Table of Contents

ASSESSMENT OF LEARNING AT BSC: AN OVERVIEW

The Structure of Assessment

The term "assessment" describes BSC's broad range of measures and process to evaluate support of learning (Student Incoming Assessment), student learning (Learning Outcomes Assessment—Course/Program Assessment and Learning Outcomes Assessment—Broad-Based Assessment of General Education), and Institutional Evaluation.

Assessment Efforts	Responsibility	Documentation	Prepared By	Schedule
Student Incoming Assessment	Student Services	• Ongoing tracking reports • Annual Incoming Assessment Summary Report	• Testing & Assessment Coordinator • Assessment Coordinator and Testing & Assessment Coordinator	• Ongoing • Annually
Learning Outcomes Assessment Course/Program Assessment	Assessment Committee & Faculty	• Course/program Assessment Reports • Faculty Group Report • Annual Report	• Faculty • Faculty Group Leader • Assessment Coordinator	• Annually – if not doing broad-based Gen. Ed Assessment • Annually • Annually
Learning Outcomes Assessment Broad-Based Assessment of Gen. Ed.	Assessment Committee & Faculty	• Group Reporting Form • Form A • Form B	• Faculty • Faculty Group Leader • Assessment Coordinator	• Rotating among groups • Every other year • Ongoing – every 4 years
Institutional Evaluation	Office of Institutional Research	A variety of survey instruments	BSC administrative and support staff	• Ongoing

Learning Outcomes Assessment

The Learning Outcomes Assessment Program at Bismarck State College has been developed to improve student learning through improved teaching.

Course Assessment/Program Assessment: Faculty members set objectives for their classes, then conduct assessment activities during the semester to see how well students are meeting those objectives. Assessment tools vary, but may include such things as pre- and post-tests, essays, projects, papers, or presentations. While these may be evaluated as part of the course grade, they also need to be assessed according to how well students demonstrate their mastery of the objective. Using these results, the faculty member works with colleagues and students to determine what changes should be made to increase the number of students performing at the desired level.

The course syllabus should explain the objectives of the course and indicate what will be assessed and how. Words such as "competencies" and "sub-competencies" identify specific skills or knowledge each successful student will be able to demonstrate by the end of the course. "Measures" tell, in general, how the faculty member intends to determine the levels at which students operate throughout the semester.

Broad-Based Assessment of General Education: Broad-Based Assessment of General Education targets selected general education objectives each year. The ten general education objectives have been subdivided into 24 assessable objectives (see pp. 7-10). These outcomes are assessed over a four-year period, with the responsibility rotating among the four general education faculty groups (Arts & Humanities, Social & Behavioral Sciences, Communications, and Business, Math, Science, & Technology), with some of the skills being assessed across disciplines. The Four-Year Plan, then, is cross-disciplinary, systematic, and systemic (see pp 11-12).

Assessment Timeline

As we develop and participate in the outcomes assessment program, we become more aware of its potential for helping us to meet BSC's objectives by showing us where we can improve teaching and learning. This potential is increased when the work is done in a timely manner. Therefore, it is critical that everyone completes his or her assessments and reports on schedule.

Faculty Responsibility	Schedule
Prepare new learning activities and PTAs for course assessment in the upcoming semester (based on assessment results)	Before the semester begins
Participate in Faculty Group discussions on development and administration of assessment activities for the semester or year	As requested
Conduct course assessment on current semester OR Conduct Faculty Group's scheduled assessment efforts for the Four-Year Plan	Middle to end of semester (course assessment and Four-Year Plan assessment in alternate years)
Administer Sophomore Student Self-Assessment Survey in classes as directed	Week 12-15 of spring semester
Submit Faculty Assessment Report on current semester to Faculty Group Leader	On or before the final grades deadline
Use assessment results to improve student learning	Ongoing

Principles Underlying BSC's Assessment Program

1. The assessment program flows from the Bismarck State College mission and goals statements.
2. The purpose of assessment is to improve and document student learning.
3. Assessment looks at individual competencies. The grades students receive in their courses reflect a combination of factors and are not used for the purpose of assessment.
4. In assessing student achievement, the assessment program looks at core competencies across courses, recognizing that each course contributes to the development of more than one competency and measures competency levels using its own unique methods. Thus, multiple measures in multiple settings are employed to determine how well the objectives of the program are being met.
5. The assessment program is designed and implemented by faculty and staff and addresses questions BSC most wants to know about student learning.
6. Assessment is not a part of evaluation of faculty performance; however, assessment provides information useful to faculty members in deciding on instructional changes which will enhance student learning.
7. Assessment results are used to improve courses and programs, instruction, and support services in a continuing cycle. Assessment is an ongoing, cyclical process.
8. Good assessment proceeds by identifying manageable chunks. It is incremental.
9. Assessment requires the cooperation of all sectors of the college community.
10. Administrative support is provided for the development of the assessment program and for implementing any needed changes revealed through the assessment of student learning.
11. Students are informed about the assessment program, its purposes and its results through orientation, the classroom, the student newspaper, the web, and the college catalog.
12. The assessment program itself is evaluated regularly to increase its reliability, variety, and usefulness in accomplishing its goal of improving student learning.

Steps to Course Assessment Using PTA Scales

1. **Determine what objectives should be assessed in the courses you are teaching.** The General Education philosophy statement and the objectives are given on pp. 6-10 of this handbook. Most faculty members are now assessing at least two objectives. Consult with those who have taught your course or other colleagues. Outcomes historically used for a course are available in the Dean of Instructional Services' office on the Gen Ed Check Sheet for the course.

2. **Design an assignment that allows your students to demonstrate their knowledge or ability related to each of the objectives you are assessing.** These are assignments that are part of the course (course-embedded) and graded in the usual way for the course, then also assessed and scored for the assessment program.

3. **Develop a primary traits analysis scale (PTA scale) for each objective you are assessing.** A PTA scale is a rubric that describes levels of performance or accomplishment on an assignment. A scale is developed that identifies responses that will qualify for a particular score. The scores are 1 = below average, 2 = average, 3 = above average, and 4 = outstanding. The scale must be detailed and precise. Samples of PTA scales can be found beginning on p. 25 of this handbook, or ask colleagues to share PTA scales they have found effective. These scales can be shared with students when the assignment is given to clarify for the students what is expected on the assignment.

4. **Score each assignment according to the appropriate PTA scale.** Decide if each student's assignment is a 4, 3, 2, or 1 based on the PTA scale you have developed.

5. **Analyze the Results.** Analyze the results and state the implications for teaching, as well as the changes planned to improve student learning.

6. **Fill out all components of the PTA form.** Completed samples of PTA forms can be found beginning on p.25 of this handbook.

7. **Give your faculty group leader a copy of the completed PTA form for each of the objectives you have assessed in each of your courses.** Forms must be submitted to the faculty group leader by the day final grades are due at the end of the semester. The faculty group leader then compiles the results from all instructors in the group and writes the Faculty Group Annual Assessment Report.

8. **Use the assessment results to improve student learning ("Close the Loop").** Use your results to make improvements in your own courses. Refine your PTA scales, or make changes to curriculum or lesson plans as needed. Share your results with your colleagues. Participate in faculty discussions or forums to help improve student learning at all levels.

Bismarck State College
General Education Philosophy Statement

Statement of Philosophy

The aim of General Education is to introduce students to the methods of thinking and working upon which an advanced education is founded and to help them learn to derive pleasure from disciplined study. General Education exposes students to a broad but coherent array of fields of knowledge, as well as the basic intellectual thinking and communicating skills necessary to acquire, process and integrate knowledge. In addition, General Education seeks to help students understand the value of the general education component of their college studies, as well as the integrity of each and their interrelationship.

General Education enables students to develop academic skills, acquire liberal knowledge, shape individual values, and apply all three (skills, knowledge and values) in their academic, professional, personal, and societal lives. Bismarck State College is committed to a general education program that provides instruction in these areas. The college is equally committed to giving students access to the diverse cultures within and beyond our nation and to helping them understand fundamental relationships in the national and global community through its general education program.

The academic skills that are a focus of General Education make it possible for students to acquire and create new knowledge, and consequently, the skills enable students to assess existing values and develop new values. They are the key elements in every student's continuing academic development and the vehicles for further learning in and beyond the college experience. The fundamental academic skills include reading, writing, listening, speaking, creative problem solving, abstract logical thinking, independent thinking, critical analysis, quantitative and qualitative reasoning, mathematics, computer use and methods of human inquiry**.** The fundamental academic skills include reading, writing, listening, and speaking; mathematics and quantitative reasoning; computer use; methods of human inquiry; problem solving; logical and critical thinking; and independent, creative, and interpretive thinking.

The liberal knowledge component of General Education concerns itself with the intellectual context of student's lives within and beyond their specialized studies and college experience. In their liberal studies, students acquire a knowledge of basic concepts and current thinking in the areas of: communication, the physical and biological sciences, mathematics and technology, the social and behavioral sciences, and the arts and humanities. Students come to understand these disciplines as distinct yet interrelated ways of knowing and understanding the world.

The values component of General Education asks students to deal directly with their own values and the values of others, to identify the values implicit in both the substance and the process of what they study, to develop a sense of the intellectual and cultural context in which values are formed, and to actively experience and express values within a community of learners. By comparing and contrasting their own values with those held by others, students gain a better understanding of the various cultures of the world in which they live.

Our Philosophy of General Education is grounded in the belief that an array of knowledge and experiences broadens students' abilities to contribute to a more reflective, progressive, and educated citizenry. Students will also be able to conceptualize, theorize, analyze, and then critically reflect and apply this knowledge to benefit themselves and society.

General Education Objectives

The General Education experience at Bismarck State College has 10 main learning objectives for students. Along with a body of knowledge in social and behavioral sciences, arts and humanities, science, and mathematics, students gain skills to help them continue learning, including an understanding of the role of values and diversity in human endeavors, the use of communication skills and research skills, the use of computer technology, and thinking skills for logic, problem-solving, evaluation, creativity and interpretation. These main objectives are numbered 1-10 below.

The 10 General Education Objectives have been subdivided into objectives that are more readily assessable. These assessable objectives are numbered 1-24 below (in end parentheses).

1. Know the principles and methods of the social sciences and understand the basic social, political, and economic issues of the contemporary world
   A. Know the principles and methods of the social sciences **(1)**
      - Demonstrate an understanding of the importance of people, movements, institutions and/or forces that influence society
   B. Apply the principles and methods of the social sciences to social, political, and economic issues **(2)**
      - Analyze and evaluate sociological phenomena
      - Develop an independent interpretation of sociological phenomena and events by adapting and applying different perspectives and methodology used in social science
2. Have knowledge, appreciation, and understanding for human cultural tradition as expressed in art, music, theater, language, literature, history, philosophy, or religion
   A. Know human cultural tradition **(3)**
      - Identify and discuss different individuals/movements from a list of historical and contemporary artists, philosophers, musicians, or writers
      - Identify and discuss historical trends in at least one major world region
   B. Understand and appreciate human cultural tradition **(4)**
      - Explain how historical developments have affected culture and creative expression
      - Analyze, interpret, and critique works of art, theater, music, literature, history, religion, or philosophy, based on evidence and appropriate criteria and methodology
      - Demonstrate an increased interest and appreciation in one of the humanity areas by seeking out experiences or opportunities to develop further understanding in that area
      - Create and/or aesthetically appreciate works of art, literature, music, or theater

3. Know the principles and be able to apply the methods, terminology and reasoning of science **(5)**
    - Recognize the role of science in understanding nature, society, agriculture and industry
    - Understand and use the scientific process of question and investigation
    - Acknowledge the developing nature of science
    - Understand the terminology of science and recognize the dynamic nature of living languages

4. Understand and apply mathematical principles and be able to communicate quantitative information effectively
    A. Understand and apply mathematical principles **(6)**
        - Demonstrate an understanding of the function concept by several means (verbally, graphically, numerically, and/or symbolically)
        - Use abstract concepts and symbols to solve (apply) equations and inequalities
        - Express problems in mathematical form
        - Apply the basic math principles to practical situations
    B. Understand and communicate quantitative information effectively **(7)**
        - Organize and analyze data to make inferences about real world situations
        - Clearly communicate quantitative relationships and solutions

5. Recognize the role of values and ethics in making personal, social, and professional decisions **(8)**
    - Identify, articulate, and explain their own values
    - Recognize the connection between values and behavior
    - Identify and understand the values and ethics of another individual or group as revealed through actions, society, and culture
    - Use their understanding of their own values and those of others to resolve conflicts and make responsible decisions

6. Demonstrate knowledge of both global and American cultural diversity, including races, religions, subcultures, and ethnicities **(9)**
    - Understand that all individuals and cultures are not alike
    - Display tolerance for the ideas and perspective of others
    - Use the knowledge, attitudes, and skills gained through their understanding of individual and cultural diversity to communicate, work, and make decisions with people of other backgrounds

7. Read, write, speak, listen, and research effectively.
   Read at a level that allows students to participate in collegiate studies and chosen careers
    A. Understand what is read **(10)**
        - Anticipate and understand the structure and organization of written work
        - Recognize an author's thesis and forms of support
        - Assimilate and connect information and ideas from multiple written sources
    B. Evaluate what is read **(11)**
        - Evaluate the effectiveness and validity of an author's style, organization, support, evidence, and presentation
        - Demonstrate awareness of the connection that style and language have to an author's topic, audience, and purpose

Write effectively

C. Understand and use the writing process **(12)**
   - Use the stages of the writing process (inventing, planning, drafting, revising, editing, and proofreading) to develop, organize, and present ideas in writing
   - Participate effectively in peer editing of written work, responding productively and respectfully and being open to the ideas and suggested revisions of others

D. Express ideas effectively through writing **(13)**
   - Analyze the demands and possible strategies of a writing task, based on the topic, purpose, and audience, and then accomplish that task with clarity and accuracy
   - Produce finished writing that includes a clear, original idea or thesis, appropriate evidence and support, a logical structure and organization, and a style of language that serves the writer's purpose and audience
   - Identify and exercise their individual voices as writers, as appropriate for the topic, purpose, and audience of a writing task
   - Use Edited Standard Written English in spelling, grammar, punctuation, and syntax

Speak effectively

E. Understand and use a process in developing a speech **(14)**
   - Develop, organize, and present ideas in a formal or informal speaking situation
   - Participate effectively in peer editing of oral presentations, responding productively and respectfully and being open to the ideas and suggested revisions of others

F. Express ideas effectively through speaking **(15)**
   - Analyze the demands and possible strategies of a speaking situation based on the topic, purpose, audience, and occasion
   - Feel more confident in their ability to speak in public or in other oral communication settings
   - Deliver an oral presentation that includes a clear, original idea or thesis, appropriate evidence and support, a logical structure and organization, and a style of language that serves the topic, purpose, audience, and occasion
   - Identify and exercise their individual voices as speakers, as appropriate for the topic, purpose, audience, and occasion of a speaking situation
   - Use standard English in pronunciation, grammar, and syntax

Listen with literal and critical comprehension at a level that allows students to participate in collegiate studies and chosen careers

G. Understand information and ideas gathered through listening **(16)**
   - Anticipate and understand the structure and organization of oral presentations
   - Recognize a speaker's thesis and forms of support
   - Assimilate and connect information and ideas from multiple oral presentations

H. Evaluate information and ideas gathered through listening **(17)**
   - Evaluate the effectiveness and validity of a speaker's style, organization, support, evidence, and delivery
   - Demonstrate awareness of the connection that style and language have to a speaker's topic, audience, and purpose, as well as the occasion

Use information resources effectively

I. Develop and follow a research strategy **(18)**
   - Find and consult a variety of research sources
   - Formulate and refine a researchable question
   - Evaluate the relevance and reliability of sources

J. Apply the information found through research **(19)**
   - Draw conclusions based on information and ideas found through research
   - Use sources ethically and honestly, preserving the meaning of the source, avoiding plagiarism, and documenting the use of the source in the style appropriate for the student's discipline or field
   - Integrate source material smoothly and clearly into the student's own communication

8. Use computer technology to access, retrieve, process, and communicate information **(20)**
   - Interpret data collected or generated by technology and equipment
   - Use appropriate technology to communicate information effectively
   - Recognize the responsible and ethical use of technology

9. Think logically and critically and solve problems effectively

   A. Think critically **(21)**
      - Analyze and interpret results or outcomes of investigation and draw reasonable conclusions from the analysis
      - Provide reasoned support for beliefs or ideas
      - Recognize and analyze arguments that support theories and perspectives other than their own
      - Follow and give directions, whether written or oral
      - Analyze content, discover meaning or significance, draw conclusions, and make an assessment
      - Compare and evaluate opposing arguments or ideas
      - Distinguish between fact and opinion

   B. Solve problems effectively **(22)**
      - Identify a problem and outline or describe a realistic approach to solving the problem
      - Draw conclusions based on the outcomes

10. Think independently in creative and interpretive tasks

   A. Think independently in creative tasks **(23)**
      - Produce creative work that fulfills established criteria for effectiveness and/or aesthetics
      - Develop an independent appraisal of what defines quality creative work

   B. Think independently in interpretive tasks **(24)**
      - Develop an independent interpretation of information, ideas, concepts, actions, trends, and/or works, based on evidence and appropriate methodology
      - Draw conclusions based on the interpretation

Steps to Broad-Based Assessment of General Education

Broad-based assessment is assessment of our general education program. This is different from course assessment where individual faculty members work independently assessing some aspect of their courses; in broad-based assessment, the faculty assessment group works together on assessing the general education objective for which they are responsible. While course assessment is valuable in that a course is improved by individual faculty working on refining their expectations through PTA's thereby improving student learning, broad-based assessment is essential in determining whether or not the general education objectives that we have set are being met.

On the next page is the Four-Year Plan in which all 24 objectives will be assessed at least once during a four-year cycle. On the extreme left is an abbreviated listing of general education objectives (the complete version is found on pp. 7-10). The numbers in parentheses correspond to the number assigned in the second column to the faculty assessment groups listed in the first column. The third column lists standardized tests that will be given along with the objectives they will assess. The fourth column is a list of indirect measures of assessment used at BSC.

Members of each faculty group together develop a valid assessment measure that can be feasibly administered to students, allowing them to demonstrate their mastery of one or more of the 24 objectives. Typically these assignments are assessed by means of a Primary Traits Analysis scale, making the process familiar to faculty using PTA's in their course assessment. When these measures are also an assignment in a course, students take the task more seriously and are more likely to give it their best effort. Usually all students will be expected to complete the assessment measure, but it's possible that the data from only a select population will be compiled for assessment purposes, depending on the course and other circumstances. For example, since we are trying to determine the knowledge and skills our students have once they have completed their general education experience at BSC, often second semester sophomores will be targeted for the data collection. During the academic years that a faculty group is working on broad-based assessment, courses in this Gen. Ed. are not required to be assessed for course assessment.

1. **Participate in discussions with your faculty group to develop valid assessment measures.**
2. **Conduct broad-based assessment efforts as directed.** Integrate these assignments into the course curriculum. Don't sabotage assessment efforts by failing to give students adequate time to complete the assignment.
3. **Score the assignment for assessment purposes.** Grade the assignment appropriately for the course, but also assess it according to your group's instructions.
4. **Report the results to your faculty group leader.** Forms will vary, but results should be reported on or before the day final grades are due for the semester.
5. **Use the assessment results to improve student learning ("Close the Loop").** Work with your faculty group to analyze the results and work with colleagues to improve student learning.

Four-Year Plan for Broad-Based Assessment of General Education

GENERAL EDUCATION OBJECTIVES

S&B Sciences
1A. Know **(1)**
1B. Apply **(2)**
Humanities
2A. Know **(3)**
2B. Understand **(4)**
Science
3. Know and Apply **(5)**
Math
4A. Apply Principles **(6)**
4B. Comunicate **(7)**
Values
5. Recognize **(8)**
Diversity
6. Demonstrate **(9)**
Communications
7A. Read—Understand **(10)**
7B. Read—Evaluate **(11)**
7C. Process—Writing **(12)**
7D. Write Effectively **(13)**
7E. Develop Speech **(14)**
7F. Speak Effectively **(15)**
7G. Listen—Understand **(16)**
7H. Listen—Evaluate **(17)**
7I. Research Strategy **(18)**
7J. Apply Research **(19)**
Technology
8. Use technology **(20)**
Critical Thinking
9A. Think Critically **(21)**
9B. Solve Problems **(22)**
Independent Thinking
10A. Think—Creatively **(23)**
10B. Think—Interpretive **(24)**

Bismarck State College
Four-Year Plan for Broad-Based Assessment of General Education

Faculty Group	Gen Ed Objectives	Standardized Tests & Outcomes	Surveys
Year 1 (2002-2003)			
Business, Math Science & Technology	5, 13, 6, 7	Academic Profile 1, 2, 3, 4, 5, 6, 10, 13, 21, 22	• Student Satisfaction Survey • BSC Sophomore Self Assessment of Learning Survey • Alumni Outcomes Survey
Social & Behavioral Sciences	1, 2, 21, 8		
Year 2			
Communications	12, 14, 18, 19, 20, 21, 24	CAAP Critical Thinking 21, 22	• Entering Student Survey • Withdrawing Student Survey • BSC Sophomore Self Assessment of Learning Survey
Arts & Humanities	3, 4, 20, 13, 23		
Year 3			
Business, Math Science & Technology	6, 7, 20, 21, 22, 23, 15	CAAP Writing 13	• CESQ • BSC Sophomore Self Assessment of Learning Survey
Social & Behavioral Sciences	1, 2, 24, 9, 16, 10, 13, 15		
Year 4			
Communications	7, 8, 9, 11, 17	CAAP Reading 10, 11	• BSC Sophomore Self Assessment of Learning Survey
Arts & Humanities	3, 4, 14, 15, 23		

During the years when general education faculty groups aren't focused on broad-based assessment, they do course assessment.

Appendix A

Glossary

Assessment Methods / Measures / Tools / Techniques: Assessment methods (measures, tools, techniques) are devices used to determine if a student has mastered the desired outcomes of an activity, course, program, or general education requirement. They may include direct and indirect measures. Assessment methods focus on evaluating and measuring what abilities a student has gained. Using multiple measures in a program, general education requirement, or course is recommended to increase reliability. Frequent feedback is also recommended.

Broad-Based Assessment: This term refers to assessment of our general education program. At BSC, we do this through the Four-Year Plan.

Class Assessment: Techniques or activities designed to measure learning in the classroom. Compare with **Course Assessment** below.

Closing the Loop: This term refers to what is done with the results of assessment, which should be documented. Once assessment has taken place in a general education category or program, the results must be carefully examined to determine if changes in instruction (or curriculum or mission) are needed. Thus, the data of assessment are not simply collected; they are utilized to improve student learning, the goal of a learning college.

Course Assessment: Techniques or activities designed to measure student learning in **all** sections of a course (like Math 103). These techniques or activities should be common to all sections. Compare with **Class Assessment** above.

Course-Embedded Assignment: An assignment used for assessment that is also a graded part of the class.

Direct Assessment Measures: Direct measures of learning require students to display their knowledge and skills as they respond to the learning activity. Refer to the list in Appendix B. Compare to **Indirect Assessment Measures** below.

Faculty Group Leaders: The Assessment Committee member responsible for collecting, compiling and analyzing assessment results for a particular faculty group. This person also spearheads efforts to implement changes necessary to improve student learning.

Focus Groups: Planned group discussions conducted by trained moderators, designed to generate in-depth consideration of a defined topic. Questions are developed in advance of the meeting and serve as the basis for discussion. Typically, the goal is to examine perceptions, feelings, attitudes, and ideas rather than to reach consensus or solve problems. Participants are given adequate time to respond to questions and to discuss topics at length. Group interaction is encouraged.

Four-Year Plan: Bismarck State College's schedule for broad-based assessment of general education.

General Education Category Goals: These groupings of disciplines have broad statements of purpose and aim which flow from the institutional statements. They are more specific than the institutional goals.

General Education Curriculum: This is the core curriculum of the college, a requirement for graduation with a degree or diploma. Students meet this requirement by selecting courses from the **four general education categories**: Communication; Arts and Humanities; Social and Behavioral Sciences; and Business, Math, Science and Technology. Each general education category contains a number of related disciplines.

General Education Faculty Groups for Assessment: Groups comprised of faculty members teaching classes in any of the four general education requirement categories: Communication, Arts & Humanities, Social & Behavioral Sciences, and Business, Math, Science & Technology. Developmental Education is a sub-category of General Education. The term "departmental group" is inadequate for use in this context because the general education categories cross departments.

Grading: Evaluation of student performance in a class for the purposes of determining the final grade for the class. If an assignment is both graded and scored it is a course-embedded assignment. Compare to **Scoring** below.

Incoming Assessment: Through its incoming assessment program, BSC measures students' current abilities in the areas of math, reading, and English, to insure that all students begin their college education by taking the right level of courses. Information derived from incoming assessment testing is used as an advising tool to determine an individual's ability to benefit from instruction and to provide proper program placement.

Indirect Assessment Measures: Indirect methods such as surveys, interviews, focus groups, and forums ask students to *reflect* on their learning rather than to *demonstrate* it. Faculty groups also reflect on the learning of their students in a forum setting as a way of indirectly measuring learning. Refer to the list in Appendix B. Compare to **Direct Assessment Measures** above.

Institutional Evaluation: Techniques and measures used to judge the effectiveness of the campus environment and student experiences with the various entities of the campus and how conducive these are to student learning.

Institutional Mission and Goals: These are broad statements of purpose and aim that describe Bismarck State College's reason for being.

Learning Activities: Learning activities are the instructional strategies that educators use to meet the objectives of their courses and to promote learning. They range from more traditional to highly innovative, including readings, lecture, film, collaborative work, labs, projects, presentations, performances, and many, many more. It is important for instructors and students to know what the proposed learning outcomes for a learning activity are before it is undertaken. Instructors should have a means of assessing the objectives for learning activities and should provide feedback to students.

Learning Outcomes Assessment: "Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well

performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance. When it is embedded effectively within larger institutional systems, assessment can help us focus our collective attention, examine our assumptions, and create a shared academic culture dedicated to assuring and improving the quality of student learning."

--AAHE Bulletin, November 1995, p. 7

Objectives (what we want students to know): Objectives are statements that indicate what students will be striving to learn or achieve in the general education requirements or programs. They are more specific than the goal statements of the discipline groupings. Objectives must be measurable. Compare to **Outcomes/Competencies** below.

Outcomes/Competencies (what students actually know): Learning outcomes, or competencies, are significant and essential abilities acquired by students; they describe what a student can do with what he or she knows. Outcomes/competencies statements often parallel the wording of the statement of objectives of a program or course; however, the two types of statements are used in slightly different contexts. The statement of objective refers to what the student is striving to achieve, while the statement of outcome/competency refers to the level of ability the student has achieved at the time of assessment. Faculty articulate outcome statements on their assessment forms. At BSC, the terms "outcomes" and "competencies" are used interchangeably in documents and discussions. Compare to **Objectives** above.

Primary Traits Analysis Scale (PTA/Rubric): A numerical scale that identifies levels of student competency. The scale must be detailed and precise. If a faculty group uses a PTA scale, we commonly use a 4-point PTA scale.

Program: A program is a discipline with a prescribed curriculum, which offers one or more of the following: certificate of completion, diploma, and AAS degree.

Program Goals: Based on the institutional mission and goal statements, these are broad statements of purpose and aim which apply to individual programs. These goals are more specific than the institutional goals.

Program Lead Teachers for Assessment: Faculty responsible for collecting, compiling, and reporting assessment data from their program to the appropriate faculty group leader.

Scoring: Evaluation of student performance for assessment purposes. If an assignment is both graded and scored it is a course-embedded assignment. Compare to **Grading** above.

Appendix B

Measuring Student Outcomes

The information in this section on measures and non-measures of student learning is from Cecelia López's paper "Opportunities for Improvement: Advice from Consultant-Evaluators on Programs to Assess Student Learning, 1998" (NCA).

Some examples of direct measures: Assessment methods may include the direct and indirect measures listed here, as well as the assignment and test types and the "CATs" (classroom assessment techniques) listed on pp. 18-19, along with others that are born out of the creative imagination of individual instructors. More than one direct measure of student learning in a given program or in general education is recommended. Multiple measures ensure greater reliability.

- Capstone experience
- Portfolio assessment
- Standardized tests
- State or national licensure, certification or professional exams
- Locally developed tests
- Pre- and post-testing
- Essay questions blind-scored by faculty across a discipline
- Qualitative internal and external juried review of comprehensive projects
- Externally reviewed exhibitions and performances
- External evaluation of performance during internships based on stated program outcomes [Course-specific assignments and performances—Walvoord; Huba; Banta]

Some examples of indirect measures: Indirect measures should be used to supplement direct measures. Alone they are inadequate measures of student learning. Indirect measures can support and enrich the information obtained through direct measures.

- Alumni, employer, and student surveys
- Exit interviews of graduates
- Graduate follow-up studies
- Retention and transfer studies
- Length of time to degree
- Graduation and transfer rates
- Job placement data
- Sophomore student focus groups
- Faculty focus groups

Some examples of non-measures of student learning:

Instruments that are measures or reports associated with program review.

- Program Review of Vocational-Technical Education
- Curriculum review reports
- Evaluation reports of individual programs submitted by specialized accrediting agencies or committees of visiting experts

Information gathered not for assessment, but for specific administrative purposes.

- Faculty publications and recognition
- Kinds of courses students select, including course enrollments and course profiles
- Faculty-student ratios
- The percentage of students who study abroad
- Enrollment trends
- The percentage of students who graduate with an associates degree or diploma in two years
- The diversity of the student body
- Final grades and GPA's

Why are final grades not considered measures of student learning?

Increasingly, final grades and GPA's have been examined for their reliability and validity as measures of student learning. Although most institutions have not ceased using grades to report a student's final level of mastery in a course, many researchers, accreditors, and teachers have come to question whether grades really indicate what a student has learned in a course and what a student's level of ability in a given area is. Educators also have found that grades are influenced by numerous factors—institutional, cultural, social, personal, etc.—other than a student's ability. Final grades and GPA's are assigned in institutions dedicated to assessment practices; however, such schools also emphasize student learning as a process, not just a final product. Most importantly, assessment measures specific competencies, while final grades reflect a combination of factors.

Of course, some grading methods can be more meaningful than others as tools for assessing specific competencies, and Primary Trait Analysis (Use of Rubrics) has become an increasingly valued method of assessing student work. [It is, in fact, one of the key documents in BSC's Assessment Program.] For an excellent discussion of this topic, please consult *Effective Grading: A Tool for Learning and Assessment* by Barbara E. Walvoord and Virginia Johnson Anderson (Jossey-Bass 1998). [A copy of this book is available in each department chair's office.]

Types of Assignments and Tests

This "idea list" comes from *Effective Grading: A Tool for Learning and Assessment*, by Barbara Walvoord and Virginia Johnson Anderson.

- Abstract
- Advertisement
- Annotated bibliography
- Biography or autobiography(of the student or of some real or hypothetical character)
- Briefing paper or "white paper"
- Brochure, poster
- Budget with rationale
- Case analysis
- Chart, graph, visual aid
- Client report for an agency
- Cognitive map, web, or diagram
- Contemplative essay
- Court brief
- Debate
- Definition
- Diagram, table, chart
- Dialogue
- Diary of a fictional or real historical character
- Essay exam
- Executive summary
- Fill-in-the-blank test
- Flowchart
- Group discussion
- "I Search" (first-person narrative account of an inquiry) (Macrorie, 1980)
- Instructional manual
- "Introduction" to an essay or scientific report (rather than the full report)
- Inventory
- Laboratory or field notes
- Letter to the editor
- Matching test
- Materials and methods plan
- Mathematical problem
- Memo
- "Micro-theme" (a tight, coherent essay typed on a 5 x 8 note card) (Bean, 1996; Bean, Drenk, and Lee, 1982)
- Multimedia or slide presentation
- Multiple-choice test
- Narrative
- News or feature story
- Nursing care plan
- Oral report
- Outline
- Personal letter
- Plan for conducting a project
- Poem, play
- Question
- Reflective journal
- Regulations, laws, rules
- Research proposal addressed to a granting agency
- Review of book, play, concert, exhibit
- Review of literature
- "Start" (a thesis statement and outline or list of ideas for developing)
- Statement of assumptions
- Summary or precis
- Summit conference
- Taxonomy or set of categories
- Technical or scientific report
- Thesis sentence (sentence that expresses author's main point)
- Term paper, research paper
- Work of art, music, architecture, sculpture author's main point)
- Word problem

More Classroom Techniques

This list of Classroom Assessment Techniques (CATs) comes from *Classroom Assessment Techniques*, by Thomas A. Angelo and K. Patricia Cross. Each CAT is fully described in the book.

A word of caution applies to this list when one is looking for learning activities to use for one's contribution to general education or program assessment. In this book, Angelo and Cross are addressing *classroom* assessment, not course-embedded general education or program assessment; so many of their suggestions are actually indirect measures of learning and not intended to be used as graded activities. These kinds of indirect measures are a great idea to gain information about how students experience learning—use them, by all means; but they are not direct assessments of the level of learning achieved in a given competency. For general education and program assessment, look for learning activities that you can assign grades to and that target a specific general education or program competency.

- Analytic memos
- Annotated Portfolios
- Applications cards
- Approximate analogies
- Assignment assessments
- Audio- and videotaped protocols
- Background knowledge probe
- Categorizing grid
- Chain notes
- Classroom assessment quality circles
- One-sentence summary
- Concept maps
- Content, form, and function outlines
- Course-related self-confidence surveys
- Defining features logs
- Directed paraphrase
- Documented problem solutions
- Double-entry journals
- Electronic mail feedback
- Empty outlines
- Everyday ethical dilemmas
- Exam evaluations
- Focused autobiographical sketches
- Group instructional feedback technique
- Group-work evaluations
- Human tableau or class modeling
- Interest/knowledge/skills checklists
- Invented dialogues
- Memory matrix
- Minute paper
- Misconception/preconception check
- Muddiest point
- Paper or project prospectus
- Pro and con grid
- Problem recognition tasks
- Process analysis
- Productive study-time logs
- Profiles of admirable individuals
- Punctuated lectures
- Reading rating sheets
- RSQC2 (recall, summarize, question, comment, and connect)
- Self-assessment of ways of learning
- Student-generated test questions
- Teacher-designed feedback forms
- What's the principle?
- Word journal

Appendix C

American Association of Higher Education's (AAHE) Principles of Good Practice for Assessing Student Learning

(This document was developed under the auspices of the AAHE Assessment Forum with support from the Fund for the Improvement of Postsecondary Education with additional support for publication and dissemination from the Exxon Education Foundation. Copies may be made without restriction.)

1. **The assessment of student learning begins with educational values.** Assessment is not an end in itself but a vehicle for educational improvement. Its effective practice, then, begins with and enacts a vision of the kinds of learning we most value for students and strive to help them achieve. Educational values should drive not only what we choose to assess but also how we do so. Where questions about educational mission and values are skipped over, assessment threatens to be an exercise in measuring what's easy, rather than a process of improving what we really care about.

2. **Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.** Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom. Assessment should reflect these understandings by employing a diverse array of methods, including those that call for actual performance, using them over time so as to reveal change, growth, and increasing degrees of integration. Such an approach aims for a more complete and accurate picture of learning, and therefore firmer bases for improving our students' educational experience.

3. **Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes. Assessment is a goal-oriented process.** It entails comparing educational performance with educational purposes and expectations—those derived from the institution's mission, from faculty intentions in program and course design, and from knowledge of students' own goals. Where program purposes lack specificity or agreement, assessment as a process pushes a campus toward clarity about where to aim and what standards to apply; assessment also prompts attention to where and how program goals will be taught and learned. Clear, shared, implementable goals are the cornerstone for assessment that is focused and useful.

4. **Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.** Information about outcomes is of high importance; where students "end up" matters greatly. But to improve outcomes, we need to know about student experience along the way—about the curricula, teaching, and kind of student effort that lead to particular outcomes. Assessment can help us understand which students learn best under what conditions; with such knowledge comes the capacity to improve the whole of their learning.

5. **Assessment works best when it is ongoing, not episodic.** Assessment is a process whose power is cumulative. Though isolated, "one-shot" assessment can be better than none, improvement is best fostered when assessment entails a linked series of activities undertaken over time. This may mean tracking the process of individual students, or of cohorts of students; it may mean collecting the same examples of student performance or using the same instrument semester after semester. The point is to monitor progress toward intended goals in a spirit of continuous improvement. Along the way, the assessment process itself should be evaluated and refined in light of emerging insights.

6. **Assessment fosters wider improvement when representatives from across the educational community are involved.** Student learning is a campus-wide responsibility, and assessment is a way of enacting that responsibility. Thus, while assessment efforts may start small, the aim over time is to involve people from across the educational community. Faculty play an especially important role, but assessment's questions can't be fully addressed without participation by student-affairs educators, librarians, administrators, and students. Assessment may also involve individuals from beyond the campus (alumni/ae, trustees, employers) whose experience can enrich the sense of appropriate aims and standards for learning. Thus understood, assessment is not a task for small groups of experts but a collaborative activity; its aim is wider, better-informed attention to student learning by all parties with a stake in its improvement.

7. **Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.** Assessment recognizes the value of information in the process of improvement. But to be useful, information must be connected to issues or questions that people really care about. This implies assessment approaches that produce evidence that relevant parties will find credible, suggestive, and applicable to decisions that need to be made. It means thinking in advance about how the information will be used, and by whom. The point of assessment is not to gather data and return "results"; it is a process that starts with the questions of decision-makers, that involves them in the gathering and interpreting of data, and that informs and helps guide continuous improvement.

8. **Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.** Assessment alone changes little. Its greatest contribution comes on campuses where the quality of teaching and learning is visibly valued and worked at. On such campuses, the push to improve educational performance is a visible and primary goal of leadership; improving the quality of undergraduate education is central to the institution's planning, budgeting, and personnel decisions. On such campuses, information about learning outcomes is seen as an integral part of decision making, and avidly sought.

9. **Through assessment, educators meet responsibilities to students and to the public.** There is a compelling public stake in education. As educators, we have a responsibility to the publics that support or depend on us to provide information about the ways in which our students meet goals and expectations. But that responsibility goes beyond the reporting of such information; our deeper obligation—to ourselves, our students, and society—is to improve. Those to whom educators are accountable have a corresponding obligation to support such attempts at improvement.

Authors: Alexander W. Astin, Trudy W. Banta, K. Patricia Cross, Elaine El-Khawas, Peter T. Ewell, Pat Hutchings, Theodore J. Marchese, Kay M. McClenney, Marcia Mentkowski, Margaret A. Miller, E. Thomas Moran, and Barbara D. Wright

Appendix D

Resources On Assessment

BSC Library's Collection of Books on Assessment

Angelo, T. *Classroom Assessment and Research: An Update on Uses, Approaches, and Research Findings*. San Francisco: Jossey-Bass Publishers, 1998.

Angelo, T. and Cross, K. P. *Classroom Assessment Techniques: A Handbook for College Teachers,* 2nd ed. San Francisco: Jossey-Bass Publishers, 1993. (BSC Library)

Banta, T.W., Lund, J.P., Black, K.E., and Oblander, F.W. *Assessment in Practice: Putting Principles to Work on College Campuses*. San Francisco: Jossey-Bass Publishers, 1996.

Bloom, B.J. *Taxonomy of Educational Objectives*, Vol. 1 (The Cognitive Domain) & Vol. 2 (The Affective Domain). New York: David McKay Company, Inc., 1956

Brookfield, S.D. *Becoming a Critically Reflective Teacher*. San Francisco: Jossey-Bass Publishers, 1995.

Chaffee, John. *Thinking Critically*, 4th Ed.Boston: Houghton Mifflin, 1994.

Erwin, T.D. *Assessing Student Learning and Development*. San Francisco: Jossey-Bass Publishers, 1991. (BSC Library)

Huba, M.E. and Freed, J.E. *Learner-Centered Assessment on College Campuses*. Needham Heights, MA: Allyn-Bacon, 2000 (A copy of this book is available in each faculty leader's office.)

Katz, J. and Henry, M. *Turning Professors into Teachers: A New Approach to Faculty Development and Student Learning*. (American Council on Education Series on Higher Education). Phoenix: Oryx Press, 1993.

Lutzker, M. *Multiculturalism in the College Curriculum: A Handbook of Strategies and Resources for Faculty*. Westport, CT: Greenwood Press, 1995.

Nichols, James and Nichols, Karen W. *General Education Assessment for Improvement of Student Academic Achievement: Guidance for Academic Departments and Committees.* New York: Agathon Press, 2001.

O'Banion, T. *A Learning College for the 21st Century*. Phoenix: The Oryx Press, 1997.

Palomba, C. A. & Banta, T. W. (1999). *Assessment Essentials: Planning, implementing and improving assessment in higher education*. San Francisco: Jossey-Bass Publishers.

Walvoord, B.E. and Johnson Anderson, V. *Effective Grading: A Tool for Learning and Assessment.* San Francisco: Jossey-Bass Publishers, 1998. (A copy of this book is available in each faculty leader's office.)

Other Assessment Resources: A Bibliography by Dr. Cecilia López

AAHE Assessment Forum. (1997). *Learning through assessment: A resource guide for higher education.* Edited by Lion F. Gardiner, Caitlin Anderson, and Barbara L. Cambridge. Washington, DC: American Association of Higher Education.

Erwin, T. D. (1998). *Definitions and assessment methods for critical thinking, problem solving, and writing* ("The Sourcebook"). Washington, DC: National Postsecondary Education Cooperative. Interactive version and hardcopy of the Sourcebook is available on-line: http://nces.ed.gov/pubsearch

Huba, M. E., & Freed, J. E. (1999). *Learner-centered assessment on college campuses: shifting the focus from teaching to learning*. Boston: Allyn & Bacon.

López, C. L. (1999). General education: Regional accreditation standards and expectations. *Liberal Education*, 85(3) 46-51.

____. (1999). Assessing student learning: Why we need to succeed. *Assessment and Accountability Forum: Journal of Quality Management in Adult-Centered Education*. Special Edition : Regional Accrediting Bodies, 9(2), 5-7, 18.

____. (1999). *A decade of assessing student learning: What we have learned: What's next?* Presented at the 104th Annual Meeting of the NCA/Commission on Institutions of Higher Education. Available on line: http://www.ncacihe.org/resources/assessment/index.html

____. (1998). *Assessment of student learning: A progress report*. Presented at the 103rd Annual Meeting of the NCA/Commission on Institutions of Higher Education. Available on line: http://www.ncacihe.org/resources/assessment/index.html

____. (1998). How campuses are assessing general education. *Liberal Education*, 84(3), 36-43.

____. (1996). Classroom research and regional accreditation: Common ground. Special Insert, *Briefing, 14*(3), 1-4.

____. (1996). *Opportunities for improvement: Advice from Consultant-Evaluators on programs to assess student learning*. Presented at the 102nd Annual Meeting of the North Central Association of Colleges and Schools, Commission on Institutions of Higher Education. Available: http://www.ncacihe.org/resources/assessment/index.html

North Central Association of Colleges and Schools. (2000). Assessment of Student Academic Achievement: Levels of Implementation. *Addendum to the Handbook of Accreditation, Second Edition* (pp. 6-13). Chicago, IL: Commission on Institutions of Higher Education. Available: http://www.ncacihe.org/resources/assessment/index.html

Palomba, C. A. & Banta, T. W. (1999). *Assessment Essentials: Planning, implementing, and improving assessment in higher education*. San Francisco: Jossey-Bass Publishers.

Rogers, G. M., & Sando, J. K. (1996). *Stepping ahead: An assessment plan development guide*. Terre Haute, IN: Rose-Hulman Institute of Technology: gloria.rogers@rose-hulman.edu.

Web Resources on Assessment (list by Dr. Cecilia López)

Outcomes Assessment Resources on the Web (links are organized into eight categories: university assessment pages; general resources; agencies, institutes, and organizations; assessment instruments and techniques; assessment papers and reports; commercial resources on assessment; benchmarking; software):
http://www.tamu.edu/marshome/assess/oabooks.html

Resources for Methods in Evaluation and Social Research:
http://gsociology.icaap.org/methods

Resources for higher education outcomes assessment collected by North Carolina State University (organized by general resources; assessment handbooks; assessment of specific skills or content; individual institutions; assessment-related pages; accrediting bodies):
http://www2.acs.ncsu.edu/UPA/assmt/resource.htm

Jossey-Bass: publisher specializing in books on topics in higher education, including assessment. You can browse through their collection at this web address:
http://www.JosseyBass.com

Appendix E

Sample Assessment Forms

Following this cover page are sample faculty forms specific for your course or program

Index