College of Lake County

Handbook for Career Program Assessment

September 2003
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Fast Facts and Frequently Asked Questions

Why are we doing assessment?

The most important reason for conducting assessment is to use the results to improve student learning. Finding out more about what and how our students learn will give us information we can use to improve that learning. We also need to meet the standards of the Higher Learning Commission of the North Central Association and the Illinois Board of Higher Education, which both require assessment of student learning and the use of assessment results to improve programs.

Will assessment results be used to evaluate faculty?

No. CLC’s assessment plan will not be used to evaluate individual instructors, students or courses. We are assessing what students, on average, have learned as a result of completing a program.

What will I, as a faculty member, have to do?

Identify the knowledge and skills you expect your students to have:
You and the other faculty members in your program will need to identify what students should know and be able to do as a result of completing your program. The knowledge and skills identified should be stated in intended learning outcomes for the program.

Design a method to measure whether the students actually DO have the knowledge and skills you expect:
You may be able to use assignments, projects or examinations you already have in place, especially those that are in capstone courses or courses at the end of the program that draw on the knowledge and skills learned in courses earlier in the sequence. There is a wide variety of methods that can be used: exams, demonstrations, portfolios, presentations, etc.

Analyze and use the results of assessment to improve the program:
Determine how the results will inform teaching/learning and associated decision-making. For example, revise pedagogy, curriculum, sequence of courses, advising; address faculty and staff development, resources, support services, etc. Implement the changes.

How often do I have to conduct assessment?

Assessment should be ongoing. You might, for example, administer a test in the final course in your program. That test would be repeated each year so that you not only have the results of one particular class but can also look for trends over time.
What’s the best way to do assessment?

- Focus on what matters most – don’t try to assess everything
- Use multiple measures (ex: tests, writing assignments, demonstrations)
- Assess at more than one point in the program
- Include students, advisory committees, and employers to give input on the design of assessment, interpretation of the results and suggestions for improvement

How many measures do I have to have?

Eventually, programs should be measuring all of the significant intended learning outcomes of the program. For the first year, implementing two measures (one quantitative and one qualitative) will be a good way to start and phase in your assessment plan.

I coordinate more than one program. Do I have to this for all of them?

Over time, all programs (degrees and certificates) will need to be assessed. To begin, choose one program to start with. If you have several certificates related to a degree program, you might want to begin with the degree program. Create a plan for when assessment of the other programs will begin.

Do I have to write an assessment plan for my program?

Your program assessment plan is reflected in the template for assessment that you will fill in. It includes a place to record the intended learning outcomes, methods, results and actions. Each year you will update the results and actions section (and the methods section if you change or add methods). You do not need to write anything else, except for incorporating the results of assessment into your program evaluation every five years, as you have been doing.

<table>
<thead>
<tr>
<th>PROGRAM GOALS</th>
<th>INTENDED LEARNING OUTCOMES</th>
<th>ASSESSMENT METHOD and TIMING</th>
<th>PERFORMANCE CRITERIA</th>
<th>RESULTS AND DATE</th>
<th>ACTION TAKEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Graduates will have the technical knowledge and skills expected of an entry-level professional in xyz field.</td>
<td>a. Graduates will be able to demonstrate the ability to apply theory to common problems in xyz.</td>
<td>a. Semester project in capstone course</td>
<td>a. Average score on project will be 2.5 on a 3-point scale in each of the three grading categories on the rubric.</td>
<td>a. May 2002: Average scores were 2.6 on “Problem identification”, 2.2 on “Identification of Alternative solutions” and 2.8 on “Implementation of appropriate solution”</td>
<td>a. Faculty discussed findings. Next time capstone course is offered will spend additional time on how to generate alternative solutions</td>
</tr>
</tbody>
</table>
Assessment of Career Programs - Introduction

Assessment of career programs is already occurring in many programs, especially programs that are required to meet external accreditation standards that involve assessment. Career program assessment is more localized in the program areas, and will be developed, approved, and administered at the program level, in most cases led by a program coordinator. While the assessment methods in career program assessment will be determined on a case-by-case basis, there are some questions that should be considered by each program with regards to assessing their program:

1. Since it is impractical to measure every student in every learning outcome, we will need to carefully select a reasonable number of the most significant learning outcomes to measure on an ongoing basis. What are the most significant learning outcomes for your students on the program level?

2. What is the best way to get the input of students, advisory committee members and employers?

3. Issues of method, timing and sampling will need to be addressed, such as:
   - What students will be assessed? All graduates of a program or a sample of graduates? How will the graduates be identified? Will course-takers be included?
   - At what point will graduates be assessed? For example, is there a final capstone course in the program that could include program-level assessment? Should we measure midway through the program so students having difficulty could be advised better re: the remaining courses? Could participation in the assessment be part of the graduation requirements?
   - How will graduates be assessed on a program-wide basis if there are multiple options within a program?
   - What performance measures will be acceptable in the assessment process? Comprehensive program-wide tests? Essays? Portfolios? Checklists? Case studies? Any or all of the above?
   - What records will need to be maintained by the coordinators to ensure that assessment information is routinely collected and analyzed?

4. How will the assessment information be incorporated into the program evaluation process?
Steps in the Assessment Process

The following steps are recommended for each program to develop and administer the assessment for their program. Each step is explained in the following pages:

1. Establish (or review) overall program goals
2. Identify specific learning outcomes at the program level
3. Select methods to measure learning outcomes
4. Establish the level of performance expected (Performance Criteria)
5. Collect data
6. Analyze assessment results
7. Use assessment results for improvement
8. Report and share assessment information
9. Assess the assessment process
1. **Establish/review overall program goals**

Review your program goals (or establish them if you don’t yet have program goals). For purposes of assessment, include only goals that are related to student learning (not enrollment goals, faculty development goals, etc.) Your advisory committee should verify the program goals. Other stakeholders such as students and alumni should also be included in the discussion.

See the Template for Assessment (Appendix D) for examples of program-level goals.

- Record your program goal(s) in the Template.

<table>
<thead>
<tr>
<th>Goal 1: Graduating students will have the knowledge, skills and ethics expected of an entry-level professional in xyz field.</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTENDED LEARNING OUTCOMES</td>
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<tr>
<td>----------------------------</td>
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<tr>
<td></td>
</tr>
</tbody>
</table>
2. **Identify specific learning outcomes at the program level**

Each program will clearly and succinctly state the *learning outcomes* of their program. What do we expect students to **know, value, and be able to do** by the time they complete the program? These *intended learning outcomes* (sometimes referred to as objectives) should be more specific than the overall program goals, and should reflect the knowledge and skills expected in the workplace. Since the intended learning outcomes of interest here are not course-level outcomes but program-level outcomes, in most cases it is not appropriate to merely select course objectives as the program-level outcomes.

When designing a new program, the program goals should be stated first with the desired program learning outcomes flowing from the program goals. From the program outcomes, courses and course content included in the program would be decided upon. Course objectives should support the outcomes of the program.

Existing programs without documented goals and objectives may find themselves reconstructing this process, looking to the course objectives to construct program-level learning outcomes. Ask yourself about the courses in the curriculum: why is this course included? What does it do for my students in meeting overall program goals? It may be helpful to list all your learning outcomes in a table, with the courses that address those outcomes in a second column of the table.

Advisory committees should be included in developing and/or reviewing the intended learning outcomes, keeping faculty focused on the needs of the employers and changes in the field.

For many programs, the first two steps in the assessment process, reflecting upon the program, its goals and intended outcomes, will prove to be a valuable assessment of the program in and of itself, resulting in changes to the program. Programs may find that course objectives/content needs to be changed or updated or that some courses should be eliminated from the program and/or others added.

**Examples of intended learning outcomes at the program level:**

*Example for AOS: The student will be proficient in word processing.*

*Example for AUT: The student will be able to diagnose, test and repair brakes.*

*Example for FSM: The student will be able to plan a menu, identify ingredients and calculate meal costs.*

*Example for SRG: The student will be able to set up the instruments required for a surgical procedure.*

Some of the intended learning outcomes may be related to more general knowledge and skills. Skills in communication, problem-solving, information literacy and team-work are examples. The SCANS competencies (see Appendix D for a condensed version) are broad-based skills that could be incorporated into a program-level learning outcome.
Example: Student will demonstrate the ability to search out technical information independently.

See the Template for Assessment for more examples of learning outcomes.

- Record your Intended Learning Outcomes in the Template.

<table>
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<tr>
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<td>a. Graduates will be able to demonstrate the ability to apply theory to common problems in xyz.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>b. Graduates will demonstrate knowledge of technical concepts in xyz field.</td>
<td></td>
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</tbody>
</table>
3. **Select methods to measure learning outcomes and determine how and when to administer the measures.**

Determine what methods and measures you will use to determine if the students are achieving the intended learning outcomes. Both quantitative and qualitative methods should be considered. Some of the decisions that will need to be made at this time include: (1) what measure(s) will be used, (2) what students will participate, (3) when will the assessment be administered, (4) who will administer the assessment, (5) how will the assessment be administered (within a class, outside of class), etc.

The establishment of assessment methods and performance criteria will vary greatly from program to program. Factors influencing the methods chosen will be size of the program, influence of outside accrediting agencies, length of the program, program stakeholders and what type of information is needed and whether the program is more technical-skills-oriented or general-skills-oriented (such as AOS or RAC vs. accounting or business).

At this point, program faculty will determine what methods they will use to assess whether students have achieved the desired learning outcomes. Consider when and where in the program students are exposed to each of the desired outcomes. In most instances, the first point of exposure will be in a particular course (or courses). Assessment measures may be established to measure the level of achievement in the course or courses. Assessing at this point will give faculty the opportunity to recognize and address course weaknesses sooner than had assessment only taken place at the end of the program.

Assessment and measurement should also take place near or at the end of the program. This may be a semester project in a capstone course, certification exam, comprehensive program exam, internship, project or performance, portfolio review. If you plan to administer a commercially prepared examination, discuss the budget implications with your dean.

Finally, the desired outcome may be measured after graduation, perhaps in the form of follow up surveys of graduates or employers, or from the results of licensure or certification exams.

**A Few Possible methods:**
- Certification/licensure exam results
- Multiple-choice examinations- standardized or developed by faculty
- Lab projects
- Semester projects
- Portfolios
- Writing Samples
- Employer surveys
- Demonstrations
**Timing:**
Throughout program, midway, final semester? After graduation?
In a capstone course?

**Students assessed**
All or sample? How selected?
Students in a particular course?

- In the Template for Assessment, in the column headed “Assessment Method and Timing,” record the method used (case study, writing assignment, multiple-choice test, portfolio, performance, project, etc.), and when it is to be administered (in the capstone course, during the workplace experience).

<table>
<thead>
<tr>
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<td>a. Semester project in capstone course</td>
<td>ANNUALLY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Graduates will demonstrate knowledge of technical concepts in xyz field.</td>
<td>b. Locally developed multiple-choice test simulating certification exam in capstone course</td>
<td>ANNUALLY</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. **Establish the level of performance expected – “Performance Criteria”**

At this point you will want to be more specific about the level of performance expected on the assessment measure and, if applicable, give consideration to the context in which learning or performance takes place. The expected level should relate to the aggregate performance of the students (i.e., average score). Following are three examples of how to measure proficiency in word-processing.

Examples: (1) Students will be able to key a two-page letter with 100% accuracy and in correct format within twenty minutes; or (2) Students will be able to correctly answer 90% of the questions on a multiple-choice test on letter formatting; or (3) Employers of graduates will rank the word-processing skills of our graduates at a mean of 3.5 or higher on a 5-point scale.

➢ In the column of the Template entitled “Performance Criteria,” describe the expected level of performance.

<table>
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<td>b. Graduates will demonstrate knowledge of technical concepts in xyz field.</td>
<td>b. Locally developed multiple-choice test simulating certification exam in capstone course ANNUALLY</td>
<td>b. Average score on test will be 80% or above. No graduate will score less than 70%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. **Collect the data**

After the decisions about measures, timing, participation, etc., have been made, it is time to collect the data. You may want to start small by piloting an assessment, or building upon assessments you already do (such as evaluating semester projects or competency check-lists). Remember that you are collecting data about the average performance of a group of students, so individual identification of student work should be avoided. For examples, you may wish to review samples of student writing according to a list of criteria: compile the results so they don't identify individual students.
6. Analyze assessment results

Analyze the initial results. Compare the performance on the assessment measure with the criteria established. What percentage of the students achieved the desired level? Did performance vary across different dimensions of an assessment? (For example, did students do well on diagnosing brake problems but not as well on actually repairing them – or vice versa?)

How do the results compare to those of previous assessments or the results achieved in other programs (if that information is available)? If you use the same assessment for multiple years, you will be able to look for trends in performance. Does it appear that the findings will be useful? You may need to make adjustments to the process and/or the instrument. Identify program strengths and weaknesses, and areas for improvement.

- In the column of the Template entitled “Results and Date,” record the date the results were compiled and a summary of them.

| Goal 1: Graduating students will have the knowledge, skills and ethics expected of an entry-level professional in xyz field. |
|---|---|---|---|---|
| **INTENDED LEARNING OUTCOMES** | **ASSESSMENT METHOD and TIMING** | **PERFORMANCE CRITERIA** | **RESULTS AND DATE** | **ACTION TAKEN** |
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| b. Graduates will demonstrate knowledge of technical concepts in xyz field. | b. Locally developed multiple-choice test simulating certification exam in capstone course ANNUALLY | b. Average score on test will be 80% or above. No graduate will score less than 70% | b. April 2002: Average score was 83%. 2 of 10 students scored less than 70% |
7. **Use assessment results for improvement**

Assessment findings can be used for many purposes in addition to the primary one, which is to improve student learning. Findings can also be used to identify needed improvements in the program curriculum, to document the success of the program, and to support requests for additional resources. Some examples from Parkland College:

- Retain or revise instructional methods and suggest changes in students learning strategies.
- Incorporate the proposed changes into the planning and budget process
- Incorporate changes into the program review process
- Monitor and evaluate the effectiveness of specific changes
- Revise the program (purpose, goals and objectives) – course offerings, course content

➢ Record the action(s) taken or planned in the column on the Template entitled “Action Taken,” along with the date.

---

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<td>b. Average score on test will be 80% or above. No graduate will score less than 70%</td>
<td>b. April 2002: Average score was 83%. 2 of 10 students scored less than 70%</td>
<td>b. Two students were given review materials to study for certification exam.</td>
</tr>
</tbody>
</table>
8. **Report and share assessment information**

Results should be disseminated to faculty, student groups, external stakeholders, and be used as a basis for discussion about what worked and what was less successful. In February of each year, the results of the assessment and the actions taken should be reported to:

- Dean of the division
- Assessment Committee
- Assistant Vice-President for Educational Affairs

Results will be incorporated into the Program Review that is conducted every five years for ICCB. Results may also be used in the budgeting process.

9. **Assess the assessment process**

The assessment plan should include a provision to review the assessment process itself. A review of the assessment plan will be conducted every five years (in conjunction with the Program Review) to determine if it is meeting its goals and what revisions might improve its performance.
### Recommended Timeline for Implementing Assessment Process in Career Programs

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
<th>Comments</th>
<th>Responsible Parties</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Establishing (or reviewing) overall program goals</td>
<td>Review any existing goal statements. Revise as needed.</td>
<td>Faculty, Advisory Comm., Employers</td>
<td>Draft May 2003 Final Sept 2003</td>
</tr>
<tr>
<td>2</td>
<td>Identifying specific learning outcomes at the program level</td>
<td>Review samples from other colleges. Review objectives in Course Reference Files and syllabi, esp. upper-level courses. Review any available skill standards and certification or licensure requirements. Verify w/ employers and Advisory committee</td>
<td>Faculty, Adv. Comm., Employers</td>
<td>Draft May 2003 Final Sept 2003</td>
</tr>
<tr>
<td>4</td>
<td>Establish the level of performance expected – “Performance Criteria”</td>
<td>Establish specific levels for average: average score will be &gt;80%, for example</td>
<td>Faculty</td>
<td>November 2003 (submit Template with columns 1-4)</td>
</tr>
<tr>
<td>5</td>
<td>Collecting data</td>
<td>Begin implementation of assessment process.</td>
<td>Faculty</td>
<td>Begin Sp 2004 or Fall 2004</td>
</tr>
<tr>
<td>6</td>
<td>Analyzing results</td>
<td>Review findings to see if they provided data you needed. Identify strengths, areas for improvement.</td>
<td>Faculty, Dean.</td>
<td>Fall 2004</td>
</tr>
<tr>
<td>7</td>
<td>Using results for improvement</td>
<td>Improve student learning. Improve curriculum. Document success. Assessment findings should be considered in “quality” section of program evaluation.</td>
<td>Faculty, Curriculum Comm.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>8</td>
<td>Reporting and sharing assessment</td>
<td>Report to Dean and Assistant, Vice President. Share w/ faculty, advisory committee, students, etc.</td>
<td>Faculty</td>
<td>Yearly - February</td>
</tr>
<tr>
<td>9</td>
<td>Assessing the program’s assessment process</td>
<td>Revise methods, instruments and procedures as needed.</td>
<td>Faculty, Administration</td>
<td>Every 5 years</td>
</tr>
</tbody>
</table>
APPENDIX A - GLOSSARY OF TERMS

General Terminology

Sources: Course material developed by A.P. Rovia; “Glossary of Assessment Terms” (1994) by Barry Sweeney; “Assessment Methods Handout” (2002) by Gloria Rodgers; “Assessment Essentials” by Palomba and Banta

Assessment
“The systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development” (Palomba and Banta; 1999)

Assessment methods
An illustrative task or performance opportunity allowing students to demonstrate their progress and capabilities, such as: written surveys and questionnaires; exit and other interviews; commercial, norm-referenced, standardized examinations; locally developed examinations; archival records; focus groups; portfolios; simulations; performance appraisals; external examiner; oral examinations; and behavioral observations.

Authentic assessment
Assessment that resembles "real-life" as closely as possible. The task resembles something that might actually be done outside of the classroom. In psychology, authentic assessment refers to testing under natural, actual conditions rather than in a clinical or artificial environment.

Criterion-referenced tests
Used to assess a student's level of proficiency in or mastery of the standards. This is accomplished by comparing a student's performance to a criterion. Such information tells us whether a student needs more or less work regarding the standards, but it says nothing about the student's performance relative to other students.

Curriculum (plural curricula)
A plan of instruction that details what students are to know (i.e., the standards), how they are to learn it, what the teacher's role is, and the context in which learning and teaching take place.

Department review
A process by which a department works to enhance their performance, improve their effectiveness, and improve their quality by recognizing opportunities for improvement and identifying strengths.

Formative assessment (also known as classroom assessment and monitoring)
Designed to collect data and information used to improve learning. Formative assessments are also conducted to improve the effectiveness of the various components of an instructional program, as well as to address implementation concerns such as efficiency (time, cost, resources needed etc.). Self-assessment is a type of formative assessment.

Generalization (or generalizability)
The extent to which assessment findings and conclusions from a study conducted on a sample population can be applied to the population at large.

Goals (of program learning)
What you want a student to be at the end of an educational program. e.g. "be a good typist" or "be a critical thinker".

Inter-rater Reliability
The degree to which different raters/observers give consistent estimates of the same phenomenon.
Internal Validity
Internal validity refers to (1) the rigor with which the study was conducted and (2) the extent to which the designers of a study have taken into account alternative explanations for any causal relationships they explore.

Norm-referenced tests
Used to assess a student's performance in comparison to a norm or average of performance. Norm-referenced tests are often reported in terms of percentiles or percentile rankings. Grading "on the curve" is an example of a norming procedure. A norm-referenced tests says nothing about the level of mastery of the standards.

Outcomes (program level)
What you want a student to know and be able to do at the end of an educational program. e.g. “be able to type with a proficiency acceptable by industry standards” or “Read and think critically to analyze arguments, data, and information”

Outcome-based education
Designed to lead students to demonstrate a specific level of mastery. It promotes the alignment of specific student outcomes, instructional methods, and assessment.

Performance assessment
Assessment that is based on observation and evaluation of student-created products, projects, and performances. It requires students to perform a task or demonstrate a skill rather than simply select a response. Performance assessments can go well beyond testing the knowledge level of learning by examining understanding, application, analysis, synthesis, and evaluation. In other words, performance assessments are used to assess higher-order thinking skills.

Performance criteria or benchmarks
Threshold for achievement of program learning goals and outcomes, based on results of assessing a group of students. e.g. “90% of students completing program type at 60 WPM with less than five errors” or “80% of students receiving an A.S. degree score at xx or above on critical thinking portion a standardized test”.

Program Evaluation
Using the guidelines of the Illinois Community College Board, program evaluation is a systematic accountability measure whereby instructional programs are evaluated on the criteria of program cost, quality, and need.

Rubrics
Sets of guidelines for rating student work that describe what is being assessed, provide a scoring scale, and help the teacher correctly place work on the scale. A rubric is also frequently used as an instructional tool to promote self-assessment.

Standards
Targets and expectations for what teachers need to teach and students need to learn. Standards may include performance criteria. Also called standards of learning, educational objectives, instructional objectives, learning outcomes, learning targets, and priority outcomes by various educators.

Standard for a Learning Outcome
The qualitative and quantitative assessment criteria by which it is decided if students have attained a specified level of performance related to an outcome. The parts of a standard include: a) the learning outcome, (b) the assessment tasks which will measure student learning relative to the learning outcome, (c) the cut-score or proficiency level required to "pass" the assessment and (d) the overall level of performance needed to combine assessments and indicate whether a student has mastered the whole outcome.
**Standardized tests**
Tests that are taken by many students under identical conditions that allow results to be compared statistically to a standard such as a norm or a criterion. Accordingly, standardized tests can be either norm-referenced or criterion-referenced. Examples of national norm-referenced standardized tests given to public school students are the *Iowa Test of Basic Skills* (ITBS) and the *Stanford 9* test. Many states such as Virginia complement national norm-referenced standardized tests by also administering their own criterion-referenced standardized tests (i.e., the *Virginia Standards of Learning Tests*).

**Summative assessment**
Used to provide evidence for grades, promotion, placement, certification, accountability, etc. Also called high-stakes assessment, particularly when used for promotion, placement, certification, and accountability.

**Traditional assessment**
Refers to teacher-made tests that consist of true-false, multiple-choice, and matching items that assess factual recall (i.e., lower order thinking skills). Also called conventional assessment or conventional testing.
APPENDIX B – BIBLIOGRAPHY & REFERENCES

Bibliography

References
Graduate Follow-Up Report of the College of Lake County

Secretary’s Commission on Achieving Necessary Skills (SCANS) competencies from the Department of Labor (statements on workplace skills). Available at: [http://wdr.doleta.gov/SCANS/whatwork/whatwork.pdf](http://wdr.doleta.gov/SCANS/whatwork/whatwork.pdf)

Ball State University [http://web.bsu.edu/IRAA/AA/WB/Chapter1.htm](http://web.bsu.edu/IRAA/AA/WB/Chapter1.htm)
✓ Performance Based Measures [http://web.bsu.edu/IRAA/AA/WB/chapter5.htm](http://web.bsu.edu/IRAA/AA/WB/chapter5.htm)
✓ Other [http://web.bsu.edu/IRAA/AA/WB/chapter7.htm](http://web.bsu.edu/IRAA/AA/WB/chapter7.htm)

✓ Assessment Instruments and Methods

Parkland’s program assessment documents are all available at the website: [http://www.parkland.edu/aac/programs/index.htm](http://www.parkland.edu/aac/programs/index.htm)
Secretary's Commission on Achieving Necessary Skills (SCANS) was established by the Department of Labor to identify the skills necessary to success in the workplace. More detail and examples are available from the Department of Labor website (http://wdr.doleta.gov/SCANS/whatwork/)

**FIVE COMPETENCIES**

**Resources:** Identifies, organizes, plans, and allocates resources

A. *Time* -- Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules

B. *Money* -- Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives

C. *Material and Facilities* -- Acquires, stores, allocates, and uses materials or space efficiently

D. *Human Resources* -- Assesses skills and distributes work accordingly, evaluates performance and provides feedback

**Interpersonal:** Works with others

A. *Participates as a Member of a Team* -- contributes to group effort

B. *Teaches Others New Skills*

C. *Serves Clients/Customers* -- works to satisfy customers’ expectations

D. *Exercises Leadership* -- communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies

E. *Negotiates* -- works toward agreements involving exchange of resources, resolves divergent interests

F. *Works with Diversity* -- works well with men and women from diverse backgrounds

**Information:** Acquires and uses information

A. *Acquires and Evaluates Information*

B. *Organizes and Maintains Information*

C. *Interprets and Communicates Information*

D. *Uses Computers to Process Information*

**Systems:** Understands complex inter-relationships

A. *Understands Systems* -- knows how social, organizational, and technological systems work and operates effectively with them

B. *Monitors and Corrects Performance* -- distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems’ performance and corrects malfunctions

C. *Improves or Designs Systems* -- suggests modifications to existing systems and develops new or alternative systems to improve performance

**Technology:** Works with a variety of technologies

A. *Selects Technology* -- chooses procedures, tools or equipment including computers and related technologies

B. *Applies Technology to Task* -- Understands overall intent and proper procedures for setup and operation of equipment

C. *Maintains and Troubleshoots Equipment* -- Prevents, identifies, or solves problems with equipment, including computers and other technologies.
A THREE-PART FOUNDATION

**Basic Skills:** Reads, writes, performs arithmetic and mathematical operations, listens and speaks
A. *Reading* — locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules
B. *Writing* — communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts
C. *Arithmetic/Mathematics* — performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques
D. *Listening* — receives, attends to, interprets, and responds to verbal messages and other cues
E. *Speaking* — organizes ideas and communicates orally

**Thinking Skills:** Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons
A. *Creative Thinking* — generates new ideas
B. *Decision Making* — specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative
C. *Problem Solving* — recognizes problems and devises and implements plan of action
D. *Seeing Things in the Mind’s Eye* — organizes, and processes symbols, pictures, graphs, objects, and other information
E. *Knowing How to Learn* — uses efficient learning techniques to acquire and apply new knowledge and skills
F. *Reasoning* — discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

**Personal Qualities:** Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty
A. *Responsibility* — exerts a high level of effort and perseveres towards goal attainment
B. *Self-Esteem* — believes in own self-worth and maintains a positive view of self
C. *Sociability* — demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings
D. *Self-Management* — assesses self accurately, sets personal goals, monitors progress, and exhibits self-control
E. *Integrity/Honesty* — chooses ethical courses of action
APPENDIX D:
TEMPLATE FOR CAREER PROGRAM ASSESSMENT
4/17/2003 by Career Program Assessment Subcommittee of Assessment Task Force
adapted from Parkland College

Goal 1: Graduating students will have the knowledge, skills and ethics expected of an entry-level professional in xyz field.

<table>
<thead>
<tr>
<th>INTENDED LEARNING OUTCOMES</th>
<th>ASSESSMENT METHOD and TIMING</th>
<th>PERFORMANCE CRITERIA</th>
<th>RESULTS AND DATE</th>
<th>ACTION TAKEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Graduates will be able to demonstrate the ability to apply theory to common problems in xyz.</td>
<td>a. Semester project in capstone course ANNUALLY</td>
<td>a. Average score on project will be 2.5 on a 3-point scale in each of the three grading categories on the rubric.</td>
<td>a. May 2002: Average scores were 2.6 on “Problem identification”, 2.2 on “Identification of Alternative solutions” and 2.8 on “Implementation of appropriate solution”</td>
<td>a. Faculty discussed findings. Next time capstone course is offered will spend additional time on how to generate alternative solutions</td>
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<tr>
<td>b. Graduates will demonstrate knowledge of technical concepts in xyz field.</td>
<td>b. Locally developed multiple-choice test simulating certification exam in capstone course ANNUALLY</td>
<td>b. Average score on test will be 80% or above. No graduate will score less than 70%</td>
<td>b. April 2002: Average score was 83%. 2 of 10 students scored less than 70%</td>
<td>b. Two students were given review materials to study for certification exam.</td>
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<td>c. Graduates will have the knowledge and skills expected by employers.</td>
<td>c. Employer survey EVERY 5 YEARS</td>
<td>c. Average rating on every component of employer survey will be satisfactory or higher.</td>
<td>c. Employer survey rating 2001 graduates: All components ranked above average except abc.</td>
<td>c. Faculty and advisory committee met to determine how to improve abc.</td>
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<td>d. Graduates will demonstrate their understanding of code of ethics and how it is applied in practice.</td>
<td>d. Case study in capstone course</td>
<td>d. Average score on case study will be 2.5 on a 3-point scale in each rubric category.</td>
<td>d. May 2002: Average scores were 2.6, 2.9, 2.8</td>
<td>d. Standard met. No changes made.</td>
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<td>e. Graduates will be able to write documents with appropriate technical and professional style and content.</td>
<td>e. Writing assignment of a technical memo in course XYZ 171</td>
<td>e. All students will earn a satisfactory or higher score on the writing assignment</td>
<td>e. November 2002: 2 of 12 students scored less than satisfactory</td>
<td>e. 2 Students referred to Writing Center. Also, Faculty met w/ writing instructor to get some assistance in preparing students for the writing assignment</td>
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<tr>
<td>e. Writing assignment (feasibility study) in course XYZ 217</td>
<td>e. All students will earn a satisfactory or higher score on the writing assignment</td>
<td>e. Feb 2003: All students scored satisfactory or higher</td>
<td>e. No changes planned</td>
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</tbody>
</table>

**CHARACTERISTICS OF THIS ASSESSMENT EXAMPLE**

- Uses multiple methods (writing samples, multiple-choice test, case study).
- Assesses learning at more than one point in the curriculum (writing assessments are at midpoint and end).
- All examples are embedded within courses in the curriculum so that the assessments “count” – making it more likely that students will be motivated to do their best…. And faculty will not have to generate “add-on” assessments for use outside of the classroom.
- Results were used to make improvements to curriculum, which will hopefully lead to improvements in student learning.
- Results were used in a formative way for students (1b. students given review materials to help for certification exam preparation; 1e. students were referred to Writing Center) as well as for program improvement.
- Stakeholder views were incorporated (employer survey in 1c).