

LEARNING OUTCOMES ASSESSMENT

2010-2011 Summary Report

Bismarck State College
Academic Assessment Committee
Dr. Jane Schulz, Assessment Coordinator

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BSC Strategic Plan, July 2012

Deliver a high quality education by helping students learn through the development and implementation of systematic approaches to measuring, assessing, documenting and communicating student learning outcomes.

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Departments/Programs Not Reporting

Last Report Was Submitted Using The TracDat System For 2009-2010 Year

- Agriculture Industry and Technology
- Farm and Ranch Management
- Automotive Collision Technology
- Automotive Technology
- Automotive Technology MRCC
- Business Management
- Carpentry
- Engineering Technology
- Farm Management Education
- Heating, Ventilation and Air Conditioning
- Lineworker (Electrical)
- Paramedic (EMT)
- Welding

Departments/Programs Not Reporting

- Instrumentation & Control Technology
- Management
- Mass Communications
- Mechanical Maintenance
- Phlebotomy
- Technical Studies (no students)

Introduction

Assessment of student learning outcomes at Bismarck State College includes a range of measures and processes to evaluate the occurrence and degree of student learning. Assessment activities focus on incoming student assessment, class and course assessment, instructional program assessment, and general education program assessment.

An overview of student learning assessment activities and highlights of the year follow.

Committee Structure and Purpose

The Academic Assessment Committee consists of several permanent members and a rotating group of faculty group leaders. Each group leader works with a general education faculty group or with a faculty group from instructional programs. Meetings of the committee were held monthly. The following is a list of permanent members and faculty members.

Permanent members:

- Provost and Vice President for Academic Affairs – Dr. Drake Carter
- Associate Vice President for Academic Affairs and Assessment Coordinator – Dr. Jane Schulz
- Institutional Research Analyst – Michael Kubisiak
- Testing and Assessment Coordinator – Kayla McCloud
- Recording Secretary – Karla Buzick

Faculty members and assignments:

- Assessment Facilitator – Wendy Pank
- TractDat Support – Dr. Amy Juhala and Greg Bach
- ACT general education assessment (awareness, communication, thought) – Ryan Pitcher, Deb Shipman, Dr. Tony Musumba, Sherry Omlid, Liz Braunagel
- CIP 1, 11, 22 & 52 – Amy Helgeson, Josh Kern
- CIP 43, 44 & 51 – Trudy Riehl, Kitty Netzer
- CIP 09, 14, 15 & 50 – Holy Burch, Rick Wilke, Sean Thorenson
- CIP 46, 47 & 48 – Lee Friese, Brent Reems
- Development Courses – Kitty Netzer

Previous year goals/actions 2009-2010

- Identify the instructional programs that are either not completing assessment reports or are struggling with developing assessment measures for their programs.
 - *Faculty group leaders tried to work with programs that are not completing reports. Finding time to provide sufficient assistance was difficult.*
- Significantly increase the number of programs using TracDat for their assessment data.
 - *This goal was not reached. Many committee members did not feel comfortable in working with the software and did not have time to assist others.*

- Review the ACT plan and assess its effectiveness.
 - *Committee members discussed the effectiveness of the ACT plan, particularly considering the value of a three year cycle. Some members felt the cycle did not provide enough data on which to make decisions. Other members felt that we did not have enough experience with the plan as yet and should continue with the ACT plan and the existing cycle. The committee decided to use the ACT timeline for another cycle. The effectiveness of the plan will be assessed toward the end of the next cycle.*
- Determine if it would be better to use a more standardized rubric, such as the VALUE rubrics.
 - *The VALUE rubrics developed by the American Association of Colleges and Universities were reviewed for possible use or adaptation on our campus. The VALUE rubrics are being seriously considered by the ND General Education Council. The rubrics are fairly similar to ours, but would need to be revised to more effectively meet our needs.*
- Study the advisability of using a standardized test to measure some aspects of general education.
 - *Several standardized tests were identified for further study.*

Current year goals 2010-2011

- Encourage more faculty participation in assessment.
- Provide more meaningful training/education about assessment.
- Identify assessment processes and plans that we may want to adopt for our general education program.
- Increase faculty use of TracDat.

Committee Activities

- It was decided to engage a known and respected leader in assessment to address faculty at Faculty Development Days in the fall. Susan Hatfield agreed to be the keynote speaker and to spend time with the assessment committee to answer questions and provide guidance.
- The ACT General Education report was presented to the Executive Committee.
- A trainer from Nuventive came to campus to provide refresher TracDat training to the assessment committee members.
- The assessment website was reviewed by the committee members who made suggestions for change. Thanks to Amy Helgeson for taking on the responsibility for making the changes and updates to the website.
- Josh Kern, Amy Juhala, and Jane Schulz attended the Higher Learning Commission general meeting.
- Various standardized reports were reviewed for use. The CLA is widely used and was discussed. Opinions about using standardized tests are varied and no consensus was reached to adopt such a test at this time.

- With the assistance of Greg Bach, more instructional programs entered data into TracDat. TracDat user guides were updated.
- Several committee members presented a session on assessment for the new faculty workshop. The goal of the presentation is to help new faculty members understand assessment and the processes used on our campus.

Campus Activities

There are numerous campus activities that support general education goals and objectives. Some of these include various diversity films and panels, Campus Read, Constitution Day, Visiting Scientist and Visiting Writer series, Phi Theta Kappa activities, ArtsQuest and many others.

Department/Programs Reporting Learning Outcomes Assessment Data

Career and Technology

Graphic Design & Communications:

- The Graphic Design and Communications program has 7 learning objectives. The average minimum acceptable rate of achievement for each criterion listed under each learning objective was 80%. Overall, the GDC program achieved stated learning outcomes in 4 out of 7 learning objectives and successfully achieved 12 out of 19 criteria for an achievement rate of 63%.

Action plans to reach minimum achievement rates in the seven unmet criteria were included in the program's annual learning outcomes assessment report. These action plans included the following:

- Utilizing more assignments and exercises in the areas of measurement, enlargement and reduction
- Find more engaging and interactive methods to help students memorize
- More emphasis on basic skills and following directions
- Review competencies that make up problem areas on the Skills USA Certification exam to improve collective scores to above 70%

Electronics/Telecommunications Technology

- The Electronics/Telecommunications Technology program has 1 program goal and 1 program objective. The program objective has 2 primary competencies. The first primary competency is related to technical knowledge and has two sub-competencies relating to circuit calculations and knowledge of circuit operation. The second primary competency is related to technical skills and has three sub-competencies relating to the use of test equipment, soldering and interpretation of schematics.

The assessment methods include a graduate survey, an employer survey, pre-post testing, an in-class project and a national skills exam. Summary results from the graduate and employer survey were reported for only one sub-competency relating to

interpretation of schematics, which resulted in survey responses ranging from adequate to above. The graduate and employer survey was not conducted for any of the other remaining sub-competencies.

The pre and post-testing assessment results indicated that 100% of the students showed improvement in their technical knowledge and skills in electronics/telecommunications technology.

The in-class project assessment, which was used only in the areas of testing equipment and soldering, resulted in 87.51% and 91.42% respectively, of the students who scored in the above average to outstanding ranges.

The overall examination comparisons to the state and national averages showed that BSC's Electronics/Telecommunications Technology program average was 6.93% above the ND state average and 9.45% above the national level. Two out nine students did not score above the state or national averages.

Computers & Office Technology

Administrative Assistant General:

Administrative Assistant Legal:

Administrative Assistant Medical:

- The administrative assistant programs have 2 program objectives and 7 related program competencies. The minimum acceptable rates of achievement for the competencies were based upon recommended pass rates on program exams, certifying exams and program portfolio presentations. Overall, the administrative assistant program successfully met 10 out of 21 competencies for all programs combined. The general administrative assistant and the medical administrative assistant programs completed the highest rate of competencies at 4 out of 7, and the lowest completion rate of competencies occurred in the legal administrative assistant program at 2 out of 7 successfully completed.

No action plans or follow-up activities were reported in the annual learning outcomes assessment report by the office technology program.

Computer Support Specialist:

- The computer support specialist program has 3 program objectives and 6 related program competencies. The minimum acceptable rate of achievement for each competency was based upon the activity of successfully completing an exam. The computer support specialist program reported that the minimum acceptable rate of achievement for all competencies was met. Follow-up activities included ensuring that tests are updated with advanced topics, real world scenarios, latest versions of Windows, and Linux distributions.

Information Processing Specialist:

- The information processing specialist program has 3 program objectives and 7 competencies. The minimum acceptable rates of achievement for each competency

were based upon the results of certifying exams, final portfolio projects, pre-post testing and weekly timed writings. The information processing specialist program did not provide any results or action plans due to the fact that there was only one graduate.

Web Page Development and Design:

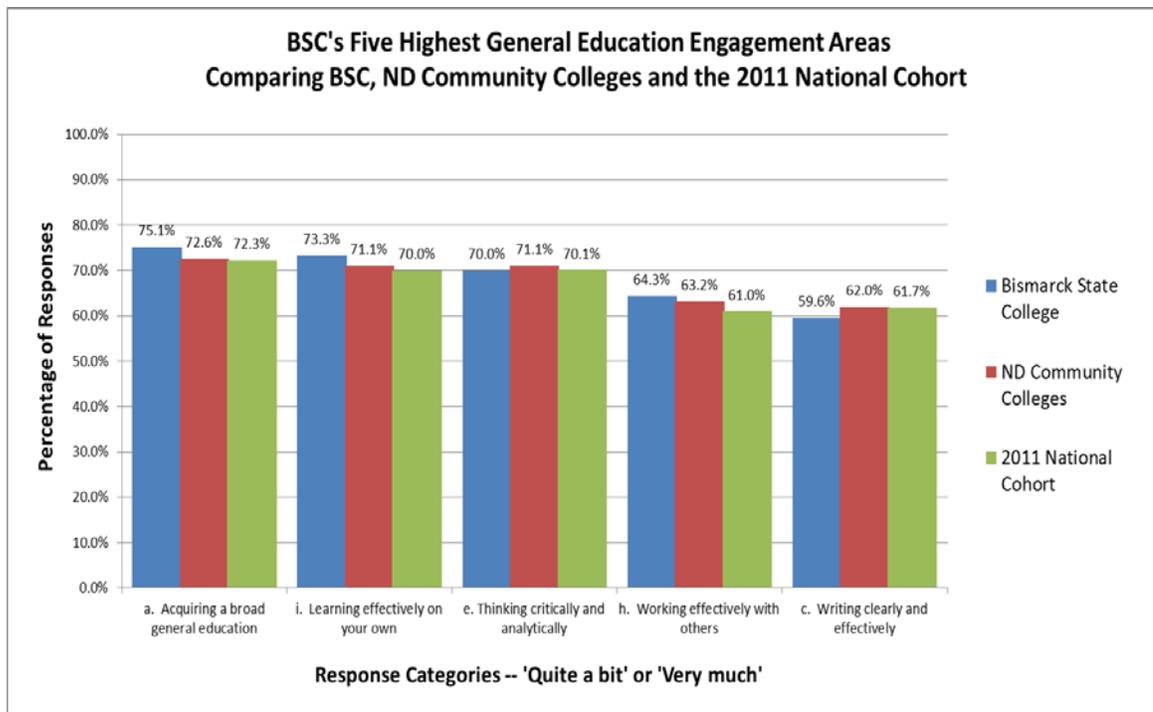
- The web page development and design program has 2 program objectives, 10 competencies and 26 goals relating to minimum standards of achievement. The minimum acceptable rates of achievement for each competency were based upon the results of certifying exams and portfolio projects. The WPDD program successfully achieved 10 out of 26 achievement goals. The WPDD program reached a 40% achievement rate on their program objective 1 and a 37% achievement rate on their program objective 2. The WPDD program did not include in their annual assessment report any follow-up or action plans.

General Education

- The General Education assessment committee began the second rotation of a three year cycle of the A-C-T (awareness, communication, and thought) program. This current learning outcomes assessment report reviews the general education category of Awareness. Several reports were not submitted by faculty, which caused a lower number of students being assessed for this report. Several faculty who participated, commented that clarifying the directions and expectations of the assignment would have improved the assessment process.

Levels of achievement were measured by a rubric consisting of four stages of awareness. The rubric levels included beginning, developing, competent and accomplished stages. Based upon a 4-point Likert scale where the accomplished stage is equal to 4, the competent stage is equal to 3, the developing stage is equal to 2 and the beginning stage is equal to 1, the overall average achievement result of the awareness competency was 3.34. The lowest achievement at 2.73 occurred in the competency “acknowledging the rights and responsibilities of citizens in society” and the highest achievement at 3.50 occurred in the competency “Examining one’s attitudes, values, and assumptions”. The achievement rates for the competencies “recognizing the diversity of people” and “recognizing the impact of past events on contemporary society” were 3.27 and 3.25 respectively.

The Community College Survey of Student Engagement was administered in spring of 2011. A number of the questions from the survey are related to general education learning outcomes. The chart below shows the five highest general education engagement areas.



Geomatics, Engineering & Mathematics

Geographic Information Systems

- The GIS program has 2 learning objectives for its students/graduates. Each learning objective has 2 competency requirements. The program learning objectives are focused on technical skills, and oral and written communication skills. No competency/learning outcome results were provided by the GIS program.

Medical Arts & Emergency Services

Medical Laboratory Sciences:

- The medical laboratory science program has 3 programs objectives. The assessment methods used to measure achievement of program objectives includes MLT National Board Certification Exam pass rates, and clinical rotation grades. All 3 program objectives were met since 100% of the graduating class of 8 passed the national MLT exam on the first attempt. All students also received no less than the required minimum grade of a "C" on their clinical rotations. Clinical rotation grades were based upon bench skills evaluations, attitude assessment tools and traditional exams, both practical and written. No follow-up activities were reported by the medical laboratory sciences program.

National Energy Center of Excellence

Electric Power Technology

Electrical Transmission Systems Technology

Nuclear Power Technology

Petroleum Production Technology

Process Plant Technology

Renewable Generation Technology

Power Plant Technology (PPT):

- The onsite energy programs are in the process of revising course outcomes for its students/graduates. No assessment data is available this year due to changes in curriculum. The program provided indirect assessment data from former employers, supervisors and past graduates, which indicated that student performance was very good. Students also continue to test above average on the Edison Electrical Institute pre-employment exam. The power plant technology program has incorporated a rubric for assessing written work in technical courses to further develop technical writing practices that include being clear and concise.

A developing goal for the energy programs is to maintain continuity between the online program and the traditional program despite the difference in delivery methods. The online pre- and post-test process continues to be inconsistent due to the fact that once the students know that the pre- and post-test activity does not affect their grade, many will not complete the activity. Currently, the energy program is considering several methods to strengthen the pre- and post-test assessment process in the online courses.

Social Sciences, Humanities & Education

Criminal Justice:

- The criminal justice program reported one assessment method related to the successful completion of the internship experience as indicated by the internship site evaluator. The performance evaluations included ratings of poor, below average, average, above average and excellent. 100% of the internship site evaluations showed an above average and excellent rating for 9 criminal justice students. Follow-up activities include the review and implementation of site evaluator suggestions received on student evaluations, the inclusion of a program evaluation with the graduate survey.

Human Services:

- The human service and eligibility worker programs did not report any specific program objectives, but did report one primary indirect assessment method based upon internship site evaluator performance comments. The performance evaluations included ratings of poor, below average, average, above average and excellent. 100% of the internship site evaluations showed average, above average and excellent ratings for 15 human services students. Follow-up activities include the review and implementation of site evaluator comments received on student evaluations, and the inclusion of a program evaluation with the graduate survey.

Nursing:

- The nursing program has 1 program objective, 3 competencies/measures and 3 assessment criteria related to minimum standards of achievement in order to meet the 3 competencies. The nursing program reported that competencies/measures 1, 2 and 3 were met at a 100% rate. Follow-up comments included the following:
 - Add self-evaluation component to preceptorship experience

- Continue to use the ATI as a good predictor exam
- Track individual ATI scores in specific areas on the BSC assessment and map curriculum to determine areas of weakness and supplement instruction
- Continue to track student trend data.
- Early testing and required remediation to enhance NCLEX pass rates

Surgical Technology:

- The surgical technology program has 3 program objectives and 6 competencies. The acceptable criterion for achievement for each competency was based upon pass rates of certifying exams and employer survey results. Pre- and post-testing results were eliminated as criterion for measuring achievement. All 3 program objectives were met based upon a 100% pass rate on the Surgical Technology Certification exam by all 7 graduates and employer surveys results that indicated a satisfaction rate of 85%. No follow-up or subsequent action plans were reported by the surgical technology.

Other Assessment Reports

Incoming Assessment:

- The college testing services' program reported 2,337 exams completed. The types of exam services included academic placement assessments, proctoring assistance, accessibility accommodations, certification exams and makeup exams. The Compass exam was the most used service and accounted for 27% of all exam services provided. Makeup exams, proctoring and accessibility accommodations accounted for 57% of other major types of exam services provided. Accessibility accommodation testing was the second highest used service at 14%. The highest usage of testing services occurs during the fall semester and accounts for 43% of all testing services for the academic year and summer term. The Compass exam accounts for 57% of testing services provided during summer term.

The testing services' office enhanced overall testing and proctoring services in the areas of test tracking, scheduling, and staff access to scheduling.

Developmental Reading and Writing Placement

- The developmental reading and writing placement program focused on 2 goals to improve reading and writing skills to levels necessary for students to successfully complete subsequent college level work. The developmental reading course (Effective Reading 082, not required) had 35 students, who were enrolled during the 2010-2011 academic year. All 35 students completed course 082. Compass post-test results revealed that 15 out of 22 post-test completers or 68% scored a 68+ (minimal readiness for college level work). Effectiveness is evaluated by a pre- and post-test process.

The developmental writing course (College Writing Prep 087, required) had 133 students, who were enrolled during 2010-2011 academic year. End enrollment results showed that 132 students completed course 087. Compass post-test results revealed that 71 out of 95 post-test completers or 75% scored at least 43+ (minimal readiness for

college level work). Effectiveness is evaluated by a pre- and post-test process and subsequent success rate comparisons with non-ASC087 students. Eight year comparisons show that ASC087 students on average have a 9% better success rate in English 110 than non-ASC087 students.

Sophomore Survey

- The sophomore survey for 2011 was completed by 427 students. The survey revealed that 75% of students felt their ability in 13 academic/personal skill areas improved as a result of completing general education courses at BSC. In contrast, 11% of students felt their ability in 13 academic/personal skill areas did not improve. 14% of students indicated that the academic/personal skill areas didn't apply to any general education courses they completed at BSC. The two highest rated improvement academic/personal skill areas were the "ability to collect and analyze information" (83.3%) and "instilling the desire to continue to learn throughout my life" (85.9%). The two lowest rated improvement academic/personal skill areas were "increased my awareness of diverse cultures, people, and ideas" (68%) and "improved my reading skills" (61.1%).