2020 – 2021
College of Behavioral and Social Sciences
Assessment of the Critical Thinking Student Learning Outcome

Introduction:

In 2020 – 2021, the College of Behavioral and Social Sciences (BSS) continued its College-wide assessment strategy to evaluate BSS majors' mastery of the critical thinking student learning outcome (SLO). The critical thinking SLO was selected because WASC Senior College and University Commission (WSCUC) encourages students to acquire and develop higher-order intellectual skills and critical thinking is considered a core competency. The assessment of critical thinking was supposed to transpire in the 2019 – 2020 academic year, but due to COVID – 19 and the transition to online learning in March 2020, the assessment was paused and restarted in 2020 – 2021.

Why a College-wide assessment?

In the past, each program within BSS designed and conducted its own SLO assessment. Most often, programs chose to assess content specific SLOs, which would be material covered in only one discipline (e.g., Political Science majors can demonstrate knowledge of basic structural components of national government and explain their relationship to each other and to subnational units or Anthropology majors can document, interpret, and analyze human cultural and biological diversity). These content specific SLOs, while useful and worthy of assessment, are not considered core competencies by WSCUC.

Additionally, at times, many programs' assessment strategies had flaws, which minimized the value of the final data reported. Some of these problems included, but were not limited to: not informing the students their work was being used for assessment, not using a rubric, or if a rubric was used, not providing the students the rubric in advance, and not having the assessors normed.

Occasionally, different programs would select the same SLO to assess. When the same SLO was assessed, different rubrics would be used to evaluate the students' work, so the results were not comparable. Due to these inconsistencies, the College was unable to evaluate the students' proficiency of the WSCUC core competencies at or near the point of graduation.

What is good direct assessment?

Countless books thoroughly discuss and explain quality assessment practices (see Appendix 1). This report will not belabor or dwell on the qualities of good assessment techniques. A very few of the main requisites for proper assessment include:

1. A clear and measurable SLO;
2. The SLO, the assignment, the rubric and how all three relate to each other are clearly communicated to the students before the assignment is due;
3. The assessors are normed or calibrated prior evaluation of the student artifacts;
4. The assessors have reasonable inter-rater reliability, and;

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5. The assessment leads to actionable results that are shared with the faculty and broader constituencies as appropriate.

How did BSS design and conduct its assessment?:

The following steps were utilized to design and assess the critical thinking SLO:

1. A draft rubric was created;
2. There were three meetings held during fall 2019 and one in spring 2020 to discuss, refine, modify, and finally agree to the critical thinking rubric (see Appendix 2);
3. Each BSS assessment program facilitator worked with the department chair and the appropriate faculty to select a course "at or near the point of degree completion" to collect the student work to be assessed (see Appendix 3);
4. The rubric was circulated to the faculty whose courses were providing the student work;
5. Due to the number of the faculty participating in the assessment, two norming sessions were held and the facilitators and their teams attended one of the two norming sessions, and;
6. The facilitators and their teams assessed the student work during the summer or fall of 2021 and submitted their reports during fall or winter of 2021/22.

Results:

The evaluation of BSS majors' critical thinking skills (N = 306) revealed mixed results (please see Table 1). The rating range is from 4 (high) to 1 (low). In the area of "identifies and explains issues," 86 percent of students "were proficient or had high proficiency." In the area of "recognizes stakeholders/contexts" 81 percent of students "were proficient or had high proficiency." In the area of "frames personal responses and acknowledges other perspectives," 80 percent of students "were proficient or had high proficiency." In these three areas of evaluation, the students clearly exceeded the 70 benchmark. The average scores in these three areas were 3.16, 2.86, and 2.96 respectively. In the area of "evaluates assumptions," 60 percent of students "were proficient or had high proficiency." In the area of "evaluates evidence," 69 percent of students "were proficient or had high proficiency." In the area of "evaluates implications/conclusions," 66 percent of students "were proficient or had high proficiency." In these three areas of evaluation, the students failed to reach the 70 benchmark, though they were close in the last two areas. The average scores in these three areas were 2.73, 2.95, and 2.86 respectively. Regarding the reliability of the data, of the 12 programs participating, 11 programs provided data to compile an inter-rater reliability (IRR) of the assessors, which was averaged at .61 (1.0 the highest and .35 the lowest).

Discussion:

When averaged across all six assessment categories, the students achieved the benchmark of 70 percent (74.7 percent). It should be noted, however, students struggled to achieve proficiency in the final three categories. These findings, while encouraging, should also inspire faculty to maintain and increase the level of critical thinking in their courses and across the curriculum. While this assessment is only one

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snapshot in time, the evidence demonstrates the BSS students sampled are proficient in their critical thinking skills, however, there is room for growth.

Assessing critical thinking is challenging, more difficult than other SLOs. Common writing assignments or exams often do not ask students to engage in assessable critical thinking skills. Creating a rubric for this assessment required more discussion than normal because there were differing opinions about how to assess critical thinking and how students would be able to demonstrate critical thinking in a written assignment. One department believed its assessment process suffered because its written assignment was not carefully crafted. Experts agree it is important to be critical of the significance of one assessment result. This report creates a baseline for BSS majors' competency in critical thinking and begins the conversation in the College about how to help students achieve, and build upon, their competency.

As these results are understood and disseminated, BSS will implement the following strategies:
1. Ensure the results are distributed College-wide;
2. Discuss the results with chairs and faculty;
3. Encourage faculty to analyze their program's results and discuss methods to build critical thinking into courses and develop best practices to increase students' competence in this area, and;
4. Continue to provide College-wide support individually to each program and through the BSS Student Success Center.

Table 1:

	High Proficiency (4)		Proficiency (3)		Some Proficiency (2)		Low/Limited Proficiency (1)		Total	Mean	Mode
	N	%	N	%	N	%	N	%	N		
Identifies & Explains Issues*	194	35	285	51	78	14	5	1	562	3.16	3
Recognizes Stakeholders/ Contexts	43	12	252	69	66	18	3	1	364	2.86	3
Frames Personal Responses, Acknowledges Other Perspectives	98	20	301	60	97	19	6	1	502	2.96	3
Evaluates Assumptions*	66	16	181	44	140	34	21	5	408	2.73	3
Evaluates Evidence	121	29	167	40	120	29	9	2	417	2.95	3
Evaluates Implications/ Conclusions	138	23	251	43	180	31	19	3	588	2.86	3
Average	* rounding error									**2.92**	**3**

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Closing the loop:

As noted previously, as the first College-wide assessment of critical thinking, these data provide us one snapshot in time but do not denote trends (positive or negative), so it is important not to overreact. Another data point about critical thinking comes from an indirect assessment of 138 graduating seniors in the Fall of 2021. Ninety two percent of participants responded their BSS major coursework trained them to be successful in critical thinking. The College will continue to help facilitate discussions on critical thinking and encourage programs to be thoughtful of its curriculum. When BSS next assesses critical thinking, there will be more targeted conversation about designing assignments that are appropriate to assess the SLO.

Moving forward:

For this academic year, BSS created an exam assess the quantitative reasoning SLO. The BSS exam has comparable questions to the General Education quantitative reasoning assessment exam, so we will hopefully be able to contrast BSS majors with students in the General Education program.

Contact:

For questions or concerns regarding this report, please contact Associate Dean Ryan Patten at rpatten@csuchico.edu or 898-6171.

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APPENDIX 1

Allen, M. J. (2004). *Assessing academic programs in higher education*. San Francisco: Jossey-Bass.

Allen, M. J. (2006). *Assessing general education programs*. San Francisco: Jossey-Bass.

Banta, T. W., & Associates. (2002). *Building a scholarship of assessment*. San Francisco: Jossey-Bass.

Bresciani, M. J. (2006). *Outcomes-based academic and co-curricular program review*. Sterling, VA: Stylus.

Driscoll, A., & Wood, S. (2007). *Outcomes-based assessment for learner-centered education*. Sterling, VA: Stylus.

Kuh, G. D., Ikenberry, S. O., Jankowski, N. A., Cain, T. R., Ewell, P., Hutchings, P., and Kinzie, J. (2014). *Using Student Evidence to Improve Higher Education*. San Francisco: Jossey-Bass.

Suskie, L. (2nd edition; 2009). *Assessing Student Learning: A Common Sense Guide*. San Francisco: Jossey- Bass.

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CRITICAL THINKING – AY 20 – 21				
	High Proficiency (4)	**Proficiency (3)**	**Some Proficiency (2)**	**No/Limited Proficiency (1)**
Identifies & explains ISSUES	Clearly identifies and summarizes main issues and successfully explains why/how they are problems or questions; and identifies embedded or implicit issues, addressing their relationships to each other.	Successfully identifies and summarizes the main issues and explains why/how they are problems or create questions	Identifies main issues but does not summarize or explain them clearly or sufficiently	Fails to identify, summarize, or explain the main problem or question. (OR) Represents the issues inaccurately or inappropriately.
Recognizes stakeholders and CONTEXTS (i.e., cultural/social, historical, political, economic, ethical, environmental, personal experience, etc)	Not only correctly identifies all the empirical and theoretical contexts relevant to all the main stakeholders, but also finds minor stakeholders and contexts and shows the tension or conflicts of interests among them.	Correctly identifies all the empirical and most of the theoretical contexts relevant to all the main stakeholders in the situation.	Shows some general understanding of the influences of empirical and theoretical contexts on stakeholders, but does not identify any specific contexts and/or stakeholders relevant to situation at hand.	Fails accurately to identify and explain any stakeholders, empirical or theoretical contexts for the issues. (OR) Presents problems as having no connections to other conditions or contexts.
Frames personal responses and acknowledges other PERSPECTIVES	Not only formulates a clear and precise personal point of view, but also acknowledges objections and rival positions and provides convincing replies to these.	Formulates a clear and precise personal point of view concerning the issue, and discusses their weaknesses as well as their strengths	Formulates a vague and indecisive point of view, (AND/OR) considers weak but not strong alternative positions.	Fails to formulate and clearly express own point of view, (AND/OR) fails to consider other perspectives and position.
Evaluates ASSUMPTIONS	Identifies and evaluates all the important assumptions	Identifies all the important assumptions.	Identifies some of the most important assumptions.	Fails to identify and evaluate the important assumptions behind the claims and recommendations made.
Evaluates EVIDENCE	Identifies and rigorously evaluates all important evidence offered.	Identifies all important evidence.	Successfully identifies some data and information that counts as evidence.	Fails to identify data and information that counts as evidence.
Evaluates IMPLICATIONS, conclusions, and consequences	Identifies and thoroughly discusses implications, conclusions, and consequences.	Identifies and briefly discusses implications, and conclusions.	Suggests some implications, conclusions, and consequences.	Fails to identify implications, conclusions, and consequences of the issue.

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BSS Courses Providing Student Critical Thinking Assignments			
Name of Program	**Course Number**	**Title of Course**	**Students Assessed**
Anthropology^			
Child Development	495	Senior Seminar in Child Development*	24
Economics	495W & 499H	Capstone in Economics* and Honors Independent Research in Economics	24
Geography and Planning	390 and 407W	Foundations of Geographical Analysis & Writing and Earth Systems Analysis if Global Change	12
Health and Community Services -- Health Administration	328	Health Equity	10
Health and Community Services -- Health Education	328	Health Equity	23
Multicultural and Gender Studies^^		*Did not participate*	0
Criminal Justice	439W	Capstone in Criminal Justice*	16
International Relations	345	War, Security, and Conflict	25
General Political Science	429W	Senior Seminar in U.S. Politics*	25
*Public Administration^^*		*Did not participate*	0
Psychology	401W	Capstone in Psychology*	64
Sociology	441W	Public Sociology	20
Social Science	495	Great Books and Ideas in Social Science**	38
Social Work	485	Social Welfare Policy	25

Total N =   306

* Capstone course
** General Education Course
^ Completed its assessment in AY 19 – 20 with a different rubric
^^ Chose to not participate

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