

General Education Outcomes at Mt. SAC: Plan 2009-2012¹

Approved by the Academic Senate on May 28, 2009

INTRODUCTION

General education outcomes (GEOs) are statements that describe the knowledge, skills, and perspectives intended to be achieved by students who satisfy Mt. SAC's general education (GE) requirements by taking courses that fall within the GE sequence. Per **Mt. SAC's revised GE Philosophy Statement**,

General education is the distinguishing feature of higher education. It is a broadly-based core of humanistic knowledge and abilities, the acquisition of which is the distinctive characteristic of the educated person. General education courses emphasize the ability to reason, to examine issues from different perspectives, to challenge authority, and to communicate ideas logically and confidently. They instill open-mindedness, respect for differences among people, and knowledge of self. By exposing students to different fields of study, general education courses provide an understanding of the human condition and of human accomplishments and encourage a lifelong interest in learning.

Mt. SAC's Academic Senate Resolution 2008-13² directed the General Education Outcomes Committee (GEOC)³, and then was re-written to direct the proposed merged SLO and GEO Committee^{4 5}, to suggest a plan and timeline to monitor, facilitate, document and evaluate the process of both the determination and assessment of college completing course-level Mt. SAC GEOs⁶, assessment and use of assessment results. Although the proposed new Outcomes Committee will take on this charge in fall 2009, it is important for GEOC to provide planning directives to guide to the new committee members and keep the momentum.

The purpose of Academic Senate Resolution 2008-13 is to respond to both internal and external conditions affecting the use of GEOs at Mt. San Antonio College:

- **Internal:** The college's mission statement, "to support [students] in achieving their personal, educational, and career goals in an environment of academic excellence," is our overriding impetus. And to contribute toward the achievement of goals such as:

¹ Special thanks to the Student Learning Outcomes Committee of whose SLO Plan was used as the basis for this plan. Also thanks to the GEO Coordinator, Joseph Terreri and the GEO Committee as most of their efforts are represented in this plan.

² <http://www.mtsac.edu/administration/senates/academic/uploads/0813GEOPlan.pdf>

³ <http://inside.mtsac.edu/organization/committees/generaled/>

⁴ <http://www.mtsac.edu/administration/senates/academic/uploads/0812SLOGEOMerge.pdf>

⁵ <http://www.mtsac.edu/administration/senates/academic/uploads/FullSenateMinutes030509approved.pdf>

⁶ GEOs can be used as course-level SLOs. See <http://www.mtsac.edu/instruction/generaled/>

- **College Goal #2:** The College will prepare students for success through the development and support of exemplary programs and services.
- **College Goal #8:** The College will encourage and support participation in professional development to strengthen programs and services.
- **College Goal #11:** The College will improve effectiveness and consistency of dialogue between and among departments, committees, teams, and employee groups across the campus.
- **External:** The accrediting agency for California Community Colleges (ACCJC)⁷ uses the application and integration of GEOs as an integral part of its accrediting standards (see Resource Section at end of report).

Although we believe that the fundamental drive behind the GEO process should always be the improvement of student learning, we must also respond to accreditation mandates that require the visibility of specific components that reflect the appropriate institution-wide application of GEOs:

- The creation of GEOs for all active GE courses⁸
- Full transparency of GEOs (see resources at end of paper for related accreditation standards and Academic Senate’s web site for related resolution)

The process of guiding the development and measurement of GEOs must remain the responsibility of faculty. We also believe, however, that the best planning occurs when we encourage and support appropriate input and support from all college constituencies (i.e., managers and classified). Through this collaboration, we become a more efficient and effective team.

Because the GEO process includes the assessment and improvement of student learning, it is also an integral element of institutional planning at Mt. SAC (see Appendix A). Within this context, the foundation of department planning comprises clearly articulated goals related to the improvement of student learning as well as the delivery of unit services. The integrated planning process allows for documentation of efforts related to these goals, to improve our institutional effectiveness, and is essential to the thoughtful use of our complex and sometimes limited resources.

Our ultimate goal is institutional effectiveness—the effective establishment and improvement of student learning.

⁷ www.accjc.org

⁸ We define “course-level GEOs” as any SLO that crosses two or more courses and has an Intended Outcome statement as well as a clearly articulated Means of Assessment (columns 2 and 3 in the Nichol’s 5-column model—see Appendix B). All active courses include all credit courses listed in the catalog.

PROPOSED GOALS AND ACTIVITIES

The next table outlines the goals, activities and timeline need. The logistics of some of the actions will need to be reviewed before implementation can occur (e.g., placing GEOs in the catalog; transparency of GEOs). It is understood that consultation and coordination with appropriate committees/constituents across campus will be necessary.

The goals stated in the table below are a total fraction of the eight Workgroups that will have completed a particular activity:

1. Area A English
2. Area A Speech
3. Area B Science
4. Area C Arts
5. Area C Humanities
6. Area D US History and American Institutions
7. Area D Social, Political and Economic Institutions
8. Area E Lifelong Learning and Personal Development

A Workgroup will have met a goal related to assessment or use of results if at least 60% of the courses within the Workgroup Area have completed the task. In the end, the goal is that all courses (100%) under the Mt. SAC GE Areas are to do assessment and evaluate the results for their GEO for course-level and program-level review. The other courses that will be examined include:

9. Mathematics /MATH 71
10. Reading /READ 90 & AmLa33R
11. Physical Well Being (PE-X and DNCE).

Table 1. Activities & Timeline	Dec 2008	June 2009	Dec 2009	June 2010	Dec 2010	June 2011	Dec 2011	June 2012
Goal 1: By December 2010, 100% of courses will complete at least one GEO assessment cycle. (related to college goal #2 & 11)								
Convene workgroups to create one GEO, one criterion for success and one common rubric for each GEO Area. Continue monthly communication and follow-up to facilitate full assessment	2/8	8/8						
GEOs included in the college's program review document through the course-level review tab as an SLO		√	√	√	√	√	√	√
Complete assessment of GEO		Area A	Areas E and D1	Areas B and D2	Area C			

Table 1. Activities & Timeline	Dec 2008	June 2009	Dec 2009	June 2010	Dec 2010	June 2011	Dec 2011	June 2012
Complete workgroups to review compilation of findings, use of results ⁹ and congratulate and evaluate including GE Courses mapped to GEOs, GE Zones, and inclusion in e-PIE. Each GEO will be assessed once every four years at a minimum			Area A	Areas A, E and D1	Areas B and D2	Area C		
Facilitate workgroups for assessment of concrete competencies for AA Degree Requirements (Read, Math, Physical well-being) and put into e-PIE			Read90 AmLA33R, Math71	Physical Well Being (PE-X and DNCE)		_____	_____	_____
Goal 2: Each semester, the GEO Coordinator will continue to create opportunities for dialogue, communication and professional development campus-wide to facilitate, evaluate and report on the GEO process. (related to college goal #2, 8 & 11)								
Follow-up and meetings weekly/monthly with Areas/Divisions, Chairs and Deans (attend Division meetings, etc.) on process and progress	√	√	√	√	√	√	√	√
Continue partnerships with GEOC, Academic Senate and others to facilitate the work. Provide monthly updates to Curriculum and Instruction (C&I) for Academic Senate (AS)	√	√	√	√	√	√	√	√
Coordinate and facilitate campus professional development opportunities (via TLC (cross-over credit), POD, Division/Dept meetings, etc.) ^{10 11}	√	√	√	√	√	√	√	√
Document, evaluate and make suggestions for improvement to the process and achievement of goals (e.g., norming session for using rubrics; college goals) Publicize it and report to IEC, C&I, AS and the campus community		√		√		√		√

⁹ The amount of time required to review the findings and propose use of results may take more than one semester.

¹⁰ <http://www.mtsac.edu/instruction/generaled/resources.html>

¹¹ http://www.mtsac.edu/instruction/generaled/assessment_plan.html

Table 1. Activities & Timeline	Dec 2008	June 2009	Dec 2009	June 2010	Dec 2010	June 2011	Dec 2011	June 2012
Using e-PIE and other means, create reports to document GEOs and the assessment cycle per AS Transparency Resolution. Provide documentation for accreditation		√		√		√		√
Recommend to C&I and AS process improvements (e.g., multiple means of assessment; direct or indirect assessment)		√		√		√		√
Evaluate and keep up-to-date websites for GEOs	√	√	√	√	√	√	√	√
Work with campus community to publicize GEOs	√	√	√	√	√	√	√	√

The GEO Coordinator is the person responsible for overseeing these tasks and timelines. The Coordinator will work collaboratively with the GEO Committee (and in fall 2009, the proposed Outcomes Committee), Academic Senate and other faculty members to engage in a team effort to achieve these tasks. A specific work plan example can be found in Appendix C; it was this work plan that was used in fall 2008, winter 2009 and spring 2009 to coordinate and drive the GEO activities.

As mentioned earlier, for this process to be institutionalized, there needs to be a team effort. As such, it is hoped that the division deans and chairs provide assistance as needed to facilitate the process. Their assistance is needed to compile the information on the courses assessed under their areas and to guide the dialogue and use of results.

In consultation with faculty, each division dean and chair responsible for a course should indicate by June 2009 the status of their GEO assessment and their continuous plan and timeline for assessment (e.g., such as a four-year cycle aligned with course review). The division should be able to report on the summary data for each course. The division dean and chair should use the GEOC Reporting form to provide summary data and feedback to GEOC via the Research and Institutional Effectiveness office. Some questions to consider when providing feedback might include:

1. Did we have a positive or negative experience doing the GEO assessment? Why?
2. What did we learn? How does what we learn impact us as teachers and the curriculum?
3. How could the GEO Assessment process and reporting be improved?
4. How could I use the results in my Planning for Institutional Effectiveness (PIE) program review process?

5. How does our division plan to use the results related to this course and the Mt. SAC General Education curriculum?
6. What changes would we recommend to the Mt. SAC General Education assessment plan for the next semester?
7. What changes are needed to the Mt. SAC GE Philosophy statement?
8. Any other thoughts to share?

Each division dean and chair should maintain the records necessary to show assessment and use of results for each course. The chairs are further encouraged to record course-level assessment into e-PIE and include all resources needed paying particular attention to the use of results section called "action".

Using the information collected at the end of each semester, the GEOC will review the summary reports from each course and will compile the data, write an overall summary report, and review the findings by GEO Area with the faculty, deans and chairs. GEOC will review the plans and discuss recommendations for changes such as course-level changes/discussion, GE Area level changes/discussion and overall GE discussion (e.g., changes to philosophy statement, courses in the GE pattern and any other relevant issues).

As appropriate, a meeting will be called for faculty, deans and chairs to attend each fall and spring to review the results, to celebrate the achievements and discuss action needed to improve the process and student learning. Reports will be given to IEC, C&I and Academic Senate each fall and spring semesters.

If a course has been evaluated in one semester and re-evaluation is not immediately needed, then there is no need to evaluate it again for a few years. If the area already has a course-assessment timeline, the faculty may consider adhering to it as much as possible and discussing any timing questions with the GEO Coordinator. For assessment help and/or process questions, faculty may feel free to contact the GEO Coordinator or any member of the GEO Committee including the research office.

RESOURCES

In order to accomplish this work, the GEO Coordinator will need to adhere to timelines and concrete, directive tasks – including creating the templates and materials - with a goal toward intensive project management techniques (i.e., reviewing the plan, protecting the plan, keeping to the plan, accomplishing the plan and documenting and evaluating the progress and process). It is recommended that the GEO Coordinator continue to work with the GEO Committee and that the new, proposed, merged SLOC and GEOC committee adhere to the tasks at hand and to ultimately achieve the goal of creating opportunities for faculty to demonstrate GEOs and creating a collegial opportunity for self-reflection, congratulations and improvement.

Overall, in order to accomplish this GEO plan it is clear that the following will be needed:

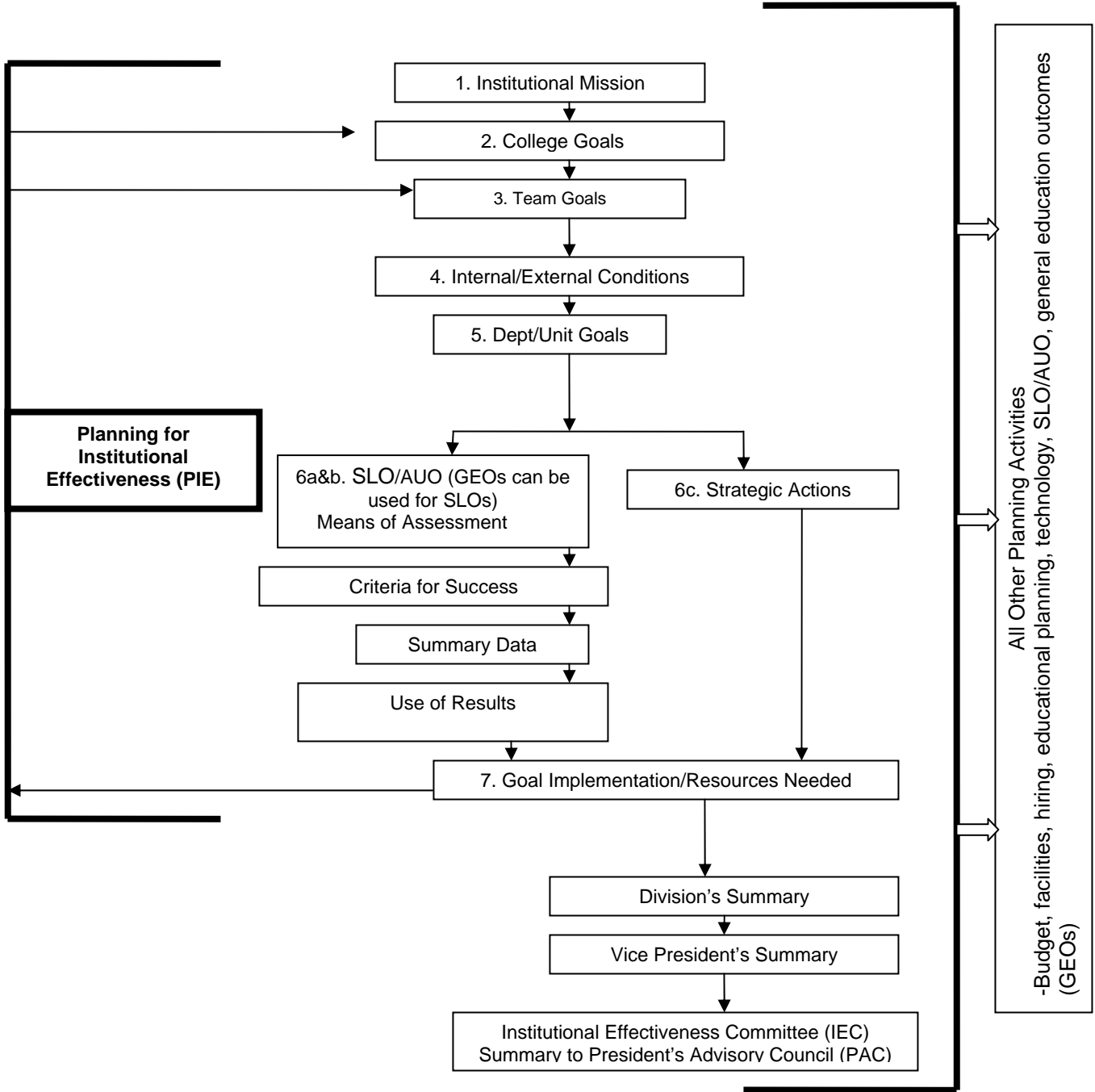
- ✓ GEO Coordinator
- ✓ Faculty perspectives
- ✓ Faculty facilitation
- ✓ Educational Research Assessment Analyst from the research office
- ✓ Deans' and chairs' advocacy and facilitation

CONCLUSION

Although this plan includes timelines, it should be noted that planning resides at the unit level and is assumed to be continuous and flexible as conditions change at the college and in the broader environment. We expect, similar to any planning exercise, slight changes as necessary. Large changes in the plan, would, of course, need to be first reviewed by Curriculum and Instruction Council and Academic Senate.

GEOC believes that this plan, while ambitious, is necessary in order to adhere to the fundamental drive behind the GEO process, which is the continual assessment of and improvement of student learning with the continued understanding of accreditation mandates. Faculty members are doing SLOs and to some degree their GEOs and their assessment every day. It is time to provide a venue and plan for their documentation, exploration, collaboration and celebration. We hope this plan is of value to the proposed Outcomes Committee as well as Curriculum and Instruction and Academic Senate.

APPENDIX A MT. SAN ANTONIO COLLEGE PLANNING FRAMEWORK



APPENDIX B

Nichols' 5-Column Model for SLO/AUO Development and Assessment (now more commonly known as part of Mt. SAC's program review process called Planning for Institutional Effectiveness (PIE))

Mission & Goals	Intended Outcome(s)	Means of Assessment and Criteria for Success	Summary of Data Collected	Use of Results
The mission of the program, department or administrative unit.	What will the student think, feel know or do as a result of a given educational experience?	What are the criteria for success? What tools will be used to establish and measure success?	Summarize the findings.	<p>What do the data tell us about our process?</p> <p>What, if anything, do we need to do to our program, department, or course to improve student learning?</p> <p>What resources are necessary?</p>

Appendix C

Mt. San Antonio College Plan for GEO Assessment in Fall 2008, Winter 2009 & Spring 2009

Five Column Model of Plan (updated as of April 24, 2009)

Unit Goal	Intended Outcome/objective	Means of Assessment and Criteria for Success	Summary of Data Collected	Use of Results
Develop and assess GE Outcomes	The GEO Committee prepares facilitators to lead the workgroups in their creation of the GE outcomes and assessment plans. (Strategic Action)	The training will take place at the 11/4/08 GEO Committee meeting.	In fall 2008 and winter 2009, facilitators were trained and workshop materials were prepared, reviewed and edits made.	In fall 2008, winter 2009 and spring 2009, the materials were used to advertise the workshops via the GEOC and facilitators.
Develop and assess GE Outcomes	Each workgroup will establish GEOs and an assessment plan. (SLO)	<p>100% of the eleven (11) workgroups will establish GE outcomes and assessment plans by March 15, 2009.</p> <p>Of the GE outcomes and assessment plans created, 80% will meet the criteria in a checklist established by the SLO Committee (see the SLO/AUO Guidebook). The GEO Committee will evaluate the work by April 15, 2009.</p>	<p>In fall 2008 and spring 2009, 8 area workgroups were convened.</p> <p>8 groups have a GEO, means of assessment and criteria for success. Of these 8, 100% pass the checklist criteria.</p> <p>The competency workgroups (3) will be addressed in fall 2009.</p> <p>We did not meet the 100% goal.</p>	Faculty took the GEOs, etc. back to their areas for discussion and worked with GEO Coordinator to create an implementation timeline. Attendance at the workshops was low and so further evaluation is necessary.

Project Execution Template (updated as of April 24, 2009)

Phase	Objective	Action	Target Dates & Update
GEOC planning	Adopt this GEO plan, including 8 areas or units of GEO assessment corresponding to the 8 required GE areas of study and 3 additional areas of required achievement	<ol style="list-style-type: none"> 1. Area A English 2. Area A Speech 3. Area B Science 4. Area C Arts 5. Area C Humanities 6. Area D US History and American Institutions 7. Area D Social, Political and Economic Institutions 8. Area E Lifelong Learning and Personal Development <ol style="list-style-type: none"> 1. Mathematics /MATH 71 2. Reading /READ 90 3. Physical Well Being (PE-X and DNCE) 	Approve via email by 10/14/08. 8 areas were contacted. The achievement areas will be contacted in fall 2009.
GEOC Planning	Communicate plan to Deans, Chairs, and other key constituent groups to support recruitment of strong workgroup representatives.	Joe will contact Debbie to get on agenda for Wed morning Instruction Team meeting. Liesel will adapt talking points into a flyer/handout for general consumption.	By 10/22/08. Completed
Phase I: Single-course workgroups: GEO composition and assessment planning	Bring together representatives of Math 71, ENGL 1A, SPCH 1A, READ 90 to identify existing course-level SLOs suitable as GEOs and the timeline for assessment.	Joe will facilitate. If possible, adopt existing course-level assessments for the "single course" degree competencies for institutional assessment purposes. Facilitate composition of additional GEO/SLOs for these courses and agree to assessment timeline of at least one GEO/SLO per course by spring 2009.	First meeting by 10/15/08 One or more GEO/SLO written per course - with assessment plan - by 12/1/08. English 1a and Speech 1A were completed. Rest will be done in fall 2009.
GEOC planning	<p>Confirm workgroup facilitators and representatives for 7 multi-disciplinary workgroups (see listing at end).</p> <p>Develop handouts and other materials for 7 multi-disciplinary workgroups (see list at end of document).</p>	<p>GEO Committee rep. will contact chairs/deans to identify persons with disciplinary expertise and authority.</p> <p>Joe will coordinate the creation of these materials, starter templates, and instructions. (Debbie has already begun a good draft of this)</p> <p>Recruit new GEOC members with</p>	<p>By 11/4/08. Done.</p> <p>By 11/4/08. Done.</p> <p>At 11/4/08 GEOC meeting. Done.</p>

Phase	Objective	Action	Target Dates & Update
	Conduct training of GEOC committee reps as workgroup facilitators	strong SLO experience. Determine step-by-step plan for workgroup success.	
Multi-disciplinary workgroups: GEO composition and assessment planning	Workgroup meetings/composition of GEO/SLOs. Attendees = identified discipline representatives AND anyone from a GE discipline who would like to participate and assist.	Scheduling of workgroup meetings by GEOC reps. Use a model similar to that of the A.A. degree faculty groups last year. In the session, using the GEO zones, suggested GEOs AND the defined GE outcomes of the accreditation standards AND the Mt. SAC GE philosophy as guiding tools, define one (or a few) central, unifying GE outcome statements that could be applied to any GE course in the Area. Workgroups also work to establish assessment criteria that will characterize any assessment chosen by the faculty at the course level. The assessments themselves are not identical and can be chosen locally, but they must adhere to the standards set for the GE workgroup.	First meeting between 11/5/08 and 12/4/08 Ongoing facilitation, as needed. GEOC reps will facilitate/consult. May require second meeting before 3/15/09 to determine assessment rubrics
GEOC Planning	Development of criteria for success	The GEO Committee will review assessment plans (see 5-column model above)	By April 15, 2009. Done during workshops.
All 11 workgroups: GEO composition and assessment planning	Completion of GEO composition and assessment planning for all 11 workgroup areas.	GEOC rep maintains progress chart to ensure at least one GE outcome statement is attached as an SLO at the course level to every course each of the 11 areas, and that each of the 7 multi-disciplinary areas has a common rubric or other common assessment plan.	By March 15, 2009 Not yet completed.
GEO/SLO Assessment	GEO/SLOs are measured at the department level as part of regular SLO process and reported in e-PIE	GEOC rep monitors progress in e-PIE.	Spring 2009. Ongoing
Assessment	Summary report (11 areas)	Committee reviews.	June 2009
GEO Use of Results	Report of findings based on data	GEO committee evaluates overall progress, designs feedback mechanisms to Area groups, and perhaps makes recommendations for institutional changes.	Summer 2009

***Multidisciplinary Workgroup Representatives:**

1. Physical Well Being: DNCE & PE
2. Area B Science: ASTR, CHEM, GEOG, GEOL, METO, OCEA, PHSC, PHYS, AGOR, ANAT, ANTH, BIOL, MICR, PSYC
3. Area C Arts: ART, AHIS, ARCH, DN-T, ID, MUS, PHOT, SPCH, THTR
4. Area C Humanities: CHIN, ENGL/LIT, FRCH, GERM, HIST, HUMA, LATN, ITAL, JAPN, PHIL, SIGN, SPAN
5. Area D US History and American Institutions: HIST & POLI
6. Area D Social, Political and Economic Institutions: AGAG, AGFR, ANTH, BUSC, CHLD, GEOG, HIST, JOUR, POLI, PSYC, SOC, SPCH
7. Area E Lifelong Learning and Personal Development: AD, BIOL, CHLD, COUN, LEAD, FCS, NF, PE, PSYC

RESOURCES: ACCJC Standard II.A.3 Related To GEOs

Standard II: Student Learning Programs and Services

The institution offers high-quality instructional programs, student support services, and library and learning support services that facilitate and demonstrate the achievement of stated student learning outcomes. The institution provides an environment that supports learning, enhances student understanding and appreciation of diversity, and encourages personal and civic responsibility as well as intellectual, aesthetic, and personal development for all of its students.

A. Instructional Programs

The institution offers high-quality instructional programs in recognized and emerging fields of study that culminate in identified student outcomes leading to degrees, certificates, employment, or transfer to other higher education institutions or programs consistent with its mission. Instructional programs are systematically assessed in order to assure currency, improve teaching and learning strategies, and achieve stated student learning outcomes. The provisions of this standard are broadly applicable to all instructional activities offered in the name of the institution.

II.A.2. The institution assures the quality and improvement of all instructional courses and programs offered in the name of the institution, including collegiate, developmental, and pre-collegiate courses and programs, continuing and community education, study abroad, short-term training courses and programs, programs for international students, and contract or other special programs, regardless of type of credit awarded, delivery mode, or location.

b. The institution relies on faculty expertise and the assistance of advisory committees when appropriate to identify competency levels and measurable student learning outcomes for courses, certificates, programs including general and vocational education, and degrees. The institution regularly assesses student progress towards achieving those outcomes.

f. The institution engages in ongoing, systematic evaluation and integrated planning to assure currency and measure achievement of its stated student learning outcomes for courses, certificates, programs including general and vocational education, and degrees. The institution systematically strives to improve those outcomes and makes the results available to appropriate constituencies.

II.A.3. The institution requires of all academic and vocational degree programs a component of general education based on a carefully considered philosophy that is clearly stated in its catalog. The institution, relying on the expertise of its faculty, determines the appropriateness of each course for inclusion in the general education curriculum by examining the stated learning outcomes for the course.

General education has comprehensive learning outcomes for the students who complete it, including the following:

- a. An understanding of the basic content and methodology of the major areas of knowledge: areas include the humanities and fine arts, the natural sciences, and the social sciences.
- b. A capability to be a productive individual and life long learner: skills include oral and written communication, information competency, computer literacy, scientific and quantitative reasoning, critical analysis/logical thinking, and the ability to acquire knowledge through a variety of means.
- c. A recognition of what it means to be an ethical human being and effective citizen: qualities include an appreciation of ethical principles; civility and interpersonal skills; respect for cultural diversity; historical and aesthetic sensitivity; and the willingness to assume civic, political, and social responsibilities locally, nationally, and globally.

General Education Outcomes 2006 to 2009¹

An Historical Perspective

By

General Education Outcomes Committee

July 8, 2009

INTRODUCTION

Mt. San Antonio College (Mt. SAC) is continually focused on student success and improving student learning outcomes. A focus on general education outcomes (GEOs) began in 2006 and 2007, with the document "*Recommendation for Implementation of General Education Outcomes at Mt. San Antonio College*" (Appendix A) followed by a change in May 2007 (Appendix B). The document outlined proposed models for assessing GEOs. Over the years, the plan and activities have progressed and been updated as needed to match the current perspective and direction for the college. The following is a synopsis of the how GEOs were created at Mt. SAC and the planning and Academic Senate Resolutions that supported its creation.

General education outcomes (GEOs) are statements that describe the knowledge, skills, and perspectives intended to be achieved by students who satisfy Mt. SAC's general education (GE) requirements by taking courses that fall within the GE sequence. Per **Mt. SAC's revised GE Philosophy Statement**,

General education is the distinguishing feature of higher education. It is a broadly-based core of humanistic knowledge and abilities, the acquisition of which is the distinctive characteristic of the educated person. General education courses emphasize the ability to reason, to examine issues from different perspectives, to challenge authority, and to communicate ideas logically and confidently. They instill open-mindedness, respect for differences among people, and knowledge of self. By exposing students to different fields of study, general education courses provide an understanding of the human condition and of

¹ Special thanks to the Student Learning Outcomes Committee of whose SLO Plan was used as the basis for this plan. Also thanks to the GEO Coordinator, Joseph Terreri and the GEO Committee as most of their efforts are represented in this plan. The web sites were particularly useful for this report.

human accomplishments and encourage a lifelong interest in learning.

It is clear that the college continues to value measuring GEOs as the Academic Senate passed several resolutions to create the infrastructure and direction for GEOs at Mt. SAC:

- GE Outcomes Committee (GEOC) created by AS Resolution 2006-06 (passed October 5, 2006)
<http://www.mtsac.edu/administration/senates/academic/documents/0607YearEndReport.pdf>
- GEO Coordinator Resolution 2007-05 (passed June 7, 2007)
<http://www.mtsac.edu/administration/senates/academic/uploads/0705GEOCoordinator.pdf>
- General Education Outcomes Plan Resolution 2008 – 13 (passed March 5, 2009)
<http://www.mtsac.edu/administration/senates/academic/uploads/0813GEOPlan.pdf>
- Transparency of SLOs/GEOs Resolution 2009–02 (AMAC passed April 22, 2009)
<http://www.mtsac.edu/administration/senates/academic/uploads/0902Transparency.pdf>

Mt. SAC's Academic Senate Resolution 2008-13² directed the General Education Outcomes Committee (GEOC)³, and then was re-written to direct the proposed merged SLO and GEO Committee (now accepted to be the Outcomes Committee)^{4 5}, to suggest a plan and timeline to monitor, facilitate, document and evaluate the process of both the determination and assessment college completing course-level Mt. SAC GEOs⁶, assessment and use of assessment results. Although the Outcomes Committee will take on this charge, it is important for GEOC to leave as much historical and planning perspectives as possible to guide the new proposed merged committee. The final adopted GEO Plan and Timeline can be found at <http://www.mtsac.edu/administration/senates/academic/documents/GEOPlan.pdf>. This current document represents the historical perspective for the Outcomes Committee to review.

² <http://www.mtsac.edu/administration/senates/academic/uploads/0813GEOPlan.pdf>

³ <http://inside.mtsac.edu/organization/committees/generaled/>

⁴ <http://www.mtsac.edu/administration/senates/academic/uploads/0812SLOGEOMerge.pdf>

⁵ <http://www.mtsac.edu/administration/senates/academic/uploads/FullSenateMinutes030509approved.pdf>

⁶ GEOs can be used as course-level SLOs. See <http://www.mtsac.edu/instruction/generaled/>

ACCOMPLISHMENTS

There are numerous accomplishments by GEOC (see Appendix C). Some of the many accomplishments include creating GEO Zones that represent the areas that the college thought our graduates should excel (see Appendix D). College employees were given the opportunity for input several times and through this method the GEO zones were formed:

- Critical Thinking and Reasoning,
- Effective Communication,
- Quantitative Reasoning,
- Reading Competence,
- Information Competence and the Effective Uses of Technology,
- Personal Responsibility,
- Social Responsibility and Cultural Competence and
- Civic Engagement and Global Citizenship

The above GE Zones, of course, are not written as GEOs. Furthermore, the GE Zones do not align with the Mt. SAC GE Areas; as such, the committee felt it was necessary to have faculty members who taught in specific Mt. SAC GE Areas to determine the specific GEO for that Area as opposed to the committee's earlier thought about assigning a GE Zone to a GE Area⁷ - this change was made after attending a state-wide GEO Workshop and speaking with fellow colleagues. To accomplish this task, a two hour Workshop⁸ has been designed for the Workgroups that focuses on two main goals: (1) that in conjunction with the GEO Zones⁹, the philosophy of their respective Area and the measurable objectives for those courses that they will determine a common outcome to assess; and (2) that the Workgroup comes to a shared understanding of what student attainment of that learning outcome entails.

For each course within the designated Workgroup, the outcome agreed upon in this cooperative manner will function as both a course level SLO and a GEO. Therefore, it is important that faculty knowledgeable about each course within the designated Workgroups be in attendance at the appropriate Workshop. Two pilot Workshops were held on 11/20/08, four other workshops were held in Spring 2009. The results, to date, of these workgroups can be found in Appendix E; the

⁷ http://www.mtsac.edu/instruction/generaled/pod_resentation.swf

⁸ http://www.mtsac.edu/instruction/generaled/docs/GEO_workshop_handouts.pdf

⁹ <http://www.mtsac.edu/instruction/generaled/outcomes.html>

appendix outlines the amazing amount of work and collaborative effort that faculty completed in, sometimes, a two-hour time period. During this time period, they were able to create the GEO, means of assessment (common rubric) and criteria for success. They will use a common reporting form to document their absolute one-shot assessment due to the Research and Institutional Effectiveness department by June 30, 2009. Some assessment results have already been received. Example GEOs are listed below:

STUDENTS WILL BE ABLE TO WRITE AN ESSAY IN WHICH THEY SYNTHESIZE INFORMATION FROM MULTIPLE TEXTS. STUDENTS WILL BE ABLE TO APPLY MLA FORMAT FOR CITING AND DOCUMENTING SOURCES.

STUDENTS COMPLETING AN ASSIGNMENT IN AREA A COURSES (SPCH 1A AND SPCH 1AH) WILL BE ABLE TO ANALYZE MODES OF ARTISTIC EXPRESSION.

STUDENTS COMPLETING AN ASSIGNMENT IN AREA A COURSES (SPCH 1A AND SPCH 1AH) WILL CRITICALLY EVALUATE PUBLIC SPEECHES.

STUDENTS COMPLETING AN ASSIGNMENT IN AREA A COURSES (SPCH 1A AND SPCH 1AH) WILL UNDERSTAND THE NEED TO ADAPT COMMUNICATION STYLE TO ACKNOWLEDGE THE DIFFERENCES IN OTHERS.

STUDENTS COMPLETING AN ASSIGNMENT IN AREA A COURSES (SPCH 1A AND SPCH 1AH) WILL BE ABLE TO EVALUATE THE RELIABILITY OF INFORMATION SOURCES.

GENERAL EDUCATION OUTCOME: STUDENTS COMPLETING RELEVANT ASSIGNMENTS IN AREA B COURSES WILL EVALUATE THE IMPACT OF SCIENCE ON THEIR DAILY LIVES.

GENERAL EDUCATION OUTCOME: STUDENTS COMPLETING AN ASSIGNMENT IN HUMANITIES AREA C WILL BE ABLE TO IDENTIFY THE INFLUENCE OF CULTURE ON HUMAN EXPRESSION.

GENERAL EDUCATION OUTCOME: STUDENTS COMPLETING AN ASSIGNMENT IN AREA C (ARTS) COURSES WILL BE ABLE TO ANALYZE MODES OF ARTISTIC EXPRESSION.

GENERAL EDUCATION OUTCOME: STUDENTS WILL BE ABLE TO DIFFERENTIATE AMONG CHANGES IN THE AMERICAN CONSTITUTIONAL GOVERNMENT OVER TIME. (D1)

GENERAL EDUCATION OUTCOME: STUDENTS COMPLETING RELEVANT ASSIGNMENTS IN AREA D2 COURSES WILL ANALYZE THE RELATIONSHIP BETWEEN SOCIAL, POLITICAL, AND/OR ECONOMIC INSTITUTIONS AND HUMAN BEHAVIOR.

GENERAL EDUCATION OUTCOME: STUDENTS COMPLETING AN ASSIGNMENT IN AREA E COURSES WILL DEMONSTRATE MEANINGFUL SELF-EVALUATION RELATED TO INCREASING THEIR LIFELONG PERSONAL WELL-BEING.

In order to allow more information sharing from the chairs about GEO progress and expectations, the GEOC also asked chairs to complete some minor questions about their GEO assessment status and plans (see Appendix F).

Based on the amount of work completed to date, it is clear that a formalized GEO Plan was necessary to both guide the college in the specific activities and timeliness of work to be completed and to provide a library, if you will, of the accomplishments to date¹⁰. This plan (<http://www.mtsac.edu/administration/senates/academic/documents/GEOPlan.pdf>) allows for a concurrent-level GE Area assessment that is rapid, requires intensive coordination for the GEO Coordinator, the GEO Committee, division deans and faculty.

CONCLUSION

Course-level GEOs and planning resides at the unit level and is assumed to be continuous and flexible as conditions change at the college and in the broader environment. GEOC believes that its work facilitating the process across the college was necessary to adhere to the fundamental drive behind the GEO process, which is the continual assessment of and improvement of student learning with the continued understanding of accreditation mandates (see last Resources section).

Faculty members are doing SLOs and to some degree their GEOs and their assessment every day (Appendix G). GEO assessment provides a venue for their documentation, exploration, collaboration and celebration.

We hope this document provides the newly created Outcomes Committee (to convene in fall 2009) with some historical background as they go forward with GEOs and SLOs.

¹⁰ Given that there is a proposed merger of the SLO and GEO Committees, a synopsis and/or history perspective of the GEO work would be advantageous for the next committee, for the GEO web site and for accreditation.

Appendix A

Recommendation for Implementation of General Education Outcomes at Mt. San Antonio College
in Accordance with Accreditation Standards IIA.2.b, IIA.2.f., and IIA.3

June 6, 2006, Revised April 4, 2007

I. Preface

Mt. SAC is currently using the Nichols model for SLOs/AUOs assessment; in comparison with other General Education Outcomes assessment models, the Nichols' model, grounded in the creators' 15 years working with 250 institutions, is by far the most credible (see Bibliography).

The college is required to assess its General Education Outcomes in three accreditation standards. 11A2f is representative of those standards:

The institution engages in ongoing, systematic evaluation and integrated planning to assure currency and measure achievement of its stated **learning outcomes** for courses, certificates, and **programs including general and vocational education**, and degrees. The institution systematically strives to improve those outcomes and makes the results available to appropriate constituencies.

General Education outcomes are statements of what groups of **students will think, know, feel or do** upon completion of a college's General Education Program. These are not statements of what **faculty intended to do** as part of the General Education process. To measure General Education Outcomes, faculty members across disciplines create 3-5 outcomes that support one or more areas of the college's General Education philosophy. Then those outcomes are assessed within the given course or program in order to improve the Gen Ed program. Typical assessments include standardized tests given to freshmen and graduates, standardized and locally developed entrance and exit surveys, performance assessments and behavior observations, and locally developed cognitive assessments. It's important to note, "Criterion for success is established by the faculty for their exclusive use...it is not a tool for making administrative judgments concerning the program" (Nichols, *A Practitioner's* 62). If we move beyond the simple definition, we see that

...Outcomes concerning general education serve a number of purposes. The most important of these purposes is the articulation of the educational characteristics that we seek in generally or liberally educated students at the time of their completion of the GE curriculum. In addition, these outcomes serve important roles regarding validation of the institution's statement of purpose, engagement of the faculty, and the assessment process itself (Nichols, *General Education* 29).

General Education Outcomes assessment is a monumental project for a college to undertake; it is assessment on a global scale. It is necessary, therefore, just

as it was for SLOs/AUOs implementation, to establish a plan, a three-year timeline, and designated roles and responsibilities in order to ensure the project's effectiveness.

II. Mt. SAC's General Education Philosophy

"General education is the distinguishing feature of higher education. It is a broadly based core of humanistic knowledge and abilities, acquisition of which is the distinctive characteristic of the educated person. General education courses emphasize the ability to reason, to examine issues from different perspectives, to challenge authority, and to communicate ideas logically and confidently. They inculcate open-mindedness, respect for differences among people, and knowledge of self. They provide an understanding of the human condition and of human accomplishments and encourage a lifelong interest in learning.

General Education courses are not primarily skills based, nor are they limited to, or more appropriate for, majors in a specialized field of study. Courses that fulfill general education requirements must:

1. Require post-secondary level skills in reading, writing, computation, and critical thinking.
2. Improve students' abilities to:
 - communicate oral and written ideas effectively;
 - define problems, design solutions, critically analyze results;
 - work effectively and cooperatively with others;
 - develop and question personal and societal values, make informed choices, and accept responsibility for one's decisions;
 - function as active, responsible, ethical citizens;
 - acquire the curiosity and skills essential for life-long learning.
3. Impart understanding, knowledge, and appreciation of:
 - our shared scientific, technological, historical, and artistic heritage, including the contributions of women, ethnic minorities, and non-western cultures;
 - the earth's ecosystem, including the processes that formed it and the strategies that are necessary for its maintenance;
 - human social, political, and economic institutions and behavior, including their interrelationships;
 - the psychological, social, and physiological dimensions of men and women as individuals and as members of society"

(Mt San Antonio College 32).

Consideration of the college's General Education philosophy and its requirements, reveals the scope of the assessment project before us.

III. Seven Steps to Gen Ed Assessment

Briefly, there are 8 general steps required to move through the process, and they are all faculty-directed.

Step One:

The College will adopt either the course or program approach to assessment (see attached sample)

Course: The course approach to General Education Outcomes assessment looks at what students know, do, think, or feel with regard to General Education tenets in particular courses. Departments with courses deemed appropriate for the assessment of a particular Gen Ed outcome determined by the college would be asked to assess that outcome across the sections of those courses and to report the results to the college for documentation.

Advantages:

- ✓ Faculty may stay within their comfort zone (discipline) for the majority of the work

Disadvantages:

- ✓ Course approach does not fit well with accreditation requirement, which speaks to the General Education program in its entirety
- ✓ Increased work load for faculty and Gen Ed Outcomes Committee. According to Nichols, "the course level approach to GE assessment generates a level of assessment work at the course level which is so resource and labor intensive that it can not be sustained for any meaningful period of time" (19).

Program: The program approach to General Education Outcomes looks at what students know, do, think, or feel with regard to General Education tenets upon transfer/graduation

Advantages:

- ✓ Allows for comprehensive assessment beyond individual section and instructor
- ✓ Meets accreditation standards
- ✓ More accomplishable year in and out
- ✓ Significantly less work for faculty
- ✓ Improves cross-department communication

Disadvantages:

- ✓ Requires faculty to work across departmental lines
- ✓ May require class time for assessment

Step Two:

The college's Academic Senate will create the General Education Outcomes Committee through a resolution process. Its membership will represent all

General Education Areas. It will generate outcomes, document campus-wide efforts to assess them, and ensure that the entire Gen Ed program is assessed over time (see attached General Education Outcomes Committee Purpose and Function Statements and Membership list).

Step Three:

The General Education Outcomes Committee will make a recommendation to Academic Senate, suggesting the college utilize either the course or program approach, and that it assess either several Gen Ed outcomes from a variety of areas, which will require significantly more effort on the part of faculty but will enable the college to move through the program assessment rapidly, or one Gen Ed outcome per year, which will slow the process down and lessen faculty work load.

Step Four:

The Gen Ed Outcomes Committee, will determine how the chosen outcomes will be assessed. In brief, the options for assessment are:

- ❖ **Cognitive Assessment-** absolute measures of learning or academic achievement as well as measures of growth in abilities from students' entrance in General Education program to graduation/transfer

Standardized cognitive tests

Advantages:

- ✓ Normative comparisons may be made
- ✓ Readily available
- ✓ Comprehensive
- ✓ Validity of results accepted outside of college

Disadvantages

- ✓ May be a poor fit with college GE
- ✓ Liberal Arts faculty often opposed to standardized tests
- ✓ Cost
- ✓ Difficult to motivate students to put in time required

Locally developed cognitive tests

Advantages:

- ✓ Good fit with Gen Ed
- ✓ More accepted by faculty
- ✓ Meet accreditation standards

- ✓ College's Educational Research Assessment Analyst may guide the process

Disadvantages:

- ✓ Time and effort for faculty
- ✓ Little external credibility

- ❖ **Attitudinal Means of Assessment** -surveys completed by students while enrolled or upon graduation, students as alumni, or alumni employers

Standardized surveys

Advantages:

- ✓ Availability
- ✓ Normative comparisons readily available
- ✓ Ability to add locally developed items

Disadvantages:

- ✓ Match of survey items to actual college Gen Ed Program
- ✓ Viewed as indirect by accrediting agencies
- ✓ Cost

Locally developed surveys:

Advantages:

- ✓ Specific wording to match college needs
- ✓ Adjustable

Disadvantages:

- ✓ Effort to produce (up to one year),
- ✓ No normative comparison

- ❖ **Performance Assessment**-contrived situation that requires the student to demonstrate a skill or value identified in Gen Ed outcomes while he or she is still enrolled (videos of oral presentations, responses to case studies, analysis of writing).

Advantages:

- ✓ Provides direct evidence

Disadvantages:

- ✓ Requires significant extra work for faculty

❖ Behavioral Observation **occurs when student actions are documented for assessment**

either during their attendance (i.e. case studies in capstone course for major) or after they leave (i.e. alumni surveys), which may be used as an indicator of values or beliefs. This form of assessment must determine graduates' enhancement of or change in values or beliefs that occurred while they were enrolled.

Advantages:

- ✓ May be the only method available to collect the data

Disadvantages:

- ✓ May not be accurate

Step Five (see attached Gen Ed 5 column model sample):

The Gen Ed Outcomes Committee will determine criterion for success, which will identify for each means of assessment how well students completing the GE program are to perform.

The committee will also determine a secondary, more detailed, minimum subscale for scoring, which will identify the need for faculty to determine the cause of students' poor performance and to make the necessary improvements to the program

Step Six (see attached Gen Ed 5 column model sample):

The Gen Ed Outcomes Committee will determine how assessment will be conducted.

Will it survey entire population or a representative sample?

How will it resolve participation Issues?

Option: Assessment Day

Advantages:

- ✓ Data collection is simpler

Disadvantages

- ✓ Students may not take this seriously
- ✓ Faculty time and effort required

Option: Course imbedded Assessment (oral presentations, writing samples taken in classroom settings)

Advantages

- ✓ Fewer problems with student performance

Disadvantages

- ✓ Logistics of data collection

✓ Faculty time and effort required

Step Seven (see attached Gen Ed 5 column model sample):

College research department will tally and submit results to the Gen Ed Outcomes Committee and individual departments involved or the entire college as appropriate. Faculty may then make changes to curriculum, ranging from adjustment of course syllabi or means of instruction to updating material to refocusing of content within courses to align instruction across disciplines. The College may make create Professional Development workshops or host events on campus targeted to address areas in need of improvement.

Step Eight (see attached Gen Ed 5 column model sample):

The Gen Ed Outcomes Committee, will document results. These documented results will be uploaded to the accreditation warehouse as appropriate.

This documentation will be:

written in past tense

statements of what was actually done

a logical result of assessment described

detailed enough to be convincing

based on and responsive to the assessment results

IV. General Education Outcomes Assessment 5 Column Sample

Statements of Purpose	General Education Outcomes	Means of Assessment & Criteria for Success	Summary of Data Collected	Use of Results
College Mission: ...operates in the belief that all individuals should be ...provided an opportunity to equip themselves for a fulfilling life and responsible citizenship in a world characterized by change.	1.Students will be able to compose an effective essay on a current events topic	1a. 80% of those representative writing samples randomly selected at the end of English 202 will pass the faculty written standards rubric. No more than 25% of students rated will receive "needs improvement" or "unsatisfactory" on any portion of the rubric 1b.No more than 30% of students' skills scores on the "Writing as Process" or the "Conventions of Written English" scales	1a. 82% of writing samples were found overall "acceptable" by the faculty panel. However, 41% were rated either "needs improvement" or unacceptable" on the "Thematic Organization" portion of the rubric 1b.19% of the writing samples were reported as "Low" on the "Writing as a Process" skill and 26%were reported as	1a.English faculty discussions resulted in modification of official course outline to include more emphasis on "Thematic Organization" 1b. English faculty discussions resulted in additional collaboration with Writing

Statements of Purpose	General Education Outcomes	Means of Assessment & Criteria for Success	Summary of Data Collected	Use of Results
		will be reported as "low" on the CBASE.	"Low" on the "Conventions of English" skill	Center staff and increased faculty referrals of students to the center.
<p>College Goal: All recipients of an Associate of Arts Degree will be able to: 1. express themselves clearly and correctly in writing 2. perform the basic mathematical calculations required to function in society</p>	2. Students will demonstrate basic mathematical skills	2. An average of at least 270 will be achieved on the General Mathematics component of the CBASE examination and no more than 35% of the skills scores reports for any area will be ranked as "low"	2. The average score on the "General Mathematics" cluster was reported as 327. However, 27% of students' scores were reported as being "low" in the "Using Statistics" skill area.	2. Math 107, Quantitative Reasoning, is now required for all students seeking an Associate of Arts degree

V. Initial recommendations by SLOs/AUOs Coordinator and Educational Research Assessment Analyst for Successful General Education Implementation (see attached Gen Ed Implementation Timeline)

- After the Academic Senate has approved the Gen Ed Implementation Proposal, a General Education Outcomes Committee will be created by the Academic Senate by mid Fall 2006: “Central guidance and coordination of assessment activities should be provided by the general education assessment committee. Otherwise individual departments will tend to go their own way; with the result there will probably be gaps in coverage of outcomes, overlaps regarding other outcomes and duplication of effort “(Nichols, A Practitioner’s 68). (see attached Gen Ed Committee Purpose and Function statement and membership list).
- The first round of outcomes should be chosen by General Education Committee by the end of Spring 2007 and approved by the Academic Senate by the end of Spring 2007
- Gen Ed assessment should begin Fall 2007, when new calendar has gone into effect, after SLOs/AUOs have been institutionalized but before the next accreditation cycle.
- The college should utilize program level assessment to better meet accreditation standards
- The college should assess one concrete outcome such as math competence or writing competence and one values outcome such as working effectively.
- The college should choose outcomes that will serve dual purposes
For example, equity and diversity issues are in focus at this time, so it might work to create outcomes designed to assess related issues. That way, the survey results could do double duty. Writing pre-requisites are an issue currently, so it might be valuable to create an outcome designed to assess related issues.
- To reduce costs, the college should tack Gen Ed assessment onto existing surveys (CIRP for entering Freshmen and Career Services graduate employment survey for alumni) when feasible.
- To reduce costs, the college should utilize representative samples (when feasible), existing tests (the AWE) and course imbedded assessment.

VI. General Education Outcomes Committee

Committee Purpose:

The committee will be responsible for the creation, assessment, and documentation of college General Education outcomes efforts. The committee will report to the Academic Senate through the Curriculum and Instruction Council.

Committee Functions:

- Create General Education outcomes
- Evaluate and adjust timeline for implementation and activities
- Monitor sequencing of outcomes creation to cover the entire General Education program
- In conjunction with faculty, determine means of assessment and criteria for success
- In conjunction with researcher, oversee assessment process
- Oversee department/discipline use of results
- Publicize improvement to the General Education program
- Document efforts and results for Accreditation
- Provide a liaison to the Institutional Effectiveness Committee (most likely the General Education Outcomes Coordinator)

Committee Members:

General Education Outcomes Coordinator (Co-Chair)

Director of Research and Institutional Effectiveness (Co-Chair)

Dean of Instructional Services

Student Learning Outcomes Coordinator (title subject to change)

Educational Research Assessment Analyst

Representative from Information Technology

1 faculty representative from each of 5 General Education areas

1 faculty representative from the Vocational area

1 faculty representative from the Community Education area

VII. Final Note:

This recommendation is not intended to be definitive; it is, however, intended to start the discussion about General Education Outcomes assessment on campus and to suggest possible options for implementation. It is also intended to depict the vital role the General Education Outcomes Committee will play in the process along with its crucial connection to the faculty. Because this is going to require much time and effort from the faculty, it is important to determine the most efficient means to a productive end. The following quotation from Dr. Nichols sums up nicely what is in store for the college:

Assessment and improvement in General Education is one of those activities that are absolutely necessary, but neither fun nor easy. It is uncomfortable, tense, and frequently very frustrating work. However, adjustments in Gen Ed and improvement of student learning in Gen Ed will benefit a broader segment of the campus community than any other action in overall institutional effectiveness implementation (72).

Works Cited

Mt. San Antonio College. 2006-2007 Mt. San Antonio College Catalog. Walnut, CA, 2006

Nichols, James O. A Practitioner's Handbook for Institutional Effectiveness and Student Outcomes Assessment Implementation. 3rd ed. New York: Agathon, 2002.

Nichols, James O. General Education Assessment for Improvement of Student Academic Achievement: Guidance for Academic Departments and Committees. New York: Agathon, 2001.

Bibliography

Banta, T.W. Making a Difference: Outcomes of a Decade of Assessment in Higher Education. San Francisco: Jossey-Bass, 1993.

Gaff, J.G. New life for the College Curriculum: Assessing Achievements and Furthering Progress in Reform of General Education. San Francisco: Jossey-Bass, 1991

Hutchings, P., Marcheson. Using Assessment to Strengthen General Education. Washington, DC: AAHE, 1991

Morante, E. Handbook of Outcomes Assessment for 2 Year College. Hemet: College of the Desert .2003

Raisman, N., Directing General Education Outcomes, New Directions for Community College, San Francisco: Jossey-Bass, 1993.

Schulte, J., Assessing General Education Outcomes for the Individual :Student: Performance Assessment as Learning. Milwaukee: Alverno College Institute, 1994

Scroggins, Bill. The Teaching-Learning Cycle: Using SLO Results to Improve Teaching and Learning. , 2003.

Seybert, J., "Community College Strategies: Assessment of General Education," Assessment Update. 6(2).12, 1994

General Education Assessment Implementation Timeline: 2006-2007

Areas of Interest	Aug - Oct	Nov - Jan	Feb - Apr	May - July	
Professional & Organizational Development	Supplemental workshops		Supplemental workshops	Assess results of training, surveys- Upload to Accreditation Warehouse Determine future needs	
PIE (Planning for Institutional Effectiveness)	All Depts./Units begin PIE Coordinator provides assistance		March: All Depts./Units submit PIE to Managers April: All Managers submit summaries to VPs	May: VPs submit summaries to IEC Institutional Effectiveness Committee summary/evaluation of PIE process submitted to PAC Upload to accreditation warehouse	
Departments/Units/ Programs SLOs/AUOs efforts	Coordinator works in all depts. /units Coordinator works in Division Offices	Coordinator works in all depts. /units Coordinator works in VPs offices	Coordinator works in all depts. /units		
General Education Outcomes Efforts- Year One		Gen Ed Resolution to Senate	Gen Ed Committee refines purpose and function statements, creates long and short list of outcomes to assess, course or program approach, time frame.	Gen Ed Committee determines assessment methods	
Project SLOs/AUOs	Coordinator generates new SLOs/AUOs and means of assessment	Coordinator continues multiple measures of assessment	Coordinator continues multiple measures of assessment	Researcher summarizes data to be included in Project Summary Evaluation	
Accreditation	Applicable SLOs/AUOs 5 column info uploaded to warehouse	Applicable SLOs/AUOs 5 column info uploaded to warehouse	Applicable SLOs/AUOs 5 column info uploaded to warehouse		
C o m m u n i c a t i o n	Informal Updates	Coordinator updates Mgmt Teams/ Divisions Monthly Newsletters	Coordinator updates Mgmt Teams/ Divisions Monthly Newsletters	Coordinator updates Mgmt Teams/ Divisions Monthly Newsletters	May: Final Newsletter for the year
	Formal Reports	August: Status Report to all constituents	Dec: Status Report to all constituents	Jan: Status Report to all constituents	May: Status Report to all constituents Project Summary/Evaluation to Dean and VP Instruction, and Academic Senate
	Forums			Inter-area discussion on PIE Process	
	Website	updates	updates	updates	Updates

Areas of Interest		Aug - Oct	Nov - Jan	Feb - Apr	May - July
Professional & Organizational Development		Supplemental workshops		Supplemental workshops On-campus conference	Assess results of training, surveys- Upload to Accreditation Warehouse Determine future needs
PIE (Planning for Institutional Effectiveness)		Trac Dat Training All Depts./Units begin PIE Assistance provided		March: All Depts./Units submit electronic version of PIE to Managers April: All Managers submit electronic summaries to VPs	May: VPs submit electronic summaries to IEC Institutional Effectiveness Committee summary/evaluation of PIE process To PAC Upload to accreditation warehouse
Departments/Units/ Programs SLOs/AUOs efforts		Assistance provided to all depts /units Assistance provided to Division Offices	Assistance provided to all depts/units Assistance provided to VPs offices	Assistance provided to all depts /units	
General Education Outcomes Efforts- Year Two		Gen Ed efforts begin	Gen Ed efforts continue	Gen Ed efforts continue	Gen Ed Committee summary evaluation of Gen Ed results
Project SLOs/AUOs		New SLOs/AUOs and means of assessment generated	Multiple measures of assessment continue	Multiple measures of assessment continue	Researcher summarizes data to be included in Project Summary Evaluation
Accreditation		Applicable SLOs/AUOs/Gen Ed info uploaded to warehouse	Applicable SLOs/AUOs/Gen Ed info uploaded to warehouse	Applicable SLOs/AUOs/Gen Ed info uploaded to warehouse	
C o m m u n i c a t i o n	Informal Updates	Opening Meeting: status report Mgmt Teams/ Divisions updated Monthly Newsletters	Mgmt Teams/ Divisions updated Monthly Newsletters	Mgmt Teams/ Divisions updated Monthly Newsletters	May: Final Newsletter for the year
	Formal Reports	August: Status Report to all constituents	Dec: Status Report to all constituents	Jan: Status Report to all constituents	May: Status Report to all constituents Project Summary/Evaluation to Dean and VP Instruction
	Forums		Inter-area discussion On Gen Ed outcomes	Inter-area discussion on PIE Process	
	Website	updates	updates	updates	updates

**General Education Assessment Implementation Timeline:
2007-08**

Areas of Interest		Aug - Oct	Nov - Jan	Feb - Apr	May - July
Professional & Organizational Development		Supplemental workshops		Supplemental workshops On-campus conference	Assess results of training, surveys- Upload to Accreditation Warehouse Determine future needs
PIE (Planning for Institutional Effectiveness)		All Depts./Units begin PIE Assistance provided		March: All Depts./Units submit electronic version of PIE to Managers April: All Managers submit electronic summaries to VPs	May: VPs submit electronic summaries to IEC Institutional Effectiveness Committee summary/evaluation of PIE process to PAC Upload to accreditation warehouse
Departments/Units/ Programs SLOs/AUOs efforts		Assistance provided to all depts. /units Assistance provided to Division Offices	Assistance provided to all depts. /units Assistance provided to VPs offices	Assistance provided to all depts. /units	
General Education Outcome Efforts-Year Three		Gen Ed efforts continue	Gen Ed efforts continue	Gen Ed efforts continue	Gen Ed Committee summary evaluation of Gen Ed results
Project SLOs/AUOs		New SLOs/AUOs and means of assessment generated	Multiple measures of assessment continue	Multiple measures of assessment continue	Researcher summarizes data to be included in Project Summary Evaluation
Accreditation		Applicable SLOs/AUOs/Gen Ed info uploaded to warehouse	Applicable SLOs/AUOs/Gen Ed info uploaded to warehouse	SLOs/AUOs/Gen Ed info uploaded to warehouse	
C o m m u n i c a t i o n	Informal Updates	Opening Meeting: status report Mgmt Teams/ Divisions updated Monthly Newsletters	Mgmt Teams/ Divisions updated Monthly Newsletters	Mgmt Teams/ Divisions updated Monthly Newsletters	May: Final Newsletter for the year
	Formal Reports	August: Status Report to all constituents	Dec: Status Report to all constituents	Jan: Status Report to all constituents	May: Status Report to all constituents Project Summary/Evaluation to Dean and VP Instruction
	Forums		Inter-area discussion On Gen Ed outcomes	Inter-area discussion on PIE Process	
	Website	updates	updates	updates	updates

**General Education Assessment Implementation Timeline:
2008-09**

APPENDIX B

Mt. San Antonio College AAC&U Institute Team Report (May 2007)

What are the team's specific curricular, pedagogical, and/or process plans once it returns to campus for advancing the project worked on at the institute?

Having considered both the information presented at the AAC&U Institute and Mt. SAC's campus culture, the Gen Ed committee's plan for improvement of its General Education curriculum will:

- provide a precise, manageable definition of what we want our students to know, think, feel, or do after completing our Gen Ed curriculum
- enculturate that definition/vision campus-wide
- involve faculty in all phases of the evaluation, reform, and assessment of the college's General Education curriculum

This plan necessitates the following activities

Institutional Approval for Plan

The General Education Committee will condense the college's existing Gen Ed Philosophy into key concepts/vision statements with a clear focus on expectations for student learning at the end of the Gen Ed degree requirements that will be both memorable and easy to reproduce in campus publications and other venues.

The condensed philosophy/vision will be given to Academic Senate president and vice-president for review. Because the Senate vice president is a member of the Gen Ed Committee who has established a rapport with the Senate, it will be his responsibility to submit the final version to the Senate for review and approval.

The Senate president and vice-president will ask the College President's Cabinet, through the Academic Mutual Agreement Council, to support this philosophy/vision as an institutional priority.

After Senate and Cabinet approval, the Gen Ed Committee will recommend to the Institutional Effectiveness Committee that a college goal be written, reflecting the college's commitment to the improvement of the Gen Ed curriculum.

The Gen Ed Committee will recommend to the Institutional Effectiveness Committee that the SLOs- based program review process (PIE) be modified to include a Gen Ed assessment component.

Foundational Work with Faculty

The committee will discuss possible cross-over credit for faculty actively participating in training sessions or summer or intersession institutes.

The College will explore the possibility of establishing a Center for Teaching and Learning to operate as an information/training hub in support of the college's Gen Ed efforts.

The College will explore the possibility of summer or inter-session training institutes for faculty development in support of the college's Gen Ed efforts. Note: These institutes could be conducted in the Center for Teaching and Learning.

The Gen Ed Coordinator will present basic information about the college's renewed commitment to its Gen Ed philosophy to the Divisions. This presentation will be framed by the handout entitled "Changing Educational Practices," detailing the evolution of this concept.

The Gen Ed Coordinator will assist the departments as they begin involving faculty in guided discussions regarding how they perceive their role in the implementing Gen Ed expectations in their curriculum. This may be framed by a mapping of the content across Gen Ed courses of connection to Gen Ed outcomes.

Communication to Campus Community

The Gen Ed Coordinator will work with the college's Director of Marketing to create a marketing plan to publish the philosophy statement in every possible venue (i.e. the college catalog, schedule of classes, instructor syllabi, college web site, etc).

In consultation with the college's web-master, the Gen Ed Committee will establish a site to present the plan and timeline, a calendar of related events, and links to helpful resources. The Committee will continue to monitor the site to ensure that it does not become difficult to navigate or overwhelming to the viewers.

The Gen Ed Coordinator will work with Student Services to integrate the Gen Ed philosophy statement into the New Student Orientations, academic advising sessions, etc.

The Gen Ed Coordinator will work with Academic Divisions and Departments to integrate the philosophy statement into the faculty hiring process, new faculty orientations, faculty self-evaluations, graduation speeches, the Opening of the semester meeting, open forums, college, division, and department web sites, faculty syllabi, division office and department office décor, etc.

The Gen Ed Committee will continually strive to "make the work not the committee high profile and visible."

Assessment and Improvement

Note: All assessment activities will involve input from the Director of Research and the Educational Research Assessment Analyst

The Gen Ed Committee, in conjunction with the Office of Research, will discuss the use of pre/post tests to establish baseline information regarding employee/student understanding of the Gen Ed philosophy/vision.

The Office of Research will conduct a focus group in which three or four departments will answer questions about the curriculum mapping process and additional concerns they have related to GE. The results will be shared across departments.

Once there is significant faculty involvement, the Gen Ed Coordinator will facilitate discussions about the types of improvements that might be made to the curriculum.

The Gen Ed Coordinator and the Educational Research Assessment Analyst will facilitate assessment efforts in departments.

The departments will work together to create proposals for the modification of Gen Ed curriculum as needed.

Curriculum modifications will be submitted to the Educational Design Committee and the Academic Senate for approval and ratification.

Working with departments, the Gen Ed Coordinator will reinforce the meaningful connections discovered between short term Gen Ed work and longer term Gen Ed efforts.

The Gen Ed Coordinator will work with departments to generate classroom activities for students, which would prompt consideration of the students' own personal learning goals in light of the College's Gen Ed Philosophy.

The Gen Ed Committee will assess its own effectiveness yearly.

Documentation

The Gen Ed Coordinator will document Gen Ed improvement efforts for accreditation.

The Gen Ed Committee will report to all constituents, including students, regarding improvement of the curriculum through articles in the student newspaper and the college web-site.

In particular, how does the team plan to share the knowledge, insights and expertise gained during the institute with colleagues on campus?

See above

APPENDIX C

GEOC ACCOMPLISHMENTS

GEOC Key Dates and Accomplishments: October 2006 through June 2009

Fall 2006

- **10/05/2006:** Academic Senate passes resolution 2006 – 07 establishing the creation of a General Education Outcomes Committee (GEOC) on campus.

Spring 2007

- **3/20/2007:** First meeting of GEOC under leadership of Coordinator Jemma Blake – Judd.
- **5/18/2007 – 5/23/2007:** Five members of GEOC attend a conference in Rhode Island on General Education given by the Association of American Colleges and Universities. The attendees were Jemma Blake-Judd, SLO Coordinator & English faculty member; Virginia Burley, Dean, Instruction; Barbara McNeice-Stallard, Director, Research and Institutional Effectiveness; Priyadarshini Chaplot, Educational Research Assessment Analyst; Joseph Terreri, Mathematics faculty member (soon to be GEO Coordinator).
- **5/31/2007:** Academic Senate endorses changes proposed by GEOC to the Mt. SAC General Education Philosophy for publication in 2007 – 2008 College Catalog.

Fall 2007

- **9/06/2007:** Academic Senate endorses GEOC Purpose and Function Statement.
- **9/18/2007:** First meeting of GEOC under leadership of new General Education Outcomes (GEO) Coordinator Joe Terreri and co-chair Barbara McNeice-Stallard, Director of Research and Institutional Effectiveness. The Committee agreed that a main first task will be to formally establish General Education Outcomes (GEOs) at Mt. SAC using significant faculty input. Future meetings will convene on the first and third Tuesdays of the month.
- **10/26/2007:** The Top Six Goals for GEOC for 2008/2009 were agreed upon by the Committee. These were: 1. Revise Assessment Plan approved in Spring 2008. 2. By the end of fall 2008, two of six interdisciplinary Workgroups

defined in Assessment Plan will attend a Workshop to help implement that plan.

3. By the middle of spring 2009, the four remaining Workgroups will have attended the Workshop. 4. By the end of spring 2009, all courses within six interdisciplinary Workgroups, and two single courses, Speech 1A and English 1A, will have determined and assessed a General Education Outcome. 5. All relevant details of committee activity will be communicated to members of the campus community, including faculty and students. 6. GEOC and SLOC will collaborate on details of the merger of these two committees, with this merger completed by the end of spring 2009.

- **11/05/2007:** First campus communication sent out to all Mt. SAC employees in both electronic and paper form. This message introduced the GEOs initiative and outlined the role of the Campus Community in the task of establishing GEOs at Mt. SAC.
- **11/19/2007:** A survey sent out to all Mt. SAC employees in both electronic and paper form. The purpose of the survey was to get input from the campus community to help establish GEOs for Mt. SAC.

Spring 2008

- **2/14/2008:** A letter to the campus community from President John Nixon emphasizes the importance of the GEOs initiative for our next comprehensive accreditation review in 2010.
- **2/22/2008:** Flex Day presentation on GEOs solicits further input from attendees to help establish GEOs for Mt. SAC.
- **3/18/2008:** GEOC agrees on proposed GEOs for Mt. SAC for presentation to the campus community for further input prior to formal submission to the Academic Senate for approval. This proposal was generated using responses from faculty and staff to the campus-wide survey and input generated at the Flex Day presentation. The open-ended input was extensively reviewed and coded by multiple raters to arrive at a consensus list that reflected the breadth of input received to date.
- **3/25/2008:** Proposed GEOs presented as an information item at Curriculum and Instruction Committee meeting.

- **3/28/2008:** GEOs Coordinator and the two research members of the committee attend a day long conference attended by Student Learning Outcomes (SLOs) Coordinators from across the State regarding issues they are facing. Mt. SAC SLO Coordinator, Darrow Soares, hosts this event.
- **4/03/2008:** GEO Coordinator proposed GEOs as an information item to the Academic Senate.
- **4/04/2008:** Proposed GEOs presented to the campus community in both electronic and paper form. GEOs website launched in conjunction with this communication. The website included an electronic discussion forum on the proposed GEOs.
- **4/07/2008:** Communication sent to all Career Technical Education Department Chairs and the Director of Career and Transfer Services regarding the proposed GEOs for Mt. SAC. Individuals contacted were asked to forward materials related to this issue to our local businesses and community stakeholders to give them an opportunity to comment on the proposed GEOs as they deemed appropriate.
- **4/08/2008:** The GEO Coordinator gave a presentation about the proposed GEOs to the Associated Students Senate to solicit their input.
- **4/18/2008, 4/22/2008:** Professional and Organizational Development (POD) sessions conducted soliciting further input on proposed GEOs.
- **5/01/2008:** First Reading of proposed GEOs for Mt. SAC made to Academic Senate.
- **5/07/2008:** Communication sent to all Mt. SAC Department Chairs regarding a coming POD session on an Assessment Plan for GEOs at Mt. SAC and the importance of faculty input into this Plan.
- **5/15/2008:** Academic Senate approves “Areas of GEOs” for Mt. SAC.
- **5/15/2008:** POD session on an Assessment Plan for GEOs was conducted. The message from the faculty in attendance was clear. GEOs assessment should focus on what we believe we are doing now, and the process for doing so should not represent an extreme additional burden on faculty already charged with course level SLOs assessment.

- **5/23/2008:** A survey sent out to all Mt. SAC employees in both electronic and paper form. A purpose of the survey was to determine the degree of understanding on campus about the GEOs initiative.
- **6/03/2008:** GEOC approves the use of the terms “GEO Zones” to replace “Areas of GEOs.” The Committee agreed on an Assessment Plan that will use the results of course level SLOs assessment in general education courses.

Fall 2008

- **9/02/08:** Results from a survey conducted in spring 2008 that solicited input on faculty understanding of the GEOs Initiative were analyzed. One result was contact information for seventeen members of the campus community who wanted further information and involvement with GEOs. GEOC members followed up on contacting this group on an individual basis.
- **9/02/08:** A “Narrative of Events” was approved by GEOC and published on the GEOs website. This included all committee activity and accomplishments from the senate resolution approving the creation of a GEOC on 10/05/06 through 6/03/08. Committee consensus was that this information, with subsequent additions as time passes, will not only provide transparency on what GEOC is doing, but can function as a document of committee activity for Accreditation purposes as well.
- **9/11/08, 9/16/08, and 9/18/08:** A POD session was conducted on these dates that focused on implementing a GEOs Assessment Plan based only on the existing SLOs assessment model and the GEO Zones adopted by the Academic Senate in Spring 2008. Only one faculty member attended these sessions, indicating to the GEOC that we need a better method than POD sessions to get faculty involvement with the GEOs initiative.
- **9/12/08:** At a special Learning Outcomes meeting composed of GEOC members, consensus was reached that an Assessment Plan for GEOs should include more interdisciplinary communication and cooperation, something not addressed in the existing SLOs assessment model. It was also agreed that a better method of getting faculty involvement with GEOs would be to conduct Workshops similar to those that were held to define different degrees for Mt. SAC. Intensive work

- was done on formulating such a plan for presentation to GEOC. The goal was set of approving, devising, and implementing such a plan before the end of the fall semester.
- **10/10/08:** An email was sent to GEOC presenting a revised Assessment Plan, incorporating multidisciplinary interaction, which was agreed on through the listserv. This plan involved splitting courses within Areas B – E of the Mt. SAC general education pattern into six different multidisciplinary Workgroups. Area A, composed of the two singular courses English 1A and Speech 1A with related honors sections, was split into two Workgroups featuring the English and Communications departments. A two hour Workshop was designed for the multidisciplinary Workgroups that focused on two main goals: (1) that in conjunction with the GEO Zones and the philosophy of their respective Area, they will determine a common outcome to assess; and (2) that the Workgroup comes to a shared understanding of what student attainment of that learning outcome entails. It was agreed that the Workshop should be piloted in Fall 2008 with two Workgroups, and that the remaining four Workshops be conducted in early Spring 2009.
 - **10/10/08:** With a new plan in place, and direction given by the GEOC, work begins to contact all necessary faculty and managers to make sure that all courses constituting the Workgroups in the pilot Workshops had participants knowledgeable about the key learning outcomes for that course in attendance. This contact entailed one-on-one meetings with the appropriate personnel outlining what GEOs are as well as Workshop goals.
 - **10/16/08 – 10/18/08:** GEOC members attended a WASC SLO Level II Training Conference. The members who attended were Priya Chaplot, Barbara Mcneice – Stallard, Liesel Reinhart, and Joan Sholars. Much important information was learned, and then shared with GEOC. Notably, this included the fact that at no other institution was work on GEOs done by a committee separate from their SLOs committee. This prompted the setting of the goal of merging SLOC and GEOC by the end of Spring 2009.

- **11/12/08:** Six committee goals for 2008/2009 were presented to GEOC by email, with no objections given. These were: 1. Revise Assessment Plan approved in Spring 2008. 2. By the end of fall 2008, two of six interdisciplinary Workgroups defined in Assessment Plan will attend a Workshop to help implement that plan. 3. By the middle of spring 2009, the four remaining Workgroups will have attended the Workshop. 4. By the end of spring 2009, all courses within six interdisciplinary Workgroups, and two single courses, Speech 1A and English 1A, will have determined and assessed a General Education Outcome. 5. All relevant details of committee activity will be communicated to members of the campus community, including faculty and students. 6. GEOC and SLOC will collaborate on details of the merger of these two committees, with this merger completed by the end of spring 2009.
- **11/18/08:** In a collaborative effort between the GEOC and the English and Communications departments, Area A GEOs for English 1A and Speech 1A are determined.
- **11/20/08:** Pilot Workshops were conducted for two of the six multidisciplinary Workgroups, Area D, History and Political Science, and Area E.
- **11/26/08:** Jemma Blake – Judd asked for information on all aspects of interdisciplinary communication that was occurring due to the GEOs Initiative for accreditation purposes. A detailed report on this topic was sent to her on this date.
- **12/02/08:** Details on the four remaining Workshops are solidified. These Workshops are scheduled to take place on 3/06/09. Locations have been secured as well.
- **12/10/08:** An email was sent to all department chairs with responsibility for courses within Workgroups where the corresponding Workshop will take place in spring. This email included the offer of individual meetings over Winter Intersession to help prepare for these Workshops.

Spring 2009

- **Winter Intersession 2009:** Department chairs and/or division managers with courses within Areas B – D were contacted in order to explain the gist of the GEOs Assessment Plan 2009 – 2012, and to get faculty representation at the appropriate Workshop scheduled for 3/06/09. Most of the personnel involved were met with on an individual basis. All others were contacted by email or phone. Website revisions are also made to better act as a resource to support Workshop understanding and attendance. Numerous other website revisions are made throughout the semester that mirror the progress made in this phase of GEOs assessment.
- **2/04/09:** A proposal for how GEOs could be mapped throughout the general education curriculum using TracDat is shared through the committee listserve. The conclusion was that this structure is not necessary for the phase of GEOs assessment we are currently in. In this phase, GEOs have been mapped across the curriculum based on Workgroup designation.
- **2/20/09:** In cooperation with the SLOs Coordinator, a joint Flex Day presentation on SLOs and GEOs was given during two sessions. The GEOs portion focused on explaining the GEOs Assessment Plan, and getting faculty representation at the appropriate Workshop.
- **2/27/09:** An Area E follow – up Workshop was conducted. Joe Terreri acted as moderator, with Priya Chaplot giving valued assistance. This meeting focused mostly on general questions regarding GEOs assessment. After much discussion of issues, the GEO, Rubric, and Criteria for Success created in the Pilot Workshop last fall were approved. The insights gleaned from this session resulted in substantial changes to some of the Workshop content and handouts scheduled for the following week. Most significantly, Area E Workshop attendees agreed to the use of their product in Workshop handouts as a good example of the type of results that are expected from the Workshops.
- **3/03/09:** At the GEOC meeting on this day, the GEOs and SLOs coordinators were given the task of coming up with a draft of a Purpose and Function

Statement and a Membership List for a possible merged committee that will start to meet in Fall 2009. Key dates for getting a proposal of this nature through both C & I and AS this semester were also noted.

- **3/03/09:** The GEOC approved a “GEOs Reporting Form” that will be part of the handouts given at the coming GEOs Workshops. This form was deemed necessary due to the fact that ePIE currently does not have the ability to store or report GEOs assessment information.
- **3/05/09:** Academic Senate Resolution 2008 – 13 is passed that directs the GEO committee to propose a plan and timeline to help guide faculty in the creation of General Education Outcomes and to allow documentation of such a plan.
- **3/06/09:** The four remaining Workshops were conducted. Joe Terreri moderated the sessions involving Workgroups in Areas B and D, Electives. GEOC members Debbie Boroch, Priya Chaplot, Mary Johnson, and Barbara Macneice – Stallard assisted. Liesel Reinhart moderated the sessions involving Workgroups for Area C, Arts and Humanities. GEOC members Kristina Allende, Barbara Macneice – Stallard, and Jennifer Tucker helped facilitate these sessions. The main outcome was that all Workgroups met the goal of determining a GEO, a Rubric, and Criteria for Success.
- **3/11/09:** A comprehensive report on Workshop results is sent to all Workshop attendees. This report included the GEO determined, the scoring rubric for the GEO, criteria for success, and a sample of a spreadsheet that could be used in courses to facilitate assessment.
- **3/17/09:** The GEOC recommends a strategy for following up on the Workshops. Meetings need to first be set with Division Deans and/or Associate Deans to apprise them of the specifics of the GEOs Assessment Plan and to get advice on how best to proceed with implementation within their divisions. Follow up meetings with key personnel would be made based on the managers recommendations. At the same time, meetings would be set with personnel who attended the Workshops on an as needed basis.

- **3/27/09:** A comprehensive report on GEOs is given to all Division managers at the Instruction Team Meeting on this day. This report not only included the Workshop results sent to attendees on 3/11/09, but the GEOs, scoring rubrics, and criteria for success for Area A GEOs as well.
- **3/28/09:** An email is sent to Instruction Team members with supplementary materials reinforcing the report given on the prior day.
- **4/02/09:** The GEOs Coordinator met with the Dean and Associate Dean of the Business Division regarding GEOs. This is the first of many such meetings held throughout the semester.
- **4/07/09:** The GEOC concludes that the expectation that 100% of general education courses will have assessed the appropriate GEO by the end of June 2009 is unrealistic. The committee agreed that a more realistic timeline needs to be developed.
- **4/21/09:** The GEOC approves a draft of a Purpose and Function Statement and a Membership List for a merged committee, called the Outcomes Committee, that will start meeting in Fall 2009. The GEOC also approved “GEOs at Mt. SAC: Plan 2009 – 2012.” This document includes a specific timeline for when all eight of the defined GEOs Workgroups will have finished a complete GEOs assessment cycle, including an analysis of data and a use of results. All of these key documents will next be sent to C & I for review, and then to the AS for approval.
- **4/22/09:** Resolution 2009 – 02 concerning the Transparency of SLOs and GEOs is passed by AMAC.
- **5/07/09:** The Dean and Division Coordinator of the Arts Division are met with. All Division managers have been met with to this point.
- **5/13/09:** A report on the status of 2008/2009 GEOC goals is sent to the committee. Members confirm the accuracy of this report through the listserv.
- **5/14/08:** The Academic Senate approves the Purpose and Function Statement and the Membership List for The Outcomes Committee. This committee will

represent the merger of the GEOC and SLOC. It will begin meeting in Fall 2009.

- **5/15/09:** An email is sent to all department chairs with courses in the Mt. SAC general education pattern requesting information on either their timeline for assessing GEOs within their department, or an indication of when such a timeline will be available.
- **5/26/09:** In consultation with Barbara McNeice – Stallard, the GEO Coordinator revises the job description for the GEOs Coordinator position. Major revisions are made to this document, reflecting the growth in understanding of what this position entails over the past two years.
- **5/28/09:** “GEOs at Mt. SAC: Plan 2009 – 2012” is approved by the Academic Senate.
- **6/01/09:** The document “GEOs Historical Perspective 2006 to 2009” is distributed to GEOC. The content included a record of the four different GEO Assessment Plans that have been in operation over the past two years. This comprehensive document was deemed to be not only an important part of the historical record on GEOC activity, but a key source of background information to pass on to the Outcomes Committee.
- **6/02/09:** The final meeting of the GEOC was held. Members congratulated each other on a job well done. Consensus was that the group is handing off to the Outcomes Committee a thorough look at what has been done, what is currently being done, and an indication of where to go from here with GEOs assessment.
- **6/03/09:** A hard copy of the June 2009 Spotlight is distributed to personnel attending the Faculty and Managers Recognition Ceremony. This article mainly focused on the basics of the GEOs Assessment Plan, the GEOs that were produced by each Workgroup, and the faculty that participated in their creation.
- **6/04/09:** An electronic version of the June 2009 Spotlight is sent to all Mt. SAC employees.

Appendix D

Mt. SAC General Education Outcome Zones

These are the General Education Outcome Zones for Mt. San Antonio College.

Critical Thinking and Reasoning – includes synthesis, evaluation, interpretation of ideas, application of concepts; problem solving and analysis; identification of logical fallacies or sources of error; development of logical arguments based on cogent analysis of supporting evidence.

Effective Communication – includes development of effective skills for both written and oral communication, including presentation skills.

Quantitative Reasoning – includes the ability to interpret and analyze information given graphically or numerically; apply mathematical expressions, equations, and theorems; understand statistical data; use mathematical concepts to construct math models; and to use math models to solve applied problems.

Reading Competence – includes the ability to understand vocabulary, critically analyze content, meaning, and author's purposes, as well as the development of increased proficiency and depth of understanding. Includes analysis of a variety of written materials and styles appropriate to different disciplines.

Information Competence and the Effective Uses of Technology – includes the ability to identify, research, and assess the credibility of a variety of information sources, including those obtained from the internet and other electronic data sources as well as more traditional published sources. Also includes knowledge and proficiency in the use of standard computer technology and software used in academics, a variety of professions, and daily life.

Personal Responsibility – includes the development of skills, attitudes, abilities, and values that facilitate advanced learning, personal growth, and preparation for lifelong learning. These include study skills development, awareness of academic environments and resources, self-awareness of learning styles and habits, persistence, acceptance of personal and professional responsibility, leadership, initiative, proactive action, empathy, interpersonal skills development, and the ability to work independently.

Social Responsibility and Cultural Competence – includes understanding, appreciation, and respect for perspectives, values, and societal contributions of diverse peoples and cultures; awareness, sensitivity to and acceptance of a variety of different viewpoints; and the ability to understand and work with individuals who differ from one's self.

Civic Engagement and Global Citizenship – includes an understanding of current events, of ethics and the implications of personal and societal choices as they affect our interconnected world economy, governments, environment, and social climate; as well as acceptance of responsibility for civic and societal engagement.

Appendix E

COMPILATION OF GENERAL EDUCATION OUTCOMES EFFORTS

Last Updated March 23, 2009

AREA A: COMMUNICATION IN THE ENGLISH LANGUAGE

Courses: ENGL1A, ENGL1AH,

<u>Name</u>	<u>Discipline</u>	<u>GE Courses you are representing</u>
Kristina Allende	English	ENGL1A, ENGL1AH

General Education Outcome(s): Students will be able to write an essay in which they synthesize information from multiple texts. Students will be able to apply MLA format for citing and documenting sources.

Rubrics with criteria for success to be finalized on 3/24/2009

- Students will be able to develop a thesis statement that advances a clear argument.
- Students will be able to synthesize implicit meanings in texts.
- Students will be able to implement appropriate rhetorical strategies for organizing their essays.
- Students will be able to use textual evidence for support of their thesis.
 - Students will be able to use direct quotation for textual support
 - Students will be able to use paraphrase for textual support.
 - Students will be able to use summary for textual support.
- Students will be able to evaluate the reliability of information from a variety of print and electronic sources.

Rubric:	Performance level		

AREA A: COMMUNICATION IN THE ENGLISH LANGUAGE

Courses: SPCH1A, SPCH1AH

Name Liesel Rienhart	Discipline Speech	GE Courses you are representing SPCH1A, SPCH1AH
--------------------------------	-----------------------------	---

GEO #1 Students completing an assignment in Area A courses (SPCH 1A and SPCH 1AH) will be able to analyze modes of artistic expression.

Criterion for Success: Students will meet expectations by scoring a “2” on two of the four categories.

	3	2	1	0
Eye Contact	Sustained	Direct	Partial/Glancing	Avoidance
Organization	Intro/Body/ Conclusion and Signposting	Intro/Body/ Conclusion	No clear division of three areas	No structure to speak of
Body Control	Controlled body; some purposeful movement and/or gesture	Solid speaker’s stance	Some distracting wandering or fidgeting	Lack of body control. Excessive wandering/ fidgeting.
Volume	Commanding, authoritative. Fills the room.	Adequate to be easily heard and hold attention.	Not easily heard; does not hold full attention of audience	Not audible.

GEO #2 Students completing an assignment in Area A courses (SPCH 1A and SPCH 1AH) will critically evaluate public speeches.

Criterion for Success: Students will meet expectations by scoring a “1” using the criteria below:

Score	Criteria	Tally
3	Student evaluation will: <ul style="list-style-type: none"> • summarize the observed speech • identify both content and delivery aspects of the speech. • consistently utilize terminology consistent with the course text and/or lecture • propose strategies the speaker could utilize to improve the content and/or the delivery of the speech, when appropriate. • Provide at least one detailed description of the speech as support. 	
2	Student evaluation will <ul style="list-style-type: none"> • summarize the observed speech • identify multiple areas of excellence and areas for improvement, when appropriate. • utilize terminology consistent with the course text and/or lecture. 	
1	Student evaluation will <ul style="list-style-type: none"> • summarize the observed speech • identify at least one area of strength and one area for improvement, but may omit either content or delivery variables • will not consistently utilize terminology consistent with the text and/or lecture. 	
0	Students are unable to critically evaluate public speeches.	
	TOTAL	

GEO #3 Students completing an assignment in Area A courses (SPCH 1A and SPCH 1AH) will understand the need to adapt communication style to acknowledge the differences in others.

Criterion for Success: Students will meet expectations by scoring a “1” in both assessments described below.

Students will complete two exam questions. The first is an open-ended, short-answer item asking students to list categories of information that is useful to know when preparing for a likely audience.

	3	2	1	0
	list of at least 5 items using course terminology	list of at least 5 items	list of 3 items	no accurate items

The second question will ask students to accurately identify reasonable adaptation steps that a speaker should take to make a successful presentation among 9 choices.

	3	2	1	0
	8 or more correct	6 or more correct	4 or more correct	less than 4 correct

GEO #4 Students completing an assignment in Area A courses (SPCH 1A and SPCH 1AH) will be able to evaluate the reliability of information sources.

Criterion for Success: Students will meet expectations by scoring a "2" on two of the four categories.

TBA

AREA B: THE PHYSICAL UNIVERSE AND LIFE

Physical Sciences: ASTR 5, ASTR5L, ASTR7, ASTR8, CHEM10, CHEM 20, CHEM40, CHEM50/H, CHEM51, GEOG 1/H, GEOG 1L/H, GEOL 1, GEOL 7, GEOL 8/H, GEOL 8L, GEOL 9, GEOL 10, GEOL 13, METO 3, OCEA 10/H, OCEA 10L, PHSC 7, PHSC 7L, PHYS 1, PHYS 2AG, PHYS 2BG, PHYS 4A

Life Sciences: AGOR 1, ANAT 10A, ANAT 10B, ANAT 35, ANAT 36, ANTH 1/H, ANTH 1L, BIOL 1, BIOL 2, BIOL 3, BIOL 4/H, BIOL 6, BIOL 6L, BIOL 17, BIOL 20, BIOL 21, MICR 1, MICR 22, PSYC 1B

<u>Name</u>	<u>Discipline</u>	<u>GE Courses you are representing</u>
Craig Webb	Earth Science	GEOL8,8L,10, OCEA10,10L,METO3,3L
Karyn Kakiba-Russell	Natural Sciences	Bio1, Bio 6, Bio 6L
Cindy Shannon	Biology	Bio 3, Bio 4, Bio 4H
Beta Meyer	Biology	Anat 10A, 10B, 35, 36
Jennifer Garwick	Agriculture	AGOR1
Malcolm Rickard	Physics	Phys 2A, 2B, 4A, 4B
Julie Bray-Ali	ESA	Astr5,5L,7 &8

AREA B: THE PHYSICAL UNIVERSE AND LIFE

General Education Outcome: Students completing relevant assignments in Area B courses will evaluate the impact of science on their daily lives.

Criteria for Success: Students must score at least a "1" in each of the two criteria to meet expectations.

Rubric:

Performance level		
0 - Below Expectations	1 - Meets Expectations	2 - Exceeds Expectations

Criterion	ANALYSIS: Analysis of scientific information	No analysis	Some analysis including some key points	In-depth/thorough analysis including all key points
	APPLICATION: Application of concepts to their daily lives	Not able to explain relevance	Somewhat able to explain relevance	Thoughtful and comprehensive explanation of relevance

STUDENT	ANALYSIS (0, 1, 2)	APPLICATION (0, 1, 2)	MEETS CRITERIA

AREA C: Humanities and Arts

Humanities Area C

CHIN 1, CHIN 2, CHIN 3, CHIN 4, ENGL 1B/H, FRCH 1, FRCH 2, FRCH 3, FRCH 4, FRCH 5, FRCH 6, FRCH 60, GERM 1, GERM 2, GERM 3, HIST 1, HIST 3/H, HIST 4/H, HIST 7/H, HIST 8/H, HIST 10, HIST 11, HIST 19, HIST 30, HIST 31, HIST 35, HIST 36, HIST 39, HIST 40, HUMA 1, ITAL 1, ITAL 2, ITAL 3, ITAL 4, ITAL 5, ITAL 6, JAPN 1, JAPN 2, JAPN 3, JAPN 4, JAPN 5, LIT 1, LIT 2, LIT 6A, LIT 6B, LIT 11A, LIT 11B, LIT 14, LIT 15, LIT 20, LIT 25, LIT 33, LIT 35, LIT 36, LIT 40, LIT 46, LIT 47, PHIL 5/H, PHIL 12/H, PHIL 15/H, PHIL 20A, PHIL 20B, SIGN 101, SIGN 102, SIGN 103, SIGN 104, SIGN 202, SPAN 1, SPAN 2, SPAN 3, SPAN 4, SPAN 11, SPAN 12, SPAN 25

<u>Name</u>	<u>Discipline</u>	<u>GE Courses you are representing</u>
HUMANITIES Kristina Allende Bob Stuard David Medina	English Sign Philosophy	All LIT and ENGL 1B SIGN 101, 102, 103, 104, 202 Philosophy

General Education Outcome: Students completing an assignment in Humanities Area C will be able to identify the influence of culture on human expression.

Criteria for Success: Students will meet expectations by scoring a "1" on each of the two categories.

	0 Below Expectations	1 Meets Expectations	2 Exceeds Expectations

	0 Below Expectations	1 Meets Expectations	2 Exceeds Expectations
Identify Culture	Cannot identify a culture; misidentify a culture	Accurate identification of relevant culture(s)	
Influence on Human Expression	Cannot identify or misidentify a relationship between the culture and the human expression.	Identify a relationship between the culture and the human expression.	Identify additional facets of the relationship.*

*Such as sequence of events, depth or magnitude of the influence, and barriers to influence.

Optional TracDat assessment summary:

Instructors will evaluate _____ on a 3-point rubric (0, 1, 2) to measure identification of both culture and its influence on human expression. Students will meet expectations by scoring a “1” or better in both categories.

NOTE: Fill in the blank above with the type of artifact you will use for assessment in each particular course, such as “a student essay”, “A student class presentation”, “observations of student discussions,” “multiple choice exam questions”, etc.

Arts Area C

AHIS 1/H, ARTB 1, AHIS 10, AHIS 2/H, AHIS 3/H, AHIS 4/H, AHIS 5/H, AHIS 6/H, AHIS 9, AHIS 11, AHIS 12/H, ARCH 31, ARCH 32, ARTB 14, ARTD 15A, ARTD 20, ARTD 25A, ARTG 20, ARTS 22, ARTS 30A, ARTS 40A, DN-T 20, ID 180, MUS 7, MUS 11A, MUS 11B, MUS 12, MUS 13/H, MUS 14A, MUS 14B, MUS 15, PHOT 15, SPCH 4, THTR 9, THTR 10, THTR 11

<u>Name</u>	<u>Discipline</u>	<u>GE Courses you are representing</u>
ARTS		
Carolyn Alexander	Arts	ARTB1, ARTB14, ARTD 15A, 20, 25A, ARTS 22, 40A, 30A, ARTG20
Crystal Lane Swift	Speech	SPCH 4
Bob Perkins	Architecture	ARCH 31, 32

General Education Outcome: Students completing an assignment in Area C (Arts) courses will be able to analyze modes of artistic expression.

Criterion for Success: Students will meet expectations by scoring a “1” on two of the three categories.

	0 Below Expectations	1 Meets Expectations	2 Exceeds Expectations
ACQUISITION: Quality of information collected	No acquisition	Somewhat detailed and complete	Detailed and complete
ANALYSIS: Analysis of information	No analysis	Summary of information with some analysis	In-depth/thorough analysis
APPLICATION: Application of concepts to a mode of artistic expression	No application	Some appropriate application is evident	Thoughtful and specific application

Optional TracDat assessment summary:

Instructors will evaluate _____ on a 3-point rubric (0, 1, 2) to measure student achievement of acquisition, analysis, and application variables. Students will meet expectations by scoring a “1” or higher on two of the three categories. .

NOTE: Fill in the blank above with the type of artifact you will use for assessment in each particular course, such as “a student essay”, “A student class presentation”, “observations of student discussions,” “multiple choice exam questions”, etc.

AREA D1

HIST1, HIST7, HIST7H, HIST8, HIST8H, HIST30, HIST31, HIST36, HIST40, POLI1,
POLI1H, POLI25, POLI35

<u>Name</u>	<u>Discipline</u>	<u>GE Courses you are representing</u>
Ralph Spaulding	History	Hist1, Hist7, Hist7H, Hist8, Hist8H
Tyler Trull	Political Science	Poli1, Poli1H
Guest Representative (David Medina)	Sociology	N/A

General Education Outcome: Students will be able to differentiate among changes in the American constitutional government over time.

Criteria for success: Students will obtain a score of “3” or better on multiple-choice or essay item related to the GEO.

Descriptive Criteria and Scores	Performance level			
	Exceeding Expectations	Meeting Expectations	Approach Expectations	Not Meeting expectations
	4	3	2	1
	The student demonstrated accurate sequence of understanding constitutional changes over time; could also explain cause-effect relationships for events and changes in the constitution; could name multiple changes in the constitution over time.	The student could accurately identify/sequence a few changes in the constitution over time.	The student illustrated some understanding of changes in the constitution.	The student had no awareness or very inaccurate knowledge regarding changes in the constitution over time.

AREA D2: SOCIAL, POLITICAL, AND ECONOMIC INSTITUTIONS (ELECTIVE COURSES)

AGAG1, AGFR 20, ANTH 3, ANTH 5, ANTH 22, ANTH 30, BUSC 1A/H,
 BUSC 1B/H, CHLD 1, CHLD 10/H, GEOG 2/H, GEOG 5, GEOG 8, GEOG 30,
 HIST 3/H, HIST 4/H, HIST 10, HIST 11, HIST 19, HIST 35, HIST 39, JOUR 100,
 JOUR 107, POLI 2, POLI 5, POLI 9, PSYC 1A/H, PSYC 19, PSYC 25, SOC 1/H,
 SOC 2/H, SOC 4, SOC 5, SOC 14, SOC 15, SOC 20/H, SPCH 7, SPCH 26/H

<u>Name</u>	<u>Discipline</u>	<u>GE Courses you are representing</u>
David Medina	Sociology	All Sociology
Amrik Singh Dua	Business Economics	BUSC 1A, BUSC1B
Jeff Archibald	Speech	SPCH 7, SPCH26
Jennifer Garwick	Agriculture	AGAG1
Rasool Masoomian	Business Administration	BUSC1A, BUSC1B

General Education Outcome: Students completing relevant assignments in Area D2 courses will analyze the relationship between social, political, and/or economic institutions and human behavior.

Criteria: Students must score at least a "1" to meet expectations.

Rubric:

	Performance level		
	0 - Below Expectations	1 - Meets Expectations	2 - Exceeds Expectations
Criteria	<p>Identifies some relevant information about social, political and/or economic institutions but is missing some key ideas;</p> <p>lacks the ability to identify related human behaviors.</p>	<p>Adequately identifies relevant information about social, political, and/or economic institutions;</p> <p>articulates the relationship to human behavior using one or more examples.</p>	<p>Thoroughly identifies relevant information about social, political, and/or economic institutions;</p> <p>articulates the relationship to human behavior using one or more examples;</p> <p>extends analysis to predictions and/or recommendations.</p>

STUDENT	SCORE (0, 1, 2)	MEETS CRITERIA	DOES NOT MEET CRITERIA	DID NOT COMPLETE

AREA E: LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT

AD3, BIOL3, BIOL13, BIOL15, BIOL15H, CHLD10, CHLD10H, COUN5, FCS41, LEAD55, NF10, NF25, NF25H, NF28, PE34, PSYC14, PSYC25, PSYC26, PSYC33

<u>Name</u>	<u>Discipline</u>	<u>GE Courses you are representing</u>
PAUL SHARPE	Alcohol/Drug Dependency	AD 3
MIKE GOFF	Physical Education	PE 34
DYRELL FOSTER	Leadership	LEAD55
STACY BACIGALUPI	Psychology	PSYC14, PSYC25
CAROL IMPARA	Consumer Science and Design Technologies	NF10, NF25, NF28
DARLENE LANDEROS	Child Development	CHILD10, CHILD10H
LISA LEDEBOER	Family and Consumer Sciences	FCS41
LYNDA HOGGAN	Biology	BIOL15
EDDIE LEE	Counseling	COUN5
DIEDRE VAIL	Biology	BIOL15

GENERAL EDUCATION OUTCOME: Students completing an assignment in Area E courses will demonstrate meaningful self-evaluation related to increasing their lifelong personal well-being.

Criteria: Students will meet expectations by scoring a "1" or more in at least two categories.

Rubric:

		Performance level		
		0 - Below Expectations	1 - Meets Expectations	2 - Exceeds Expectations
Criterion	COLLECTION: Quality of information collection	No collection	Somewhat detailed and complete	Detailed and complete
	ANALYSIS: Analysis of information	No analysis	Summary of information with some analysis	In-depth/thorough analysis
	APPLICATION: Application of concepts to enhance lifelong well-being	No application	Somewhat thoughtful and somewhat specific information	Thoughtful and specific application

Appendix F

May 15, 2009

Hello Department Chairs.

As you may be aware, the General Education Outcomes (GEOs) Committee and the Student Learning Outcomes (SLOs) Committee will be merging to form a single committee, the Outcomes Committee, starting Fall 2009. In order to pass on accurate information on the status of GEOs assessment to this new committee, and to provide a report on this status to the Academic Senate, we need some information from you. Please answer the following questions and email your responses to the research office, research@mtsac.edu, by June 30, 2009. Detailed information on the GEOs initiative can be found at our website, <http://www.mtsac.edu/instruction/generaled/>. Information about which GEOs apply to a particular course can be found on the attachment GEOsp09web.

----- Questions below -----

1) Name:

2) Department (s) you are replying on behalf of:

3) What is your department's timeline for assessing GEOs?

[Please refer to the GEO Plan and Timeline and note if there are any misalignments and we can discuss these further. The deadlines for the assessment of GEOs can be found at (<http://www.mtsac.edu/administration/senates/academic/documents/GEOPlan.pdf>). Include a target assessment date for each general education course within your department(s). An example of a department-level timeline can be found on the first page of the Spotlight newsletter http://www.mtsac.edu/instruction/outcomes/newsletter/2009-04_spotlight.pdf]

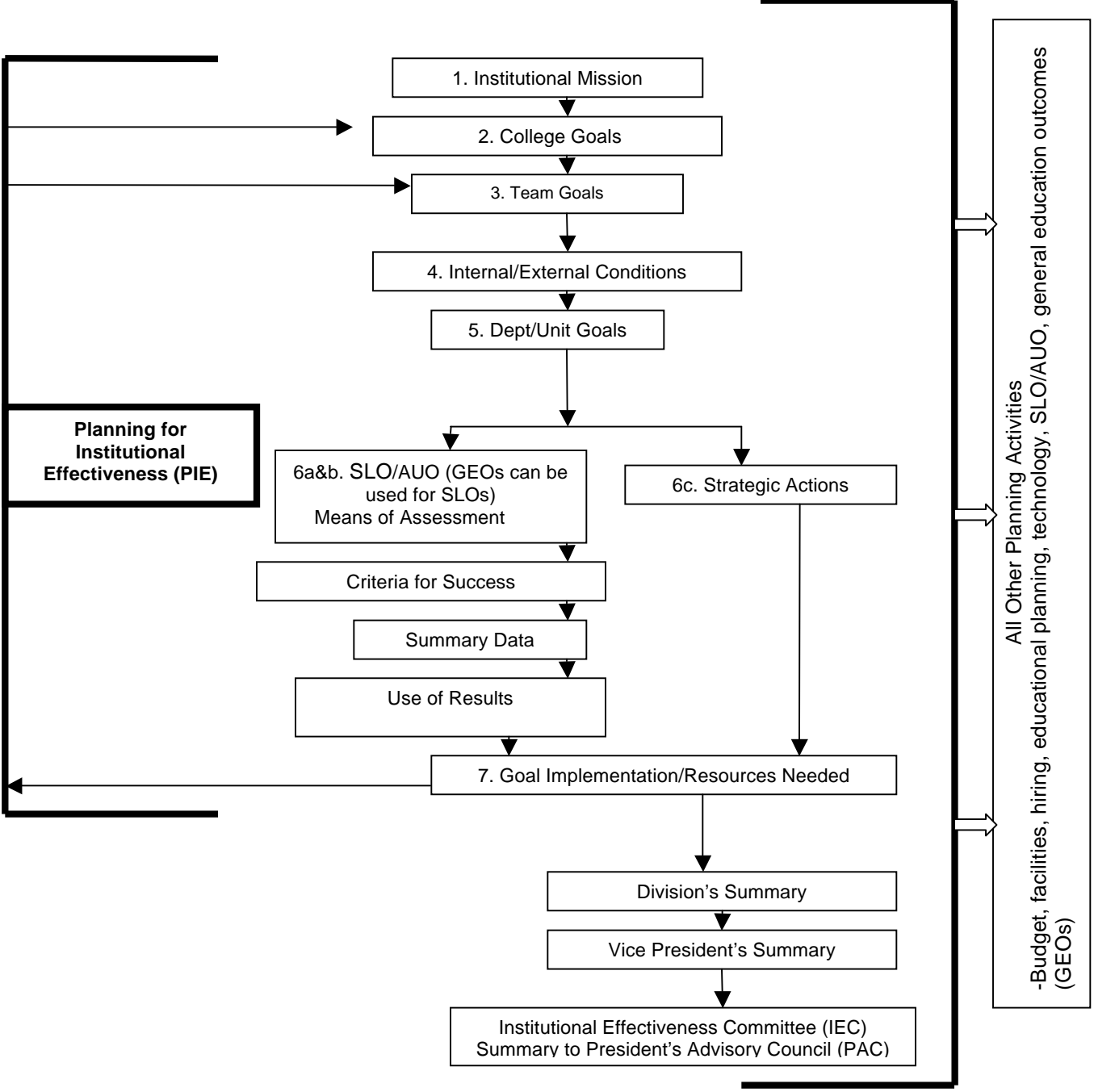
4) If such a timeline has not been determined yet, indicate your plans for when this information will be available.

Thank you very much for your effort in providing this information. If you need help with the GEOs process, please feel free to contact the research department (research@mtsac.edu or pchaplot@mtsac.edu). We look forward to receiving your GEOs assessments.

Sincerely, the GEOs Committee

APPENDIX G

MT. SAN ANTONIO COLLEGE PLANNING FRAMEWORK



RESOURCES: ACCJC Standard II.A.3 Related To GEOs

Standard II: Student Learning Programs and Services

The institution offers high-quality instructional programs, student support services, and library and learning support services that facilitate and demonstrate the achievement of stated student learning outcomes. The institution provides an environment that supports learning, enhances student understanding and appreciation of diversity, and encourages personal and civic responsibility as well as intellectual, aesthetic, and personal development for all of its students.

A. Instructional Programs

The institution offers high-quality instructional programs in recognized and emerging fields of study that culminate in identified student outcomes leading to degrees, certificates, employment, or transfer to other higher education institutions or programs consistent with its mission. Instructional programs are systematically assessed in order to assure currency, improve teaching and learning strategies, and achieve stated student learning outcomes. The provisions of this standard are broadly applicable to all instructional activities offered in the name of the institution.

II.A.2. The institution assures the quality and improvement of all instructional courses and programs offered in the name of the institution, including collegiate, developmental, and pre-collegiate courses and programs, continuing and community education, study abroad, short-term training courses and programs, programs for international students, and contract or other special programs, regardless of type of credit awarded, delivery mode, or location.

b. The institution relies on faculty expertise and the assistance of advisory committees when appropriate to identify competency levels and measurable student learning outcomes for courses, certificates, programs including general and vocational education, and degrees. The institution regularly assesses student progress towards achieving those outcomes.

f. The institution engages in ongoing, systematic evaluation and integrated planning to assure currency and measure achievement of its stated student learning outcomes for courses, certificates, programs including general and vocational education, and degrees. The institution systematically strives to improve those outcomes and makes the results available to appropriate constituencies.

II.A.3. The institution requires of all academic and vocational degree programs a component of general education based on a carefully considered philosophy that is clearly stated in its catalog. The institution, relying on the expertise of its faculty, determines the appropriateness of each course for inclusion in the general education curriculum by examining the stated learning outcomes for the course.

General education has comprehensive learning outcomes for the students who complete it, including the following:

1. An understanding of the basic content and methodology of the major areas of knowledge: areas include the humanities and fine arts, the natural sciences, and the social sciences.
2. A capability to be a productive individual and life long learner: skills include oral and written communication, information competency, computer literacy, scientific and quantitative reasoning, critical analysis/logical thinking, and the ability to acquire knowledge through a variety of means.
3. A recognition of what it means to be an ethical human being and effective citizen: qualities include an appreciation of ethical principles; civility and interpersonal skills; respect for cultural diversity; historical and aesthetic sensitivity; and the

willingness to assume civic, political, and social responsibilities locally, nationally, and globally.