a portion of the third sub-goal ("*work independently*") is considered.** The sub-goals specify "*integrating theory, practice, and problem-solving to address practical issues*" and "*the ability to apply their knowledge and skills to new settings or in addressing complex problems.*" Several graduate programs do not have any reference to applied knowledge in their PLOs, but, from an outsider perspective, their disciplinary content has both applied and theoretical dimensions. It is once again hard to imagine that, even in the most theoretically focused programs, the graduate faculty and curricula do not reflect the duality of theory and application at some level. This may be another area that requires further exploration with program faculty to find a way to express (easily) assessable applied learning that is actually going on in the programs and merely not noted in the PLOs.
5. **ULG 5: Social and Global Responsibilities is similarly not reflected in a few graduate programs' PLOs.** While the PLOs of most programs address ethics, global context, leadership, and/or civic responsibility, some do not. Every graduate program addresses ethics in some way in teaching the scientific method, professional behavior, or even publishing. Thus while all programs at least touch on ethics and perhaps the other dimensions of this goal, they do not all give it the priority that would raise it up into an assessable program outcome. Preliminary discussion of this finding at the April Graduate Advisors Meeting was met with interest by participants and would likely be welcome as the topic of a continuing conversation in AY 2014-15.

6. ULG 5b: Diverse and global perspectives through engagement with the multidimensional SJSU community was the most problematic University Learning Goal for the graduate programs. Several practical challenges are immediately evident: (1) many graduate programs are technical and highly specialized, and they do not wish to devote precious time and do not recognize the breadth gained or urgency to address global or diverse perspectives; (2) graduate programs are far shorter than undergraduate programs (usually 30 units compared to 120), limiting the time available for university community engagement; (3) graduate programs are often completely contained within a single academic unit, thus barricading them from exposure to other dimensions of the university community; (4) graduate students are usually older than undergraduates, with professional commitments and responsibilities that limit the time available for engagement with much more than their program and its requirements; and (5) many graduate programs are built on evening class schedules to accommodate working professionals, which limits student engagement with the broader campus community. The latter point is even more pronounced for off-campus, special-session graduate programs. And yet, most program leaders would say that a graduate degree in their field from San José State University is different on some important level from the same degree offered by another institution. Some of that difference is embedded in SJSU's unique demographic, historic, and community-based character and composition. Further exploration of this discordant alignment will tease out if this "SJSU difference" should be normed as a goal for all graduate students or merely noted as a hopeful situated reality. One way to globalize a campus and enhance diversity within the academic training is for instructors to incorporate global issues and examples into the course curriculum. This can be done even in classes not generally associated with global matters, such as basic science classes. Faculty members are often resistant to mandates that they do this kind of global integration, but it could be a matter of emphasis in administrative direction and could be folded into the RTP process.

C. Recommendations

- 1. Continue the discussion of ULGs and PLOs, framed as an expected and healthy iteration of the relationship between a whole and its parts.** This is a new conversation, introduced just this year. Our approach in the Graduate PLO Initiative was to make this an invitation to exploration and dialogue. Our preliminary results, presented to the graduate advisors in April, were met with interest and goodwill. This opened the door to continue the discussion in the year ahead, with the goal of narrowing the gaps discovered between the five University Learning Goals and the graduate program learning outcomes by first making sure that the PLOs truly reflect program priorities, processes, and student accomplishments. This is not to say that we will in any way pressure the programs to adopt outcomes that are not already realized; we will encourage an addition only of those that have simply gone unacknowledged.
- 2. Invest resources in a multi-faceted strategy for helping programs ensure that their PLOs truly reflect what their program does and intends to do, with particular attention to the five University Learning Goals for all students.** The strategy should include ongoing dialogue among peers, best practice examples, and provision of technical support as needed.
- 3. Add a domain to the WASC Program Outcomes Rubric – SJSU Influence – with categories and associated criteria from "none," "emerging," "developed," and "highly developed" as a way to explore systematically the relevance of University Learning Goal 5b for graduate programs.** Programs such as Linguistics, English, Music, Philosophy, Library Science, Art History, and foreign languages might find no relationship with the locale that would be included in the curriculum. There would be nothing that sets these programs apart in this realm from those taught at other universities. GS&R would argue against compelling these

programs to incorporate (artificially) such a San Jose/Silicon Valle/Bay Area flavor simply for the sake of complying with university learning goals. There is a gradation in uniqueness and in local integration across the diverse SJSU offerings. It would be useful to categorize the degree by a rubric, even if no value judgment were attached to the classification. This analysis might very well enlighten some programs to recognize local integration that they already have but have not acknowledged in their learning outcomes and goals. Thus some programs, such as Geography, Environmental Studies, Urban and Regional Planning, Meteorology, Geology, Marine Science, and Biology, have substantial affiliations with the local landscape, population, and ecosystem, especially for those students and faculty members engaged in field work. Strong ties in all of the sciences, Engineering, and Business (especially Taxation and Accounting) have been built with local industry, such as biotechnology, pharmaceutical companies, many Silicon Valley firms, and NASA. Programs in Education, Nursing, Social Work, Public Health, Occupational Therapy, and Clinical Lab Science not only have associations with the county and local agencies, hospitals, clinics, and schools but they send their graduate students on specific field studies, such as student teaching and clinical work. Other programs in Engineering and others arrange for or at least formally accommodate in the curriculum internships in the local community. Special sessions programs in Engineering are taught on site in company settings. Consultations with community experts is another means of connecting the curriculum to the community. In fact, SJSU allows a community expert to serve on master's committees as the third member, and this opportunity is often exploited. Local phenomena are frequently cited in the classroom to illustrate principles or provide examples. Students conducting interviews as part of their research (Psychology, Sociology, Anthropology, Justice Studies, Communication Studies, Kinesiology and so forth) may find their subjects in the local population. And of course, graduate students often focus on a local problem in their culminating experience, such as in History, Justice Studies, and Sociology. These activities could be quantified by fitting them to categories in a rubric from none to emerging, developed and highly developed. Careful analysis of this added domain would systematically address a fundamental assumption of this "Goal for All Students" – that place and context (SJSU) can matter, even to graduate programs. Regardless of the outcome of the analysis, the inquiry itself could make a meaningful contribution to the broader dialogue regarding the meaning of an academic degree.

4. **Actively engage program leaders who have successfully navigated a common challenge to share their process and products with their graduate program peers.** The graduate advisors are a group with immense talent and commitment. There are numerous examples of collaboration between faculty to establish PLOs, innovation, and coordination that could be shared and promoted among the graduate advisors group to provide relatable, local examples of SJSU's participation in this national dialogue about the meaning, quality, and integrity of academic degrees.
5. **Identify the culminating experience as a way to better understand and articulate programmatic expectations for accomplishment.** Working from both ends (expected vs. demonstrated), this approach will allow a determination of satisfaction of PLOs by culminating experiences; the hope is that exploration and refinement of one will result in modification of the other. This may also be met with significant resistance from graduate advisors unless it is framed as inquiry rather than demand, interesting rather than burdensome, and opening possibilities rather than adding to workload.
6. **Continue to frame the next steps with the guiding principles that served the PLO Initiative so well: *staying mindful of the diverse paths to a shared goal, commitment to strengthening our graduate programs, enhancing their visibility and ability to attract qualified applicant pools, guiding and retaining an excellent student body, and enabling***

programs to demonstrate and proudly assert student capabilities upon graduation, thus demonstrating, with evidence, the meaning, quality, and integrity of their degrees.

7. **Continue to make the case that attention to program outcomes is important far beyond the parameters of the WASC institutional review.** Program leadership on this issue is key to continuous program improvement. It also helps a program to center itself in the mix of SJSU degrees, demonstrate its value added, and advocate for resources. There is hope that this process will lead to self-evaluation of the set of PLOs devised by the program. Clearly, there are useful PLOs and assessment strategies and procedures, and there are cynical ones that offer ease of completion but produce little information that could prompt meaningful revision and improvement and thus be of any real value. Between monitoring, peer pressure, and self-reflection, we foresee modification in the choice of learning outcomes. However, a change in learning outcomes must be accompanied by addition to assessment plans. One must realistically recognize that the graduate advisors are on an island of sorts. They constitute an extraordinarily dedicated and arduous group. Their realizations about the adequacy of their PLOs and assessment plans will not generate revision without cooperation from their department colleagues. This buy-in in the face of greater workloads may not be forthcoming. More broadly, articulation and assessment of program outcomes can establish a program's competitive edge in the rapidly changing landscape of higher education and make the case for the intellectual and societal value of advanced study beyond the undergraduate degree. Finally, our university's commitment to this level of self-reflection can be a point of Spartan Pride and open opportunities to contribute SJSU-informed perspectives to the national dialogue on the meaning, quality, and integrity of the college degree.

VI. Summary and Next Steps

The Graduate PLO Initiative was designed around four key questions. Each is presented below with a summary response based on the evidence presented in this report.

A. Key Questions

1. *Do all SJSU graduate degree programs have program learning outcomes, are they being used in program planning and assessment, and are they publicly available?*

Yes! Our graduate programs have program learning outcomes (or will by the end of June). They are used in program planning as each department cycles through the 5-year process and are increasingly associated with course-level assessment of student learning. Nearly all graduate PLOs are publicly available on the assessment website, and more and more are being posted to program websites.

2. *To what degree do the graduate program learning outcomes support the newly adopted university learning goals for all students?*

Overall, the graduate PLOs support the five broad domains of the University Learning Goals for all students. Given the diversity and autonomy of our 70+ graduate programs, this is remarkable.

3. *Are there areas within the university learning goals that are not reflected in the graduate program outcomes and, as such, may not apply to SJSU graduate students?*

It is too soon to tell. Some areas – specifically *global and social responsibilities* and, to a lesser extent, *applied knowledge* – are not uniformly reflected in the graduate program learning outcomes at the present time. However, it would be premature to conclude that those goals do not apply to SJSU graduate students since the graduate PLOs need more work before we can be certain that they fully reflect the priorities and outcomes of the

programs. Undoubtedly, however, we will not find 100% correspondence between the ULGs and program curricula.

4. *Do graduate programs make unique contributions to student learning that are not yet reflected in the university goals?*

It is also too soon to answer this question, since the program outcomes may not yet fully reflect what students are able to do as a result of their course of study. Continued refinement of the PLOs and exploration of the processes and results of the culminating experiences should provide the evidence needed to address this question. Particularly promising are the outcomes related to higher levels of learning and higher order thinking, leadership, and professional development.

B. Recommended Next Steps

Based on the evidence presented in this report and the experience of working on the Graduate PLO Initiative for AY 2013-14, the following seven actions are recommended as next steps. Following each action item is the time frame and suggested responsible lead.

1. **Review and prioritize the 26 recommendations included in this report** (Summer 2014: GS&R leadership, PLO Initiative principals)
2. **Continue to work with the graduate advisors as a group and with individual program leaders as needed to refine the PLOs until everyone is certain that they accurately reflect program intentions and processes** (AY 2014-15: GS&R leadership, PLO Initiative principals)
3. **Bring in WASC resource people to help put the SJSU efforts in the context of broader and important discussions regarding the future of higher education.** Of particular importance will be orientation to the WASC meaning, quality, and integrity of the degree framework and the program learning outcomes rubric.
4. **Expand the leadership opportunities for graduate advisors who indicate interest in this project and/or are doing innovative work on their own program learning outcomes** (AY 2014-15: GS&R leadership, PLO Initiative principals)
5. **Introduce – with care and purpose – the importance of the culminating experience as the premier assessable vehicle for the PLOs** (AY 2014-15; GS&R leadership and their designees)
6. **Strengthen the resources, outreach, and support for the conceptual and intellectually interesting work of the PLO Initiative that can be provided by GS&R, particularly through the website** (Summer planning, AY 2014-15; GS&R leadership, PLO initiative principals).
7. **Seek opportunities to bring engaged graduate program leaders to WASC training trainings, particularly the Spring 2015 Academic Resources Conference (ARC) or regional workshops on key topics, such as the meaning, quality, and integrity of the degree (MQID) or program outcome assessment to extend the capacity of our local team and excite our core about the importance of this work and the relevance of the SJSU contributions to the broader national dialogue** (AY 2014-15, GS&R leadership).

Principles of the Graduate PLO Initiative

WASC Accreditation and Graduate Programs – Statement of Principles

1. GS&R is proud of our graduate programs and committed to their success.
2. Any threat to the accreditation of SJSU overall is a threat to our graduate programs. Similarly, deficiencies in our graduate programs pose a serious threat to the university's successful WASC accreditation affirmation.
3. The SJSU WASC Institutional Review leadership, GS&R leadership, and graduate program leaders share responsibility for the processes, assessment, and outcomes necessary for a successful accreditation institutional review.

The Graduate Program Learning Outcomes [PLO] Initiative

4. The Graduate PLO Initiative is designed to further strengthen the place and significance of graduate education in SJSU's mission, learning goals, and resource alignment.
5. The goal of the Graduate PLO Initiative is to determine the status of each graduate program's learning outcomes, culminating experiences, and achievement of those expressed program learning outcomes, staying mindful of the diverse paths to a shared goal and attention to the resources needed to fully participate in university assessment priorities.
6. All timelines, processes, and deadlines of the Graduate PLO Initiative will be established staying mindful of the unique calendars and workload patterns of graduate programs and accommodate where possible.
7. The GS&R Committee is a key partner in any initiatives involving graduate programs. It should be involved in laying the groundwork and framework for the discussions of the Graduate PLO Initiative.
8. The graduate advisors are critical to the dialogue between programs, GS&R Committee, and the Office of GS&R. Their involvement guarantees a faithful representation of the current status of graduate programs, shared best practices and challenges, and help for graduate programs to effectively plan for the future.
9. Mindful of faculty workload and time, we need to minimize the "extra work" for the PLO Initiative at the program level, while also assuring that program faculty are engaged in the most meaningful way for the analysis and success of their programs.

Our Ultimate Goal

The Graduate PLO Initiative is dedicated to

- a. strengthening our graduate programs
- b. enhancing visibility of our graduate programs
- c. contributing to program ability to attract qualified applicant pools
- d. guiding and retaining an excellent student body,
- e. matriculating and graduating students with efficiency
- f. enabling programs to demonstrate and proudly assert student capabilities upon graduation.