2017/2018 Annual Academic Assessment Report

Assessment Coordinating Committee
Spring 2018
Executive Summary

The Annual Academic Assessment Report (AAAR) is a document that aims to encapsulate the achievements and the processes accomplished in the name of assessment across Dakota State University. The primary intended audience is faculty members, but professionals across the institution may find the accomplishments and insights provided by the Assessment Coordinating Committee (ACC) helpful.

This document is organized across three specific themes with subgroups therein. The first theme explores the assessment achievements of 2017-2018. Secondly, we describe the institutional processes implemented for data collection, and conclude with an overview of recommendations and next steps. In brief, the inaugural year of the AAAR, the topics to be summarized include:

- Fall Assessment Survey
- Tech Exam
- Major Field Tests
- Program Review
- General Education Committee
- Curriculum Committee

Readers of the AAAR should direct feedback of the document to the members of the Assessment Coordinating Committee. This membership includes:

- Dorine Bennett
- Justin Blessinger (Chair)
- Tim Fiegen
- Mary Francis
- Richard Hanson
- Kristine Harms
- Mark Hawkes
- Jason Jenkins
- Ben Jones
- Jay Kahl (Advisor)
- Scott Klungseth
- Scott McKay
- Christopher Olson
- Crystal Pauli
- Wayne Pauli
- Sarah Rasmussen
- Susan Slaughter
- Daniel Talley

Assessment Achievements 2017-2018

Fall Survey

A qualitative survey developed by ACC was deployed to all faculty in the Fall 2017 term. The intention of the survey was to provide faculty members an opportunity to report on the classroom assessment they are currently implementing as well as what changes they are making based on their results. The survey included the following questions:

1. What changes are you making in your instruction for the 2017/2018 academic school year?
2. What data/evidence helped you reach this conclusion? (feel free to include data)
3. How will you know your changes have been effective?
4. Please include any noteworthy assessment of student learning questions, comments, or suggestions for the ACC.
Thirty-two faculty members completed the survey out of a potential 148, with a return rate of 22 percent. Considering it is the first time for an optional survey, the ACC is quite pleased with this return. The survey data provided some apparent themes based on faculty members responses to each question. For example, in response to question 1 several respondents stated that they are implementing a new technology known as Flipgrid. Faculty stated that this technology offers more hands-on activities, gamification, and creation of video content. In response to question 2 above, faculty members cite the Student Opinion Surveys, anecdotal evidence from students, and the results of student retention of information. Though there are recognizable limitations to the evidence provided by the survey, the faculty responses to this initial survey were important in establishing a baseline understanding of the assessment practices that currently exist. The results of this initial survey are shared in Appendix A.

**Tech Exam**

Another important assessment achievement emerged with the revision of the content of the Tech Exam. Over the summer of 2017, faculty members Jason Jenkins and Dr. Chris Olson revised the content of the Tech Exam. In prior years the results did not give enough insight into whether students were meeting the intent of the CIS 123, CIS 130, and CSC 150 classwork; requirements that were previously named the “Institutional Graduation Requirements” of Information Systems and Computing. The results from the Fall Tech Exam were compiled by Jenkins and Olson and shared with the Assessment Coordinating Committee.

The most drastic change of the new Tech Exam is that programming-specific questions were introduced to the test, commensurate with the content in 123, 130, or 150. Jenkins and Olson agreed that the change in average scores for CIS 123 may not be indicative of a trend and intend to monitor this and the other scores for at least another year before suggesting any curricular changes. ACC reviewed the results and asked questions related to the scope of each class and the sequencing and outcomes related to Microsoft Access, the section with the lowest student scores. ACC agreed with Jenkins and Olson that the test format was too new to make any drastic changes. To see the results of the changes made to the Tech Exam, please see Appendix B.

**Major Field Tests**

As we seek to improve institution assessment processes, an important conversation began around the effective use of summative assessment data. Major Field Tests (also called Exit Exams) are required of all students graduating with a Bachelor’s or Associate’s degree from DSU. This policy was called into question by Dr. Jay Kahl in 2017 as SDBOR does not require these any longer and a Task Force was formed to review practices across the institution. Dr. Dorine Bennett chaired this task force, and their report is in Appendix C.

The following Comments and Recommendations were made to ACC:

Comments:

- Generally, we felt that the purpose of exit exams should be to provide student feedback and gather information to be used for program development and improvement.
- Most exit tests (and other exit evaluative methods such as portfolios) are locally developed. Education and business utilize nationally normed tests from ETS (Praxis and MFT).
• There were some instances, but not many, where the students receive feedback.
• In most instances, a minimum level of performance is not required. (Graduate programs, exercise science, and education programs might be the only exceptions. Education minimum performance is required for graduation, but for entry into employment.)
• There were few instances where the results of the tests are reviewed or discussed by faculty (or deans or directors).
• There are benefits to nationally-normed exit exams, such as comparative data that may be used for feedback to students and/or programs. Positive results may offer competitive advantage for recruitment and marketing.

Recommendations:

• Programs should collect data about student performance in relation to learning outcomes for their individual programs.
• As there are no regional accreditation or Board of Regent requirements specifically calling for exit evaluation of students, programs should be allowed to develop or utilize appropriate methods to meet their own specific needs. (Methods may include currently used methods of comprehensive exit exams or portfolio evaluation, as well as evaluations (exams/assignments/etc.) in courses throughout the program, or others as determined appropriate.)
• The results of evaluation should be used by faculty, deans, and program directors for program and curriculum development and improvement.
• Feedback should be provided to students.

ACC reviewed these at their last meeting of the term and agreed with the recommendations provided. It has not been determined the best route to provide information back to students, or, how summative assessment like this can be reinforced in the academic year. For instance, should ACC review some sort of MFT results annually? Or, have Exit Exams been created with summative assessment as the overarching goal? The comments and recommendations reflected here represent an important achievement regarding the development of a comprehensive institutional assessment process, one that continues to evolve with the impute of important stakeholders, such as DSU faculty members.

Processes and On-going Discussions

DSU Assessment Structure

In the Fall of 2017, DSU’s Provost asked the Director of Institutional Effectiveness (DIEA) to create a structure that represents the assessment activities of the entire institution. The organizational strategy is reflective of a macro, meso and micro pyramid structure that sets the foundation for assessment at the institutional, general education, and program level. In addition, this pyramid structure identifies the interconnectedness of the various parties across the institution, and how our work can inform each other’s assessment processes. A draft of this was shared with ACC in January. What was provided to ACC is included in Appendix D.

A Task Force was convened to review the content and structure overall. This will be reported upon by that Task Force in Fall 2018. The team can review this as a structure that represents the activity on campus, and, how to potentially chart-out activity across Departments and Colleges across campus.
Co-Curricular Task Force

In the Fall of 2017, discussions regarding philosophical approaches for co-curricular outcomes began and are evolving. At the same time, it was suggested that the VPSA (or their designee) would become part of ACC to include both Academic and Student Affairs assessment between curricular and co-curricular outcomes. This joint approach resulted in the formation of a Task Force whose aim is to assess where co-curriculars currently stand, how they may be expanded, and to create a plan moving forward. This is expected for Fall 2018.

Program Review

During the 2017/2018 academic year, the English for New Media, Biology, Exercise Science, Digital Art and Design, and Educational Technology were up for Program Review. Digital Art and Design was moved to Fall 2018, and the others have finished their self-study and visit components. The results from the self-study, related documents, and final report are posted here: https://public-info.dsu.edu/academic-program-reviews/.

In the next academic year, the Bachelor’s, Master’s, and D.Sc. programs in Information Systems will be up for review.

Recommendations and Next Steps

General Education Committee Update

At the close of the 2016/2017 academic year, Drs. Hanson, Droge, Avery, and Kahl met to outline what the scope of a new General Education Committee would be. It was acknowledged by all that this Committee would be entrenched in assessment initially, but that the purview of this group went beyond that.

The Committee convened their first meeting on January 16th, 2018. With the General Education Assessment process being as new as it was, the Committee has focused efforts on getting resources ready for English and Mathematics assessment and the resulting Assessment Summit this summer. Guidelines were set regarding Cover Sheets, Artifact Selection, and the compilation of these items to a website: https://public-info.dsu.edu/academic-assessment/general-education/.

The General Education Committee has also helped convene Natural Science and Social Science faculty members to prepare for next year’s General Education Assessment and approved a class to be considered a General Education course at DSU. This group will begin meeting again in the Fall of 2018 and some topics have already been discussed for large-scale projects in the next academic year. These include but are not limited to: rationale for General Education classification, General Education Program Review, and implementation of cross-cutting skills.

Curriculum Update

We are excited to announce important updates to the curriculum that is offered across several degree areas at DSU. A complete list of the New Programs, New Specializations, Program Terminations, and Anticipated Programs for the next Academic year are included in Appendix E. In addition, this list includes both the Curriculum Committee and Graduate Council’s recommendations. Please see the Appendix for a comprehensive list of these changes.
Summary and Conclusion

The content reviewed in the AAAR is reflective of collaboration across disciplines, programs and institutional stakeholders, and includes a focus on three specific themes. We reviewed the assessment achievements of 2017-2018, which include a brief review of faculty survey data, changes made to the Tech Exam, and comments and recommendations for reorganizing the Major Field Tests. Secondly, we describe the institutional processes implemented for data collection, including the institutional assessment structure and the creation of a Task Force dedicated to co-curricular assessment. Finally, we conclude with an overview of recommendations and next steps which emphasize new curriculum changes and preparation for data collection for the Natural and Social Science General Education outcomes in Fall 2018.

At the close of this academic year, we are excited to share our accomplishments, however we recognize that this process has only just begun and is reflective of a culture of continuous improvement. Thank you to all who have contributed their time and talents to this process. We look forward to continued collaboration across disciplines, programs, and departments here at DSU.
### Appendix A – Fall Faculty Survey

<table>
<thead>
<tr>
<th>What changes are you making in your instruction for the 2017/2018 academic school year?</th>
<th>What data/evidence helped you reach this conclusion? (feel free to include data)</th>
<th>How will you know your changes have been effective?</th>
<th>Please include any noteworthy assessment of student learning questions, comments, or suggestions for the ACC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since my teaching is online, I am creating more video content and less emails. The new software, Ensemble Anthem is very user friendly.</td>
<td>Comments from the learners that they like the videos, and that my voice makes it easier to understand class issues when compared to an email. Even though they are both asynchronous forms of communication.</td>
<td>I am presuming from the end of semester course evaluations</td>
<td>My advisees and my classes are graduate, I think the assessment we most look at is undergraduate. I am not much help I guess.</td>
</tr>
<tr>
<td>I'm going to spend less time on lecture and more time on hands-on, in-class activities. Traditionally I have spent the majority of class periods lecturing with little in-class practice. I intend to balance these things more evenly.</td>
<td>I have noticed that students tend to become lecture weary after the first ~30 minutes, especially on Mondays and Fridays. This leads to less focus, less interaction, less questions being asked, and less excitement about the subject. Conversely, when students are given a small task or challenge during the second half of class which re-enforces what they've just learned, I find that they pay better attention during the lecture, and stay on topic for the duration of the class period. Learning and engagement seem to be improved.</td>
<td>This is difficult. I'm not sure I have a fool-proof method. My plan is to pay close attention to student's focus and engagement, hoping to see less &quot;zoning-out&quot; or distraction. I'd like to see more eyeballs pointed forward for the lecture, even if it's shorter. I'd also like to see the majority of students excited about trying hands-on practice during class. These will be subjective measures of success.</td>
<td>none</td>
</tr>
<tr>
<td>Much more hands on for students.</td>
<td>Student opinion surveys, discussions with former students. Performance by students on final projects.</td>
<td>Results. Better student performance at</td>
<td></td>
</tr>
</tbody>
</table>

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Including topics not included before. | end of master on a computer science project.  

more guest speakers and more project work | past experience with guest speakers and project work. Students remarked favorably on the SOS.  

SOS and student feedback.  

The primary changes are typically to follow technology trends as they develop. As for instructional methods, I don't foresee any significant changes. | Qualitative data, primarily in the area of my expertise and following technology trends have driven the updates needed to the curriculum. As far as not changing instructional methods, this typically comes from student feedback, both directly and via the IDEA survey.  

Observation of the impact of students is typically what I use to measure instructional methods. Adapting to new technological trends does occasionally have a speed bump here and there, but that's typically when a hands-on lab doesn't go as expected.  

Adding more in class demonstrations. Revised and expanded student labs to better integrate the labs with the course. A new math review and exercises were added to help identify students who struggle with crucial math concepts and the areas of deficiency so I can offer targeted assistance.  

The labs and demonstrations give students a chance to apply abstract concepts (or see them applied). The disconnect between formulas and real applications caused some students issues in last year's class. I will be soliciting student feedback on the labs and demonstrations. The labs also include new conceptual discussion questions to help see if students are understand the concepts presented.  

More project and group based work in game design (ever growing). Trying small amounts of inverted classroom in math.  

none  

student performance on evaluations and student feedback.  

There are changes in every one of my classes. The largest change was the System general education - columns in gradebook for assignments linked to general education outcomes. Students comments concerning the The gradebook changes will be effective since the columns with the
<table>
<thead>
<tr>
<th>Presentation of online lectures in a cross listed course.</th>
<th>Presentation of content in online course.</th>
<th>Needed data will be present. Comments on the SOS forms will need to be read to see if there are students that still don't like how the data is presented.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checking the post-graduation credentialing scores and adjusting course content based on weak areas.</td>
<td>We get a pretty complete breakdown of areas on the exam and use it as our basis.</td>
<td>When future scores improve.</td>
</tr>
<tr>
<td>More applied projects.</td>
<td>I think the more practice with an application or concept the better. The more these applications mirror real world experience the better.</td>
<td>Quality of assignments will improve.</td>
</tr>
<tr>
<td>Pushing students harder, giving them less time to work on assignments</td>
<td>Evidenced by their lack of self motivation in mid assignment presentations</td>
<td>The bell curve of students should flatten out - into more low and high grades</td>
</tr>
<tr>
<td>Some of the contents for teaching.</td>
<td>Reading some books. And discuss with other people in the field.</td>
<td>Students’ work and improvement will help me to know how have been effective.</td>
</tr>
<tr>
<td>Added new material in places. Expanded material on recent scholarship. Developed series of group presentations, Incorporated Supplemental Instructor materials.</td>
<td>Behest and data from Title III grant for SI leader. Group presentations based on requests from university and industry to better develop team skills. Recent scholarship inclusion is sort of self explanatory.</td>
<td>Long term data tracking for SI materials. Rubric scoring for group projects which can be compared over time, eventually.</td>
</tr>
<tr>
<td>I made new textbook selections in three courses to ensure the most up to date material is being provided to our preservice teachers. Because of this I am made up dates to the syllabii and am making updates to</td>
<td>Based on comments on student opinion surveys along with a continuous review of the literature in my field</td>
<td>Student success in the courses, student opinion surveys, student performance in the field</td>
</tr>
</tbody>
</table>
lectures and assignments for face to face class and the presentation of materials and assignments for online courses.

| One area I have altered along the way was to keep track of frequently asked questions that arose from students' assignments, provide detailed written responses, and then towards the end of the semester share the document of questions and answers with all students. The class then engages in a class discussion surrounding these questions and my feedback. Most of these questions go beyond what the course text covers and do not have an explicit "right or wrong" answer. | After one course I found that I had a lot of these questions, and although I answered them thoroughly to the student who asked, not everyone benefited from this learning. Therefore, the following semester I tried this and on the Student Opinion Survey several of the students specifically noted how helpful this was and/or that it provided them with some of their greatest learning and deepest thinking. | I will know this is effective if I continue to see positive results, both in the class discussion and on the Student Opinion Survey. |

| updating lessons, assignments, test questions | student feedback, evidence of cheating, item analysis of tests | student feedback, instances of cheating, item analysis of tests |

<p>| More focus on Online Students as the primary target market. | Enrollment in online v F2F classes | First test will be the increase in quantity and quality of online tools available to the students. Increased personal interaction with online students may also be an indicator of better instruction. Increased enrollment by |</p>
<table>
<thead>
<tr>
<th>Incoroporated Collaborate Ultra discussion time in undergraduate course</th>
<th>Moved course from face to face online and felt additional opportunity to create and sustain relationship with students was needed.</th>
<th>I will know how many students attended Collaborate Ultra sessions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>More detailed instruction in technical issues.</td>
<td>Less than optimal performance by students in previous courses.</td>
<td>If student grades go up.</td>
</tr>
<tr>
<td>More hands on practice, more critical thinking exercises</td>
<td>evidence from other instructors/accrediting organization that critical thinking skills were not being developed by multiple choice exercises and reading</td>
<td>end of semester grades; hope to see improvement evidenced from week to week in assignment submissions</td>
</tr>
<tr>
<td>More in class exercises for both online and on campus sessions.</td>
<td>students tend to better retain knowledge if they practice over and over.</td>
<td>Engaged in interacting with me and their peers while doing exercises. This is something I can observe in the classroom. As for online students, I will assess the outcome with exam results.</td>
</tr>
<tr>
<td>I will be teaching an honors class in Spring 2018. I am planning to change my methodology considerably from lecture to discussion/small group work. I am exploring online third party teaching tools that can facilitate this transition. I will also move the lecture material to brief online videos that are expected to be watched prior to class.</td>
<td>I have always believed a seminar style course where students are directed to information sources but then use their higher reasoning skills to synthesize both complementary and competing information sources would result in more learning than simple memorization and testing on its own.</td>
<td>Excellent question. Perhaps a standardized set of exam questions (pre-test/post-test) would be best. I will consider adding this to my course plans.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This is a new course that will be offered on an every other year basis. Assessment data will be evaluated upon completion and if there is evidence of a need to change these adaptations will be made prior to the next offering.</td>
</tr>
<tr>
<td>This will be a new experience (perhaps) for both instructor and student.</td>
<td>This is a broad question. I am trying to implement more individualized assessments and learning activities in my courses.</td>
<td>Evidence of performance on assessments suggesting that students prefer choices and the recognition that not all students learn the same way or have the same needs.</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>Creating more authentic learning opportunities by partnering with k12 teachers.</td>
<td>The realization that if a student does a project for me, it doesn't really matter. The important part is the k8 student that they are getting ready to teach so if my students can create things for k8 students and get feedback on them, it's more meaningful.</td>
<td>academic success and student opinion surveys</td>
</tr>
<tr>
<td>1) I'm implementing new tech tools (Flipgrid and Seesaw). 2) I'm devoting more time to teaching my students about online math programs. 3) I'm trying to create more opportunities for practicing delivering instruction. 4) I'm placing more emphasis on using visual note-taking/sketchnoting in my classes.</td>
<td>1) Tech Tools: I piloted Flipgrid and Seesaw last semester on a limited basis in a couple classes. The results were very positive. 2) Online Math Programs: I completed my dissertation on online math programs last spring. The study looked at preparing preservice teachers to use online math programs effectively. I'm using data from that study to inform my teaching. 3) Teaching Opportunities: Based on observing Level III students and student teachers, it is clear that they need as many opportunities to teach and explain things as possible. 4) Sketchnoting: I've read several articles about the learning benefits that can be attributed to using sketchnoting as a learning strategy.</td>
<td>1) Tech Tools: Informal feedback I receive from students as well as the student opinion surveys. 2) Online Math Programs: I'm not exactly sure how I'll monitor this. I might do a follow up survey based on my dissertation research. 3) Teaching Opportunities: I'll observe Level III students and student teachers to see if they are more prepared. 4) Sketchnoting: Informal student feedback.</td>
</tr>
<tr>
<td>I have found a number of short YouTube videos (5-minute max) that supplement what is covered in the text and in lecture. I ask up to two open ended questions and the assignments are due on the days when we do not have class. Students are invited to respond to the posts of other students (but can only view what has posted after they have made their own submission). Typically responses are a paragraph (3-7 sentences.)</td>
<td>N/A I just made the change</td>
<td>Several of the videos expand on topics that students are tested on later in the class. A correlation could be made of student scores on the video assignment with the question(s) on the text.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Evaluating the content to make sure to meet accreditation standards</td>
<td>Updated curriculum standards</td>
<td>Possible accreditation survey results. Student success on exit exams</td>
</tr>
<tr>
<td>I have added Flipgrid as a video tool to communicate with online students and for them to communicate with me and others</td>
<td>I am teaching future teachers. I want to model current strategies</td>
<td>The students have told me they enjoyed using the tool and that it was nice to see and learn about others in their class</td>
</tr>
<tr>
<td>A few things here and there.</td>
<td>Personal observations on student performance/progress.</td>
<td>I'll know them when I see them. And students will do better on classroom assessments. We spend way too much time and resources on institutional assessment.</td>
</tr>
<tr>
<td>including more observations of instructional practice</td>
<td>The course is online so the ability to use online classroom observations has been very effective.</td>
<td>Students' responses including a greater understanding of the practice and its application beyond a simplistic</td>
</tr>
</tbody>
</table>
I'm implementing gamification and more video interaction opportunities for students.

Gamification
There is a lot of literature on gamification (http://people.uta.fi/~kljuham/2014-hamari_et_al-does_gamification_work.pdf). I've also experimented with it first-hand as a K-12 teacher and observed the positive impact on student motivation. I've never tried it in my college courses and I wanted to try it.

Video Interaction
2 things led me to want to increase usage of video in my courses. First, as an online student, I had courses that used video to allow students to interact with the professor and I found it to be very helpful. Second, I experimented with using video on a weekly basis in an online class I taught last semester (Spring 2017). I found it to be very helpful for helping me build relationships with online students.

<table>
<thead>
<tr>
<th>I'm implementing gamification and more video interaction opportunities for students.</th>
<th>Gamification</th>
<th>Student Opinion Surveys; I'm going to do some data analysis of my gamification elements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>There is a lot of literature on gamification (<a href="http://people.uta.fi/~kljuham/2014-hamari_et_al-does_gamification_work.pdf">http://people.uta.fi/~kljuham/2014-hamari_et_al-does_gamification_work.pdf</a>). I've also experimented with it first-hand as a K-12 teacher and observed the positive impact on student motivation. I've never tried it in my college courses and I wanted to try it.</td>
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<td>Video Interaction</td>
<td>2 things led me to want to increase usage of video in my courses. First, as an online student, I had courses that used video to allow students to interact with the professor and I found it to be very helpful. Second, I experimented with using video on a weekly basis in an online class I taught last semester (Spring 2017). I found it to be very helpful for helping me build relationships with online students.</td>
<td></td>
</tr>
<tr>
<td>improving rubrics, diving deeper and using d2l more</td>
<td>student surveys, refinement of teaching strategies</td>
<td>student surveys</td>
</tr>
</tbody>
</table>
Appendix B – Tech Exam Results Summary

DSU Tech Exam Summary

Prepared for the Assessment Coordinating Committee at DSU

02/26/18

By Jason Jenkins and Dr. Chris Olson

In Fall 2017, Jason Jenkins and Chris Olson, in conjunction with faculty teaching CIS 123, CIS 130, and CSC 150 (introductory programming courses at DSU), completed an updated version of the Tech Exam, which is designed to ensure that students in introductory programming and computing courses are understanding fundamental concepts in their respective courses. New individual questions were written, though the overarching change for the exam is that each course has its own exam, rather than one general exam for all three courses.

Here is a summary of the results from Fall 2017, using the new Tech Exam. The last two columns relate to previous averages from the semesters the previous version of the Tech Exam was used.

<table>
<thead>
<tr>
<th>Class</th>
<th>Students</th>
<th>Programming Concepts</th>
<th>Course-Specific</th>
<th>Overall</th>
<th>Average from FA2013 - SU2017</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 123</td>
<td>32</td>
<td>68.97%</td>
<td>61.76%</td>
<td>63.67%</td>
<td>74.14%</td>
<td>-14.13%</td>
</tr>
<tr>
<td>CIS 130</td>
<td>26</td>
<td>74.03%</td>
<td>80.13%</td>
<td>77.56%</td>
<td>77.93%</td>
<td>-0.47%</td>
</tr>
<tr>
<td>CSC 150</td>
<td>170</td>
<td>82.13%</td>
<td>75.87%</td>
<td>77.87%</td>
<td>78.41%</td>
<td>-0.68%</td>
</tr>
</tbody>
</table>

The averages for CIS 130 and CSC 150 remained within expectations for both types of questions. The CIS 123 scores showed a substantial decline in scores. The CIS 123 part of the Exam will need to be revisited for future semesters, including both concepts and course-specific portions. It is not clear at this time why the scores are lower, just that it needs to be investigated further. A tentative goal for this task is Fall 2018, to provide time for investigation and to ensure that the results are repeated for Spring 2018.

The Tech Exam also relates to CSC 105, Introduction to Computers. The new Tech Exam separated this portion out so that components of the exam could be given in their respective and related courses, instead of both parts of the exam being administered in one course. The CSC 105 portion of the exam was otherwise unchanged. The results have been similar to before the 105 exam was split out.

<table>
<thead>
<tr>
<th>Category</th>
<th>Fall 2017</th>
<th>Average from FA2013 - SU2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word</td>
<td>94.53%</td>
<td>93.03%</td>
</tr>
<tr>
<td>Excel</td>
<td>86.18%</td>
<td>84.40%</td>
</tr>
<tr>
<td>Access</td>
<td>78.60%</td>
<td>75.11%</td>
</tr>
<tr>
<td>Web and PowerPoint</td>
<td>93.37%</td>
<td>92.87%</td>
</tr>
<tr>
<td>Office and Concepts</td>
<td>87.98%</td>
<td>87.14%</td>
</tr>
<tr>
<td>Total:</td>
<td>88.13%</td>
<td>84.30%</td>
</tr>
</tbody>
</table>
Appendix C – Exit Exam Task Force

Beacom College:

All BS and AS Majors are required to take the exit exam. The CSC test is externally generated for us, where CYOP and NSEC/NSA is a test administered on D2L by our faculty. We currently are developing a test for Software Development. Every spring and fall and I sent out reminders of the exit exam, I usually pick two days to hold the test on campus for students on campus, or close to campus to attend. If they cannot attend that proctored session they are required to seek a proctor and take the test with them. As far as results go I am not sure how that works, at one of our recent meetings Dr. Hanson wasn’t aware if he received results or not, so I do not have an answer for you on how we get results or what we use the results for at the moment. I hope these answers are what you were looking for, if they are not or you would like more details please let me know, and I will certainly find more details for you.

College of Ed:

Regarding exit exams, all education majors take an exit exam in the form of the Praxis Principles of Learning and Teaching (PLT) exam. Students must meet the cut-score in order to complete the program and become certified for teaching in SD. The SD Department of Education cut score for Elementary is 160 and for Secondary it is 157. Prior to student teaching, all education majors must take and pass the Praxis content exam in their area of preparation. The exception to this is computer education; at present there is no content exam in that area. Cut scores vary according to major; further information on the Praxis series testing can be found at www.ets.org.

(Note from BIS: It is unclear, but it appears that Computer Ed takes the BS CIS exit exam and Business Ed takes the BBA exit exam.)

Exercise Science majors take an exit exam as well. The Exercise Science Major Assessment Exit Exam is a locally developed assessment and is a university graduation requirement for all Exercise Science majors. The assessment consists of 100 multiple choice questions covering all major goals of the program and is preferably taken during the student’s final semester in the program.

Exit exams for all majors are required by the South Dakota Board of Regents prior to graduation. In the spring of 2013, the Exercise Science exit exam was revised to reflect appropriate standards students should meet or exceed prior to graduation. The current exit exam is based on the NSCA’s CSCS exam and the ACSM’s Health Fitness Specialist (now Certified Exercise Physiologist) exam. The new exit exam was piloted in the spring of 2013 and adopted in spring of 2014. Students have to pass the exit exam with a score of 70% or higher before they can start their internship. If a student does not pass the exam, they have to retake it until they pass.

College of BIS
Associate Degree (AS.BUSM) – Business (2 hours – allow half hour of set up time)

The Major Field Test in Business for Associate Degree Programs contains 100 multiple-choice items. The questions are designed to measure a student’s knowledge and skills in the core curriculum of a two-year business program. Students are asked to analyze and solve problems, understand relationships and interpret representative material.

The test assumes that most institutions will offer common core areas of study that include accounting, economics, management and marketing. In addition, it is assumed that these common core areas address important social and international considerations of modern business operations.

The questions represent a wide range of difficulty, and the test attempts to cover both depth and breadth in assessing students’ levels of achievement. Programs can choose when and where to administer the test. It is designed to take two hours and may be split into two sessions. This test must be given by a proctor. Mathematical operations do not require the use of a calculator.


http://www.ets.org/mft/test_administration/format

Bachelor’s Degree (BBA majors) – Business (2 hours – allow half hour of set up time)

The Major Field Test in Business contains 120 multiple-choice items, some of which are grouped in sets and based on such materials as diagrams, charts and tables of data. The questions are designed to measure a student’s knowledge and ability to apply significant facts, concepts, theories and analytical methods. The questions represent a wide range of difficulty, and the test attempts to cover both depth and breadth in assessing students’ levels of achievement. Programs can choose when and where to administer the test. This test must be given by a proctor. Mathematical operations do not require the use of a calculator.

Following the general guidelines of business school accrediting agencies, the Business Test covers areas outlined in statements of the “Common Body of Knowledge” for undergraduate business education. The test assumes that most institutions will offer a common core that includes accounting, economics, finance, law, management, marketing and quantitative analysis. In addition, it is assumed that the common core will address important social and international considerations of modern business operations. The Business Test is intended to measure students’ academic achievement in the multidisciplinary subject matter representative of undergraduate business education; provide information to students regarding their level of achievement; provide information to faculties regarding the achievement of their students — information that can be used by the institution to assess their performance relative to their specific mission and objectives. It is designed to provide information to facilitate development of appropriate goals and educational programs, and to enhance the accountability of undergraduate business education.

http://www.ets.org/mft/test_administration/format

CINFO/INFS (Computer Information Systems) (2.5 hours)

The exam will be 150 minutes. There are 120 questions. The exam is administered on D2L. The test will cover computing and internet concepts, Word, Excel, Access, PowerPoint, Webpages, Programming Logic, Networking, Database, SAD, and Web Programming.

HIM

Each program (HIA, HIT, certificates) has campus developed multiple choice testing. Faculty utilize the national certification exams for HIA and HIT for developing the content of the exams (utilizing similar domain categories). Individual results are summarized and sent to testers for feedback. Aggregate results are reviewed by faculty to identify trends, strengths, weaknesses, and process is reported to advisory board.
Appendix D – DSU Assessment Structure

DSU Assessment Structure

Institutional Outcomes

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Responsible parties</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Systems and Computer Technology (CSC105, 123, 150, or CIS130)</td>
<td>President, Provost, Director of Institutional Effectiveness and Assessment (DIEA), Assessment Coordinating Committee (ACC), and Dean of Beacom College of Computer and Cyber Sciences</td>
<td>The Tech Exam is administered in CSC105, 123, 150, and CIS130. The scores are collected and reviewed by ACC each Fall, and included in the Annual Assessment Report (AAR).</td>
</tr>
</tbody>
</table>

Spring 2018 Tasks:
Since the Tech Exam was edited over the summer term and implemented in the Fall 2017 term, the plan is to simply collect results from the exam in early spring (for Fall 2017) and early summer (for Spring 2018) for ACC to review. The ACC will need a few data points before they can recognize any potential trends.

**Justification:**
From HLC Criteria for accreditation:

1. The institution has clearly stated goals for student learning and effective processes for assessment of student learning and achievement of learning goals.
2. The institution assesses achievement of the learning outcomes that it claims for its curricular and co-curricular programs.
3. The institution uses the information gained from assessment to improve student learning.
4. The institution's processes and methodologies to assess student learning reflect good practice, including the substantial participation of faculty and other instructional staff members.

**General Education Outcomes**

<table>
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<tr>
<th>Outcomes</th>
<th>Responsible parties</th>
<th>Timeline</th>
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<tr>
<td>General Education Goals:</td>
<td>President, Provost, DIEA, ACC, General Education Committee, and Dean of Arts and Sciences.</td>
<td>As part of the state-wide summit and preparation therein, cover sheets for all reviewed General Education classes will be submitted each semester to the DIEA. If the subsequent summit is covering a faculty member’s respective discipline, artifacts from the classroom will also be required towards the end of the spring term. Results to be included in the AAR.</td>
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<td>1. Written Communication</td>
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<td>2. Oral Communication</td>
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<td>3. Social Sciences</td>
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<td>4. Arts and Humanities</td>
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<td>5. Mathematics</td>
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<td>6. Natural Science</td>
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<tr>
<td>Cross-Cutting Skills</td>
<td>President, Provost, DIEA, ACC, General Education Committee, and Deans Council.</td>
<td>DRAFT: The General Education Committee will work with Dean’s Council and Program Coordinators to create a map of skills for each program, where these are assessed, and a process for reviewing results. These results will be included in the AAR.</td>
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<tr>
<td>• Critical and Creative Thinking</td>
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<td>• Inquiry and Analysis</td>
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<td>• Problem Solving</td>
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<td>• Information Literacy</td>
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<td>• Ethical Reasoning</td>
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**Spring 2018 Tasks:**
Faculty members teaching ENGL 101, ENGL 201, MATH 102, MATH 120, MATH 121, and MATH 281 (minus dual-credit courses) are required to send cover sheets to the OIEA at the close of the spring term with results on the pre-approved student outcome and respective rubric. The General Education Committee will decide the best method for random selection, but due to the sheer number of sections being offered, it is likely all sections will be asked to
submit artifacts. These artifacts will be provided by the same faculty members mentioned above, and will fall into the three categories already determined on the rubric. These will be sent to the DIEA in time to provide for the summit this summer.

The General Education Committee will begin discussing Cross-Cutting Skills and how these will be implemented and assessed over the 18/19 academic year. They will run their initial implementation strategy by Dean’s Council, AAC, and President’s Cabinet.

**Justification:**
From HLC Criteria for accreditation:

3.B. The institution demonstrates that the exercise of intellectual inquiry and the acquisition, application, and integration of broad learning and skills are integral to its educational programs.

1. The general education program is appropriate to the mission, educational offerings, and degree levels of the institution.
2. The institution articulates the purposes, content, and intended learning outcomes of its undergraduate general education requirements. The program of general education is grounded in a philosophy or framework developed by the institution or adopted from an established framework. It imparts broad knowledge and intellectual concepts to students and develops skills and attitudes that the institution believes every college-educated person should possess.
3. Every degree program offered by the institution engages students in collecting, analyzing, and communicating information; in mastering modes of inquiry or creative work; and in developing skills adaptable to changing environments.
4. The education offered by the institution recognizes the human and cultural diversity of the world in which students live and work.
5. The faculty and students contribute to scholarship, creative work, and the discovery of knowledge to the extent appropriate to their programs and the institution's mission.

### Program Outcomes

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Responsible parties</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Outcomes as dictated by Faculty Members, accreditation agencies, and/or state agencies.</td>
<td>President, Provost, Director of Institutional Effectiveness and Assessment (DIEA), Assessment Coordinating Committee (ACC), Faculty Members, and Dean’s Council.</td>
<td>DRAFT: Annually, Program Coordinators will review program outcomes and send these to their respective Dean and DIEA. As available, results will be shared to demonstrate needs for curriculum changes and/or changes to the outcomes themselves.</td>
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</tbody>
</table>

**Spring 2018 Tasks:**
DRAFT: Program Coordinators will send their respective Dean and DIEA the outcomes as they are currently stated by the end of the Spring term. If they have data available and a curriculum map, those will be shared as well. These outcomes will be included in website program pages revised over the summer.

**Justification:**
From HLC Criteria for accreditation:

1. The institution has clearly stated **goals** for student learning and effective processes for **assessment** of student learning and achievement of learning **goals**.

2. The institution assesses achievement of the learning **outcomes** that it claims for its curricular and co-curricular programs.

3. The institution uses the information gained from **assessment** to improve student learning.

4. The institution’s processes and methodologies to assess student learning reflect good practice, including the substantial participation of faculty and other instructional staff members.
Appendix E – DSU Curriculum Update

New Programs Effective Fall 18
D.Sc. Information Systems to Ph.D. Information Systems (curriculum unchanged)
D.Sc. Cyber Operations to Ph.D. in Cyber Defense (curriculum unchanged)
B.S. Cyber Leadership and Intelligence
English for New Language Minor
K-12 Special Education Minor
Data Analytics Certificate (undergraduate)
Cybersecurity Certificate (undergraduate)
Network Services Certificate (undergraduate)
Software Development Certificate (undergraduate)
Mathematical Foundations of Cryptography Certificate (undergraduate)
Healthcare Data Analytics Certificate (graduate)
Introductory Graduate Mathematics Certificate (graduate)
Graduate Mathematics Certificate (graduate)

New Specialization within an existing major:
M.S. Information Systems, Information Assurance
B.S. Computer Science-Artificial Intelligence-Machine Learning
B.S. Mathematics, Cryptography
B.S. Mathematics, Intermediate Education

Program Termination
Website Administration Certificate
Information Technology Entrepreneurship Certificate

Anticipated Programs Effective Fall 19
Ph.D. Cyber Defense
Ph.D. Computer Science
M.S. Security Policy & Management
M.S. Athletic Business
B.S. Software Development