BISMARCK STATE COLLEGE REPORT

2017-2018

INSTITUTIONAL ASSESSMENT REPORT

Office of Institutional Effectiveness and Strategic Planning

AMN-027D-0119

INTRODUCTION

In previous academic years, Bismarck State College established Institutional Essential Learning Outcomes (IELOs) and developed common rubrics for each outcome. BSC moved forward with implementation and data collection for the IELOs during the 2017-2018 academic year. Initially the IELOs were rolled out with the intention of aligning an IELO to each academic course. After piloting this approach, challenges arose in general and for career and technical academic programs, in particular, as there is not a consistently clear alignment from a technical course curriculum to the IELOs. The focus on course and institutional assessment, while valuable, overlooked the program level of assessment, resulting in a less applicable and more cumbersome process for some. Thus, the direction for institutional assessment was revised during the fall of 2017.

The liberal arts/transfer disciplines continued to align the IELOs to the course level. Career and technical academic programs, however, were asked to align at least one IELO to the program. Technical program faculty were tasked with developing and documenting assessment plans, which lay out program learning outcomes, the connection to at least one IELO, an assessment cycle for data collection, and a program curriculum map.

Progress implementing the IELOs varied among programs and disciplines, and data collection was not consistent across the institution during the 2017-2018 academic year. Faculty in the liberal arts/transfer disciplines were directed to collect assessment data for the IELOs each semester (specifically one course in the fall and one course in the spring semester) in order to begin demonstrating where we are at as an institution with regard to our educational goals and student learning. Assessment reports were submitted by faculty at the end of the academic year. Career and technical program faculty initially worked on the creation and completion of assessment plans. If assessment plans were completed and implemented early enough in the academic year, data collection also occurred and assessment reports were submitted. All of the assessment reports submitted during the 2017-2018 academic year were compiled and synthesized into an institutional assessment report. Analysis was completed at the department level as the variation in assessment data collected did not lend itself to analysis organized around the IELOs.

In order to disseminate the 2017-2018 Institutional Assessment Report across campus, Conversations in Assessment (CIA) meetings were introduced and implemented beginning in the fall of 2018. The CIA meetings were designed to increase communication and heighten the presence of assessment of student learning. The meetings also help successfully close the assessment loop. It demonstrated to faculty and staff that the data collected and documentation submitted does not go unused. The Institutional Assessment Coordinator scheduled CIA meetings with academic departments that submitted assessment reports during the 2017-2018 academic year. A CIA meeting was also held with staff from the Student and Residence Life department. Including co-curricular departments in the formal assessment process was a first for the institution. During each CIA meeting, a draft of the institutional assessment report was shared with the group for consideration, review, and in hopes of spurring additional dialogue about assessment and student learning. The conversation and discussion stemming from these meetings led to additions, revisions, and edits to the institutional assessment report. To help minimize any negative associations with assessment and promote partnership in the process as well, participants received CIA badges – window clings in the shape of a badge with a design that

incorporated the institution specifically and the Conversations in Assessment title – at the conclusion of the meeting. Annual CIA meetings are planned for future years as assessment of student learning grows, evolves, and strengthens at BSC.

Following the CIA meetings, the draft institutional assessment report was shared with the Institutional Assessment Committee for finalization. The final report was provided to the Vice President for Academic Affairs as well as shared internally on BSC's intranet.

AGRICULTURE, ELECTRONICS, AND GRAPHIC DESIGN

Overview:

Assessment plans were completed by all of the programs in the Agriculture, Electronics and Graphic Design department during the 2017-2018 academic year. With plans in place, the programs in the department were all also able to collect and report assessment data during the 2017-2018 academic year.

Three of the four programs in the department created an assessment cycle that divides the assessment of program learning outcomes over the span of two academic years. The fourth program opted to collect data on all of the program learning outcomes and the selected IELO every academic year. All four of the programs aligned with the Problem Solving IELO within the Thought category. IELO assessment data were collected in three of the four programs during the 2017-2018 academic year.

Key Takeaways:

Key takeaways that emerged from the assessment data and reports submitted are detailed below.

- ***Integration of assessment methods/measures among existing course material.*** Across the department, faculty appeared to use existing assignments, exams, etc. for assessment purposes. This has not been the case institution-wide, particularly with respect to assessment of the IELOs.

- ***IELO assessment utilized common rubric and criteria, but not necessarily the 0-4 performance level scale.*** All programs in the department integrated all four of the criteria for the Problem Solving IELO into the program curriculum and course assignments, exams, or activities. Also consistent among the programs, performance targets or benchmarks were set at a certain percentage (i.e., 75%, 80%, or 85%) for the selected assessment measure. Where the programs diverged was in the translation to the 0-4 performance level scale on the common rubric, with only half of the programs translating the percentage results to the 0-4 performance level scale.

- ***Impact of the personality of each cohort of students.*** Each cohort of students presents certain strengths and weaknesses and tendencies that cannot be completely prepared for or anticipated in advance. Plans for instructional changes and improvements need to remain flexible and adaptable to a certain degree to complement the current group of students with which faculty are working.

Opportunities:

Future opportunities for the department to consider include:

- ***Offering feedback on the assessment form.*** Analysis of the assessment results and the inferences made from the data were not presented or shared as expected for some of the programs in the department. The department is encouraged to offer feedback and ideas about

how to best elicit and document in greater detail the analysis, dialogue, and resulting decisions at the program level. This also raises an opportunity for the Institutional Assessment Coordinator and Institutional Assessment Committee to assess the assessment process – revisiting the assessment form to ensure that questions and prompts are appropriate and the desired information is captured.

- ***Consistency in reporting results.*** Using the performance level scale provided on the IELO rubrics and following a prescribed method for reporting results will allow the results to be aggregated across the department and institutionally. With faculty in the department proposing clarification on expectations and additional standards for assessment reporting, further examples of how to report assessment data and a recommended format for doing so may need to be provided by the Institutional Assessment Coordinator and Institutional Assessment Committee.

- ***Conflation of grades and assessment of student learning.*** Assessment of student learning is not intended to be synonymous with student grades on an assignment, exam, or activity. While the application of student grades for assessment purposes may be appropriate in certain instances, the distinction between the two must be made clear. The Institutional Assessment Coordinator and the Institutional Assessment Committee can seek to clarify this distinction across the institution, while program faculty and the department can work together to determine if specific instances of translating a grade from a course assignment, exam, or activity to the performance level scale on an IELO rubric are appropriate.

- ***Data agreement with program curriculum map.*** The program curriculum map created by the program faculty sets forth a road map of where assessment data will be collected throughout the program. Faculty are encouraged to revisit the map to ensure that the data collected and reported agrees with the documented plan for data collection.

Met with department on November 29, 2018.

COMPUTERS AND OFFICE TECHNOLOGY

Overview:

The Computers and Office Technology department consists of four career and technical programs and the Computer Science discipline. Assessment plans were completed by all four of the career and technical programs in the Computers and Office Technology department during the 2017-2018 academic year.

While all of the programs in the department created an assessment cycle that divides the assessment of program learning outcomes over multiple academic years, three of the four programs developed a cadence for data collection that spans two academic years. The fourth program spreads the data collection for the program learning outcomes and the selected IELOs over four academic years. Most of the programs aligned with multiple IELOs within the Communication and Thought categories. More specifically, alignment with the IELOs ranged from Written Communication, Oral Communication, Information Literacy, and Teamwork within the Communication category and Critical Thinking, Creative Thinking, Problem Solving, and Quantitative Literacy within the Thought category.

One of the programs in the department – Cybersecurity and Computer Networks – was able to collect and report assessment data during the 2017-2018 academic year. The program reported assessment data for four program learning outcomes and the Problem Solving IELO.

Key Takeaways:

Key takeaways that emerged from the assessment plans and the report submitted are detailed below.

- ***Importance of finding an appropriate assessment method/measure***. Faculty reflected that the results of student learning for the IELO were as expected, but the process itself revealed that adding another assessment measure might offer a more comprehensive gauge of student achievement. By including a supplementary assessment while decreasing the amount of direction and guidance provided by faculty, faculty will be able to determine if results are replicated and truly indicative of the performance level of students.

- ***Alignment with multiple IELOs.*** Faculty aligned with multiple IELOs in most of the Computers and Office Technology programs. As the Institutional Assessment Coordinator and Institutional Assessment Committee continue to review IELO distribution across the institution, it is of particular interest to know how and why faculty in the Computers and Office Technology department chose the selected IELOs. Faculty shared in conversation that the close match between the IELOs and the program learning outcomes naturally led to and supported the selection of multiple IELOs for the program.

Opportunities:

Future opportunities for the department to consider include:

- ***Data collection cycle needs a rhythm that can translate results into action and be sustainable.*** In collecting assessment data, the ultimate goal is to improve student learning. In order to do so, data collection needs to occur frequently enough that faculty, programs/disciplines, departments, and the institution can make informed decisions and take appropriate action in a timely manner. At the same time, this pace must be counterbalanced with sustainability. The Institutional Assessment Committee has recommended that all program learning outcomes and the selected IELOs be assessed within two academic years in order to achieve this balance.

- ***Simplification of assessment process when able.*** In meeting and working with faculty in the department, it appears that the assessment process and expectations continue to create confusion. Increased communication from the Institutional Assessment Coordinator and Institutional Assessment Committee may help alleviate this. Faculty also can contribute to this effort by bringing forth their questions and issues to the Institutional Assessment Coordinator, Institutional Assessment Committee representative, department chair, or academic dean so that difficulties can be addressed. Just as BSC is committed to assess the assessment process and continuously improve the process for our institution, faculty are encouraged to regularly revisit their assessment plans for simplification and improvement opportunities.

Met with department on March 25, 2019.

HEALTH SCIENCES

Overview:

As with all of the career and technical programs at BSC, programs in the Health Sciences department were tasked with developing and documenting program assessment plans. The Institutional Assessment Coordinator met with each of the Health Sciences programs during the 2017-2018 academic year to assist program faculty with this task. During this process, it quickly became evident that the primary challenge consisted of fusing BSC's assessment process with external accreditation requirements for each respective program. While progress was made on the program plans, Surgical Technology was the only program within the Health Sciences department to complete and submit an assessment plan during the 2017-2018 academic year.

TRANSPORTATION AND CONSTRUCTION

Overview:

As with all of the career and technical programs at BSC, programs in the Transportation and Construction department were tasked with developing and documenting program assessment plans. The Institutional Assessment Coordinator met with the Transportation and Construction department on December 4, 2017 to assist program faculty with this task. Follow-up was offered in the spring of 2018. No assessment plans for the Transportation and Construction department were completed and submitted during the 2017-2018 academic year.

FINE ARTS AND HUMANITIES

Data Overview:

Assessment data were collected in Art 122, 130, 250, and 251 and History 103, 104, 212, 220, and 224. History 212 collected data for multiple IELOs – specifically, Diversity, Written Communication, and Critical Thinking. The other courses assessed in the department collected data for a single IELO. Across the department, the following IELOs were assessed:

Awareness	Diversity	5 courses
	Lifelong Learning	2 courses
Communication	Written Communication	1 course
Thought	Critical Thinking	1 course
	Creative Thinking	2 courses

Key Takeaways:

Key takeaways that emerged from the assessment data and reports submitted are detailed below.

- ***Expectations for student achievement reflective of course level and institution.*** Faculty set benchmarks with the level of the student, the level of the course, and the primarily two-year mission of the institution's academic programs in mind. For those reasons, the performance target or benchmark was set at a 2 on the 0-4 performance level scale in some instances, which may be both realistic and aggressive for the particular course.

- ***Exclusion of criterion based on initial student results.*** In some of the reported courses, all of the criterion of a selected IELO were initially integrated in the curriculum and assessed. However, faculty found that the majority of students failed to meet the benchmark performance level for a particular criterion. These early results prompted faculty to reconsider the appropriateness of the criterion for the course and ultimately opt to exclude the criterion.

- ***Strength in using a common assessment measure.*** Using a common assessment measure across multiple courses in a discipline strengthened the process, as it allowed for a longitudinal gauge of the growth of students in a particular skill, ability, or competency.

- ***Potential to more closely align and synthesize a grading rubric with an IELO rubric.*** Participation in the assessment process highlighted an opportunity to meld a grading rubric for a project with the IELO rubric. While the faculty member determined that combining the two rubrics was not ideal at the time, the careful consideration given by the faculty member to this option illustrates the engagement in continuous quality improvement.

Opportunities:

Future opportunities for the department to consider include:

- ***Connecting assessment to specific student artifacts.*** Data collection for the institutional outcomes relies on direct evidence of student learning, with a connection to specific student work or performance. Measurement can include multiple student artifacts within a single course, but faculty are asked to provide the details of the assessment methods and measures used.

- ***Use of quantitative data and IELO rubrics.*** While qualitative data hold value, faculty are asked to apply the IELO rubrics and quantify their assessment results for the institutional essential learning outcomes. This allows for an institutional aggregation of the data and a more holistic snapshot of student learning at BSC.

  Faculty in the department vocalized the challenge of quantifying student progress in their respective disciplines. The direction that the institution has taken with assessment going forward addresses this concern in part – with faculty developing assessment plans for their program or discipline that offer a degree of flexibility and latitude to assess program learning outcomes in a manner that is meaningful and appropriate to that program or discipline. And while this flexibility exists for program learning outcomes focused on discipline-specific knowledge, skills, abilities, and concepts, the IELOs are the collective expression of the learning environment the college offers to any enrolled student. As such, the IELOs measure more global skills, abilities, and concepts that are intended be quantified regardless of the particular program or discipline in which they are aligned. Continued conversation regarding the distinction between program learning outcomes and the IELOs is necessary.

- ***More seamless integration with the general education revalidation process.*** The Institutional Assessment Committee and General Education Committee are striving to meld requirements for the general education revalidation process and those set forth for institutional assessment. However, it is evident that a lack of clarity and fusion between the two still exists. These two groups will continue to work together on integrating the processes and offering clearer direction and guidance. Faculty are asked to continue to bring forth any frustrations or points of confusion so that the two groups can best address and alleviate any challenges.

- ***Enhance support for adjunct faculty.*** Greater support is needed across the institution to engage all adjunct faculty in the assessment process. As the Institutional Assessment Committee looks to address training needs and build up resources, departmental contributions to this effort are welcomed.

- ***Increasing the involvement of students in the assessment process.*** The desire to involve students in the assessment process more in the future was expressed, which the department is strongly encouraged to undertake. The department is urged to share the ideas, thoughts, and

actions pursued, as increasing student awareness and involvement in assessment would be of benefit across the institution.

Met with department on February 5, 2019.

GEOMATICS, ENGINEERING, AND MATHEMATICS

Data Overview:

Assessment data were collected in Civil Engineering and Surveying Technology 252, Geographic Information Systems 105, Engineering 101 and 201, and Math 103 and 210 during the 2017-2018 academic year. Each of the courses assessed in the department collected data for a single IELO. Across the department, the following IELOs were assessed:

Communication	Written Communication	1 course
Thought	Critical Thinking	1 course
	Ethical Reasoning	1 course
	Quantitative Literacy	3 courses

Key Takeaways:

Key takeaways that emerged from the assessment data and reports submitted are detailed below.

- ***Creative application of IELO***. Faculty aligned course material to a variety of IELOs, some with an evident connection and others with a less obvious connection. For example, a course in the GEM department is aligned with the Written Communication IELO, which might not be expected based on the course title, description, and curriculum. However, the connection makes sense given the explanation that the faculty member provided and the way in which the faculty member interpreted and applied the IELO.

- ***Importance of finding an appropriate assessment method/measure***. In reviewing results for a particular criterion of an IELO, faculty determined that the assessment measure chosen was not the most appropriate method for gauging that particular ability or skill set of students. Altering the assessment measure led to improved – and more importantly, more meaningful – results.

- ***Strength in using a common assessment measure.*** Using a common assessment measure (in this case, an exam question) across multiple sections of a course strengthened the process. It simplified the task of combining results, but also encouraged collaborative conversations and kept the focus on the analysis and resulting action plan.

- ***Internal departmental conversations created agreement among faculty about the IELO rubric performance levels.*** Faculty in the department had conversations about the performance levels on the selected IELO rubric prior to scoring student artifacts. These conversations established a degree of inter-rater reliability, with faculty noting a clearer understanding and shared consensus about the meaning of the performance levels for each criterion.

Opportunities:

Future opportunities for the department to consider include:

- ***Implication of assessment results beyond the classroom.*** Faculty noted that students who demonstrated a level of care about their education and learning, were present and active in class, and put forth effort into the assessment measure, as expected, scored higher on the assessment. Consequently, the results did not point to the need for pedagogical changes *per se*, as changes in teaching methods or practices may not necessarily lead to improved results for apathetic students. The department is challenged to consider how assessment can be used to drive change or better support those seemingly apathetic students beyond altering teaching methods or instruction.

- ***Consistency in reporting results.*** Following a prescribed method for reporting results (i.e., sharing raw numbers and percentages) will allow the results to be aggregated across the department and institutionally. Further explanation of and examples of how to report assessment data needs to be emphasized and provided by the Institutional Assessment Coordinator and Institutional Assessment Committee.

- ***Illustration of sampling procedure.*** Faculty reported that data were collected from a sample of students enrolled in a particular course. In conversation, faculty elaborated on the simple random sampling procedure employed in which they gathered the entire population of student artifacts for the course and randomly selected a subset of artifacts until the desired sample size was achieved (equivalent to roughly 50% of the population). Given that other areas across the institution might benefit from employing a sampling procedure as well, opportunities to train others on various sampling techniques and showcase the procedure used by the GEM department may be worthwhile.

- ***Guidelines for criteria exclusion.*** The GEM department presented a valid example of a course that aligned with an IELO, but did not connect with all of the criteria of the IELO. In this particular instance, the faculty member excluded two of the five criteria – stating that the excluded criteria were not applicable for the assignment chosen, nor for the course curriculum overall. However, the faculty member provided rationale that the IELO chosen still has merit and meaningful application for the course. This example raises the question for the Institutional Assessment Committee to revisit of whether the guideline set that only one criterion of an IELO may be excluded is too stringent or still appropriate.

Met with department on January 31, 2019.

LANGUAGE, LITERATURE, AND COMMUNICATION

Data Overview:

Assessment data were collected in Communication 110 and 112, Spanish 101 and 102, and English 120 during the 2017-2018 academic year. Each of the courses assessed in the department collected data for a single IELO. Across the department, the following IELOs were assessed:

Awareness	Lifelong Learning	1 course
Communication	Oral Communication	3 courses
	Written Communication	1 course

Key Takeaways:

Key takeaways that emerged from the assessment data and reports submitted are detailed below.

- ***Timing of assignments in semester contributed to changes in results.*** Unsurprisingly, the timing of the assessment method during the semester mattered. If the direct assessment occurred earlier in the semester, results tended to be lower than if the assessment occurred later in the semester.

- ***Instructional improvements already made in a course were evident.*** Faculty noted that previously made pedagogical adjustments and changes were discernable in the results. Common issues and shared student challenges that have come to the attention of faculty have been addressed. In other words, improvement of student learning has continually been a focus at BSC. The goal currently, as has been stated by the Institutional Assessment Coordinator and Institutional Assessment Committee, is to formally document and capture the assessment process and successes that have been occurring.

- ***Strength in using a common assessment measure.*** Using a common assessment measure across multiple courses in a discipline strengthened the process, as it allowed for a longitudinal gauge of the growth of students in a particular skill, ability, or competency.

Opportunities:

Future opportunities for the department to consider include:

- ***Ensure that assessment of student learning is separated from course grades.*** Assessment of student learning is not intended to be synonymous with student grades in a course. Repeated emphasis and clarification on this point needs to continue.

- ***Use of quantitative data and IELO rubrics.*** While qualitative data hold value, faculty are asked to apply the IELO rubrics and quantify their assessment results. This allows for an institutional aggregation of the data and a more holistic snapshot of student learning at BSC.

- ***Discipline collaboration to complete reporting requirements.*** Working together as a discipline, where applicable, to complete assessment reporting requirements will make the process more meaningful and valuable. Collaborative conversations among faculty about assessment results, action plans, and successes represents one of the most important end goals of the process.

- ***Appropriate selection of IELO and setting aggressive, yet realistic, benchmarks important.*** Selecting the most appropriate IELO may seem straightforward for some courses, programs, and disciplines, but the decision may warrant further consideration. Feedback from faculty regarding the fit of the IELO supports BSC's commitment to assess the assessment process and continuously improve the process for our institution. Hand in hand with that, faculty are encouraged to explore and try applying alternative IELOs that may not have been initially selected.

  Setting appropriate benchmarks is another matter that may benefit from inter-departmental and cross-departmental conversations. Taking that idea one step further, establishing inter-rater reliability for the IELO rubrics could be a next step for BSC in the future. Achieving inter-rater reliability and norming at a department level was discussed during the department meeting.

- ***Address differences in application and scope of the institutional rubrics.*** Discussion with the department shed light on a potential discrepancy in the application and perceived scope of the IELO rubrics. The rubrics could be approached as course specific, with students able to achieve a 0-4 performance level in each course aligned with any particular IELO. Expectations for achievement of a certain performance level increase over a sequence of courses, while the performance level scale remains independent in each course. For example, a student may achieve a level 3 for the content development criterion within the Written Communication rubric in English 110. However, in English 120 this same student may only achieve a level 2 performance rating for content development within the Written Communication rubric. In this scenario, the difference in the student achievement is attributed to the increased expectations that faculty have of the student skills and abilities in a higher level course.

  Alternatively, the IELO rubrics could be viewed as associated with the entire educational experience that a student has at BSC. In this instance, courses build upon each other and a student would generally achieve a higher performance level in more advanced classes. The expectations for a student, however, remain the same across courses. A student in English 110 may achieve a level 2 for content development within the Written Communication rubric and may advance to a level 3 for that same criterion in English 120 as the student's skills and abilities mature.

  While faculty in the Language, Literature, and Communication department agreed in sharing the former perspective of the institutional rubrics, the Institutional Assessment Committee has an opportunity to provide clarity on the intent of the rubrics and shape a consistent institutional view and application.

- ***Develop shared understanding of how to handle incomplete student artifacts.*** The department raised questions about how to handle incomplete or omitted student work. While the Institutional Assessment Committee has deliberated about this issue in the past and agreed upon guidelines for the appropriate use of a 0 performance level score and the appropriate use of an N/A, further communication about the guidelines may be necessary.

Met with department on December 4, 2018.

PHYSICAL AND BIOLOGICAL SCIENCES

Data Overview:

Assessment data were collected in Biology 102, 111, and 220; Chemistry 112, 116L, 121, 121L, 122, and 122L; Science 102 and 102L; and Physics 251, 251L, 252, and 252L during the 2017-2018 academic year and summer 2018 semester. Each of the courses assessed in the department collected data for a single IELO. Across the department, the following IELOs were assessed:

Thought	Critical Thinking	5 courses
	Problem Solving	6 courses
	Inquiry and Analysis	2 courses
	Quantitative Literacy	2 courses

Key Takeaways:

Key takeaways that emerged from the assessment data and reports submitted are detailed below.

- ***Integration of assessment methods/measures varied among courses.*** In some courses, faculty appeared to use existing assignments, exams, etc. for assessment purposes, whereas in other courses, faculty designed new activities in order to fulfill assessment requirements.

- ***Sample size made a difference.*** Small sample sizes in some courses led to differences in results. For certain courses, this will continue to be a reality; consequently, a longitudinal approach to the data may be more meaningful.

- ***Structure of assessment within a course consisted of finding a balance.*** Logistics of the assessment method/measure created natural constraints that may have impacted student results – e.g., using a question from a timed, in class exam. Students may have demonstrated less evidence of a higher level or complex criterion of an IELO (e.g., evaluation within the Problem Solving rubric) due to the time pressure inherent in this scenario. Further complicating the matter, the need to cover a certain amount of material and curriculum within the course may inhibit the implementation of a stand-alone assignment or activity for assessment, instead requiring faculty to weave assessment into an existing assignment or activity.

  Despite these limitations, faculty made note of some instances where the assessment method and/or tool can and will be adjusted in order to more accurately measure student performance – e.g., transitioning an online quiz to an in-class assignment with group discussion.

- ***Student abilities and attitudes served as a confounding factor.*** Fluctuation of student abilities from semester to semester led to changes in the assessment results with little to no changes made in the teaching method or instruction. Furthermore, results reflected the attitude, demeanor, and level of commitment that students exhibited toward their education – with students that put forth little to no effort, had attendance issues, appeared apathetic, etc. constituting the outlier data points on the lower end of the IELO rubric performance level scale.

Opportunities:

Future opportunities for the department to consider include:

- ***Use of a signature assignment and common assessments.*** Using a signature assignment or a common assessment that can cross from course to course and semester to semester may better gauge the growth of students in a particular skill, ability, or competency.

- ***Consistency in reporting results.*** Following a prescribed method for reporting results (i.e., sharing raw numbers and percentages) will allow the results to be aggregated across the department and institutionally. Further explanation of and examples of how to report assessment data needs to be emphasized and provided by the Institutional Assessment Coordinator and Institutional Assessment Committee.

- ***Establish agreement on IELO rubric performance levels and aggressive, yet realistic, benchmarks.*** The department has engaged in conversations about the IELO rubric performance levels and what each level means. Furthermore, faculty in the department have deliberated about what an appropriate benchmark and expectations for student achievement may be within their courses. While the institution as a whole has an opportunity to consider methods for establishing inter-rater reliability for the IELO rubrics and consensus on the application of the performance level scale, the department is encouraged to continue discussing these issues internally as well. Departmental thoughts, feedback, and suggestions can help shape the efforts undertaken by the Institutional Assessment Coordinator and Institutional Assessment Committee.

Met with department on November 15, 2018.

SOCIAL SCIENCES, BUSINESS, AND EDUCATION

Data Overview:

Assessment data were collected in Accounting 102 and 218; Business 170; Business Administration 210, 274, and 281; Criminal Justice 201; Economics 202; Psychology 111, 211, 250, and 270; Sociology 110 and 235; and Social Work 256 during the 2017-2018 academic year. Each of the courses assessed in the department collected data for a single IELO. Across the department, the following IELOs were assessed:

Awareness	Diversity	1 course
Thought	Critical Thinking	7 courses
	Creative Thinking	3 courses
	Problem Solving	4 courses
	Inquiry and Analysis	1 course

Key Takeaways:

Key takeaways that emerged from the assessment data and reports submitted are detailed below.

- ***Instructional improvements already made in a course were evident and can be extended to other courses.*** Faculty noted that previously made pedagogical adjustments and enhanced activities for students were discernable in the results. Faculty shared plans to mirror those successful practices within other courses in the discipline in order to improve student learning. The results and documented plans to extend the successful practices demonstrate that improvement of student learning has continually been a focus at BSC. The goal currently, as has been stated by the Institutional Assessment Coordinator and Institutional Assessment Committee, is to formally document and capture the assessment process and successes that have been occurring.

- ***Longitudinal data consistent.*** The offering frequency of some of the courses assessed allowed for longitudinal data to be collected and reviewed. The longitudinal data revealed consistency in the results, giving greater confidence to the decisions made and consequent action plans.

- ***Assessment tool or method itself can impact the results.*** Tweaking the assessment method can alter the student performance scores. Faculty provided evidence that the changes can range from procedural – such as clarifying the instructions of the assignment, activity, project, etc. used for assessment – to larger in scope – such as redefining or clarifying assignment or assessment expectations. Ultimately, the goal is to design and implement an assessment method that measures student learning and the specific skill, ability, or competency as accurately as possible.

- ***Expectations for student achievement reflective of course level and institution.*** Faculty set benchmarks with the level of the student, the level of the course, and the primarily two-year mission of the institution's academic programs in mind. For those reasons, the performance

target or benchmark was set at a 2 on the 0-4 performance level scale in some instances, which may be both realistic and aggressive for the particular course.

Opportunities:

Future opportunities for the department to consider include:

- ***Consistency in reporting results.*** Following a prescribed method for reporting results (i.e., sharing raw numbers and percentages) will allow the results to be aggregated across the department and institutionally. Further explanation of and examples of how to report assessment data needs to be emphasized and provided by the Institutional Assessment Coordinator and Institutional Assessment Committee.

- ***Extend beyond course improvement to student learning improvement.*** Some of the analyses of assessment data and action plans presented included ideas and planned changes to help students improve their grade on the particular assignment, activity, project, exam, etc. used for assessment. While this approach is valuable in helping students succeed in the course, faculty are challenged to think further about improvement of student learning and increasing the proficiency of concepts exhibited by students.

  As part of this, the fit of the assessment method may need to be critically examined. Potential struggles to extend to student learning improvement may tie back to the assessment method selected.

- ***Conflation of grades and assessment of student learning.*** Assessment of student learning is not intended to be synonymous with student grades on an assignment, exam, or activity. While the application of student grades for assessment purposes may be appropriate in certain instances, the distinction between the two must be made clear. The Institutional Assessment Coordinator and the Institutional Assessment Committee can seek to clarify this distinction across the institution, while discipline faculty and the department can work together to determine if specific instances of translating a grade from a course assignment, exam, or activity to the performance level scale on an IELO rubric are appropriate.

Met with department on March 28, 2019.

NATIONAL ENERGY CENTER OF EXCELLENCE

Overview:

As with all of the career and technical programs at BSC, programs in the Energy division were tasked with developing and documenting program assessment plans. The Institutional Assessment Coordinator worked with the Energy department chairs and program faculty during the 2017-2018 academic year to assist with this task. Assessment plans were completed and submitted for some of the Energy programs – specifically for the Water and Wastewater Technology, Lineworker (Electrical), and the Mechanical Maintenance programs – during the 2017-2018 academic year. The remaining Energy programs were at various phases in the development of a program assessment plan at the conclusion of the year.

For all three of the programs with assessment plans in place, data collection and reporting also occurred during the 2017-2018 academic year. Two of the programs collected assessment data for some of their program learning outcomes only during the 2017-2018 academic year. The Water and Wastewater Technology program collected data for both certain program learning outcomes and an IELO. In addition, the Nuclear Power Technology program collected IELO assessment data during the 2017-2018 academic year. Two programs aligned with the Critical Thinking IELO within the Thought category. The Water and Wastewater Technology program aligned with the Ethical Reasoning IELO within the Thought category, whereas the Nuclear Power Technology program aligned with the Information Literacy IELO within the Communication category.

Key Takeaways:

Key takeaways that emerged from the assessment data and reports submitted are detailed below.

- ***Importance of the assessment method/measure structure***. When reflecting on student results, faculty suggested that adjusting the length of time allowed for the assessment method may lead to improvement in the results. This analysis illustrates the importance of the structure of the assessment and the methodology used. Appropriately and carefully designed assessment methods can potentially increase the accuracy of the measurement of student performance.

- ***Sample size can limit ability to draw inferences from results.*** Small sample sizes in some courses can hinder the ability to reach meaningful and valid conclusions from a single set of results. As certain courses may continue to have lower enrollments, the limitation that this creates should be recognized. In these instances, the need for a longitudinal approach to the data is essential in order to truly assess student achievement, determine improvements to be made, and positively impact student learning.

- ***Need for replication of results before making changes.*** As this was the first time that BSC's IELOs were being formally assessed in some courses and programs, faculty justly noted that further evidence may be needed before making substantial pedagogical changes. Additional evidence could be established by adding a supplementary assessment measure to the course or simply by continuing to collect data on a regular cycle.

- ***Strength in using a common assessment measure.*** Using a common assessment measure across multiple courses in a program strengthened the process, as it allowed for a longitudinal gauge of the growth of students in a particular skill, ability, or competency.

Opportunities:

Future opportunities for the department to consider include:

- ***Offering feedback on the assessment form.*** Analysis of the assessment results and the inferences made from the data were not presented or shared as expected for some of the programs in the division. Faculty are encouraged to offer feedback and ideas about how to best elicit and document in greater detail the analysis, dialogue, and resulting decisions at the program level. This also raises an opportunity for the Institutional Assessment Coordinator and Institutional Assessment Committee to assess the assessment process – revisiting the assessment form to ensure that questions and prompts are appropriate and the desired information is captured.

- ***Consistency in reporting results.*** Following a prescribed method for reporting results (i.e., sharing raw numbers and percentages) will allow the results to be aggregated across the department and institutionally. Further explanation of and examples of how to report assessment data needs to be emphasized and provided by the Institutional Assessment Coordinator and Institutional Assessment Committee.

- ***Program faculty collaboration to complete reporting requirements.*** Working together as a program, where applicable, to complete assessment reporting requirements will make the process more meaningful and valuable. Collaborative conversations among faculty about assessment results, action plans, and successes represents one of the most important end goals of the process.

Met with department on April 16, 2019.

NON-ACADEMIC ASSESSMENT

Overview:

BSC joined the Higher Learning Commission Assessment Academy in the fall of 2015. As part of the Assessment Academy project, BSC created a non-academic assessment process to match the academic assessment process, including using the IELOs as a guiding framework, integrating the institutional outcomes into co-curricular programs, and formalizing assessment data collection, reporting, and follow-up. After creating the process, a pilot phase was initiated. In the pilot, program staff developed and documented an initial assessment plan. Similar to the program assessment plans for career and technical programs, a non-academic program assessment plan identifies program learning outcomes, aligns with the IELOs, lays out a cycle for assessment data collection, and includes a program curriculum map. Once the plan is in place, appropriate and meaningful methods and measures for assessing the stated outcomes were determined.

Four programs were initially selected for participation in the pilot – Resident Assistant (RA) training, new student registration, orientation, and tutoring. The RA training program has emerged as a valuable example or model for other non-academic programs to emulate when initiating a formal assessment process. The lead for the RA training program, who joined BSC's Assessment Academy team in the fall of 2017, has excelled in grasping the assessment process, translating and applying the steps to the RA training program, and leading colleagues in a department-wide collaborative effort. The department put together an assessment plan detailing the program learning outcomes, assessment cycle, program curriculum map, and assessment methods/measures in a thoughtful, deliberate, and methodical manner. Additionally, they constructed a RA checkpoint survey, scoring rubric, and protocol for implementation during the 2018-2019 academic year.

Initially, staff involved in the orientation program and new student registration program worked individually on developing assessment plans. After some time, though, it was decided to combine orientation and new student registration under the umbrella of a single program. The structure of those events on our campus - one event (new student registration) naturally leads to the other event (orientation) - and the connection they have in terms of an overarching goal to welcome and acclimate new students to BSC support this decision. Furthermore, the melding of the two will alleviate some of the challenges that arose in implementing assessment of student learning in each program separately - namely identifying what student learning transpires in a one-hour registration session and how to appropriately assess it. As a result of this restructuring, the program learning outcomes were reconsidered and revised to appropriately reflect the array of events that fall within the program. In addition to reworking the program learning outcomes, a program curriculum map was completed to visually indicate where and how each event and activity supports the program learning outcomes and selected institutional learning outcomes (IELOs). The survey administered to students after the orientation event was reviewed and adjusted to ensure that the survey items correspond to the program learning outcomes with which the orientation event aligns. The revised survey will be administered to students in August 2018.

CONCLUSION

The 2017-2018 academic year was one of great growth in assessment of student learning. Marking the first opportunity to move from planning and developing to implementation of the IELOs on an institutional level, data collection occurred – albeit unevenly so across the institution. The data collected provided an initial snapshot not only of student achievement, but also of the assessment process itself. This led to the biggest takeaway – the need for consistency in data reporting. Data were presented in varying manners in assessment reports submitted during the 2017-2018 academic year, despite directions being provided in the form as to how to report the data. For instance, some faculty provided raw data for each performance level for each criterion of a particular IELO rubric. Other faculty reported percentages of students achieving a certain performance level or higher (i.e., x% of students achieved a 2 or higher) for each criterion of a particular IELO rubric. In conjunction with the variance in quantitative data formats, reports were also submitted with qualitative data only, as well as with seemingly no direct application of the IELO rubrics. The disparity in the data formats made it challenging, and not possible in some cases, to aggregate it at an institutional level. While the data still hold merit, the inferences that can be drawn and the exploration of the IELOs across the institution remain limited. The Institutional Assessment Coordinator and Institutional Assessment Committee will use this as an opportunity to revise the assessment reporting form with a more prescribed results section in order to lessen the variation and elicit more holistic, rich data.

Coupled with greater consistency in data reporting, assessment efforts during the 2017-2018 academic year also pointed to the need for an institutional framework to guide assessment. The 2017-2018 academic year served as a pilot of sorts, allowing faculty a chance to interact more tangibly with the IELOs. The anticipated downfall to this approach, however, was that data collection and results were more dispersed across the IELOs. In upcoming years, the institution is looking to move to an institutional assessment framework. The framework will be organized around the IELOs and BSC's long-standing structure of Awareness, Communication, and Thought.

Additional items that emerged from the submitted assessment reports and the overall process include:

- Clarifying the intent and scope of the IELO rubrics
- Increasing training to better support faculty
- Considering methods for establishing inter-rater reliability for the IELO rubrics and consensus on the application of the performance level scale
- Continuing to work to make the institutional assessment process more seamless with General Education revalidation

Each of the abovementioned items will be discussed by the Institutional Assessment Committee and translated into action plans for implementation.

While BSC has attempted institutional assessment in the past, a framework has not been successfully established that is meaningful and sustainable over time. The progress demonstrated during the 2017-2018 academic year regarding institutional assessment of student learning is a direct effort to change that history. The Institutional Assessment Coordinator and Institutional Assessment Committee look to build upon, strengthen, and systematize assessment of student learning activities in the upcoming 2018-2019 academic year.