

# **2001 Monitoring Report on Assessment**

## **INTRODUCTION**

As part of the North Central Association Accreditation Process, an evaluation team visited the University of Minnesota-Crookston (UMC) campus in March 2000. This visit resulted in many positive findings by the NCA team, but also some concerns. At the request of NCA, UMC is submitting this monitoring report documenting the progress and status of assessment activities and planning at the institution.

### **Context of Assessment at UMC**

UMC is an undergraduate, residential campus of the University of Minnesota located in Crookston, Minnesota with approximately 1,200 full time students and 70 FTE faculty. A former two-year college, UMC has made great strides in its baccalaureate programs since gaining that status in 1993. Designated a polytechnic university, UMC strives to combine theory, practice and experimentation to connect its teaching, research and outreach to serve not only its students, but the surrounding region. Many UMC programs have close working relationships with a number of industries and individual businesses.

Assessment activities at UMC during the last two years have taken place within the context of: 1) the original assessment plan established at the time UMC was first accredited to provide baccalaureate level degrees, including the collection of employer survey data, student satisfaction data and the input of Program Improvement Audit Committees (PIAC) for each degree program; 2) its designation as a polytechnic university; 3) purposes detailed in its revised Mission Statement (May 2001); and 4) concerns expressed in the report from the focused visit by an NCA evaluation team in March 2000. These concerns are:

1. Assessment of student learning has been given little attention. Before the next NCA visit in 2004-2005, UMC should:
  - a. develop an assessment plan that incorporates student learning across general education and the majors;
  - b. document the results of its assessment activities;
  - c. document what changes have occurred in the assessment plan, procedures, process, and in the improvement of student learning as a result of those changes; and,
  - d. document that UMC has formally integrated the use of assessment results into its planning, budgeting, and decision-making process. \*

\*From the Report of a Focused Visit to University of Minnesota-Crookston, March 26-28, 2000.

The concerns expressed by the NCA evaluation team tie in well with campus efforts articulated in the revised mission statement listed below. The current emphasis on assessment is focused on the first set of institutional purposes “to provide quality teaching and learning” and “continually improving student learning through meaningful assessment.”

## **MISSION STATEMENT**

The University of Minnesota, Crookston (UMC) is integral to the University’s statewide land grant mission. The college provides its unique contribution through polytechnic programs that combine theory, practice, and experimentation in a technologically rich environment. UMC connects its teaching, research, and outreach to serve the public good.

## **INSTITUTIONAL PURPOSES**

### **To provide quality teaching and learning by:**

- Committing to excellence in education;
- Maintaining a focused curriculum incorporating three core components – communication, critical thinking, and working with others;
- Developing lifelong learning skills;
- Requiring applied field experiences, laboratory instruction, and internships;
- Emphasizing technology experiences for careers in the information-age;
- Continually improving student learning through meaningful assessment; and
- Providing support services and activities that enhance students’ personal and cultural development.

### **To promote a strong and diverse community of learners and teachers by:**

- Expecting the highest in personal and professional integrity, civility and tolerance;
- Encouraging teamwork, professional growth, acceptance of responsibility, and recognition for achievement;
- Providing a caring environment with personal attention and frequent faculty-student interaction;
- Upholding individual rights to freedom of expression and association; and
- Valuing shared governance among faculty, administrators, staff and students.

### **To create an educated citizenry by:**

- Preparing students to be actively engaged responsible citizens and leaders committed to democracy and community;
- Providing opportunities for all students to participate in student and campus governance; and
- Offering students professional, social, cultural, and civic events that extend the learning environment and lead to a fulfilling life.

**To develop civic engagement by:**

- Responding to the changing needs of agriculture, manufacturing, business, health care and other industries and professions;
- Collaborating with business, industry, schools, colleges, and other organizations; and
- Seeking to improve the quality of life, the economy and the environment.

**CURRICULUM COMPONENTS RELATED TO TEACHING AND LEARNING**

The UMC curriculum is comprised of three components that pertain to assessment activities – general education courses, the core components and program specific courses. The following discussion briefly describes each component and highlights the assessment related issues and activities pertaining to each one.

**General Education**

General education requirements at UMC include a minimum of 45 credits from courses in the areas of technology, communications, humanities, mathematics/natural science and social science. Of these 45 credit hours, 12 credits (4 specific courses) are common to all students. Appendix A contains a list of the courses from which students select their 45 credit hours.

**Issues and Activities**

At this time, there is progress being made toward a common set of learner outcomes and assessments to be used to measure the impact of the general education courses on students' learning. A number of discussions have taken place among general education faculty related to determining a method for assessing general education, including the use of Jack Meacham's "Assessing General Education" questionnaire.

Considerable discussion has also taken place regarding the possible use of a standardized test such as ACT's COMP, thus enabling comparisons to be made against other institutions. A number of obstacles make this option unlikely, including cost, time and fitting a college curriculum to a test. The results of most discussions regarding general education point to some type of broad institutional assessment.

As part of a review of program outcomes in the spring of 2001, general education faculty met to discuss the development of outcomes in the areas of communication, humanities, mathematical/natural science thinking and social sciences. Using the same format as program faculty, each area developed one broad "program" outcome. They are as follows:

- Communication: Graduates will apply coherent listening, reading, speaking, and writing skills using appropriate computer technology to communicate effectively in their career disciplines.

- Humanities: Graduates will demonstrate an awareness of the evolution of human cultures and an awareness of a diverse heritage of ideas, values, and their expressions.
- Mathematical Thinking/Natural Science Thinking: Graduates will demonstrate skills in mathematical reasoning, and application of critical thinking skills to analyze, to raise questions, to develop methods of proof, and to synthesize and integrate scientific information in laboratory settings.
- Social Sciences: Graduates will demonstrate knowledge of individual and group behaviors and their impact upon social institutions.

These outcomes represent the first step in the development of general education assessment at UMC. There are a number of issues related to the lack of a required sequence of courses that make it difficult to identify a common body of knowledge and skills at a specific point in time to complete such an assessment.

A review of the next section describing the core components reveals a certain amount of overlap in knowledge and skills that are included in the area of general education. Documenting and organizing this overlap is part of the next step in assessing general education. Addressing the issue of general education assessment has been identified as one of the priorities for assessment activities in academic year 2001-02 (see Appendix B).

### **Core Components**

Building on the work of an original Core Components Task Force established in 1993, UMC has revised and endorsed the following curriculum core components; communication, critical thinking and working with others. These components are concepts and skills emphasized in the teaching and learning process, not content taught in specific courses. The intent is that they be integrated into both the general education and program-specific courses. As defined by the institution, the core components are dominant themes, transferable skills and abilities essential to an individual's success in any occupation or life setting. The chart below details the various aspects of the core components.

<b>UMC Core Components</b>	
<b>Core Component</b>	<b>Performance Indicators</b>
<b>1. Communication</b>	
Listening	<ul style="list-style-type: none"> <li>• Understands intended messages.</li> <li>• Recognizes and compares multiple viewpoints.</li> <li>• Responds by analyzing, evaluating, and synthesizing information.</li> </ul>
Reading	<ul style="list-style-type: none"> <li>• Probes and researches to gain knowledge or information.</li> <li>• Restructures meaning through interpreting and summarizing information.</li> <li>• Responds to text by analyzing.</li> </ul>
Speaking	<ul style="list-style-type: none"> <li>• Applies basic speech principles to a variety of oral experiences.</li> <li>• Applies audience analysis to topic selection and speech organization.</li> <li>• Presents well organized, carefully supported speeches, which demonstrate mastery of content and sophistication of oral style.</li> </ul>
Using Technology	<ul style="list-style-type: none"> <li>• Understands technology applications.</li> <li>• Manipulate technology for desired results.</li> <li>• Implements complex new technology.</li> </ul>
Writing	<ul style="list-style-type: none"> <li>• Applies appropriate invention, drafting, revision, editing, and proofreading strategies to the recognition and establishment of purpose of writing.</li> <li>• Understands and uses critical thinking principles in the application of research and analytical skills development of the student.</li> <li>• Carefully considers audience in the creation of logical and coherent documents appropriate to discipline-related writing.</li> </ul>
<b>2. Critical Thinking</b>	
Problem Solving	<ul style="list-style-type: none"> <li>• Identifies and describes problems.</li> <li>• Creates and collects data related to problems.</li> <li>• Creates solutions to problems.</li> </ul>
Applied Learning	<ul style="list-style-type: none"> <li>• Identifies and follows oral and written procedures.</li> <li>• Proposes basic technological solutions.</li> <li>• Implements processes using technological</li> </ul>

	improvements and changes.
<b>3. Working With Others</b>	
Teamwork	<ul style="list-style-type: none"> <li>• Participates in and assumes responsibility for accomplishing team goals.</li> <li>• Understands teams strengths and limitations.</li> <li>• Encourages, supports, and evaluates team activities.</li> </ul>
Diversity	<ul style="list-style-type: none"> <li>• Recognizes differences and biases.</li> <li>• Responsibly challenges discriminatory practices and procedures.</li> <li>• Assesses and works to modify procedures that could be discriminatory actions.</li> </ul>

### Issues and Activities

The assessment of the core components is especially important considering its emphasis in the UMC Mission Statement. The core components were revised since the last revision to the assessment plan, reducing the original nine items to three. Work preceding the NCA Focused Visit indicated that progress was being made by faculty in the integration of the core components into their courses, as well as campus-wide with the initial administration of the Watson-Glaser Critical Thinking Appraisal to more than 250 UMC students. Considerable time was spent during the past year working on ways to build on this work.

Assessment of critical thinking was reviewed based on the initial work done the previous year. There were a number of concerns expressed regarding the conditions under which students took the test, and subsequently the results have not been widely disseminated or used. A small group of assessment committee members met during the spring/summer of 2001 and recommended that UMC switch to the California Critical Thinking Skills Test (CCTST) for further campus-wide testing. Factors affecting this decision included cost, automated scoring options and the potential for more closely related normative data. This recommendation was discussed with the full assessment committee, as well as included in a presentation at the UMC summer planning retreat for faculty and administrators. Appendix C provides additional information regarding the decision and the implementation plan. The implementation component took place as scheduled on August 27, with 176 new freshmen students completing the assessment. The results have been forwarded for scoring.

An important part of this aspect of the assessment process is the dissemination and discussion of the results of the CCTST to students and faculty, followed by the development and/or implementation of instructional strategies by faculty in the

classroom. Planning is currently underway for the dissemination of the results as well as workshops designed to assist faculty and staff to make use of the findings.

Campus-wide approaches to assessing the other two core components; communication and working with others are currently being discussed and are identified as priorities. A review of program outcomes over the past six months emphasized the integration of the core components into individual program and learner outcomes. This process is discussed in more detail in the following section of this report.

## **Academic Programs of Study**

UMC offers three types of degrees, the bachelor of science (B.S.) with 17 program areas and a variety of different emphasis options, two bachelor in an applied field, (Bachelor of Manufacturing and Bachelor of Applied Health), the associate in applied science (A.A.S.), the associate in science (A.S.) and the bachelor of science (B.S.).

### Issues and Activities

The UMC Assessment Plan (1995) contained four general categories of assessment – entry level, course outcomes, program outcomes and student/employer satisfaction. This format was revised somewhat in the report prepared for the NCA focused visit in March 2000. The new assessment process emphasized four basic components:

1. assessment of general education curriculum;
2. assessment of core components –
  - critical thinking – problem solving and applied learning.
  - communication – reading, writing, speaking, listening, using technology.
  - working with others – teamwork and diversity.
3. discipline-specific knowledge and skills.
4. connecting assessment findings to institutional decision-making.

These components provide a sound framework for the continued development of the assessment process and have been used during the work this past year. Building on the course and program outcomes already in place, a review process was undertaken in spring 2001. The first step in the process emphasized the development and/or revision of current program outcomes resulting in a set of program outcomes that included the key content and skills specific to the program along with outcomes that reflected the integration of the core components within the context of the specific program. Program outcomes were reviewed and discussed with assessment consultants as needed or requested.

The second step in the review process was the development of a set of learner outcomes for each program outcome. In addition to identifying the learner outcomes, program personnel documented the courses or activities in which the learner outcomes were addressed and the assessment activities used to measure the outcomes. At this

point the assessment consultants reviewed each set of learner outcomes and met with individual program personnel. The review was guided by a set of questions addressing each aspect of the process, i.e., program outcome, learner outcome, where the outcomes are taught and the assessment activities (see Appendix D). Examples of completed sets of outcomes are found in Appendix E. Every program has completed this first review of their program outcomes. However, this process is seen as a first step only. The expectation is that programs will continue to review their outcomes and assessment activities to ensure they are aligned with what is actually occurring in the classrooms.

Expanded connections between assessment results and institutional decision-making are being developed. The campus curriculum committee is currently considering a new degree program review process. This review process includes the inclusion of learner outcome assessment data. As a part of the overall budget process and the University of Minnesota Compact process funds have been allocated to support assessment and responsibilities for guiding the assessment plan have been assigned to the Academic Affairs office and the campus assessment committee.

This process was very interactive, with a high level of faculty involvement. A faculty development workshop was held in August to review the status of the program and learner outcomes review. Thirty-five of the fifty full-time faculty participated in this workshop.

## **UMC ASSESSMENT PROCESS**

The basic framework for assessment is in place at UMC regarding what to assess and the types of data to collect. The assessment matrix on pages 12 and 13 provides a general overview of the major elements of the assessment plan. A critical task to be accomplished is connecting assessment findings to institutional decision-making. This means developing an ongoing institutional system to monitor what is being done, collect and analyze the information from an institutional perspective, and report the results to the UMC community.

### **Key Assessment Elements**

In addition to providing an overview of the assessment plan, the matrix details key elements of the assessment process. While there are still decisions to be made regarding the assessment of some of these components, the critical step of connecting assessment findings to institutional decision-making can proceed by focusing on the pieces of the plan that are in place and creating the communications or feedback flow. This step has been identified as a priority during the 2001-02 academic year.

A priority in developing the feedback process is the designation of an individual or institutional entity with responsibility for coordinating, implementing, monitoring and reporting of assessment activities and data. This entity at UMC is currently an

assessment committee comprised of faculty and administrators and assisted during the past six months by contracted consultants. The intent during the upcoming year is to integrate assessment activities and responsibilities into the organizational structure of UMC, therefore institutionalizing the process. A variety of options will be considered including designating assignments to current faculty and/or staff and the creation of an assessment unit. Additional funding to support this activity has been requested as a part of the University of Minnesota's budgeting process.

The diagram on page 14 visually depicts the flow of activities and information for one piece of the assessment plan as it is implemented, analyzed and reported for use in decision-making. Using critical thinking as an example, this diagram shows the two levels at which assessment needs to be addressed – at the program level and the institutional level. In this situation, the assessment committee is responsible at the institutional level for the campus-wide administration of the CCTST, getting the test scored and results analyzed. Most importantly, the committee is responsible for reporting the results to the UMC administration and program managers and faculty. (Students will also need to be informed of the results – but in another feedback loop.)

At the program level, critical thinking has been integrated into program and/or learner outcomes that should be assessed in some form through course assessments, internships, etc. Because the assessment process is still in the developmental stage the assessment committee will currently have to be involved in assisting program personnel refine their alignment of outcomes and assessment activities related to critical thinking. The results of program data on critical thinking will also be fed back to the assessment committee, but will also be used by faculty and each program's Program Improvement Audit Committee (PIAC) for program improvement.

A fundamental feature of the feedback process described is that information from both levels is shared and discussed with the larger UMC community. It is especially important that data be presented to the UMC administration in a format that can be used in the decision-making process.

At this time the faculty has moved to incorporate assessment activities into their processes for evaluating their teaching. The Vice Chancellor for Academic Affairs has assumed overall coordination of assessment activities utilizing an assessment coordinator, a campus assessment committee and outside consultants. The next step in further development of the assessment plan is to follow a similar process for each assessment activity.

### **Assessment Priorities for 2001-02**

In the 18 months since the NCA visit, UMC has invested considerable resources in further developing their assessment activities to address the concerns expressed in the NCA report. Appendix F provides a chronology of activities undertaken during that time.

Despite the progress that has been made during the past 18 months, it is imperative that the process continues to maintain the momentum that has built. UMC faculty and administration have shown a strong commitment to the process and there is wide spread ownership of progress that has been made. Assessment activities recommended for the 2001-02 academic year are listed in the chart on page 15. An important activity that is not specifically listed is the continual process of documenting the work and making the connections between the various components that show the types and levels of student learning that is occurring. As each piece is completed the documentation is added to an evolving assessment plan that provides meaningful information for all UMC constituencies.

## **Levels of Implementation at UMC**

Utilizing the Assessment of Student Academic Achievement: Levels of Implementation guidelines provided in the March 2001 Addendum to the Handbook of Accreditation-Second addition, the following is a summary of UMC's self-assessed status at this time.

### **I. Institutional Culture:**

#### **a. Collective/Shared Values**

UMC is currently functioning at level two with a shared understanding of the "purposes, advantages and limitations of assessment". We have progressed toward level three with developed activities in all academic programs.

#### **b. Mission**

During the past year a revised mission statement was developed by the campus and approved by the University of Minnesota Board of Regents that affirms the high value UMC places on student learning and thus would approach level three in this category.

### **II. Shared Responsibility:**

#### **a. Faculty**

From the development of a faculty directed assessment committee to the individual commitment of program managers, UMC has progressed to many of the activities outlined in level two. Faculty participation in the numerous activities outlined in this report has been outstanding. There continue to be faculty who are in the early stages of understanding the dimensions of assessment but significant progress has been seen.

#### **b. Administration and Board**

The University of Minnesota Board of Regents governs UMC and reports of UMC's progress have been reported to this body. More clarity of responsibility and commitment on the part of the CEO and CAO of the organization has been achieved. Current level of functioning is level two with specific activities formulated to move to level three.

**c. Students**

Student involvement in assessment groups has been achieved and information sessions for students have been delivered. A broader level of student involvement will be needed to move to level three.

**III. Institutional Support:**

**a. Resources**

The first direct dollars for assessment activities have been allocated, with an ongoing commitment and requests for additional funding. Grant proposals to gain support have also been developed. Committee members have attended assessment conferences and professional consultants have been hired. UMC is making progress and functioning at level two.

**b. Structures**

Decisions are being made regarding the leadership and coordination of the assessment activities that would indicate that UMC's structure for support is moving to level two.

**IV. Efficacy of Assessment**

Actual utilization of the results of assessment activities is at the beginning stage of implementation and is the target of activities planned for the coming year. Level one.

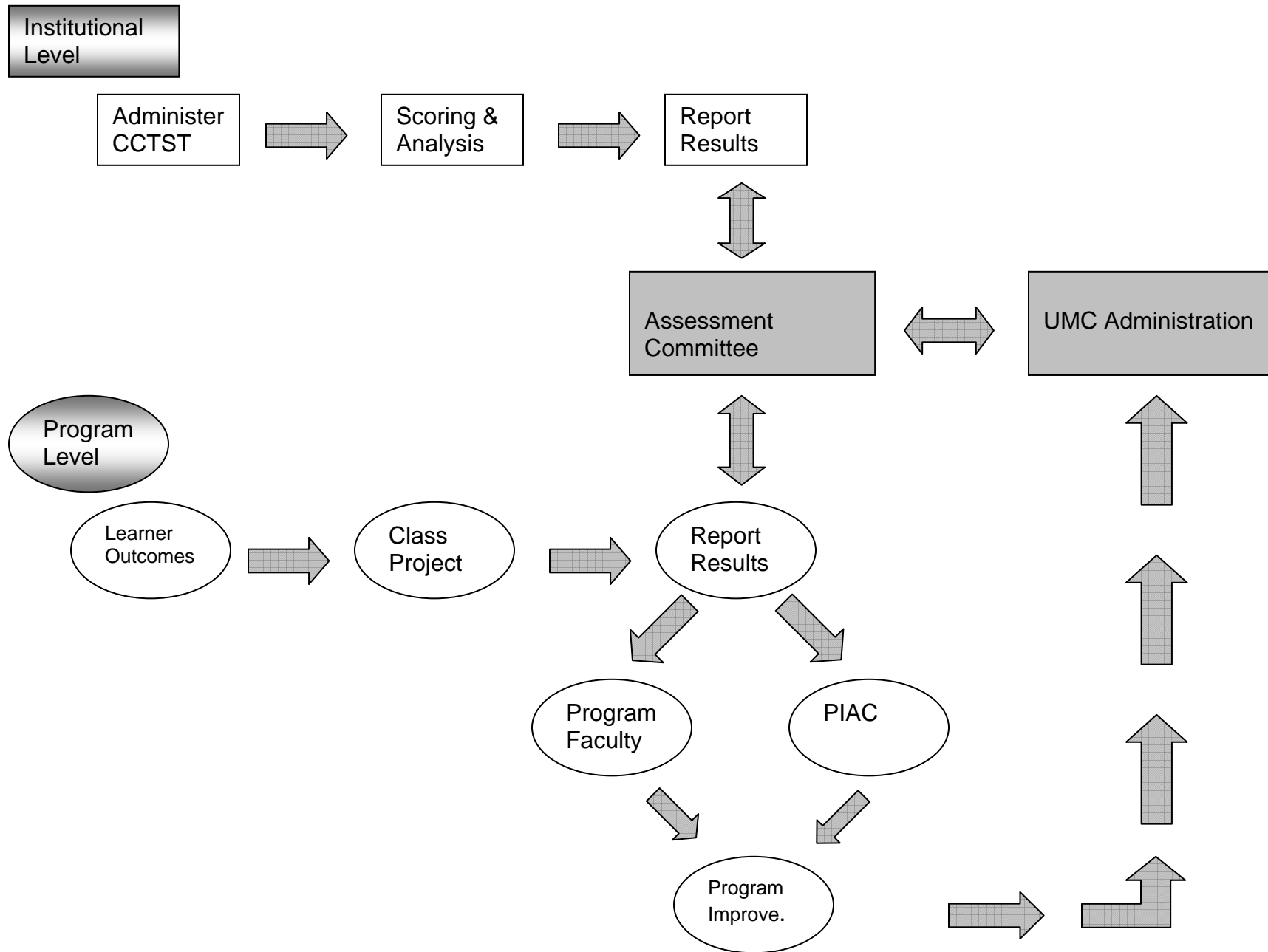
**UMC Assessment Matrix**

<b>Assessment Components (Student Learning)</b>	<b>Assessment Criteria</b>	<b>Assessment Activities and/or Measurement Tools</b>	<b>Tasks and Responsibilities</b>
<b>General Education</b>	"Program" Outcomes <ul style="list-style-type: none"> <li>• Communication</li> <li>• Humanities</li> <li>• Mathematical Thinking/Natural Science Thinking</li> <li>• Social Sciences</li> </ul>	Institutional Writing Assessment (I) Portfolio Course-based assessments Research projects Group projects Labs Demonstrations	VCAA/AC responsible for guiding development of general education assessment.  AC and faculty responsible for developing or selecting general education assessment process.  AC/Faculty/Center responsible for feedback to program and institutional level.
	Course Objectives		
<b>Core Components</b>	Critical thinking <ul style="list-style-type: none"> <li>• Problem solving</li> <li>• Applied learning</li> </ul>	California Critical Thinking Skills Test (I) Review of critical thinking strategies within programs (I) Portfolio Course-based assessments Research projects Group projects Labs Demonstrations/Displays Applied Projects Simulation Activities	AC responsible for coordinating administration of CCTST. AC responsible for CCTST results to be analyzed and reported to students, faculty and VCAA. VCAA/AC responsible for faculty development to assist with integration of critical thinking into programs/courses. Program/Center faculty responsible for revising/implementing instructional strategies and assessment activities related to critical thinking.
	Communications <ul style="list-style-type: none"> <li>• Reading</li> <li>• Writing</li> <li>• Speaking</li> <li>• Listening</li> <li>• Using technology</li> </ul>	Review of standardized reading test scores (I) Institutional Writing Assessment (I) Technology "Certification" (I) Portfolio Course-based assessments Research projects Group projects	Academic Advisors/Faculty responsible for identifying student reading problems and referring to appropriate resource. AC and Composition faculty responsible for administering, scoring writing assessment. AC responsible for results to be analyzed and reported to students, faculty and VCAA. AC/VCAA/Faculty responsible for developing/identifying technology "certification" process.

	Working with others <ul style="list-style-type: none"> <li>• Teamwork</li> <li>• Diversity</li> </ul>	Employer survey (I) Alumni survey (I) Portfolio Group projects Internship evaluation	VCAA/AC/Faculty responsible for developing or identifying campus-wide process for assessing this concept.
<b>Discipline Specific Knowledge and Skills</b>	Program Outcomes	Employer survey (I) Alumni survey (I) Placement survey (I) Internship evaluation (I) Pre-post tests Portfolio Course-based assessments Research projects Group projects Capstone course Labs Demonstrations/Displays Applied Projects Case Studies Simulations Certifications Journals	VCAA/AC/Program Managers responsible for setting up feedback process to review various assessment activities. AC responsible for coordinating administration of surveys, data analysis and reporting. Center Directors/Program Managers responsible for review of institutional assessment data and utilizing it for program improvement. Program Managers/Faculty responsible for reviewing program assessment data to see if program outcomes are being met and making changes as appropriate. Center Directors/Program Managers responsible for communications with PIAC's and other external constituencies to maintain industry connections and feedback on students/programs.
	Learning Outcomes		Program Managers/Faculty responsible for reviewing program assessment data to see if learning outcomes are being met and making changes as appropriate.
	Course Objectives		

# Assessment Feedback Process – Connections to Decision-Making

## Core Component – Critical thinking



## UMC Assessment Activities for 2001-02

Assessment Activity	Time Line	Tasks
General Assessment Administration	Ongoing.	Guide assessment committee, maintain communications with UMC administration, NCA, etc.
California Critical Thinking Skills Test	Test administration on August 27, 2001; reporting by Nov. 1; Seminars in Nov/Dec.	Planning, administration, analysis, reporting; develop and organize seminars.
Writing Assessment (Sample of 100?)	Writing samples during first week of 2001 fall classes; reporting by November 1.	Planning, administration, scoring and reporting.
Assessment Newsletter	Monthly starting September 2001.	Select information for updates, write newsletters, distribution.
Update and/or revise program and learning outcomes.	Completed by May 2002.	Communications, monitoring process, collecting, reviewing, documenting and reporting.
Employers' Survey	Field test – Summer 2002.	Coordinate discussion of campus-wide process, develop survey, planning (set up cycle, participants, procedures, etc.).
Internship Assessment	Campus-wide system in place by August 2002.	Coordinate discussion of campus-wide process, identify programs to participate, develop or revise procedures, planning.
Alumni Survey	Implement in Summer 2002.	Coordinate discussion of campus-wide process, develop or revise procedures, planning.
General Education Assessment	Decision on how to do it by May 2002.	Coordinate discussion, work with general education faculty, develop outcomes, identify assessments.
Develop Assessment Feedback Process	Completed by May 2002	Use assessment plan to develop procedures for communicating assessment results, identifying participants, etc.