

Executive Summary: ISLO/GESLO Report 2019

In the Spring and Fall of 2019, the Learning Outcomes and Advisory committee (LOAC) organized an analysis of ISLO and GESLO data that was facilitated by the SLO Co-Coordinators in conjunction with the SLO Liaisons that represent all academic areas on campus. The analysis yielded the following recommendations:

- Integrate in-class discussions and/or spoken group presentations that facilitate engagement when students analyze a text/ concept/idea and presents/shares with classmates.
- Re-examine CSLOs and which ISLO they link with.
- Allocate resources to bring cultural events to campus that would promote student engagement.
- Create a staff development retreat for critical thinking to provide faculty members with tools focused on how to integrate critical thinking activities into their courses. (Faculty could be invited to share best practices).
- Develop curriculum for a science-based critical thinking course. (Ex. Examining when science is misused—aka climate change). Currently, the Critical Thinking GESLO is only linked to English, 115 and ADN 140. Creating a science-based critical thinking course would support STEM majors. This course could also be supported by:
 - Inviting professionals in the STEM field to present their research in workshops for students.
 - Encouraging students to present their findings from internships/research projects to the campus for a symposium that would showcase their work campus wide. Award or scholarship could be developed for most innovative undergraduate research project (to be voted in by students).
- Create/better advertise a non-credit course focused on critical thinking.
- Add Power study tutors to natural science and mathematics courses.
- Provide more access to resources needed for Scientific Inquiry such as scientific calculators (e.g. via a rental program)
- Establish campus-wide consensus about what percentages are acceptable for the category of "proficiency" in SLO assessment.

ISLO/GESLO Full Report 2019

In alignment with the College mission and strategic priorities, the college annually reviews and discusses SLO data for use in institutional dialogue as it relates to the improvement of student learning, student achievement, educational quality, and institutional effectiveness. The campus utilizes a five-point rubric for assessing student learning outcomes. The range of this rubric includes the following: No Proficiency, Low Proficiency, Proficiency, High Proficiency, and Mastery.

As advised by the Director of Institutional Research, when examining ISLO & GESLO data, totals were combined for low proficiency and no proficiency. If this combined total was ≥15% it was examined and discussed for possible improvements. The following report outlines the recommendations based on this examination.

ISLO 4 Thinking and Reasoning: Formulate and share ideas, analyze the ideas of others, integrate them into their thinking.

SLO: SWC ILO 4. Thinking & Reasoning: Formulate, share, & analyze ideas										
No Proficiency Low Proficiency Proficiency High Proficiency Mastery									itery	
602	6.31%	886	9.29%	2078	21.78%	2649	27.76%	3327	34.87%	
524	7.88%	562	8.45%	1310	19.70%	1941	29.19%	2313	34.78%	
13	3.63%	17	4.75%	33	9.22%	91	25.42%	204	56.98%	
464	6.54%	456	6.43%	1147	16.16%	1891	26.65%	3138	44.22%	
1603	6.78%	1921	8.12%	4568	19.32%	6572	27.79%	8982	37.99%	
	No Prof 602 524 13 464	No Proficiency 602 6.31% 524 7.88% 13 3.63% 464 6.54%	No Proficiency Low Profice 602 6.31% 886 524 7.88% 562 13 3.63% 17 464 6.54% 456	No Proficiency Low Proficiency 602 6.31% 886 9.29% 524 7.88% 562 8.45% 13 3.63% 17 4.75% 464 6.54% 456 6.43%	No Proficiency Low Proficiency Profic 602 6.31% 886 9.29% 2078 524 7.88% 562 8.45% 1310 13 3.63% 17 4.75% 33 464 6.54% 456 6.43% 1147	No Proficiency Low Proficiency Proficiency 602 6.31% 886 9.29% 2078 21.78% 524 7.88% 562 8.45% 1310 19.70% 13 3.63% 17 4.75% 33 9.22% 464 6.54% 456 6.43% 1147 16.16%	No Proficiency Low Proficiency Proficiency High Proficiency 602 6.31% 886 9.29% 2078 21.78% 2649 524 7.88% 562 8.45% 1310 19.70% 1941 13 3.63% 17 4.75% 33 9.22% 91 464 6.54% 456 6.43% 1147 16.16% 1891	No Proficiency Low Proficiency Proficiency High Proficiency 602 6.31% 886 9.29% 2078 21.78% 2649 27.76% 524 7.88% 562 8.45% 1310 19.70% 1941 29.19% 13 3.63% 17 4.75% 33 9.22% 91 25.42% 464 6.54% 456 6.43% 1147 16.16% 1891 26.65%	No Proficiency Low Proficiency Proficiency High Proficiency Mass 602 6.31% 886 9.29% 2078 21.78% 2649 27.76% 3327 524 7.88% 562 8.45% 1310 19.70% 1941 29.19% 2313 13 3.63% 17 4.75% 33 9.22% 91 25.42% 204 464 6.54% 456 6.43% 1147 16.16% 1891 26.65% 3138	

No/Low Proficiency	Proficiency	High Proficiency/Master
14.9%	19.32%	65.78%

ISLO 4 has a combined LP and NP range of 14.90%. One way to improve these levels is to integrate in-class discussions and/or spoken group presentations that facilitate engagement when students analyze a text/ concept/idea and presents/shares with classmates.

ISLO 16 Aesthetic Sensitivity and Historical Literacy: Analyze and critique the philosophical, technical, historical, cultural and aesthetic qualities of works of art.

LO: SWC ILO 16. Aesthetic Sensitivity and Historical Literacy: Critique works of art										
	No Pro	ficiency	Low Pro	ficiency	Profic	ciency	High Pro	oficiency	Mas	stery
Fall 2017	5	15.62%	0	0.00%	8	25.00%	12	37.50%	7	21.88%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	20	16.67%	4	3.33%	7	5.83%	34	28.33%	55	45.83%
Overall	25	16.45%	4	2.63%	15	9.87%	46	30.26%	62	40.79%

No/Low Proficiency	Proficiency	High Proficiency/Master			
19.08%	9.87%	71.05%			

ISLO 16 has a combined LP and NP range of 19%. High Proficiency and Mastery have a combined total of 71%, whereas proficiency is at 9.87%. What is important to note is that this ISLO has only been linked to 152 student assessments which is a small sample size. In light of this data, it was discussed how at one point SWC

only had eleven ISLOs. At that time, it was suggested that there needed to be ISLOs related to Global Awareness and Aesthetic Sensitivity & Historical Literary. Currently, data indicates that ISLOs 12-16 are not measured as robustly as the other ISLOs. It is recommended that disciplines re-examine their CSLOs and how they link with ISLOs. A second recommendation to support the Global Awareness ISLOs (9-13) is for the campus to allocate resources to bring cultural events to campus that would promote student engagement.

GESLO for SWC Associates Degree (A. Demonstrate critical thinking by analyzing and creating central arguments and lines of reasoning.)

LO: A. Demonstrate critical thinking by analyzing and creating central arguments and lines of asoning.								
	ency Low Proficiency Proficiency High Proficien	Mastery						
Fall 2017	4.51% 596 9.24% 1414 21.93% 1931 29	% 2215 34.36%						
Spring 2018	9.55% 752 11.06% 1370 20.15% 1700 25	% 2328 34.24%						
Summer 2018	1.65% 22 5.20% 43 10.17% 114 26	% 237 56.03%						
Fall 2018	3.69% 143 6.95% 418 20.31% 616 29	% 805 39.12%						
Overall	6.50% 1513 9.62% 3245 20.63% 4361 27	% 5585 35.51%						

No/Low Proficiency	Proficiency	High Proficiency/Master
16.12%	20.63%	63.24%

GESLO for SWC Associates Degree A. has a combined LP and NP range of 16.12%. GESLO for SWC AD A. has a combined LP and NP range of 16.12%. After reviewing this data recommendations include:

- Creating a staff development retreat for critical thinking to provide faculty members with tools focused on how to integrate critical thinking activities into their courses. (Faculty could be invited to share best practices).
- Developing curriculum for a science-based critical thinking course. (Ex.
 Examining when science is misused—aka climate change). Currently, the
 Critical Thinking GESLO is only linked to English, 115 and ADN 140. Creating
 a science-based critical thinking course would support STEM majors. This
 course could also be supported by:
 - Inviting professionals in the STEM field to present their research in workshops for students.

- Encouraging students to present their findings from internships/research projects to the campus for a symposium that would showcase their work campus wide. Award or scholarship could be developed for most innovative undergraduate research project (to be voted in by students).
- Creating/better advertising a non-credit course focused on critical thinking.

GESLO for SWC Associates Degree (B. Natural Science: Examine issues related to the natural sciences from an evidence-based perspective and use in applied contexts.)

ISLO: B. Examine issues related to the natural sciences from an evidence-based perspective and use in applied contexts.

	No Prof	ficiency	Low Pro	ficiency	Profic	iency	High Pro	oficiency	Mas	stery
Fall 2017	433	8.82%	552	11.25%	1129	23.00%	1482	30.20%	1312	26.73%
Spring 2018	522	8.45%	622	10.07%	1607	26.01%	1914	30.98%	1513	24.49%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	706	8.98%	800	10.17%	1749	22.24%	2433	30.94%	2175	27.66%
Overall	1661	8.77%	1974	10.42%	4485	23.67%	5829	30.76%	5000	26.39%

No/Low Proficiency	Proficiency	High Proficiency/Master
19.19%	23.67%	57.15%

GESLO for SWC Associates Degree B. has a combined LP and NP range of 19.19%. Two ways to assist with achieving proficiency are to provide more tutoring specific to natural sciences, and to consider adding Power study tutors to natural sciences courses.

GESLO for CSU (B. Scientific Inquiry Quantitative Reasoning: Analyze and apply mathematical concepts and scientific methods to interpret and to evaluate data in order to effectively problem-solve issues in a variety of contexts.)

ISLO: B. Analyze and apply mathematical concepts and scientific methods to interpret and to evaluate data in order to effectively problem-solve issues in a variety of contexts.

No Prof	iciency	Low Pro	ficiency	Profic	iency	High Pro	ficiency	Mas	tery
405	6.42%	592	9.38%	1370	21.71%	1954	30.97%	1989	31.52%
719	8.60%	840	10.05%	1966	23.52%	2555	30.57%	2278	27.26%
0	0.00%	2	8.70%	1	4.35%	4	17.39%	16	69.57%
734	7.90%	925	9.95%	2061	22.17%	2771	29.81%	2804	30.17%
1858	7.75%	2359	9.83%	5398	22.50%	7284	30.37%	7087	29.55%
	405 719 0 734	719 8.60% 0 0.00% 734 7.90%	405 6.42% 592 719 8.60% 840 0 0.00% 2 734 7.90% 925	405 6.42% 592 9.38% 719 8.60% 840 10.05% 0 0.00% 2 8.70% 734 7.90% 925 9.95%	405 6.42% 592 9.38% 1370 719 8.60% 840 10.05% 1966 0 0.00% 2 8.70% 1 734 7.90% 925 9.95% 2061	405 6.42% 592 9.38% 1370 21.71% 719 8.60% 840 10.05% 1966 23.52% 0 0.00% 2 8.70% 1 4.35% 734 7.90% 925 9.95% 2061 22.17%	405 6.42% 592 9.38% 1370 21.71% 1954 719 8.60% 840 10.05% 1966 23.52% 2555 0 0.00% 2 8.70% 1 4.35% 4 734 7.90% 925 9.95% 2061 22.17% 2771	405 6.42% 592 9.38% 1370 21.71% 1954 30.97% 719 8.60% 840 10.05% 1966 23.52% 2555 30.57% 0 0.00% 2 8.70% 1 4.35% 4 17.39% 734 7.90% 925 9.95% 2061 22.17% 2771 29.81%	405 6.42% 592 9.38% 1370 21.71% 1954 30.97% 1989 719 8.60% 840 10.05% 1966 23.52% 2555 30.57% 2278 0 0.00% 2 8.70% 1 4.35% 4 17.39% 16 734 7.90% 925 9.95% 2061 22.17% 2771 29.81% 2804

No/Low Proficiency	Proficiency	High Proficiency/Master
17.58%	22.50%	59.92%%

GESLO for CSU B has a combined LP and NP range of 17.58%. Solutions to increase proficiency are to provide more access to resources needed for Scientific Inquiry such as scientific calculators (e.g. via a rental program) and by offering more support such as embedded tutoring in natural science courses.

GESLO for IGETC (Area 2. Mathematical Concepts and Quantitative Reasoning: Analyze and apply mathematical concepts and scientific methods to interpret and to evaluate data to effectively problem-solve issues in a variety of contexts.)

ISLO: Area 2. Analyze and apply mathematical concepts and scientific methods to interpret and to evaluate data to effectively problem-solve issues in a variety of contexts.

	No Prof	ficiency	Low Pro	ficiency	Profic	iency	High Pro	oficiency	Mas	itery
Fall 2017	16	10.39%	5	3.25%	13	8.44%	34	22.08%	86	55.84%
Spring 2018	166	16.45%	124	12.29%	189	18.73%	232	22.99%	298	29.53%
Summer 2018	0	0.00%	2	8.70%	1	4.35%	4	17.39%	16	69.57%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Overall	182	15.35%	131	11.05%	203	17.12%	270	22.77%	400	33.73%

No/Low Proficiency	Proficiency	High Proficiency/Master
26.4%	17.12%	56.5%

GESLO for IGETC Area 2. has a combined LP and NP range of 26.4%. This sample seems limited. The recommendation is to consider linking more course level SLOs to this GESLO. It is also suggested that to assist with achieving proficiency, Power study tutors for embedded tutoring in courses specific to Mathematical Concepts and Qualitative Reasoning should be increased.

GESLO for IGETC (Area 5. Physical and Biological Sciences: Examine and evaluate issues related to the physical and biological sciences from an evidence-based perspective and use in applied contexts.)

ISLO: Area 5. Examine and evaluate issues related to the physical and biological sciences from an evidence-based perspective and use in applied contexts.

[No Proficiency		Low Proficiency		Proficiency		High Proficiency		Mastery	
Fall 2017	389	6.30%	584	9.46%	1350	21.87%	1914	31.00%	1937	31.37%
Spring 2018	533	7.42%	673	9.37%	1716	23.88%	2295	31.94%	1969	27.40%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	726	7.86%	919	9.96%	2039	22.09%	2760	29.90%	2787	30.19%
Overall	1648	7.29%	2176	9.63%	5105	22.60%	6969	30.85%	6693	29.63%

No/Low Proficiency	Proficiency	High Proficiency/Master		
16.92%	22.60%	60.48%		

GESLO for IGETC Area 5. has a combined LP and NP range of 16.92%. Suggestions for increasing proficiency are to provide more access to resources needed for

Scientific Inquiry such as scientific calculators, and to support more embedded tutoring in math and sciences courses.

Other insights:

Currently, there is no established campus-wide consensus about what percentages are acceptable for the category of "proficiency." From this viewpoint, it is suggested that "norming" in each discipline is an important factor in establishing what a campus-wide understanding of proficiency levels are for college level course work. Insight from the Director of Research is requested to help establish what an acceptable percentage would be for proficiency levels across campus ISLOs.

Prepared September 20, 2019
SLO Co-Coordinators: Jessica Posey & Rebecca Wolniewicz
SLO Liaisons
LOAC Committee