

# Assessment of Student Learning at Anoka-Ramsey Community College

June 2006

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# Assessment of Student Learning at Anoka-Ramsey Community College

## *Section 1: Introduction*

### *Overview*

With more than two dozen degree and certificate programs, Anoka-Ramsey Community College has a full range of curricular options for students. These options continue to grow as new programs are added and existing programs are changed. Assessment of student learning at the College has developed into a flourishing but complex program in recent years, with increased focus on student learning goals and student outcomes. This report presents a snapshot of the assessment program, with particular attention on how the College uses assessment results. The report is organized into sections covering these topics:

- Current context of assessment (Section 1: Introduction)
- Historical context (Section 2: History of Assessment Efforts)
- Results of assessments in major goal areas (Section 3: Assessment Results)
- Evaluation of the assessment program (Section 4: Evaluating Assessment)
- Conclusions and recommendations (Section 5: Conclusions and Recommendations)
- Attachments (Section 6: Assessment Work Plans, Assessment Handbook, Goals for Student Learning)

### *Philosophy and Mission*

According to its mission statement, Anoka-Ramsey Community College is committed to “excellence in teaching and learning” and to “responding to the educational needs of its changing communities.” Assessment of student learning serves both of these aims because it can provide us with the information about our students, our curriculum, and our community that we need to strengthen learning and improve programs.

The College’s academic programs are grounded in four guiding principles (Guiding Principles for Curriculum Development and Assessment), which were developed through a college-wide process in the early 1990s. These principles, which have shaped the development of all courses and programs at the college, are focused in four critical areas of student learning. The Guiding Principle statements are excerpted below:

Anoka-Ramsey Community College continually reviews and assesses its curriculum. Throughout this process, the College is committed to developing students’ commitment to lifelong learning through clear thinking, effective communication, accepting diversity, and ethical decision making.

As a result, the College will provide learning experiences that promote:

- thinking through reasoning, creating, and reflecting
- integrating information with experience and expressing insights
- understanding and respecting individuals and local, regional, national, and global communities
- maintaining responsibility for environmental, political, economic, social, and personal concerns

### *Strategic Planning*

The College recently completed a six-month-long study that culminated in the creation of six strategic objectives covering a five-year period from 2004 through 2009. Three of the objectives relate directly to the College's efforts to assess student learning. These include:

- Objective I: Anoka-Ramsey Community College will excel in teaching and learning by promoting and demonstrating classroom effectiveness; applying innovative strategies to enhance teaching and learning; and increasing student success as measured by student learning, achievement of student goals, and student contributions to the community.
- Objective II: Anoka-Ramsey Community College will excel in student development and support services.
- Objective V: Anoka-Ramsey Community College will enhance existing career and transfer programs and establish new areas of study that respond to the needs of the community, employers, and the state.

### *Organization and Coordination of Assessment*

Responsibility for assessment of student learning is distributed broadly throughout the College. Administratively, the College President has been instrumental in supporting assessment efforts, primarily through the strategic-planning process. The Vice President of Administration has contributed through his support of funding the budget for assessment activities. The Vice President of Educational Services has played the most active role in assessment of student learning, through her supervision of the academic deans and through her participation on the Academic Affairs and Standards Council (AASC).

The faculty also has a strong voice in the College's assessment program, primarily through the Academic Affairs and Standards Council (AASC). The AASC is a contract-mandated body that is composed of two-thirds faculty members and one-third administrators with decision-making authority over all matters related to academic affairs, including "course outlines, award requirements, academic standards, course and

program components, and the inventory of course and program requirements” (MSCF Master Agreement 2005-2007, p. 10).

The AASC reviews all proposals to change the curriculum, including course changes, additions, and deletions. The primary document for establishing a course is called the Common Course Outline (CCO), which contains sections for course learner outcomes, outcomes that meet the four guiding principles, and outcomes that meet one or more goals from the general education curriculum. The CCO also contains a section that briefly describes whether the course contributes to assessment efforts within a degree or certificate program. The format of the CCO has evolved over the years, most significantly in the area of assessment. Because CCOs are scheduled for review on a three-year cycle tied to program review, many of them do not currently have the most up-to-date description of program assessment activities. This deficiency should be addressed over the next few years as a specific outcome of program review activities.

The AASC also reviews proposals related to degree and certificate programs. For new programs, the documentation required by the Minnesota State Colleges and Universities (MnSCU) System Office calls for the development of program goals. Until recently, however, the College did not require documentation showing that program goals and program assessment plans are current. The AASC has just instituted a new program form, called the Program Assessment Plan, which documents student learning goals and assessment plans for a program. This form is required when new programs are proposed and when existing programs are changed. It will be incorporated into our program documentation over the next few years as various programs rotate through the Program Review process.

The Program Review process is another method by which the AASC has review authority over programs and their plans to assess student learning. Program review is mandated by MnSCU policy 3.10, which requires an annual report to the Chancellor of program review activity. College policy 3B.1 outlines the requirements for program review, including the purpose of “continuous improvement in program efficiency, in program effectiveness, and in delivery of quality instruction.” Degree and certificate programs, along with Developmental Education and Continuing Education/Customized Training, are scheduled for program review every three years. Although the College has had plans to engage in program review for more than 10 years, it only recently has begun to follow through on the plan. As a result, the most recent program reviews have not been as thorough as they should be on the issue of examining student learning. For example, recent reviews in the Pre-Engineering and Computer Science programs resulted in identifying assessment weaknesses, such as missing goals for student learning, but failed to correct those weaknesses within the review.

In addition to participation on the AASC, College faculty members have also been involved in assessment in less formal ways, such as assessment conferences and workshops, faculty development programs, and work within departments and divisions. Over the past two academic years, the College has appointed faculty members to serve as Assessment Coordinators, with the primary responsibility of working with the faculty

on training and implementation of assessment methods. During the 2004-2005 academic year, two faculty members served as Assessment Coordinators, each with 50% released time. During the 2005-2006 academic year, a single faculty member served as Assessment Coordinator, with 100% released time. As of this writing, the College is still making plans for next year, but the intent is to spread the available released time over a larger number of faculty members to broaden the participation across disciplines and campuses and to develop assessment expertise in a larger pool of faculty members.

The College currently does not have a formal assessment committee. In past attempts to implement an assessment plan, the College experienced difficulty surrounding the creation of an assessment committee. It was not well understood by faculty members, some of whom perceived it as having too much of an oversight role that could potentially infringe upon academic freedom. As a result, earlier attempts to organize an assessment committee largely failed.

The alternative to creating a formal assessment committee has been to allow assessment work to evolve in a more or less organic way at the College. Assessment activities are developed and coordinated by the Assessment Coordinators and a supervising Dean, but work among the faculty has been focused on groups that are willing to take initiative and experiment with assessment methods. We have been successful in getting assessment activities to “take root” using this method, but the assessment program has grown to the point of needing more formal coordination. It is very possible that the shift toward more faculty members serving (in a smaller capacity) as Assessment Coordinators will evolve into a formal assessment committee. This is an issue that will require further study.

## **Section 2: History of Assessment Efforts**

### *Early History*

The Higher Learning Commission first stated an expectation about assessment of student learning in October of 1989. In the early 1990s, the College undertook a comprehensive review of its curriculum, which led to the development of college-wide goals for student learning in 1993. In 1994 the College began preparing for a comprehensive visit by the North Central Association, and developed a formal plan to assess student learning and institutional effectiveness. The plans developed during the 1994-96 self-study were: *A Plan for Assessment of Student Academic Achievement: Linking Assessment to Improvement*; and, *Assessment of Institutional Effectiveness: A Multi-faceted Program of Learning Opportunities and Student Resources*.

The period of the 1994-96 self-study was a time of tremendous change for the college, with implementation of the Minnesota Transfer Curriculum during the 1994-95 academic year; creation of the MnSCU system on July 1, 1995; preparation for conversion from quarters to semesters, which was implemented in the Fall of 1998; significant budgetary constraints during the 1995-96 academic year; and a period of substantial administrative turnover and reorganization. In light of these challenges, the 1996 self-study process identified strengths and areas of concern related to the College's assessment program, including (quoted directly from the 1996 self-study):

#### Strengths

1. The College's assessment plan was developed through College-wide participation
2. The responsibility for assessment and the evaluation of assessment results for each area or discipline in the College belongs to the specific area or discipline which developed the assessment methods/plan
3. A faculty person accepted the position of Coordinator of Student Academic Achievement Assessment beginning spring quarter, 1996
4. At the end of July 1996, a faculty member was given the responsibility of summarizing assessment results not already summarized by the Coordinator of Student Academic Achievement Assessment

#### Areas of Concern

1. As a result of developing the College's transfer curriculum, developing common course outlines, preparing for the change from quarters to semesters, and "enduring" other changes within the College and the newly merged MnSCU System during the period of 1993-96, some colleagues were reluctant to assist in the development of assessment methods
2. Throughout the College's assessment plan references are made to responsibilities of the Director of Institutional Research. Although the Director of Institutional Research position was supported throughout the College, this position has not been filled due to budget constraints

3. Advertising the position of Coordinator of Student Academic Achievement Assessment was delayed until winter quarter, 1996, as a result of budget constraints
4. Coordination and funding is needed to fully implement the College's assessment plan

The site visit report submitted after the comprehensive visit in 1996 indicated that the College had submitted an acceptable assessment plan but questioned the implementation of the plan. The report stated:

“The College, as a whole, and the faculty, in particular, have yet to implement the Plan for Assessment of Student Academic Achievement in a manner that will lead to evaluation and improvement of its educational programs.”

The report identified three factors that appeared to impede the implementation of the plan: (1) the complexity of the plan; (2) the absence of an institutional researcher; and (3) the high degree of turnover among academic administrators. However, with the recent appointment of an assessment coordinator and beginning strides toward collecting assessment data, the visit report concluded that the College's “ongoing efforts...will be sufficient to implement a process which assesses student achievement and suggests ways to improve instructional programs.”

The College's ongoing efforts proved to be insufficient in succeeding years, as the implementation of the assessment plan faltered. Attempts were made to streamline the assessment plan, but the revised plan was not implemented due to the continued turnover among academic administrators and the continued absence of an institutional researcher. (The College did post a position in 1998 for a Director of Institutional Marketing, Research, and Planning, but this position never resulted in significant progress in generating institutional research.) As a result, very little program-level assessment took place between 1998 and 2002. However, many faculty members took leadership of a classroom research movement and promoted the use of Classroom Assessment Techniques (CATs) and subject exams during this time. Although CATs and subject tests were very useful for individual faculty members implementing changes within specific courses, the assessments were not coordinated at the program level.

### *Recent History*

In the fall of 2002, the College hired a new Dean of Educational Services, Mary Raeker-Rebek, who brought with her a background in assessment, research, and program evaluation. Her questions about the College's plan to assess student learning led to greater awareness of our recent lapse and a renewed determination to develop and implement a streamlined assessment plan.

During the 2002-03 academic year, the College hired a Director of Institutional Research, with the expectation that a significant portion of her duties would be directed toward assessment of student learning. The College also sent a team of faculty and

administrative leaders to the AAHE/HLC workshop on “Changing Institutional Priorities: Developing a Shared Understanding of the Value of Assessing Student Learning” in the spring of 2003. During this workshop, the team sketched out a plan to assess student learning, with the overarching, long-range goal of creating an institutional culture of assessment.

The sitting Vice President of Educational Services (the College’s Chief Academic Officer) accepted a position as a college president during the summer of 2003 and the position of Vice President of Educational Services remained vacant during the 2003-04 academic year. Nevertheless, the College continued to make strides toward developing a workable assessment plan under the leadership of a Dean (Mary Raeker-Rebek) and the faculty Chair of the Academic Affairs and Standards Council (Jim Biederman). The College sent a second team to the AAHE/HLC assessment workshop in the fall of 2003, which led to a refinement of the assessment plan, particularly in the Student Services area.

The College began the self-study process for the 2006 comprehensive visit beginning in the spring of 2004, but the Steering Committee made very little progress with the continued vacancy in the Chief Academic Officer position. This position was filled during the summer of 2004 and the new Vice President started the Fall 2004 semester with a clear focus on advancing the self-study process and supporting the developing assessment efforts.

Two significant developments occurred during the 2004-05 academic year. One of these developments involved the purchase of a software system, called eLumen, for collecting, organizing, and tabulating assessment data. The program was still in development when the College adopted it, but this ended up being a benefit because College input became an important driver in shaping the software components. The first student learning data were entered into the eLumen system beginning in the summer session of 2004 and have increased with each successive academic year.

The second major development during the 2004-05 academic year was the appointment of two half-time faculty assessment coordinators. The assessment coordinators were charged with two primary responsibilities: (1) training faculty and staff about assessment principles and methods; and (2) assisting faculty in the implementation of assessment techniques. Under the supervision of Mary Raeker-Rebek, the assessment coordinators were involved in a number of assessment-related activities, including:

- attending local and national assessment conferences
- leading college-wide training sessions during fall and spring faculty development days
- meeting with faculty members in groups and individually to facilitate assessment activities
- developing the first edition of the Assessment of Student Learning Handbook

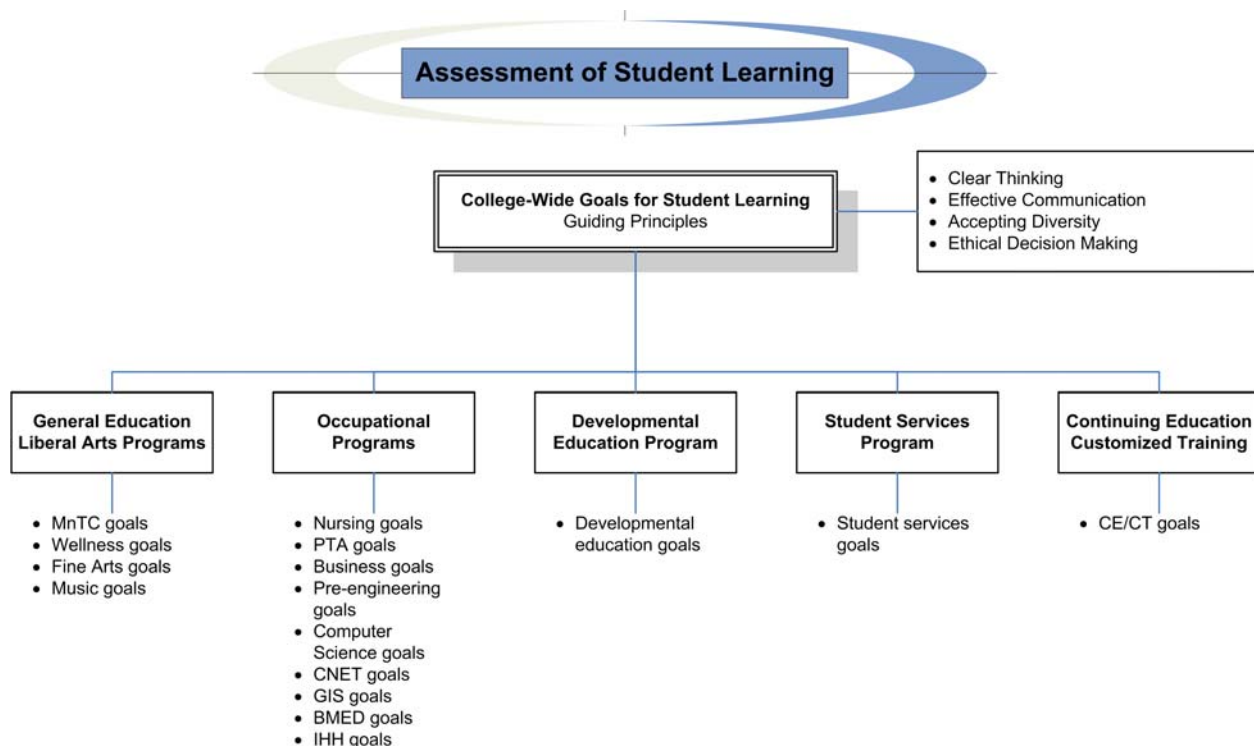
- participating in a third AAHE/HLC assessment workshop on “Making a Difference in Student Learning: Assessment as a Core Strategy”
- extending assessment activities in the student services, continuing education, and customized training units of the College
- participating on the self-study steering committee and subcommittees to help with the integration of assessment and accreditation
- facilitating use of the eLumen program

During the 2004-2005 academic year the College witnessed a surge of activity focused on both self-study/reaccreditation and assessment. The assessment coordinators and supervising dean made a concerted effort to clarify the relationship between HLC accreditation and assessment, to dispel the notion that the two efforts were synonymous. Although there was close coordination between the assessment team and the self-study steering committee, the consistent message delivered to College faculty and staff was that assessment was an on-going program that was sparked by the HLC self-study but that extended far beyond reaccreditation. To quote a passage from the current edition of the Assessment Handbook, “Assessment is really not about complying with external mandates from system offices or accrediting agencies. These external forces are on the periphery of our assessment efforts, but they should not prescribe what we deeply care about as a college” (Assessment of Student Learning Handbook, 2006, p. 1).

As of November 2004, the College’s plan to assess student learning had evolved to include one overarching goal and five more specific subsidiary goals, with progress projected over a five-year period. The six goal areas included:

1. An institutional culture of assessment and program improvement
2. Assessment of the General Education Program at multiple points with results incorporated into improving student learning
3. Expanded program assessment in technical and career programs
4. Assessment of student learning integrated within student services
5. Development of assessment strategies for the Continuing Education/Customized Training unit of the College
6. Development of assessment strategies for Developmental Education

These goal areas helped to focus the assessment efforts at the College and are used as an organizing framework for presenting assessment results, in Section 3 of this report. The goal areas are also reflected in an organizational chart created to depict the different elements of the college assessment plan:



During the 2005-06 academic year the College continued its commitment to faculty assessment coordination by appointing a faculty member to serve as a full-time assessment coordinator. The charge for the assessment coordinator continues to be focused on training and facilitation, but also has begun to focus more and more on the implementation and use of assessment techniques. Under the continued supervision of Mary Raeker-Rebek, the assessment coordinator has most recently been working on:

- attending local and national assessment conferences, including a presentation at the Association for Institutional Research in the Upper Midwest
- developing the assessment portion of the College website ([www.anokaramsey.edu/assessment](http://www.anokaramsey.edu/assessment)), launched January 2006
- evaluating and communicating the results of the 2005 Community College Survey of Student Engagement (CCSSE)
- meeting with faculty members in groups and individually to facilitate assessment activities
- developing the second edition of the Assessment of Student Learning Handbook, published January 2006
- integrating student services data into the College assessment plan, particularly in light of student engagement data
- participating on the self-study steering committee and subcommittees
- facilitating use of the eLumen program
- developing strategies to evaluate the assessment program, including a college-wide assessment survey, administered in January of 2006

The assessment work for the 2005-06 academic year was guided by a work plan that was developed from the six goals in the 2004 assessment plan. The work plan for 2005-06 included 25 specific objectives, addressing the steps needed in each of the six goal areas. The work plan is available to staff in several places, as a resource document within the Assessment of Student Learning Handbook and within the assessment section of the College website. It is also in the attachment section of this report.

Future work on the College's assessment plan may be facilitated by participation in the Higher Learning Commission's Assessment Academy. The College has expressed interest in becoming a member of the first cohort of institutions when the Academy gets underway in the fall of 2006. Preliminary information suggests that the Academy will be structured around projects that each institution will propose and work on over a four-year period, with advice and collaboration from HLC staff and peer institutions. Given the College's history of inactivity on assessment following the last NCA site visit, this Academy could be very helpful in maintaining commitment and momentum following the 2006 visit.

### **Section 3: Assessment Results**

#### ***Goal 1: An Institutional Culture of Assessment and Program Improvement***

The College established a lofty goal in its 2004 assessment plan—to achieve an institutional culture of assessment and program improvement. The 2004 plan identified six concrete steps to begin movement toward a culture of assessment, including: formation of an assessment committee; incorporation of assessment into faculty development activities; development of resources to help faculty do assessment; involvement of students in assessment; coordination of assessment activities by faculty and administrative leaders; and development of strategies to communicate about assessment.

Much of the progress made over the past two years is summarized in various sections of this report, including recent history (Section 2) and assessment results in specific programs (this Section). As a brief summary, here is a list of recent accomplishments that contribute toward an institutional culture of assessment:

- Student learning goals have been established for all degree and certificate programs and have been published in the College Catalog
- Student learning goals have also been established for Developmental Education, Student Services, and Continuing Education/Customized Training
- Student learning outcomes (“Competencies”) have been cross-referenced with program courses and activities (“Competency Maps”) for General Education, Business, and Student Services
- Faculty development activities feature assessment of student learning as a regular topic
- Students are introduced to learning goals and assessment methods during new student orientation (on campus and online)
- Information about assessment, including results, is available online for students, faculty and staff, and the general public ([www.anokaramsey.edu/assessment](http://www.anokaramsey.edu/assessment))
- Assessment of student learning handbooks are available for all faculty and staff
- A growing library of assessment resources is available in the Faculty Resource Room on the Coon Rapids Campus
- The College has invested in a software program (eLumen) to facilitate management of assessment data
- An increasing number of faculty and departments have become involved in collecting and using assessment data

While we have made strides in the directions established in the 2004 assessment plan, it is fairly easy to conclude that we have not yet reached the ultimate goal of an institutional culture in which assessment results are consistently used to make improvements to programs. Despite participation in assessment activities, many faculty

and staff members appear to be skeptical about the motivation behind the assessment movement and about the utility of assessment results, as evidenced in a recent survey.

During the spring of 2006 a brief survey was created to gauge the institutional climate around assessment. All employees were invited to complete the anonymous survey, which was administered online over a two-week period. Respondents were asked about:

- job assignment (primary assignment, campus assignment, years of service)
- level of understanding of assessment
- quality of training and preparation provided about assessment
- availability of rewards to facilitate assessment
- presence of obstacles to thwart assessment
- perceptions about the purposes and audiences of assessment

A total of 127 staff members responded to the survey, including 26 from the Cambridge Campus and 101 from the Coon Rapids Campus. Reported years of service ranged from a low of 1 to a high of 35, with a mean of 10.3 and a median of 6. The sample included full- and part-time faculty, administrators, professional staff members, and support staff members, in the following proportions:

Primary Assignment	Frequency	% of Sample
Full-time faculty	76	59.8%
Part-time faculty	25	19.7%
Administrator/supervisor	11	8.7%
Professional staff	11	8.7%
Support staff	3	2.4%
Other	1	0.8%
Total	127	100.0%

Few support staff members completed the survey, most likely because they have had minimal involvement (to date) in the assessment program. A recent staff development day included overview information about assessment, but these training efforts for college staff will need to be expanded in the future.

Survey respondents were asked to rate their current level of understanding about assessment on a five-point scale ranging from very low to very high. The mean response on this question was slightly above the midpoint of the scale, with a majority of respondents selecting the “average” response. Rated level of understanding did not vary between the two campuses nor between full- and part-time faculty members.

The survey also included a question in which respondents were asked to rate their satisfaction with training and preparation on the process of assessment. A five-point rating scale was used in this question, ranging from “very unsatisfied” to “very satisfied.” The results for this question were similar to the previous question on understanding, with an average slightly above the middle of the scale and most respondents selecting the middle response (“neutral”). Satisfaction ratings did vary by campus, however, with less satisfaction reported by respondents from the Cambridge Campus (Cambridge = 2.92; Coon Rapids = 3.43;  $t[125] = -2.50, p = .01$ ). Although faculty and staff members from the Cambridge Campus have been included in many training sessions on assessment, most of the ongoing coordination of assessment is done through the Coon Rapids Campus, contributing to the perception that the Cambridge Campus is neglected. Future training and coordination plans will need to address the problem of including the Cambridge Campus more fully, ideally with the addition of on-site assessment resources.

Two questions on the survey asked respondents to rate the level of rewards available to encourage faculty and staff to work on assessment and to rate the presence of obstacles that might impede assessment work. There was a modest correlation between the ratings on these two items,  $r(120) = -.33, p < .01$ , indicating that those who perceived rewards as high tended to rate obstacles as low (and vice versa). Although the modal response on each question was the middle point (fair rewards and moderate obstacles), there was a significant difference between the two ratings, with rewards rated lower than obstacles,  $t(121) = -3.48, p < .001$ .

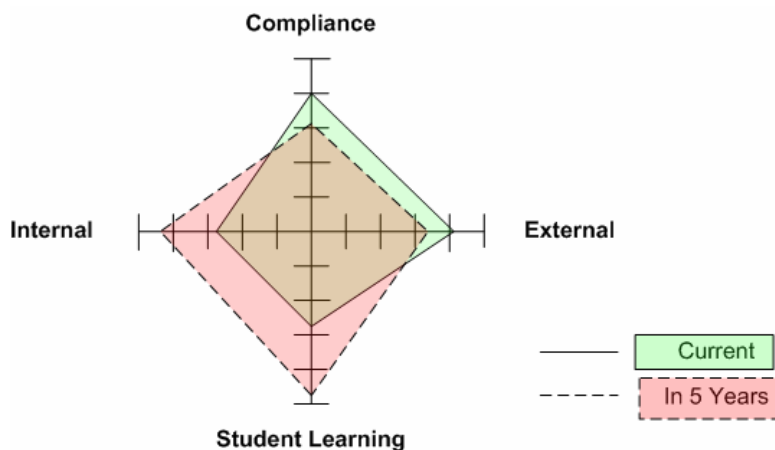
One very important issue in creating an institutional culture of assessment is the degree to which faculty and staff members feel ownership in the assessment process and assessment results. To assess this issue, four questions were included on the survey asking respondents to rate the degree to which assessment serves internal versus external audiences and the degree to which assessment is focused on compliance versus making improvements in student learning.

The results revealed a strong perception that our assessment efforts are focused more on external audiences and compliance than internal audiences and improving student learning (both differences were significant at the  $p < .001$  level).

Respondents were also asked to rate where our assessment program should be focused five years from now on these same dimensions (internal vs. external; compliance vs. student learning). These ratings showed a consensus perception that our assessment efforts should be more focused on internal audiences than external and more on improving student learning than compliance (both differences, again, were significant at the  $p < .001$  level).

The questions about compliance vs. student learning and internal vs. external audiences were developed based upon an assessment activity that Thomas Angelo

conducted at the 2005 Assessment Institute in Indianapolis.<sup>1</sup> During this session, Angelo introduced these questions as a way of evaluating where an assessment program is now and where it would like to be in five years. He recommended plotting the results on a grid to represent the desired change visually. The figure below represents the mean responses given on the survey for the eight questions addressing audience and purpose, currently and five years in the future, making clear the overlap and discrepancy between the present and the predicted future.



Evaluation and Use of Assessment Results: The development of an institutional culture of assessment is clearly a long-range, open-ended goal that will require long-range and open-ended efforts. The College has made significant progress in assessment of student learning over the past two years, but it is clear from the 2006 assessment survey that many faculty and staff question the current focus of these activities.

Taking a long view of our work, it is clear that we have just begun to engage our college community in serious conversations about assessment of student learning. Much of our recent work has been directed at the mechanics of how to do assessment, which might miss the larger picture that these survey questions addressed. We have learning outcomes, pockets of evidence, analysis tools, and dispersed responsibility for assessment, but we need to continue working on developing a distinctive, learning-focused mission, collecting useful evidence of student learning, and developing a broad and deep feeling of ownership of the assessment program.

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<sup>1</sup> Angelo, T. A. (2005, October). *Can we fatten a hog just by weighing it? Using academic program review to improve course design, teaching effectiveness, and learning outcomes.* Paper presented at the National Assessment Institute, Indianapolis, IN.

## Goal 2: Assessment of Student Learning in Liberal Arts Programs

**General education.** The College has 10 goals for student learning in General Education. These goals were developed through a statewide process to address problems in transfer between public colleges and universities. As part of implementing the state-mandated Minnesota Transfer Curriculum (MnTC), College faculty identified how individual courses addressed the goals and competencies in the MnTC, which was validated by the College Curriculum Exchange of Views Committee.

In the 2004 Assessment Plan, the College developed a five-year plan to assess the goals of General Education, with two new goal areas incorporated each year over five years. The goal areas assessed during 2003-2004 included Communication (both Written and Oral) and Humanities and Fine Arts. During 2004-2005, assessments were added in the goal areas of Natural Sciences and History and the Social and Behavioral Sciences. During the most recent academic year, 2005-2006, assessments for Mathematical/Logical Reasoning and People and the Environment were added. The remaining four goal areas (Critical Thinking, Human Diversity, Global Perspectives, and Ethical and Civic Responsibility) will be incorporated over the next two years.

**Direct measures in General Education.** Direct evidence of student learning was gathered through embedded assessment in courses that have been aligned with one or more goals for student learning in the program. Results for General Education Assessment are presented below, by goal area and competency:

Communication: To develop writers and speakers who use the English language effectively and who read, write, speak, and listen critically.

Oral Communication: In 2003-2004, 2 courses, 5 sections, and 135 students participated in assessment of four competencies from the Oral Communication goal of the General Education Program. In 2004-2005, 2 courses, 17 sections, and 413 students participated in assessment of these competencies. In the fall of 2005, 3 courses, 14 sections, and 365 students participated in assessment of these competencies.

Competency 1a: Students will be able to understand/demonstrate the speaking process through invention, organization, drafting, revision, editing and presentation. Students achieving ratings of average or above:

	'03-04	'04-05	Fall '05
Delivery	90.6%	88.9%	86.8%
Organization	92.7%	91.1%	84.5%
Support	95.3%	94.3%	92.8%

Competency 1c: Students will be able to locate, evaluate, and synthesize in a responsible manner material from diverse sources and points of view. Students achieving ratings of average or above:

	'03-04	'04-05	Fall '05
Citations	76.0%	82.2%	77.9%
Resources	81.0%	90.5%	84.2%

Competency 1d: Students will be able to select appropriate communication choices for specific audiences. Students achieving ratings of average or above:

	'03-04	'04-05	Fall '05
Audience relevance	93.9%	96.6%	95.2%

Competency 1e: Students will be able to construct logical and coherent arguments. Students achieving ratings of average or above:

	'03-04	'04-05	Fall '05
Coherence of argument	80.6%	96.8%	100.0%

Written Communication: In 2003-2004, 1 course, 1 section, and 26 students participated in a pilot test of four competencies from the Written Communication goal of the General Education Program. Students were assessed on two writing assignments, including a research paper and a thesis paper. In 2004-2005, 1 course, 10 sections, and 252 students participated in assessment of these competencies. In the fall of 2005, 1 course, 15 sections, and 268 students participated in assessment of these competencies, but with a revised rubric. The specific dimensions assessed and the rating scale used were modified, making it difficult or impossible to make certain historical comparisons.

Competency 1a: Students will be able to understand/demonstrate the writing process through invention, organization, drafting, revision, editing and presentation. Students achieving ratings of average or above:

	'03-04	'04-05	Fall '05
Mechanics and usage	80.0%	75.4%	n/a
Organization	94.1%	79.5%	n/a
Support	94.1%	76.1%	n/a
Thesis/focus	94.1%	75.9%	n/a

Competency 1c: Students will be able to locate, evaluate, and synthesize in a responsible manner material from diverse sources and points of view. Students achieving ratings of average or above:

	'03-04	'04-05	Fall '05
Citations	80.0%	75.8%	90.5%
Resources	84.0%	86.4%	n/a
Support	94.1%	77.0%	93.5%

Competency 1d: Students will be able to select appropriate communication choices for specific audiences. Students achieving ratings of average or above:

	'03-04	'04-05	Fall '05
Audience awareness	88.3%	78.1%	93.6%

Competency 1e: Students will be able to construct logical and coherent arguments. Students achieving ratings of average or above:

	'03-04	'04-05	Fall '05
Organization	94.1%	80.9%	97.0%
Thesis/focus/purpose	n/a	n/a	92.8%

#### Evaluation and Use of Assessment Results 2003-2004

- This year marked the beginning of formal assessment of student learning at the program level. We started with two program areas that were already using rubrics to score student work (Oral and Written Communication).
- Preliminary feedback from faculty suggests that modifications need to be made in scoring rubrics for Oral and Written Communication.
- A high percentage of students are reaching at least average proficiency in all assessed competencies of Oral and Written Communication. Since the sample size in Written Communication was very small, these results should be treated as pilot-testing data.
- In Oral Communication, students appear to be doing slightly better at competencies 1a and 1d than 1c and 1e.

#### Evaluation and Use of Assessment Results 2004-2005

- Results with the Oral Communication assessments show that a high percentage of our students are meeting competencies.
- Speech Department faculty members recommend extending Oral Communication assessments to non-required Speech courses and to non-Speech courses.

- Preliminary tests with the Written Communication rubric led to changes that were pilot tested during the Spring 2005 semester. Therefore, most of the data in this report are from the Fall 2004 semester.
- Results with the Written Communication assessments show that 70-80% of our students are meeting competencies.
- English Department faculty members recommend that more instructors and more sections participate in future assessments to improve the validity of the sample.
- English Department faculty would like to assess the impact of library training sessions (conducted by college librarians) on Written Communication achievements.

Critical Thinking: To develop thinkers who are able to unify factual, creative, rational, and value-sensitive modes of thought.

Goals and competencies for student learning have been identified for the Critical Thinking goal. Assessment efforts are planned to begin over the next two years.

Natural Sciences: To improve students' understanding of natural science principles and of the methods of scientific inquiry, i.e., the ways in which scientists investigate natural science phenomena.

Natural Sciences goals and competencies for student learning were assessed beginning in the 2004-2005 academic year. In 2004-2005, 5 courses, 35 sections, and 742 students participated in assessment of two competencies from the Natural Sciences goal of the General Education Program. Students were assessed on two activities in the courses—one early in the semester and one later. In the fall of 2005, 4 courses, 9 sections, and 172 students participated in these assessments.

Competency 3b: Students will be able to formulate and test hypotheses by performing experiments. Students have experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty. Students achieving ratings of average or above:

	2004-2005		Fall 2005	
	Early	Later	Early	Later
Formulate hypotheses	79.2%	87.5%	76.3%	85.9%
Data collection and analysis	82.7%	89.1%	82.9%	93.2%
Data interpretation	72.1%	80.0%	75.8%	83.7%

Competency 3c: Students will be able to communicate their experimental findings, analyses, and interpretations both orally and in writing. Students achieving ratings of average or above:

	2004-2005		Fall 2005	
	Early	Later	Early	Later
Oral communication of findings	n/a	86.7%	50.0%	n/a
Written communication of findings	81.6%	87.1%	82.8%	90.6%

Evaluation and Use of Assessment Results 2004-2005

- Results with the Natural Sciences assessments show a high percentage of students meeting the General Education competencies in this area. There appears to be slight improvement between the early and later assessments, but both show high levels of student achievement.
- The purpose of the early and later assessment design is not clear and the design is not used in all Natural Sciences disciplines. The design of the assessments should be re-evaluated.
- The assessment of oral communication of experimental findings is not included consistently across course sections or semesters.

Mathematical/Logical Reasoning: To increase students' knowledge about mathematical and logical modes of thinking.

Mathematical/Logical Reasoning goals and competencies for student learning were assessed beginning in the 2005-2006 academic year. In the fall of 2005, 4 courses, 6 sections, and 177 students participated in assessment of one competency from the Mathematical/Logical Reasoning goal of the General Education Program.

Competency 4d: Students will be able to apply higher-order problem-solving and/or modeling strategies. Students achieving ratings of average or above:

Fall '05	
Problem solving	70.7%

Evaluation and Use of Assessment Results 2005-2006

- These results are preliminary, based on one semester of data.

History and the Social and Behavioral Sciences: To increase students' knowledge of how historians and social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events, and ideas.

History and the Social and Behavioral Sciences goals and competencies for student learning were assessed beginning in the 2004-2005 academic year. In 2004-2005, 4 courses, 10 sections, and 424 students participated in assessment of one competency from the History and the Social and Behavioral Sciences goal of the General Education Program. In the fall of 2005, 4 courses, 10 sections, and 419 students participated in assessment.

Competency 5d: Students will be able to employ the methods and data that historians and social and behavioral scientists use to investigate the human condition. Students achieving a rating of meets expectations or above:

	'04-05	Fall '05
Understanding of methodology	84.8%	77.8%

#### Evaluation and Use of Assessment Results 2004-2005

- Results with the History and the Social and Behavioral Sciences assessment show that a high percentage of students are meeting the competency related to methodology.
- Social Science faculty have set a benchmark of 85% of students achieving the methodology competency, which they are very close to meeting with these initial results (84.8%).
- Social Science faculty would like to expand the number of courses participating in the methodology assessment and expand the competency areas assessed in the goal area.

The Humanities and Fine Arts: To expand students' knowledge of the human condition and human cultures, especially in relation to behavior, ideas, and values expressed in works of human imagination and thought.

The Humanities and Fine Arts goals and competencies for student learning were assessed beginning in the 2003-2004 academic year. In 2003-2004, 5 courses, 7 sections, and 286 students participated in assessment of one competency from the Humanities and Fine Arts goal of the General Education Program. Students were assessed in a pre-post fashion. In 2004-2005, 10 courses, 15 sections, and 481 students participated in assessment.

Competency 6a: Students will be able to demonstrate awareness of the size and variety of works in the arts and humanities. Students demonstrating awareness of three or more artists/authors/philosophers:

	'03-04	'04-05
Pretest	4.1%	27.4%
Posttest	56.4%	92.6%

#### Evaluation and Use of Assessment Results 2003-2004

- The Humanities and Fine Arts assessment showed a clear increase in student awareness between the pretest and the posttest. However, it is difficult to determine a benchmark with the scale used in the assessment (i.e., How many artists or philosophers should a student be able to name to demonstrate “awareness” in the arts and humanities?).

#### Evaluation and Use of Assessment Results 2004-2005

- Results with the Fine Arts and Humanities awareness assessment clearly show an increase in student awareness between the pre- and post-test. However, it is difficult to evaluate students against the competency using the existing rubric because there is no obvious benchmark.
- Two semesters of work with the Fine Arts and Humanities awareness assessment have led to suggestions that it be revised since it is not yielding information that can lead to program changes.
- Development of a new degree program in the Arts (Association of Fine Arts) has led to assessment efforts of new program goals that overlap with this General Education assessment.

Human Diversity: To increase students' understanding of individual and group differences (e.g. race, gender, class) and their knowledge of the traditions and values of various groups in the United States.

Goals and competencies for student learning have been identified for the Human Diversity goal. Assessment efforts are planned to begin over the next two years and may be shaped by work the college has undertaken recently in the Office of Multicultural Affairs (a new position for the 2005-2006 academic year).

Global Perspective: To increase students' understanding of the growing interdependence of nations and peoples and develop their ability to apply a comparative perspective to cross-cultural social, economic, and political experiences.

Goals and competencies for student learning have been identified for the Global Perspective goal. Assessment efforts are planned to begin over the next two years.

Ethical and Civic Responsibility: To develop students' capacity to identify, discuss, and reflect upon the ethical dimensions of political, social, and personal life and to understand the ways in which they can exercise responsible and productive citizenship.

Goals and competencies for student learning have been identified for the Ethical and Civic Responsibility goal. Assessment efforts are planned to begin over the next two years.

People and the Environment: To improve students' understanding of today's complex environmental challenges.

People and the Environment goals and competencies for student learning were assessed beginning in the 2005-2006 academic year. In the fall of 2005, 2 courses, 3 sections, and 89 students participated in assessment of three competencies from the People and the Environment goal of the General Education Program.

Competency 10b: Students will be able to discern patterns and interrelationships of bio-physical and socio-cultural systems. Students achieving a rating of average or above included:

Fall '05	
Discern patterns	96.3%

Competency 10e: Students will be able to propose and assess alternative solutions to environmental problems. Students achieving a rating of average or above included:

Fall '05	
Propose solutions	78.4%

Competency 10f: Students will be able to articulate and defend the actions they would take on various environmental issues. Students achieving a rating of average or above included:

Fall '05	
Articulate actions	80.4%

#### Evaluation and Use of Assessment Results 2005-2006

- These results are preliminary, based on one semester of data.

**Associate in Arts program.** In addition to the 10 goals for General Education, which comprises approximately two thirds of the program, the Associate in Arts program recently added a goal related to wellness, which is also a degree requirement. This goal was approved during the 2005-2006 academic year and faculty members are in the process of creating measurable student outcomes and scoring rubrics.

**Associate in Fine Arts programs.** The College recently developed two new degree programs in the fine arts: the Associate in Fine Arts in Music and the Associate in Fine Arts in Art. The Music program was offered for the first time beginning in the 2004-2005 academic year and the Art program was started beginning in the 2005-2006 academic year. As part of the program-approval process, the new programs developed goals for student learning. Program faculty members are currently in the process of creating rubrics to measure student learning across program goals.

Two assessments for the AFA–Music program were pilot tested during the 2004-2005 academic year, based on a standardized music theory exam.

Music analysis: Students will be able to demonstrate a required level of music analytical competency.

One course, one section, and 22 students participated in the assessment of music analysis in a pretest-post-test design. Students achieving a rating of meets expectations or above:

	'04-05	Fall '05
Pretest	0.0%	
Posttest	77.0%	

Aural recognition: Students will be able to demonstrate a required level of aural recognition.

One course, one section, and 22 students participated in the assessment of aural recognition in a pretest-post-test design. Students achieving a rating of meets expectations or above:

	'04-05	Fall '05
Pretest	0.0%	
Posttest	77.0%	

Evaluation and Use of Assessment Results 2004-2005:

- Results for the AFA–Music assessment show that students significantly increased their abilities in music analysis and aural recognition over the course of their first semester in music theory. A benchmark should be set and an exam instituted to assess students in their final semester of music theory.
- Competencies should be defined for all goal areas of the AFA–Music.
- A jury system is in development to assess goal area one of the AFA–Music: Students will be able to demonstrate a required level of artistry and technical proficiency in their instrument.

**Indirect measures in Liberal Arts programs.** The College administered the ACT Student Opinion Survey (2-Year College Form) during the Spring 2003 Semester to a randomly selected sample of class sections comprising 658 students. The survey mainly provided information about student use of and satisfaction with College services. Students were not asked to rate their own learning in the ACT survey, but they did respond to questions about satisfaction with testing/grading, course content, instruction, challenge, and preparation for work. Results indicated that students were generally satisfied with their academic programs, although the satisfaction ratings were statistically lower than the national ACT sample. The following table shows the percentage of students who reported “Satisfied” or “Very Satisfied” on these indicators:

	ARCC	Nat'l Sample
Testing/Grading System	77.7%	79.7%
Course Content in Major Field	68.6%	78.2%
Instruction in Major Field	72.9%	78.1%
Challenge Offered by Program	71.9%	77.9%
Preparation for Chosen Occupation	60.6%	72.3%

The College began participating in the Community College Survey of Student Engagement (CCSSE) beginning in the 2004-2005 academic year. One of the primary reasons for the shift was the greater focus of the CCSSE on student learning and student retention. The CCSSE is based upon the four-year version of the test, called the National Survey of Student Engagement (NSSE), which has been used extensively at four-year colleges and universities as a tool for improving student outcomes and program quality.

The CCSSE was administered to a randomly selected, stratified sample of classes, with a total of 767 students responding. Many of the questions on the CCSSE ask students

about their experiences with our academic programs and learning goals and therefore can be used as an indirect measure of student learning. In administering the CCSSE, the College participated in a consortium of similarly sized public colleges from Minnesota, which formed the Minnesota Consortium. Participation in the Consortium provided a few benefits to the college, including: (1) an addition of 20 questions to the standard CCSSE that focused on specific issues including online education; and (2) a results comparison between the College sample and the Consortium sample.

College-Wide Goals for Student Learning

Overall rating of educational experience: Students were asked to rate their overall educational experience at the college. The question and results are presented below:

Question 27: How would you evaluate your entire educational experience at this college?			
Excellent	Good	Fair	Poor
23.3%	61.5%	14.4%	0.8%

Evaluation: Close to 85% of students rated their educational experience at ARCC as good or excellent. Using the CCSSE comparison data, the corresponding percentages for the Minnesota Consortium and the national sample were 82.3% and 86.2%, respectively. Based upon the comparative data, the percentage of students reporting “Poor” at ARCC is already quite low. Therefore, the potential for change on this item would appear to be moving perceptions from “Fair” to “Good” and from “Good” to “Excellent.”

Learning Goals for the General Education Program

Overall rating of General Education: A single question on the CCSSE asked students to rate their overall development in general education based upon experiences at the college. Results for this item are presented below:

Question 12a: How much has YOUR EXPERIENCE AT THIS COLLEGE contributed to your knowledge, skills and personal development in the area of acquiring a broad general education?			
Very much	Quite a bit	Some	Very little
25.5%	46.0%	23.6%	4.8%

Evaluation: Students rated their overall development in general education quite high, with few students reporting little or no development. The pattern of ARCC responses is similar to the Minnesota and national samples, with a non-statistically significant trend toward slightly better results at ARCC.

Communication: The Communication goal of the General Education Program is similar to the college-wide guiding principle called Effective Communication. This goal area was assessed in five items on the CCSSE. Specific item results include:

	Question 4: In your experiences at this college during the current school year, about how often have you done each of the following?			
	Very often	Often	Some-times	Never
b. Made a class presentation	4.9%	16.3%	48.3%	30.5%
c. Prepared two or more drafts of a paper	19.8%	27.0%	30.5%	22.7%

Question 6c: During the current school year, about how many papers or reports have you written of any length?				
None	1 to 4	5 to 10	11 to 20	More than 20
7.1%	32.1%	33.5%	20.2%	7.0%

	Question 12: How much as YOUR EXPERIENCE AT THIS COLLEGE contributed to your knowledge, skills and personal development in the following areas?			
	Very much	Quite a bit	Some	Very little
c. Writing clearly and effectively	14.6%	38.7%	32.7%	14.0%
d. Speaking clearly and effectively	12.5%	32.8%	38.4%	16.2%

Evaluation: While the pattern of ARCC responses is not statistically different from the Minnesota or national samples, there appears to be a trend toward less-impressive results here. A sizable percentage of our students reported having a minimal exposure to writing and speaking in their coursework. These results also suggest that 14 to 16% of our students report little or no development in this important goal area.

Critical Thinking: The Critical Thinking goal of the General Education Program is similar to the college-wide guiding principle called Clear Thinking. This goal area was assessed in a number of items on the CCSSE. Questions 4d and 5a through 5f ask students about the extent to which clear thinking is emphasized at the college and within their coursework. Question 12e asks students to rate their learning in this area. Specific item results are presented below:

Question 4d: In your experiences at this college during the current school year, about how often have you worked on a paper or project that required integrating ideas or information from various sources?			
Very often	Often	Sometimes	Never
18.8%	39.2%	32.3%	9.7%

	Question 5: During the current school year, how much has your coursework at this college emphasized the following mental activities?			
	Very much	Quite a bit	Some	Very little
a. Memorizing facts	24.6%	37.4%	31.2%	6.8%
b. Analyzing elements	20.5%	45.1%	29.2%	5.2%
c. Synthesizing information	13.7%	38.3%	40.2%	7.7%
d. Making judgments	12.5%	35.1%	41.8%	10.6%
e. Applying theories	15.4%	37.9%	33.3%	13.4%
f. Using information	18.4%	30.7%	38.8%	12.0%

Question 12e: How much as YOUR EXPERIENCE AT THIS COLLEGE contributed to your knowledge, skills and personal development in the area of thinking critically and analytically?			
Very much	Quite a bit	Some	Very little
19.2%	45.5%	30.2%	5.1%

Evaluation: In general, the response pattern of ARCC students is similar to the patterns reported by the Minnesota consortium and by the national sample. The great majority of ARCC students report exposure to important components of Clear Thinking and 64.7% report “Quite a bit” or “Very much” development in this goal area.

Natural Sciences: No items on the CCSSE address the General Education goal in the Natural Sciences area.

Mathematical and Logical Reasoning: One item from the CCSSE asks students about their development in the area of mathematics. The item results are below:

Question 12f: How much as YOUR EXPERIENCE AT THIS COLLEGE contributed to your knowledge, skills and personal development in the area of solving numerical problems?			
Very much	Quite a bit	Some	Very little
13.7%	28.9%	32.9%	24.5%

Evaluation: This pattern of responses is similar to the Minnesota consortium sample, but appears to be weaker than the national sample. Nationally, 19.2% of students reported “Very much” and 17.3% reported “Very little” development in this area. These differences did not reach a level of statistical significance, but are suggestive of a difference between ARCC and the national sample.

History and the Social and Behavioral Sciences: No items on the CCSSE address the General Education goal in the History and the Social and Behavioral Sciences area.

Humanities and Fine Arts: No items on the CCSSE address the General Education goal in the Humanities and Fine Arts area.

Human Diversity: The Human Diversity goal of the General Education Program is similar to the college-wide guiding principle called Accepting Diversity. Four items from the CCSSE ask students about their experiences with issues related to diversity. Item results include:

	Question 4: In your experiences at this college during the current school year, about how often have you done each of the following?			
	Very often	Often	Some-times	Never
s. Had serious conversations with students of a different race or ethnicity	11.4%	18.1%	37.0%	33.4%
t. Had serious conversations with students who differ from you in terms of their religious beliefs, political opinions, or personal values	12.3%	24.5%	40.0%	23.2%

Question 9c: How much does this college emphasize encouraging contact among students from different economic, social, and racial or ethnic backgrounds?			
Very much	Quite a bit	Some	Very little
11.6%	22.8%	43.0%	22.6%

Question 12k: How much as YOUR EXPERIENCE AT THIS COLLEGE contributed to your knowledge, skills and personal development in the area of understanding people of other racial and ethnic backgrounds?			
Very much	Quite a bit	Some	Very little
8.6%	20.3%	36.2%	34.9%

Evaluation: An unacceptably high percentage of students report little or no exposure to diversity through their experiences at ARCC. The responses to question 4s are lower than the national sample (effect size of  $-0.24$ ) and the reported learning in question 12k is lower than both the Minnesota consortium and the national sample (effect sizes of  $-0.21$  and  $-0.27$ , respectively).

Global Perspective: The CCSSE had no specific questions that addressed student learning in the area of international relations and resolving world problems. Many of the questions related to diversity touch on this area, including exposure to students from different cultural backgrounds. Two of the Minnesota Consortium questions touched on the global issues. These results are presented below:

Consortium Question 4: To what extent has your college experience contributed to your learning in the following area: Understanding current societal issues (e.g., political, cultural, economic)?				
Very much			Very little	N/A
21%	32%	22%	20%	5%

Consortium Question 10: My college experience has helped me gain an understanding of global interdependence.				
Strongly agree	Agree	Disagree	Strongly disagree	N/A
5%	42%	34%	8%	10%

Evaluation: The results on these two questions are very similar to the results obtained in the Minnesota sample. However, in both cases, 42% of students responded on the negative side of the scale, suggesting that a large percentage of our student population does not perceive a college emphasis on global issues.

Ethical and Civic Responsibility: The Ethical and Civic Responsibility goal of the General Education Program is similar to the college-wide guiding principle called Ethical Decision Making. Three questions that touch on these issues included:

Question 10c: About how many hours do you spend in a typical 7-day week participating in college-sponsored activities (organizations, campus publications, student government, intercollegiate or intramural sports, etc.)?					
None	1 – 5	6 – 10	11 – 20	21 – 30	More than 30
91.0%	6.4%	1.6%	0.6%	0.2%	0.2%

Question 12: How much as YOUR EXPERIENCE AT THIS COLLEGE contributed to your knowledge, skills and personal development in the following areas?				
	Very much	Quite a bit	Some	Very little
I. Developing a personal code of values and ethics	9.6%	19.2%	43.0%	28.2%
m. Contributing to the welfare of your community	3.8%	9.6%	38.0%	48.6%

Evaluation: Although the ARCC results are not statistically different from the Minnesota or national samples, there is a trend toward lower levels of involvement and learning in this important goal area. Nationally, 39.4% of students reported “Very little” development in the area of contributing to the welfare of their communities. The fact that ARCC maintains this as an important college-wide goal makes our even-lower performance surprising.

People and the Environment: The CCSSE had no specific questions that addressed student learning in the area of understanding and solving environmental problems. Question 12m (included in the preceding section) is related in a general way, but it does not address the environmental issues that are central to this learning goal.

General Conclusion for Indirect Measures in Liberal Arts: The recent shift to the Community College Survey of Student Engagement (CCSSE) appears to have yielded a great deal of indirect evidence related to student learning, particularly in

broad goal areas like the College-wide Guiding Principles and General Education. The overall pattern of CCSSE results suggests that the College is doing about as well as peer groups in some goal areas (e.g., communication, critical thinking), but not as well in other goal areas (particularly diversity). The College is still working on how to use the CCSSE results to improve programs, but two concrete steps have been planned: (1) The CCSSE is being repeated in 2006 to provide two years of data to evaluate; and (2) the survey is being followed up by student focus groups to elicit more student input on possible changes to programs and support services. The College has also recently reinstated the position of Director of Multicultural Student Services, which may help in addressing perceived deficiencies in student exposure to diversity issues.

### Goal 3: Assessment of Student Learning in Technical and Career Programs

**Business programs.** The College currently offers a wide range of business programs, including: Associate in Applied Science degrees in Accounting, Management/Marketing, and Office Technology; Associate in Science degrees in Accounting, Administrative Management, and Business; and certificate programs in Accounting, Marketing/Management, and Office Technology.

**Direct measures in business programs.** Direct evidence of student learning was gathered through embedded assessment in courses that have been aligned with one or more goals for student learning in the business programs. Results are presented below, by goal area and competency:

Critical Thinking: Students will be able to use critical thinking skills to analyze and solve business problems.

In 2004-2005, 3 courses, 4 sections, and 140 students participated in assessment of five competencies from the Critical Thinking goal of the Business Programs. In the Fall Semester of 2005, 2 courses, 7 sections, and 288 students participated in assessment activities.

Competency 2a: Students will be able to obtain relevant information to use in solving a business problem/issue. Students achieving ratings of average or above:

	'04-05	Fall '05
Obtaining information	86.1%	80.0%

Competency 2b: Students will be able to make predictions and/or determine alternatives to a business problem/issue. Students achieving ratings of average or above:

	'04-05	Fall '05
Generating predictions/alternatives	86.7%	80.4%

Competency 2c: Students will be able to choose and support a solution to a business problem. Students achieving ratings of average or above:

	'04-05	Fall '05
Choosing and supporting solutions	86.0%	80.8%

Competency 2d: Students will be able to implement a decision regarding a business problem/issue. Students achieving ratings of average or above:

	'04-05	Fall '05
Implementing decisions	88.0%	81.9%

Competency 2e: Students will be able to evaluate the results of a business decision. Students achieving ratings of average or above:

	'04-05	Fall '05
Evaluating decisions	85.5%	73.5%

#### Evaluation and Use of Assessment Results 2004-2005

- Results with the Critical Thinking assessments show a high percentage of students reaching competencies related to critical thinking.
- The percentages of students reaching at least average level achievement are consistent across critical thinking components, but there are differences in the proportion of students reaching the highest levels of achievement. While 88% of students reached the “average” level for implementing decisions, no students reached the higher levels of “good” or “excellent.”

#### Evaluation and Use of Assessment Results 2005-2006

- The level of faculty and student participation in assessment activities increased from the previous academic year.

**Biomedical programs.** The College has three programs in the biomedical field, including an Associate in Science degree in Biomedical Technology and certificate programs in Biomedical Technician and Clinical Research Professional. Working with their advisory committees, these programs developed a revised set of student learning goals during the 2004-2005 academic year. They are currently working on developing assessment strategies.

**Computer Networking programs.** The College has four programs in computer networking, including an Associate in Science degree in Computer Networking and Telecommunications and certificate programs in Network Support and Administration, Network Security Support, and Computer Help Desk. The computer networking programs revised student learning goals during the 2005-2006 academic year and will begin working on assessment strategies in the near future.

**Computer Science programs.** The College has two programs in computer science, including an Associate in Science degree in Computer Science and a certificate program in Computer Programming. These programs went through the program review process during the 2004-2005 academic year, which identified the need to develop

revised goals for student learning. These goals were developed during the 2005-2006 academic year.

**Geographic Information Systems programs.** The College has two programs in GIS, including an Associate in Science degree in Geographic Information Systems and Cartography and a certificate program in GIS. Working with their advisory committees, these programs revised student learning goals during the 2004-2005 academic year and are currently working on assessment of student learning in a capstone course within the programs.

**Integrative Health and Healing programs.** The College recently developed two new programs in Integrative Health and Healing, including an Associate in Science degree in IHH and a certificate program in IHH. As part of the new program approval process, these programs developed goals for student learning and will be developing assessment strategies in the next few years.

**Nursing programs.** The College offers two programs in Nursing, including the Associate in Science degree program in Registered Nursing and the Associate in Science degree program in Registered Nursing (LPN-RN Option). The Nursing programs are approved by the Minnesota Board of Nursing and accredited by the National League of Nursing Accrediting Commission. The Nursing programs have maintained a thorough assessment and evaluation program as part of its professional accreditation but are just beginning to integrate existing assessments with eLumen. The Nursing Department undertook a review of its curriculum during the summer of 2005, which began a process to revise its goals for student learning. The new goals are currently in draft form and will be finalized during the 2005-2006 academic year.

**Physical Therapy Assistant Program.** The College offers an Associate in Applied Science degree program in Physical Therapy Assistant. This program was transferred from a nearby technical college beginning in the fall of 2001. This program is accredited through the Commission on Accreditation in Physical Therapy Education (CAPTE), and has maintained a thorough assessment and evaluation program as part of its professional accreditation.

**Direct measures in the PTA Program.** Beginning in the 2004-2005 academic year, the PTA program began integrating its goals and assessments into the new eLumen system, including data derived from two measures developed within the professional literature (Clinical Performance Instrument and Generic Abilities Assessment). While the program continues to collect additional data on their students, the results below reflect what has been integrated to date.

**Communication Skills:** Upon successful completion of the Physical Therapist Assistant Program, the student will demonstrate competent written and oral communication skills.

During the 2004-2005 academic year 20 students participated in assessment of communication skills as rated on a Generic Abilities assessment (GA1 is a rating of oral and written communication) and a Clinical Performance Instrument (CPI6 is a rating of oral communication and CPI7 is a rating of written communication). Their skills were assessed at three points: during a beginning, middle, and final clinical practice course.

**Beginning Practice Course**

	Beginning level	Developing level	Entry level
GA1	61.5%	38.5%	0.0%
CPI6	0.0%	25.0%	75.0%
CPI7	0.0%	25.0%	75.0%

**Middle Practice Course**

	Beginning level	Developing level	Entry level
GA1	0.0%	72.2%	27.8%
CPI16	0.0%	18.2%	81.8%
CP17	0.0%	36.4%	63.6%

**Final Practice Course**

	Beginning level	Developing level	Entry level
GA1	5.6%	38.9%	55.6%
CPI6	0.0%	12.5%	87.5%
CPI7	0.0%	0.0%	100.0%

**Clinical Skills:** Upon successful completion of the Physical Therapist Assistant Program, the student will perform all treatment procedures skillfully and safely, including modalities, massage, manual skills, gait training, and data collection for the physical therapist to use for assessment purposes.

During the 2004-2005 academic year 20 students participated in assessment of clinical skills as rated on a Clinical Performance Instrument (CPI11 is a rating of safety and

CPI12 is a rating of patient intervention competency). Their skills were assessed at three points: during a beginning, middle, and final clinical practice course.

**Beginning Practice Course**

	Beginning level	Developing level	Entry level
CPI1	11.1%	11.1%	77.8%
CPI12	0.0%	25.0%	75.0%

**Middle Practice Course**

	Beginning level	Developing level	Entry level
CPI1	0.0%	18.2%	81.8%
CPI12	0.0%	27.3%	72.7%

**Final Practice Course**

	Beginning level	Developing level	Entry level
CPI1	0.0%	6.2%	93.8%
CPI12	0.0%	12.5%	87.5%

Knowledge Base: Upon successful completion of the Physical Therapist Assistant Program, the student will demonstrate knowledge of the normal structure and function of the human body and understand the physiological and psychological effects of disease and injury.

During the 2004-2005 academic year 20 students participated in assessment of knowledge base as rated on a Generic Abilities assessment (GA3 is a rating of critical thinking and problem solving) and a Clinical Performance Instrument (CPI9 is a rating of participation in patient status judgments). Their skills were assessed at three points: during a beginning, middle, and final clinical practice course.

**Beginning Practice Course**

	Beginning level	Developing level	Entry level
GA3	61.5%	38.5%	0.0%
CPI9	12.5%	37.5%	50.0%

Middle Practice Course

	Beginning level	Developing level	Entry level
GA3	5.6%	72.2%	22.2%
CPI9	0.0%	45.4%	54.6%

Final Practice Course

	Beginning level	Developing level	Entry level
GA3	0.0%	44.4%	55.6%
CPI9	0.0%	6.2%	93.8%

Ethical and Responsible Practice: Upon successful completion of the Physical Therapist Assistant Program, the student will demonstrate understanding of his/her professional role as a PTA and demonstrate awareness of ethical behavior, legal responsibility, and the PT/PTA professional relationship.

During the 2004-2005 academic year 20 students participated in assessment of ethical and responsible practice as rated on a Generic Abilities assessment (GA6 is a rating of interpersonal skills and GA8 is a rating of ethical practice) and a Clinical Performance Instrument (CPI3 is a rating of interpersonal skills, CPI 4 is a rating of ethical practice, and CPI5 is a rating of legal practice). Their skills were assessed at three points: during a beginning, middle, and final clinical practice course.

Beginning Practice Course

	Beginning level	Developing level	Entry level
GA6	53.8%	38.5%	7.7%
GA8	23.1%	76.9%	0.0%
CPI3	0.0%	11.1%	88.9%
CPI4	0.0%	22.2%	77.8%
CPI5	0.0%	25.0%	75.0%

Middle Practice Course

	Beginning level	Developing level	Entry level
GA6	0.0%	38.9%	61.1%
GA8	0.0%	38.9%	61.1%
CPI3	0.0%	18.2%	81.8%
CPI4	0.0%	20.0%	80.0%
CPI5	0.0%	0.0%	100.0%

Final Practice Course

	Beginning level	Developing level	Entry level
GA6	5.6%	38.9%	55.6%
GA8	5.6%	22.2%	72.2%
CPI3	0.0%	6.2%	93.8%
CPI4	0.0%	14.3%	85.7%
CPI5	0.0%	6.7%	93.3%

Diversity: Upon successful completion of the Physical Therapist Assistant Program, the student will recognize and appreciate diversity within society and the health-care profession.

During the 2004-2005 academic year 20 students participated in assessment of clinical skills as rated on a Clinical Performance Instrument (CPI3 is a rating of respectful behavior and CPI8 is a rating of respect for individual differences). Their skills were assessed at three points: during a beginning, middle, and final clinical practice course.

Beginning Practice Course

	Beginning level	Developing level	Entry level
CPI3	0.0%	11.1%	88.9%
CPI8	12.5%	0.0%	87.5%

Middle Practice Course

	Beginning level	Developing level	Entry level
CPI3	0.0%	18.2%	81.8%
CPI8	0.0%	9.1%	90.9%

Final Practice Course

	Beginning level	Developing level	Entry level
CPI3	0.0%	12.5%	87.5%
CPI8	0.0%	6.2%	93.8%

Evaluation and Use of Assessment Results 2004-2005

- Most assessments show a high percentage of students reaching the “entry level” of competency during the PTA program.
- Assessments based on the Generic Abilities evaluation appear to be somewhat lower than those based upon the Clinical Performance Instrument. The GA is completed by full-time faculty who teach theory and practical courses. The CPI is completed by Physical Therapists who supervise practicum courses. The GA also appears to be showing greater progression of skill development over the course of the program compared to the CPI. It might be worthwhile to review the CPI rating parameters with the clinical supervisors.
- The existing assessments for Knowledge Base need to be supplemented with additional assessments. A pre-post assessment of anatomy and physiology knowledge is planned for 2005-2006.

**Pre-Engineering program.** The College offers one program in Pre-Engineering, the Associate in Science degree. This program recently completed the program review process, which led to the development of new goals for student learning. Assessment activities will begin in the next few years.

**Indirect measures in Technical and Career Programs.** Although there were no questions on the Community College Survey of Student Engagement (CCSSE) about learning goals in specific occupational programs, there were several questions about the development of general career-related skills. The questions that touch on this area are described below:

	Question 12: How much as YOUR EXPERIENCE AT THIS COLLEGE contributed to your knowledge, skills and personal development in the following areas?			
	Very much	Quite a bit	Some	Very little
b. Acquiring job or work-related knowledge and skills	13.3%	25.7%	36.4%	24.6%
g. Using computing and information technology	15.4%	36.8%	34.5%	13.3%
h. Working effectively with others	14.7%	39.1%	37.3%	9.0%
l. Developing a personal code of values and ethics	9.6%	19.2%	43.0%	28.2%
n. Developing clearer career goals	13.3%	23.8%	37.2%	25.7%
o. Gaining information about career opportunities	11.7%	22.4%	38.4%	27.5%

Evaluation: The ARCC results for these items are similar to the results obtained in the Minnesota Consortium sample. However, for many of the questions about specific career issues, the ARCC results are slightly lower than the national sample. This may be the result of differences in primary student goals. Compared to the national sample, the ARCC sample had a lower percentage of students who reported a primary goal of obtaining a certificate, developing or updating job-related skills, or changing careers. It is also possible, however, that we are under serving our students, in general, with respect to their career-development needs.

#### Goal 4: Assessment of Student Learning in Student Services

Goals for student learning in the Student Services Program area were developed during the 2004-2005 academic year. Faculty and staff members identified four goals for student learning, with intentional overlap between these goals and the college-wide guiding principles. The goals for student learning in student services are reproduced below:

1. Students will develop skills necessary for educational success
2. Students will develop skills necessary for career success
3. Students will develop skills necessary for personal success
4. Students will develop skills necessary for effective citizenship

Following the development of student learning goals, Student Services faculty and staff created competency maps showing how student learning outcomes (competencies) were addressed through program courses and activities. The competency maps are then used to determine logical points within the program to conduct assessments.

**Direct measures in the Student Services Program.** The Student Services program began developing measurement strategies during the 2005-2006 academic year. Direct evidence of student learning was collected in a credit-based career development course. One course, four sections, and 105 students participated in the assessment of competency 2a.

Career Success: Students will develop skills necessary for career success
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Competency 2a: Students will acquire knowledge about themselves and the career-development process to make informed decisions. Students achieving a rating of adequate or higher:

	Fall '05
Knowledge about self	93%
Knowledge about the career development process	91%

**Indirect measures in the Student Services Program.** Learning goals in the Student Services unit have been assessed recently with three types of indirect measures, including student activity surveys, the ACT Student Opinion Survey, and the Community College Survey of Student Engagement (CCSSE).

Activity Surveys: Surveys were administered to students participating in activities during the Fall 2004 and Fall 2005 semesters (e.g., student clubs and student life activities). A total of 229 students, representing seven different types of activities, completed the surveys.

Personal Success: Students will develop skills necessary for personal success
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Competency 3b: Students will develop the skills necessary to interact effectively with people from diverse backgrounds. Students were asked to rate the degree to which their participation in an activity helped them to accept diversity. The students indicating “Somewhat” or “Very much” were:

	Some- what	Very much
Accept diversity	24.5%	64%

Competency 3c: Students will develop effective written and oral communication skills. Students were asked to rate the degree to which their participation in an activity helped them to communicate effectively. The students indicating “Somewhat” or “Very much” were:

	Some- what	Very much
Communicate effectively	46%	49.5%

Students will develop skills necessary for effective citizenship
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Competency 4d: Students will develop skills necessary to become effective leaders within their communities. Students were asked to rate the degree to which their participation in an activity helped them to develop ethical decision-making skills. The students indicating “Somewhat” or “Very much” were:

	Some- what	Very much
Engage in ethical decision making	37.5%	34.5%

ACT Student Opinion Survey: The 2003 ACT Student Opinion Survey (2-Year-College Form) provided information about student use of and satisfaction with student services. Students were generally satisfied with College services that are viewed as important for their learning, including: academic advising/course planning; personal counseling; vocational guidance/career planning; job placement; library facilities and services; college-sponsored tutoring services; and computer services (none of these was significantly different from the ACT national sample). However, students were not asked to rate the impact of these services on learning or development, so they are of limited value for assessing student learning.

Community College Survey of Student Engagement: The CCSSE was administered in the spring of 2005 and provided additional information about students’ use of support

*Assessment of Student Learning at Anoka-Ramsey Community College*

services. In addition to questions about use of and satisfaction with support services, the CCSSE included items about the quality and impact of support services. The results are presented below by student services goal area.

Educational Success: Students will develop skills necessary for educational success.

	Question 9: How much does <u>this college</u> emphasize each of the following?			
	Very much	Quite a bit	Some	Very little
b. Providing the support you need to help you succeed at this college	20.9%	44.0%	29.6%	5.5%

	Question 13(2): How satisfied are you with the following services at this college?			
	Very	Somewhat	Not at all	N.A.
a. Academic advising/planning	17.7%	44.2%	11.0%	27.1%
d. Peer or other tutoring	15.0%	19.5%	6.6%	58.9%
j. Transfer credit assistance	14.3%	29.2%	9.6%	47.0%

	Question 13(3): How important are the following services to you at this college?		
	Very	Somewhat	Not at all
a. Academic advising/planning	47.7%	39.1%	13.2%
d. Peer or other tutoring	35.3%	33.9%	30.8%
j. Transfer credit assistance	54.1%	24.2%	21.6%

Evaluation: The ARCC sample reported lower satisfaction with the services listed above compared to the CCSSE national sample. Given their importance in supporting student learning, the Student Services program is working on plans to improve their efforts in this area. Ratings of importance were similar to the national sample, with the exception of academic advising and planning, which ARCC students rated as less important than the national sample. This suggests that the College could do a better job educating students about the importance of academic advising and planning in achieving their educational goals (competencies 1a and 1c).

Career Success: Students will develop skills necessary for career success

	Question 4: In your experiences at this college during the current school year, about how often have you done each of the following?			
	Very often	Often	Sometimes	Never
m. Talked about career plans with an instructor or advisor	3.1%	11.8%	39.3%	45.7%

	Question 12: How much has your experience at this college contributed to your knowledge, skills, and personal development in the following areas?			
	Very much	Quite a bit	Some	Very little
h. Working effectively with others	14.7%	39.1%	37.3%	9.0%
n. Developing clearer career goals	13.3%	23.8%	37.2%	25.7%
o. Gaining information about career opportunities	11.7%	22.4%	38.4%	27.5%

	Question 13(2): How satisfied are you with the following services at this college?			
	Very	Somewhat	Not at all	N.A.
b. Career counseling	9.6%	29.8%	11.5%	49.2%
c. Job placement assistance	3.2%	9.6%	8.6%	78.6%

	Question 13(3): How important are the following services to you at this college?		
	Very	Somewhat	Not at all
b. Career counseling	41.0%	36.0%	23.0%
c. Job placement assistance	29.2%	29.3%	41.5%

Evaluation: Compared to the national sample, students at ARCC reported talking about career plans less often (Question 2m) and lower amounts of career goal development (Question 12n) and gaining information about career opportunities (Question 12o). A majority of our students reported “transfer to a 4-year college or university” as their primary educational goal (Question 17c), which suggests that our student population may not see the immediate benefit of seeking career development assistance. In question 13, students rated career development services as important, but they also indicated a very low level of use (less than 2% of the sample reported using career counseling or job placement assistance “often”). It might be helpful for our student services program to develop strategies to show how career development services can be useful for students who are intending to transfer.

Personal Success: Students will develop skills necessary for personal success

	Question 4: In your experiences at this college during the current school year, about how often have you done each of the following?			
	Very often	Often	Some-times	Never
s. Had serious conversations with students of a different race or ethnicity than your own	11.4%	18.1%	37.0%	33.4%

	Question 9: How much does <u>this college</u> emphasize each of the following?			
	Very much	Quite a bit	Some	Very little
c. Encouraging contact among students from different economic, social, and racial, or ethnic backgrounds	11.6%	22.8%	43.0%	22.6%
d. Helping you cope with your non-academic responsibilities (work, family, etc.)	3.3%	10.3%	29.7%	56.6%
e. Providing you the support you need to thrive socially	3.4%	15.8%	41.9%	38.9%

	Question 12: How much has your experience at this college contributed to your knowledge, skills, and personal development in the following areas?			
	Very much	Quite a bit	Some	Very little
k. Understanding people of other racial and ethnic backgrounds	8.6%	20.3%	36.2%	34.9%

Evaluation: Many of the CCSSE questions in this area deal with diversity and ethnicity, which are important goal areas for the College but constitute only one part of the Personal Success goal area for Student Services. In general, students in the ARCC sample reported less exposure to diversity issues and less development in this area than the national sample. Students also reported receiving less help coping with non-academic responsibilities (Question 9d) and less support to thrive socially (Question 9e) than the national sample. The overall pattern in this goal area suggests that the College could improve its services that are designed to help students' personal success.

Students will develop skills necessary for effective citizenship

No items on the CCSSE asked specifically about skills related to effective citizenship. There were several questions about understanding people from other cultures and working effectively in group settings, but these results have been presented under one of the earlier student services goals.

**Evaluation and Use of Assessment Results:**

- Assessment activities have increased from 2004-2005. In Fall 2004, only an indirect measure was used to assess a student services goal area and in 2005, a direct measure was added.
- Assessment begun in fall 2004 and fall 2005 should continue in order to evaluate the consistency of the data achieved thus far.
- More direct measurement across the goal areas would be helpful.
- Competency maps developed for the goals along with CCSSE results should guide selection of the next areas to be assessed.
- Results suggest that involvement in student activities facilitates students' acceptance of diversity, communication skills, and ethical decision making.
- Preliminary results also suggest that the career development courses are successful in helping students to acquire knowledge about themselves and the career development process. Exploration of ways to promote this knowledge development in alternative formats should be explored and assessed.

*Goal 5: Assessment of Student Learning in Continuing Education and Customized Training*

The Continuing Education/Customized Training (CE/CT) unit of the College has collected satisfaction data for many years but only recently began to develop specific goals for student learning. During the 2004-2005 academic year, the CE/CT unit identified three goals for student learning:

1. Students will develop knowledge, skills, and attitudes to promote personal and professional success
2. Students will engage in learning that transforms ideas, values, and attitudes
3. Students will practice the habits of life-long learning

Students will develop knowledge, skills, and attitudes to promote personal and professional success
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**Indirect measures in the CE/CT Program.** Two indirect measures of Goal 1 were obtained as part of existing course satisfaction surveys, in which students were asked to rate their learning of new knowledge and skills. An additional assessment was recently added as a third measure of knowledge and skills.

Competency 1a: Students will acquire and apply new skills, tools, and technology effectively.

A total of 489 students, in 83 course sections, participated in course satisfaction surveys over the two most recent academic years (2003-2005). The following table shows the percentage of students reporting “agree” or “strongly agree” in response to questions about their learning.

Acquisition of significantly new knowledge/skills	94.2%
Ability to apply knowledge and skills	91.5%
Ability to make significant contributions to specific business objectives/initiatives	85.3%

An additional assessment was added during the 2004-2005 academic year in which students were asked to rate their knowledge and skills before and after a training session. Students from 47 CE/CT courses participated in these assessments. The table below shows the average before and after ratings:

	Before	After
Rating of skill/knowledge level (0% = no skills; 100% = expert)	35.6%	64.5%

#### Evaluation and Use of Assessment Results 2003-2005

- Three goals for student learning have been developed for the CE/CT unit.
- Student competencies have been developed for two of the goals, but still need to be developed for Goal 3.
- Indirect measures suggest high levels of student knowledge and skill development.
- While students report an increased level of knowledge and skill development, they do not generally see themselves as experts, which seems appropriate given the short nature of the courses offered by CE/CT.
- Direct measurement of Goal 1 should be conducted in appropriate courses.
- Measurement in other goal areas should be conducted (both direct and indirect).
- Specific assessments designed for common types of courses (e.g., computer courses) may be useful.

*Goal 6: Assessment of Student Learning in Developmental Education*

As part of the 2004-2005 work plan, the College Assessment Coordinators proposed the creation of a task force to work on assessment strategies for the College's Developmental Education Program. The Developmental Education Work Group was created by the Academic Affairs and Standards Council (AASC) during the Spring Semester of 2005. The Work Group was charged with developing goals for student learning to serve as the foundation for assessment efforts in the program.

The Work Group was convened in the Fall Semester of 2005 and presented its findings to the AASC in the spring of 2006. The goals for student learning in developmental education were adopted by the AASC, including five goal statements, reproduced below:

1. Students will develop the ability to read at the college level.
2. Students will develop the ability to write at the college level.
3. Students will develop the ability to perform mathematical operations at the college level.
4. Students will develop the skills necessary for educational success.
5. Students will develop the skills necessary for career success.

The Developmental Education Work Group was created with a specific charge and a predetermined time frame. It concluded in the spring of 2006 with its list of proposed student learning goals and associated competencies. To continue that work, the College has approved release time for a faculty member who will serve as a coordinator for the Developmental Education Program during the 2006-2007 academic year. The College is also applying for grant funding through the MnSCU System Office to work on strengthening the Developmental Education Program. The objectives of this work will include continuing work on assessment, specifically with regard to developing and pilot testing direct measures of student learning.

## **Section 4: Evaluating Assessment at Anoka-Ramsey Community College**

### *Overview*

Based in part upon the difficulties experienced with assessment in the past, the College now recognizes the importance of evaluating the assessment process on an ongoing basis. Our plan to evaluate assessment has been guided by the advice of assessment experts, including Trudy Banta.<sup>2</sup> Evaluation materials from the Higher Learning Commission have also been helpful, including the Assessment Culture Matrix, which is no longer used by the Commission, and the Fundamental Questions for Conversations on Student Learning, which have been used to frame discussions.

### *Indicators of Effective Assessment*

During 2004-2005, the Assessment Coordinators and supervising Dean identified four areas to examine for evaluating the effectiveness of the College assessment program. These areas, along with their underlying objectives and a status report, are presented below.

#### **Goals for Student Learning**

- Goals have been clearly defined for programs, consistent with the College mission
- Assessment activities are focused on program goals
- Faculty members have a primary role in developing program goals

#### Status Report

- Goals for student learning have been developed for all of our programs, although some have only recently been developed.
- Goals for student learning are being incorporated into more student-oriented materials, including New Student Orientation, the College catalog, program brochures, and on the College website.
- Goals for student learning are in general alignment with the College mission, but a specific review has not been completed.
- More assessment activity has been directed at program-level goals than has been the case in the recent past, but many faculty continue to be more interested in assessment of course-level goals.
- Faculty members have a primary decision-making role in all curricular matters, including the development of goals for student learning at the course and program level.

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<sup>2</sup> Banta, T. W. (2002). *Characteristics of effective outcomes assessment: Foundations and examples*. In T. W. Banta and Associates (Eds.). *Building a scholarship of assessment*. San Francisco: Jossey-Bass.

**Faculty and staff training**

- Faculty and staff are familiar with assessment principles, terminology, and methods
- Faculty and staff have easy access to assessment resources, including printed, online, and human
- The assessment program provides opportunities and incentives to support the development of faculty and staff leadership

**Status Report**

- Faculty members have been given many opportunities to learn about assessment, including several all-college faculty development sessions on assessment and many other training sessions at the department or division level.
- In a recent survey, faculty and staff reported a slightly above-average level of understanding of assessment and rated the training and preparation they received slightly above neutral. Many respondents identified lack of time and doubts about the purpose of assessment as obstacles to their participation.
- A majority of our faculty is still not actively engaged in doing assessment work at the program level.
- Reaching part-time faculty (particularly evening and extension-site faculty) has been very challenging and many are not involved in assessment work.
- Training efforts so far have focused primarily on faculty and academic administrators. Some resources are available to other staff members, but most know little about assessment.
- Faculty and staff have good access to a number of useful assessment resources, including a College Assessment of Student Learning Handbook (now in its second edition), books on assessment (available in the College libraries), and an assessment section of the College website.
- The availability of human resources in assessment has increased significantly in the past few years with the hiring of a full-time Director of Institutional Research, appointment of faculty assessment coordinators, availability of academic administrators with assessment expertise, and the recent hiring of additional research staff members (one half-time and one third-time researcher in 2005-2006 and one full-time researcher anticipated in 2006-2007).
- Current assessment efforts do not include a clear mechanism for encouraging the development of new assessment leaders among the faculty and staff. There are certainly opportunities for faculty and staff to become involved in assessment activities, but incorporating incentives to encourage the development of new leaders would be helpful. The most-often listed reward in the 2006 assessment survey was “time” so the College should continue to make use of release time for faculty.

**Assessment methods**

- Assessment methods are grounded in relevant research from professional literature
- Outcomes are measured at multiple levels, including direct and indirect measures

Status Report

- The assessment program is grounded in research on assessment, gleaned from books, journal articles, and conferences on assessment topics. However, most of this knowledge is concentrated within a few people.
- In many cases, the development of rubrics is guided by professional literature.
- In many other cases, rubrics have been developed and refined locally based upon trial and error.
- Outcomes are being measured with both direct and indirect methods. However, we are not currently assessing all of our program goals.
- The College has recently added an important indirect measure of student learning with the Community College Survey of Student Engagement (CCSSE) and the Community College Faculty Survey of Student Engagement (CCFSSE). We are still determining the applicability of these results to improvement of student learning.

**Implementation of assessment results**

- Assessment results are used to make decisions that improve student learning
- The process of assessment is documented at multiple levels, including divisions, programs, and the college as a whole
- Assessment results are shared widely with constituent groups, including current and prospective students, faculty, staff, and members of the public

Status Report

- At this point, assessment results are mostly leading to changes in assessment methods. There have been a few examples of using assessment results to make curricular changes, but these examples are few in number.
- The College is making use of the eLumen software to collect and organize assessment data, but this documents only part of the assessment process. Evaluation of assessment results in department, division, and program meetings is not being documented and shared in a consistent way, which limits the implementation of assessment results.
- Summary reports are available on the College website to students, faculty, staff, and members of the public. However, it is still not clear how much detail should be included in these reports.

*Assessment Culture Matrix*

Although the Higher Learning Commission has discontinued use of the Assessment Culture Matrix, the College continues to use it as a self-evaluation tool, in part because the 2004 Assessment Plan was developed around the overarching goal of creating an institutional culture of assessment. The areas examined in the matrix include

institutional culture, shared responsibility, institutional support, and efficacy of assessment.

**Institutional Culture**

- Collective/Shared Values
- Mission

There is a building understanding of the purposes, advantages, and limitations of assessment, but it is not institution wide. We have many “early adopters” who understand the principles and practice of assessment but we also have many “doubters” who still seem to perceive this as an educational fad that will pass in time. We also have a number of faculty members who are simply not engaged in assessment.

Too many faculty members (and some administrators) seem to perceive assessment as an externally mandated requirement connected to accreditation, which interferes with the development of an internalized valuing of the assessment process and assessment results. The best way to defeat that line of thinking is to incorporate assessment of student learning into the life of the College in ways that people care about, such important institutional decisions (e.g., budgets, faculty hiring and evaluation, faculty and staff recognition, and program development and review) and meaningful discussions about the goals of the institution.

In a recent survey, faculty and staff were asked about their perceptions related to assessment. The consensus view reported is that the College’s assessment efforts are currently directed toward external audiences and compliance. However, when asked about assessment efforts five years in the future, a strong consensus reported that our efforts should be directed internally with the goal of making genuine improvements in student learning. This contrast suggests that faculty and staff are somewhat pessimistic about the current state of assessment efforts but agree, at least in principle, with the value of focusing on improvements in student learning.

The College Mission emphasizes the importance of teaching and learning, but the role of assessment is not specifically mentioned. Assessment is highlighted in other documents, including the College’s strategic plan.

**Shared Responsibility**

- Faculty
- Administration and Board
- Students

The faculty, as a whole, has done a good job developing assessment strategies over the past few years, with strong faculty involvement in defining student learning goals, developing assessment methods, collecting assessment data, and evaluating and using assessment results. The main weakness continues to be the breadth of that faculty involvement. Our goal is to achieve a climate of shared ownership and shared

responsibility for assessment but our efforts, to date, have depended on too few faculty members. Even among our strongest participants, however, there appears to be a perception that we are doing assessment to comply with external mandates, which shows a lack of ownership over the assessment process.

Academic administrators at the College appear to have a clear understanding of the importance of assessment and are supportive of the work that faculty members need to undertake. Support for assessment from the MnSCU Board of Trustees and Office of the Chancellor is not entirely clear. The MnSCU Center for Teaching and Learning has sponsored faculty development workshops on assessment, but there is no centralized coordination of assessment activities and no designated funds for assessment work emerging from the system office.

The College has made beginning efforts to inform students about the assessment process, beginning with educating them about learning goals within programs through orientation, the College catalog, the College website, and other types of program materials. In a supplementary question to the 2005 CCSSE, 64% of students reported that “professors clearly explain course learning outcomes and how they will assess them” often or very often (only 9% reported “seldom” or “never”).

Students would likely take more ownership of assessment if they could see their own assessment results. Our eLumen assessment software has the capability to provide students with individualized assessment feedback, but it will be some time before we are ready to implement that feature, due to the technical development of the software and the breadth of data we would need to collect (i.e., we would need to have enough data on each student to make the feedback personally meaningful).

At this point, the assessment work at the College has not included student representatives. We see the value of including a student perspective, but we have been slow in finding ways to seek student input.

<b>Institutional Support</b>
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| <ul style="list-style-type: none"><li>• Resources</li><li>• Structures</li></ul> |
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Over the past few years, the College has invested a significant amount of financial and human resources into assessment of student learning. The current budget for assessment activities is approximately \$100,000 per fiscal year, which covers the personnel cost of the Assessment Coordinator, funds for travel and training, and printing and other material costs. However, it is not clear what priority these funds would receive in the face of some future budget constraints. In the past, budget constraints have led to a severe curtailment of faculty release time.

Assessment funding has also been supplemented with money from Federal grants, specifically targeted at the assessment needs of Perkins-eligible programs, and by funding of the Institutional Research Office, which includes one full-time researcher, one

half-time researcher, and a system researcher working under contract on database development. An additional researcher will be added for the 2006-2007 academic year.

The structure of our assessment program has developed in a more-or-less organic way, attracting faculty and staff with an interest in assessment. While that has been successful so far, there is concern that we do not have a stable assessment structure that could easily withstand turnover among key players. We currently do not have an Assessment Committee and we are struggling with how to provide continuity in the Assessment Coordinator position, through which faculty may rotate.

<b>Efficacy of Assessment</b>
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The assessment program appears to be progressing at a good rate, but we are still far from the point of having a mature assessment program based on a “culture of evidence.” In the past, our assessment efforts have been focused too much on collecting data. The shift to using data to make important decisions that affect student learning will continue to be a challenge for some time. One major issue facing us is that faculty members seem to care more about classroom and course outcomes than program outcomes. We need to build upon the level of interest and curiosity faculty members have about classroom and course outcomes by making better connections between these outcomes and larger program outcomes.

## **Section 5: Conclusions and Recommendations**

### *Areas of Significant Progress and Accomplishment*

- Significant resources have been directed toward assessment over the past three years.
- The revised assessment plan is more focused and streamlined than its predecessor, which may help in its implementation.
- There has been a significant investment in faculty and staff training in assessment, with many teams attending assessment workshops, assessment conferences, and the Annual Meeting of the Higher Learning Commission.
- Assessment efforts are progressing in a number of goal areas within a number of programs. Most of the use of assessment thus far has been directed at modifying assessment methods.
- The College now has a very active Office of Institutional Research, staffed by one full-time researcher, one part-time researcher, and one system researcher working under contract. One additional full-time researcher will be added for the 2006-2007 academic year.
- Conversations about assessment, at both a philosophical and practical level, have begun, with the hope of integrating them into the day-to-day life of the College.
- Training materials on assessment, including an assessment handbook and an assessment website, are now widely available in print and electronic form.
- A very large majority of College faculty and staff members agree that the focus of assessment should be on the improvement of student learning.
- The College began participating in the Community College Survey of Student Engagement (CCSSE) in 2005, which provides a rich source of data that can be used to improve student engagement and student learning.
- The College's purchase of the eLumen software has made some aspects of collecting and using assessment data easier to manage.

### *Areas of Significant Weakness and Challenge*

- There is still a fairly strong perception that assessment efforts are being driven by the need to comply with external mandates.
- The College's track record on assessment after the 1996 site visit raises the possibility of inactivity and inertia setting in following the 2006 site visit.
- Although participation in assessment activities has grown over the past few academic years, we still have a small minority of our faculty and students actively involved in assessment.
- Most of the College's training efforts on assessment have been focused on faculty and academic administrators. Students and support staff have not been included in most of the training to date.
- The College must deal with the challenge of coordinating assessment activities spread across two campuses. The College has a single assessment

plan but each campus needs training and support and cross-campus communication needs to be strengthened.

- The College adopted the statewide Minnesota Transfer Curriculum as its goals for general education. While this saved time, it also may have weakened the ownership faculty and staff members feel about these important learning goals.
- The College still struggles with data management issues, particularly in terms of getting assessment results in the hands of people who can use them productively. This issue has been partially addressed by the creation of the Office of Institutional Research and the adoption of the eLumen system. However, as the scale of assessment activity grows, the needs increase.
- To capitalize on existing interest and initiative, the College needs to find ways to support the course-based research needs of the faculty. The new researcher being hired for the upcoming year will be dedicated, in part, to faculty research questions.

### *Directions for the Future*

- The pace of work on assessment during the past few years has been brisk. We have emphasized getting faculty involved in “doing assessment” with relatively little deep discussion about a philosophy of student learning. Our approach has been successful in getting a number of faculty members involved and helping us to identify issues that need to be addressed. However, it might be helpful in the near future to back up and see if the foundation for assessment work is really solid. We need a shared understanding of and a shared commitment to student learning if we are going to be successful. This may include a review of goals for student learning and a review of the College Mission.
- The team approach of the HLC Assessment Academy seems like a good strategy to ensure continuity of work despite turnover among faculty and staff. Because there has been less turnover among faculty than administrators, it will be especially important to develop broad faculty leadership on assessment over both campuses.

**Section 6: Attachments**

*Assessment of Student Learning Work Plans*

- 2004-2005
- 2005-2006
- 2006-2007

*Program Goals for Student Learning*

*Assessment of Student Learning Handbook*

- Second Edition: January 2006

## Assessment of Student Learning Work Plan 2004-2005

Assessment Objectives	Projected Assessment Outcomes	Actual Assessment Outcomes	Completion Date	Evaluation
1. Fund a faculty position at full release time to coordinate the assessment of student learning.	College faculty will have an assessment resource person available for support in developing assessment activities. As a result, a greater number and higher quality of assessment activities can be implemented.	Two faculty, each with 50% release time, were assigned as Faculty Assessment Coordinators. Assessment activities have been started and progress has been made in a number of areas including Communication, Natural Sciences, Math, Social Science, Humanities and Fine Arts, PTA, BMED, GIS, Continuing Education/Customized Training, and Student Services.	Coordinator position created Fall 2004, Assessment activities ongoing	Coordinator position is helpful in getting work underway.
2. Make funds available and sufficient to support consultation, workshops, and professional development for faculty and administration in the area of the assessment of student learning.	Faculty and administration will become better educated about the importance of assessment of student learning and how to best implement effective assessment of college programs and services.	Groups of faculty and administrators have attended four conferences on the assessment of student learning. In addition, the Assessment Coordinators have led training sessions on assessment during faculty duty days. Faculty rated these training sessions as very helpful. Consequently, a larger percentage of ARCC college faculty and administrators have a better understanding of assessment.	Ongoing	
3. Engage Active Learning Advocate in assessment activities for fifteen percent of her time.	Active learning activities focused on assessment will be carried out.	The Active Learning Advocate (Kim Lynch) has been a facilitator for Small Group Instructional Feedback (SGIF) sessions. For this assessment activity, she met with 50+ instructors, then facilitated the feedback session with students. The results of the feedback sessions are used by the instructor to improve their courses. Kim also held several workshops related to formative assessment of student learning.	50+ SGIF sessions completed thus far.	

## Assessment of Student Learning Work Plan 2004-2005

<p>4. Develop a formal plan for the assessment of student learning. Review in Academic Affairs and Standards Counsel. Update annually.</p>	<p>A formal plan will allow assessment participants to prioritize goals and activities to achieve an effective assessment program. In addition, this plan will allow for a systematic way to periodically monitor progress towards achievement of the goals. Approval by the AASC committee will allow the plan to be made available to all employees and students of the college.</p>	<p>A formal assessment plan was developed (at an HLC conference) in 2003 and updated in 2004. Progress toward the achievement of the goals has been monitored and updated in the formal plan in 2004 and 2005.</p>	<p>A plan has been developed. Revising the plan will be an ongoing activity.</p>	<p>The plan has not yet been submitted to the AASC.</p>
<p>5. Faculty assessment coordinators provide support or assistance, if needed, to program areas as they develop student learning assessment rubrics.</p>	<p>Faculty will be more likely to do assessment of student learning and develop higher quality assessment activities if they are provided support by knowledgeable assessment personnel.</p>	<p>Faculty assessment coordinators and the dean in charge of assessment have provided support to faculty and administrators who were developing assessment activities and rubrics. The areas that received support were: Music, Art, Fine Arts/Humanities, Biology, Math, Student Services, Speech, Continuing Education/Customized Training, and English.</p>	<p>Ongoing</p>	
<p>6. Assess student learning in two of the ten areas of the transfer curriculum. Collect and analyze data, have programs evaluate their data and make programmatic changes as appropriate, and reassess. Continue assessment of areas begun in 2003-2004.</p>	<p>A broad look at the achievement of students in the 10 goal areas of the MN transfer curriculum will be possible. Appropriate changes to programs can be made after the assessment data is analyzed periodically. After 5 years of increasing assessment activities, all MN transfer curriculum goal areas will have some assessment activities in place, although additional assessment activities can be added to a particular goal area at any time.</p>	<p>Two additional goal areas were added in 2004 (Natural Science and Social Science). Assessment of student learning in two other goal areas (Humanities and Communication) was continued in 2004/05 after beginning the assessment of these goal areas in 2003/04. Assessment data was entered in eLumen, although analysis of the data has yet not been completed.</p>	<p>Ongoing</p>	
<p>7. Establish goals for student learning for developmental education.</p>	<p>Development of appropriate developmental education goals will allow for progress in the effective assessment of these goals.</p>	<p>A proposal has been submitted to the AASC to create a task force on Developmental Education. One of the task force's goals will be to develop goals for student learning.</p>	<p>Ongoing</p>	
<p>8. Assess student learning in developmental education. Collect and analyze data, make programmatic changes, reassess.</p>	<p>Assessment of student learning in developmental education and the consequent periodic analysis of the results will allow for appropriate changes to be made to the program in order to more effectively achieve the student learning goals.</p>	<p>Once goals are established by the developmental education task force, assessment activities can be developed and data can be collected during the upcoming academic year (2005/06).</p>	<p>Projected Spring 2006</p>	

## Assessment of Student Learning Work Plan 2004-2005

<p>9. Establish goals for Student Learning for all occupational programs.</p>	<p>Effective assessment of student learning in the A.S., A.A.S and certificate programs will be possible once goals have been developed for these programs.</p>	<p>Goals for the following programs were established or revised: Geographic Information Systems (GIS), Biomedical (BMed) Technology, PTA, Business programs and Nursing.</p>	<p>Fall 2004</p>	
<p>10. Collect and analyze assessment data in two occupational programs and make programmatic changes as necessary, and reassess.</p>	<p>Assessment of student learning in the A.S., A.A.S., and certificate programs and the consequent periodic analysis of the results will allow for appropriate changes to be made to the programs in order to more effectively achieve the student learning goals.</p>	<p>Assessment of student learning has begun in the PTA program and selected business programs; data will be entered into eLumen during spring 2005. Additional programs will be assessed next year.</p>	<p>Ongoing</p>	
<p>11. Establish goals for student learning for the AFA-Music program. Collect and analyze assessment data for the program to be used for student portfolio documentation and in making programmatic adjustments.</p>	<p>Effective assessment of student learning will assist students in portfolio development and faculty in program planning.</p>	<p>Rubrics for assessment have been established and data will be entered into eLumen during Spring 2005. This data will be reviewed by the department and advisory committee.</p>	<p>Ongoing</p>	
<p>12. Create assessment information resources such as an assessment newsletter and/or an assessment resource manual to be available to faculty to provide them with key assessment terms, principles, concepts, models, and procedures for assessing student learning.</p>	<p>Having a printed assessment resource readily available to all faculty, staff and administrators will allow personnel to more easily develop effective assessment activities and rubrics and to better understand the language of assessment.</p>	<p>An "Assessment of Student Learning" manual was distributed to all full-time faculty at the Spring 2004 duty days. Some of the background information in the manual was orally presented to the faculty group. The manual contains assessment background info, a glossary of terms, examples of rubrics currently used at ARCC and information about eLumen. Additional assessment resources will be added to these manuals on a regular basis.</p>	<p>January 6, 2005</p>	
<p>13. Inform students about the goals for student learning at ARCC during orientation.</p>	<p>When students are informed during orientation that ARCC has established goals for student learning then they will better understand the value that the college places on the assessment of student learning. It is hoped that students will be more supportive of assessment activities in their courses and programs once they understand this mission and that they will better understand their own learning.</p>	<p>An informational brochure is being developed for student orientation. This information will be available to students entering Fall 2005 and will also be incorporated into the online student orientation materials.</p>	<p>Ongoing</p>	

## Assessment of Student Learning Work Plan 2004-2005

<p>14. Establish a space on the ARCC website to display information about the assessment of student learning.</p>	<p>By publicly displaying some information about the assessment of student learning data on the ARCC website, the college will allow easier access to the assessment results by interested individuals and groups. The easy accessibility of the data will show the community the importance the college places on assessment of student learning and will inform interested parties to what level students are achieving the learning goals in various areas.</p>	<p>An assessment page for the college website is in development. It will be linked in to information about the college, information for students, and information for faculty and staff.</p>	<p>Ongoing</p>	
<p>15. Incorporate information about assessment and student learning into college publications (e.g. college catalog, view book, etc...)</p>	<p>All prospective and current students will have information readily accessible regarding the college's goals related to student learning and assessment in the most widely distributed and most important publications of the school. It is hoped that students will be supportive of the assessment process in their courses and programs if they are better informed about this topic and will better understand their own learning.</p>	<p>Printed materials are being revised to incorporate goals for student learning and information about the college assessment programs. The College Catalog, the Student Handbook, and the Faculty Handbook will be revised for their Fall 2005 editions.</p>	<p>Beginning of Fall Semester 2005</p>	
<p>16. Make students in A.A., A.S, A.A.S., and certificate programs aware of the goals for student learning in their program.</p>	<p>Student learning goals are clearly stated in all information packets and online resources available to the students of the A.A., A.S, A.A.S., and certificate programs. Consequently, students will better understand the value the college places on their success in achieving these goals (as measured by assessment of their learning) and it is hoped that students will be supportive of the assessment process in these programs.</p>	<p>Student learning goals are stated in some of the student materials in the PTA and nursing programs, but still needs to be added to some available student resources in these programs. In other A.S., A.A.S and certificate programs, goals need to be added to the printed and online information available about these programs.</p>	<p>Ongoing</p>	
<p>17. Include assessment of student learning information in regular orientations for new faculty and staff.</p>	<p>New faculty and staff will learn about the importance of assessment of student learning.</p>	<p>Information about Assessment of Student Learning will be presented to new faculty and staff beginning with Fall 2005 hiring.</p>	<p>Ongoing</p>	<p>Need to begin planning for this.</p>
<p>18. Develop a glossary of assessment related terms; incorporate existing terms where possible.</p>	<p>The ready availability of a glossary of assessment related terms will help to create a common vocabulary of assessment terminology.</p>	<p>A glossary was developed (Fall 2004) and distributed in the "Assessment of Student Learning" manual distributed during Spring 2005 duty days.</p>	<p>Spring 2005</p>	

## Assessment of Student Learning Work Plan 2004-2005

19. Recruit student leaders to participate in the development of assessment procedures.	Student leaders can provide feedback and insight about how best to inform and engage students in assessment activities.	Student leaders have not yet been recruited to participate in assessment activities.	Ongoing	
20. Plan and hold a retreat for administrative, faculty, and staff leaders to discuss principles, goals, process, and planning.	If college leaders are better informed about the processes that allow for the development of effective assessment strategies, the college will have higher quality assessment taking place now and in the future. In addition, if the leaders are given a specific time and place to discuss assessment principles, goals, and processes, progress in achieving assessment goals will take place <i>during</i> these retreats.	A ½ day retreat was planned during finals week Fall 2004 where <b>XX</b> faculty and administrators attended and discussed two areas: planning for assessment activities for Spring 2005 duty days and developing goals for student learning in the student services area.	Dec 2004	
21. Communicate goals and competencies of programs (General Education, AA, career and technical programs) to students, staff, faculty, and other constituents.	Students, staff, and faculty will be well informed about what outcomes are expected of students in a particular program. Consequently, the students in a particular program will expect assessment of these competencies.	This information will be incorporated into print and online materials.	Fall 2005	
22. Map courses in terms of General Education Goal Area and competency coverage.	The existence of an organized table that clearly shows where courses lie in terms of their General Education Area will make finding the appropriate competency area for a course more facile when assessment activities are initiated and will assist in broad coverage of assessment activities.	Completed	2004	
23. Map courses in the A.S., A.A.S, and certificate programs in terms of their competency coverage.	The existence of an organized table that clearly shows where courses lie in terms of their competency coverage will make finding the appropriate competency area for a course in a program more facile when assessment activities are initiated and will assist in the broad coverage of assessment activities in these programs.	A map for business course competency coverage is in development. Other programs need to begin this work.	Ongoing	
24. Establish goals for student learning for the Student Services area.	Goal statements will allow the Student Services Program to develop competencies and to begin data collection in Fall 2005.	Goals were drafted during the Fall 2004 assessment retreat and in follow-up meetings with faculty and staff.	Feb 2005	

## Assessment of Student Learning Work Plan 2004-2005

25. Establish a rubric and collect data for one Student Services learning goal.	Assessment results for one goal area will allow Student Services faculty and staff to evaluate whether that goal area needs improvement.	Goal related to career development will be assessed.	Ongoing	Need to meet with Andrea R. and team to get this done.
26. Establish four to six general goals related to student learning for Continuing Education/Customized Training.	Effective assessment in the Continuing Education/Customized Training area necessitates having appropriate goals developed first.	Goals were drafted at a meeting with CE/CT staff in February 2005. These goals will be refined in subsequent meetings.	Ongoing	
27. Establish a rubric and collect data for one CE/CT learning goal.	Assessment results for one goal area will allow Continuing Education/Customized Training faculty and staff to evaluate whether that goal area needs improvement.	Not yet started.		

## Assessment of Student Learning Work Plan 2005-2006

Assessment Objectives	Projected Assessment Outcomes	Actual Assessment Outcomes	Completion Date
1. Fund a faculty position at full release time to coordinate the assessment of student learning.	Faculty Assessment Coordination will facilitate the ongoing development of the assessment of student learning process at ARCC.		Projected 5/06
2. Make funds available and sufficient to support consultation, workshops, and professional development for faculty and administration in the area of the assessment of student learning.	Faculty and administration will participate in professional development activities related to student learning.		Projected 12/06
3. Formalize the assessment of student learning plan outlining our assessment cycle including what goal areas will be assessed when. Specify where and when assessment of online learning will occur. Review in Academic Affairs and Standards Council and update annually.	A formal plan monitored by AASC will add legitimacy to our assessment efforts and will promote follow through. It will allow for the prioritization of goals and a systematic way to monitor progress toward achievement of the goals.		Projected 12/05
4. Analyze student learning data related to MnTC areas collected in 2003-2004 and 2005-2005. Have programs/departments evaluate data and make programmatic changes as appropriate and reassess. Present/publish assessment results.	Appropriate changes to programs can be made after assessment data is analyzed. Student learning in these areas can then be reassessed.		Projected 12/05
5. Summarize results of assessment of student learning in online courses to date.	Analysis of student learning in online courses will help to promote quality improvement in online programs/courses. Evaluate data, make changes and reassess.		
6. Assess student learning in two new areas of the transfer curriculum. Collect and record data. Continue assessment of areas begun 2003-2005.	Assessment of student learning related to mathematical/logical reasoning and people and the environment will be conducted. Faculty support for the development of rubrics and collection of data will be enlisted.		Projected 5/06
7. Establish goals for student learning for developmental education and plan assessment.	Developmental education study group will establish goals and a plan for assessment in coordination with the faculty assessment coordinator. Goals and plan will be presented to AASC.		Projected 12/05
8. Assess student learning in developmental education viewed as a comprehensive program.	Assessment of student learning related to developmental education as a comprehensive program will be piloted.		Projected 5/06

Assessment of Student Learning Work Plan 2005-2006

Assessment Objectives	Projected Assessment Outcomes	Actual Assessment Outcomes	Completion Date
9. Analyze student learning data related to PTA and Business programs collected in 2004-2005. Have programs evaluate data and make programmatic changes necessary.	Appropriate changes to programs can be made after data is analyzed. Student learning can then be reassessed. Present/publish assessment results.		Projected 12/05
10. Assess student learning in two additional occupational programs. Collect and record data. Continue assessment of PTA and business.	Student learning related to GIS and BMED will be assessed. Faculty and advisory support in the development of rubrics and collection of data will be enlisted.		Projected 5/06
11. Assess student learning in one Student Services goal area.	Student learning related to the "career goal" area of student services will be assessed. Faculty and staff support will be enlisted to develop a rubric and collect data.		Projected 5/06
12. Confirm goals for student learning for CE/CT. Establish a rubric and collect data for one CE/CT learning goal.	Student learning related to a CE/CT goal will be assessed. Faculty and staff support will be enlisted to develop and collect data.		Projected 5/06
13. Establish goals for student learning for Wellness.	Formalizing foals for student learning for Wellness will facilitate the assessment process.		Projected 5/06
14. Create Assessment of Student Learning webpage within ARCC website with associated links.	A webpage will be completed with information added on an ongoing basis. Assessment resources for students and faculty and assessment results will be included.		Projected 5/06
15. Include brief reviews about assessment of student learning at ARCC in the College Bulletin. Include results.	Reviews about assessment in the College Bulletin will engender a culture of assessment at ARCC.		Projected 5/06
16. Better inform students about the goals for student learning in their chosen program.	Student learning goals will be clearly stated in all information packets and online resources regarding ARCC programs.		Projected 5/06
17. Publish an article about the assessment of student learning at ARCC in the school newspaper. Include results.	Informing students about their learning can assist them in their educational and career planning.		Projected 5/06

Assessment of Student Learning Work Plan 2005-2006

Assessment Objectives	Projected Assessment Outcomes	Actual Assessment Outcomes	Completion Date
18. Add information to the Assessment of Student Learning manual to distribute on a regular basis.	ARCC personnel will continue to gain knowledge and awareness about the assessment of student learning.		Projected 5/06
19. Inform new college staff about ARCC's goals for student learning and the process of assessing student learning.	Orienting new staff about ARCC's goals for student learning will further help to create a culture of assessment at ARCC.		Projected 12/05
20. Include information about the assessment of student learning in new faculty orientation process.	New faculty will be welcomed into the culture of the assessment of student learning at ARCC.		Projected 12/05
21. Update information regarding assessment of student learning activities completed the last 5 years.	The "Inventory of Assessment Activities" will be reviewed for completeness in division and program meetings facilitated by the faculty assessment coordinator.		Projected 12/05
22. Map courses in occupational programs in terms of goal areas.	An organized table that shows which courses assess which goal area for the occupational programs will facilitate the development of program level assessment activities.		Projected 5/06
23. Map CCSSE and CCSSFE items. General Education, Occupation Program, and Student Service goal areas. Compile and analyze related data. Make programmatic changes as appropriate and reassess.	CCSSE data will provide indirect evidence of student learning.		Projected 5/06
24. Add to assessment resources bibliography and secure needed items for the library.	Availability of assessment resources will assist in the use of best practices.		Projected 5/06
25. Evaluate progress related to ARCC's assessment learning process using "Evaluating Assessment" document created in Spring 2005.	Once progress is assessed, improvements to the process can be made.		Projected 12/05

## Assessment of Student Learning Work Plan 2006-2007

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Assessment Objectives	Projected Assessment Outcomes	Actual Assessment Outcomes	Completion Date
1. Fund release time to provide for faculty coordination of assessment activities.	Faculty Assessment Coordination will facilitate the ongoing development of the assessment of student learning process at ARCC.		Projected 5/07
2. Recruit a diverse group of faculty members (representing both campuses) to serve as assessment coordinators.	A group of faculty members representing both campuses and diverse departments and programs will help to coordinate assessment activities throughout the college.		Projected 9/06
3. Fund the assessment budget to support consultation, workshops, professional development, and participation in the HLC Assessment Academy.	Financial resources will be in place to provide the support needed for faculty and staff development.		Projected 8/06
4. Develop a documentation strategy to collect, evaluate, and distribute assessment results from programs.	A documentation strategy will help to make assessment results more widely communicated and more effectively used.		Projected 12/06
5. Update the assessment portion of the college website with current information and results.	The assessment section of the college website should become a centralized location for anyone to find relevant and up-to-date information about assessment.		Ongoing
6. Add a seventh and eighth area of the MnTC (from Critical Thinking, Human Diversity, Global Perspective, and Ethical and Civic Responsibility) to active assessment.	The areas will be identified and assessments designed and pilot tested.		Projected 5/07
7. Review pilot test results with assessments recently added in Mathematical/Logical Reasoning and People and the Environment and make changes, if necessary.	Recent results will be reviewed by program faculty and needed changes will be made to assessments planned this year.		Projected 5/07
8. Develop assessment strategies (assessment methods and rubrics) for Developmental Education.	Assessment of student learning related to developmental education as a comprehensive program will be piloted.		Projected 5/06

Assessment of Student Learning Work Plan 2006-2007

Assessment Objectives	Projected Assessment Outcomes	Actual Assessment Outcomes	Completion Date
9. Develop assessment strategies (assessment methods and rubrics) for Wellness.	Program faculty will identify courses, assessment methods, and rubrics and will pilot test assessment.		Projected 5/07
10. Develop assessment strategies (assessment methods and rubrics) for GIS.	Program faculty will identify courses, assessment methods, and rubrics and will pilot test assessment.		Projected 5/07
11. Develop assessment strategies (assessment methods and rubrics) for BMED.	Program faculty will identify courses, assessment methods, and rubrics and will pilot test assessment.		Projected 5/07
12. Add additional goal areas to existing assessments in Business.	Program faculty will identify courses, assessment methods, and rubrics and will pilot test assessment.		Projected 5/07
13. Add additional goal areas to existing assessments in Student Services.	Program faculty and staff will identify activities, assessment methods, and rubrics and will pilot test assessment.		Projected 5/07
14. Help programs to complete "Program Assessment Plans" and submit to AASC.	Programs undergoing program review will complete assessment plans. Other programs will work on assessment plans, as time allows.		Projected 5/07
15. Develop communication strategies for involving students in assessment.	A communication strategy will help to keep students informed about assessment strategies and assessment results.		Projected 5/07
16. Develop strategies for increasing support staff involvement in assessment.	Assessment will be incorporated into staff development activities and new staff orientation.		Projected 5/07
17. Facilitate training of new faculty in assessment through new faculty orientation.	New faculty will receive training in assessment of student learning through new faculty orientation forums.		Projected 12/06
18. Provide support to the team participating in the HLC Assessment Academy.	Assessment coordinators will serve as team members and/or liaisons to the HLC Assessment Academy team.		Projected 5/07

## Assessment of Student Learning Work Plan 2006-2007

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<b>Assessment Objectives</b>	<b>Projected Assessment Outcomes</b>	<b>Actual Assessment Outcomes</b>	<b>Completion Date</b>
19. Pilot test assessments of overall academic achievement in Perkins-eligible career programs.	Selected standardized tests (e.g., MAPP) will be pilot tested in career programs to determine utility.		Projected 5/07
20. Evaluate the results from the 2006 CCSSE and CCFSSE, communicate results, and develop action plan.	Survey results will be shared in faculty development sessions and other college-wide venues. An action plan for improving student engagement will be developed.		Projected 5/07

## **Program Goals for Student Learning**

### **Associate in Arts**

1. To develop writers and speakers who use the English language effectively and who read, write, speak, and listen critically
2. To develop thinkers who are able to unify factual, creative, rational, and value-sensitive modes of thought
3. To improve students' understanding of natural science principles and of the methods of scientific inquiry, i.e., the ways in which scientists investigate natural science phenomena
4. To increase students' knowledge about mathematical and logical modes of thinking
5. To increase students' knowledge of how historians and social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events, and ideas
6. To expand students' knowledge of the human condition and human cultures, especially in relation to behavior, ideas, and values expressed in works of human imagination and thought
7. To increase students' understanding of individual and group differences (e.g. race, gender, class) and their knowledge of the traditions and values of various groups in the United States
8. To increase students' understanding of the growing interdependence of nations and people and develop their ability to apply a comparative perspective to cross-cultural social, economic, and political experiences
9. To develop students' capacity to identify, discuss, and reflect upon the ethical dimensions of political, social, and personal life and to understand the ways in which they can exercise responsible and productive citizenship
10. To improve students' understanding of today's complex environmental challenges
11. To improve students' awareness and understanding of issues related to personal wellness

### **Associate in Fine Arts (Music)**

1. Demonstrate a required level of artistry and technical proficiency on their instrument
2. Demonstrate a required level of music analytical competence
3. Demonstrate a required level of aural recognition
4. Understand the historical and cultural development of music throughout the ages
5. Communicate informed personal reactions to recorded and live music

**Associate in Fine Arts (Art)**

1. Demonstrate a required level of creativity and technical proficiency in their medium
2. Demonstrate an ability to execute images that reflect their own ideas and concepts
3. Demonstrate an ability to develop a consistent body of work reflecting a concept/theme
4. Demonstrate a required level of critical evaluation of their own artwork
5. Understand the historical and cultural development of works of art throughout the ages from pre-history to the 21<sup>st</sup> Century
6. Communicate informed personal reactions to works of art

**Associate in Science (Accounting)**

1. Function effectively in a diverse, global business community
2. Use critical thinking skills to analyze and solve business problems
3. Demonstrate effective interpersonal skills and professional attitudes
4. Demonstrate effective business communication skills

**Associate in Science (Administrative Management)**

1. Function effectively in a diverse, global business community
2. Use critical thinking skills to analyze and solve business problems
3. Demonstrate effective interpersonal skills and professional attitudes
4. Demonstrate effective business communication skills

**Associate in Science (Biomedical Technologist)**

1. Demonstrate the ability to integrate science and math skills with technical requirements of the medical device industry
2. Demonstrate an understanding of trends, size, and scope of the medical device industry
3. Demonstrate proficiency in oral and written communication, interpersonal skills and critical thinking/problem solving
4. Demonstrate an understanding of the processes involved in the design, development and manufacture of medical devices
5. Demonstrate knowledge of various certification standards and agencies involved in regulatory processes specific to the medical device industry
6. Demonstrate application of classroom knowledge to industry field experience

**Associate in Science (Business)**

1. Function effectively in a diverse, global business community
2. Use critical thinking skills to analyze and solve business problems
3. Demonstrate effective interpersonal skills and professional attitudes
4. Demonstrate effective business communication skills

### **Associate in Science (Computer Networking and Telecommunications)**

1. Design and develop secure voice, video, and data networks
2. Implement and configure networked devices
3. Demonstrate the skills necessary to administer and monitor networks
4. Exhibit mastery of problem-solving skills to troubleshoot existing and emerging technologies
5. Function as responsible and ethical network administrators for organizations and society

### **Associate in Science (Computer Science)**

1. Write and implement algorithms using a programming language of their choice to solve any problem
2. Write object-oriented programs
3. Implement data structures in writing complex programs
4. Be fluent in two or more programming languages; 5) Understand ethical and moral issues as related to Computer Science applications
5. Understand the computer's architecture as it relates to Computer Science
6. Have a strong base to become a life-long learner in the field of Computer Science

### **Associate in Science (Geographic Information Systems and Cartography)**

1. Demonstrate an ability to apply geographic analysis principles to problems in the social and biological sciences, natural resources and business environments
2. Understand theory and implementation of relational databases and data models relevant to GIS
3. Understand and apply the principles of map design and production
4. Demonstrate proficiency in GIS software commonly used in the field
5. Demonstrate an ability to locate and create data appropriate for a wide variety of GIS applications

### **Associate in Science (Integrative Health and Healing)**

1. Demonstrate proficiency in oral and written communication, interpersonal skills, critical thinking and problem-solving skills
2. Evaluate the fundamental principles of integrative health and healing, trends in holistic health, and the complexities of this emerging field
3. Demonstrate an understanding of the interconnectedness of mind, body and spirit of the human system
4. Describe holistic healing philosophies and healing through social, cultural, environmental and global perspectives of healing
5. Evaluate the role of healing strategies for self-care as well as strategies in the healthcare system
6. Describe ethical responsibilities in the practice of holistic healing
7. Identify current scientific literature to support the emerging field of Integrative Health and Healing
8. Create and participate in a comprehensive internship project in which to apply classroom knowledge to workplace experience

### **Associate in Science (Pre-Engineering)**

1. Comprehend and apply fundamental engineering concepts
2. Solve technical problems
3. Present clear and accurate solutions with respect to mathematics and units of measure

### **Associate in Science (Registered Nurse: Two-Year Option)**

(Note: Nursing goals are cross-referenced to Guiding Principles--CT for Critical Thinking, EC for Effective Communication, AD for Accepting Diversity, and ED for Ethical Decision Making)

1. Integrate nursing knowledge and understanding of behavioral, biological and physical sciences as a basis for beginning nursing practice (CT)
2. Utilize the nursing process as a basis for decision-making in planning care with clients of all ages and all cultures (CT)
3. Relate and apply research finding to current nursing practice (CT)
4. Communicate effectively with individuals, families, communities, and members of the health team (EC)
5. Establish an interpersonal environment that promotes holistic care (EC)
6. Work cooperatively with individuals, families, communities and the health care team to achieve health care goals and outcomes (EC)
7. Manage care for clients within the scope of associate degree nursing competencies (CT)
8. Facilitate the continuity of care within and across health care settings (EC)
9. Delegate to other nursing personnel nursing care that is appropriate to their level of ability and educational preparation (EC)
10. Supervise and evaluate nursing personnel in providing health care (EC)

11. Implement health teaching and counseling specific to the client's culture, knowledge, and level of development (AD)
12. Utilize the teaching and learning process to assist clients and the health care team to meet health care goals and outcomes (EC)
13. Establish realistic goals in relation to personal growth, personal health, professional involvement, and educational responsibility (CT)
14. Assimilate technological literacy and proficiency in current nursing practice (CT)
15. Demonstrate caring behaviors that are nurturing, protective, compassionate and person-centered (AD)
16. Respect the dignity, worth, and uniqueness of the individual (AD)
17. Advocate for client rights (ED)
18. Foster an environment of hope and trust where client choices related to cultural values, beliefs, and lifestyles are respected (AD)
19. Foster an environment of respect for colleagues (EC)
20. Practice nursing within an ethical framework; i.e., remain an active participant in professional practice (ED)
21. Demonstrate responsibility and accountability for the standards of nursing practice (CT)
22. Integrate components of professionalism into nursing practice (CT)
23. Demonstrate the ability to recognize and apply lessons learned from previous experience to nursing practice (CT)
24. Relate nursing knowledge, skills, values, and experiences to identify, understand, describe, influence, and manage common situations (CT)
25. Implement nursing strategies to provide cost-effective care (CT)

### **Associate in Science (Registered Nurse: LPN-RN Option)**

(Note: Nursing goals are cross-referenced to Guiding Principles--CT for Critical Thinking, EC for Effective Communication, AD for Accepting Diversity, and ED for Ethical Decision Making)

1. Integrate nursing knowledge and understanding of behavioral, biological and physical sciences as a basis for beginning nursing practice (CT)
2. Utilize the nursing process as a basis for decision-making in planning care with clients of all ages and all cultures (CT)
3. Relate and apply research finding to current nursing practice (CT)
4. Communicate effectively with individuals, families, communities, and members of the health team (EC)
5. Establish an interpersonal environment that promotes holistic care (EC)
6. Work cooperatively with individuals, families, communities and the health care team to achieve health care goals and outcomes (EC)
7. Manage care for clients within the scope of associate degree nursing competencies (CT)
8. Facilitate the continuity of care within and across health care settings (EC)
9. Delegate to other nursing personnel nursing care that is appropriate to their level of ability and educational preparation (EC)
10. Supervise and evaluate nursing personnel in providing health care (EC)

11. Implement health teaching and counseling specific to the client's culture, knowledge, and level of development (AD)
12. Utilize the teaching and learning process to assist clients and the health care team to meet health care goals and outcomes (EC)
13. Establish realistic goals in relation to personal growth, personal health, professional involvement, and educational responsibility (CT)
14. Assimilate technological literacy and proficiency in current nursing practice (CT)
15. Demonstrate caring behaviors that are nurturing, protective, compassionate and person-centered (AD)
16. Respect the dignity, worth, and uniqueness of the individual (AD)
17. Advocate for client rights (ED)
18. Foster an environment of hope and trust where client choices related to cultural values, beliefs, and lifestyles are respected (AD)
19. Foster an environment of respect for colleagues (EC)
20. Practice nursing within an ethical framework; i.e., remain an active participant in professional practice (ED)
21. Demonstrate responsibility and accountability for the standards of nursing practice (CT)
22. Integrate components of professionalism into nursing practice (CT)
23. Demonstrate the ability to recognize and apply lessons learned from previous experience to nursing practice (CT)
24. Relate nursing knowledge, skills, values, and experiences to identify, understand, describe, influence, and manage common situations (CT)
25. Implement nursing strategies to provide cost-effective care (CT)

#### **Associate in Applied Science (Business Programs)**

1. Function effectively in a diverse, global business community
2. Use critical thinking skills to analyze and solve business problems
3. Demonstrate effective interpersonal skills and professional attitudes
4. Demonstrate effective business communication skills

#### **Associate in Applied Science (Physical Therapy Assistant)**

1. Demonstrate competent written and oral communication skills
2. Perform all treatment procedures skillfully and safely
3. Demonstrate knowledge of the normal structure and function of the human body and understand the physiological and psychological effects of disease and injury
4. Demonstrate understanding of his/her professional role as a PTA and demonstrate awareness of ethical behavior, legal responsibility, and the PT/PTA professional relationship
5. Recognize and appreciate diversity within society and the health-care profession

### **Certificate Program (Biomedical Technician)**

1. Demonstrate an understanding of trends, size, and scope of the medical device industry
2. Demonstrate proficiency in oral and written communication, interpersonal skills, and critical thinking/problem solving
3. Demonstrate an understanding of the processes involved in the design, development and manufacture of medical devices
4. Demonstrate knowledge of various regulations and agencies involved in regulatory processes specific to the medical device industry
5. Demonstrate application of classroom knowledge to industry field experience

### **Certificate Program (Business: Accounting, Management/Marketing, Office Technology)**

1. Function effectively in a diverse, global business community
2. Use critical thinking skills to analyze and solve business problems
3. Demonstrate effective interpersonal skills and professional attitudes
4. Demonstrate effective business communication skills

### **Certificate Program (Clinical Research Professional)**

1. Explain the steps in the research process
2. Describe the process for data collection and documentation
3. Demonstrate an understanding of applicable Regulations for conducting clinical trials in the US and other countries
4. Describe the elements of Good Manufacturing Practices (cGMP) and Good Clinical Practices (cGCP)
5. Understand and demonstrate components of clinical research protocol

### **Certificate Program (Computer Networking: Network Support and Administration, Computer Help Desk Specialist, National Security Support)**

1. Design and develop secure voice, video, and data networks
2. Implement and configure networked devices
3. Demonstrate the skills necessary to administer and monitor networks
4. Exhibit mastery of problem-solving skills to troubleshoot existing and emerging technologies
5. Function as responsible and ethical network administrators for organizations and society

### **Certificate Program (Computer Programming)**

1. Be fluent in two or more programming languages
2. Write computer programs to solve any type of problem
3. Understand ethical and moral issues as related to Computer Science applications
4. Write Windows-based programs
5. Write Graphical User Interface programs that are platform independent
6. Write Object-Oriented programs

### **Certificate Program (Geographical Information Systems and Cartography)**

1. Understand theory and implementation of relational databases and data models relevant to GIS
2. Understand and apply the principles of map design and production
3. Demonstrate proficiency in GIS software commonly used in the field
4. Demonstrate an ability to locate and create data appropriate for a wide variety of GIS applications

### **Certificate Program (Integrative Health and Healing)**

1. Evaluate the fundamental principles of integrative health and healing, trends in holistic health, and the complexities of this emerging field
2. Demonstrate an understanding of the interconnectedness of mind, body and spirit of the human system
3. Describe holistic healing philosophies and healing through social, cultural, environmental and global perspectives of healing
4. Evaluate the role of healing strategies for self-care as well as strategies in the healthcare system
5. Describe ethical responsibilities in the practice of holistic healing
6. Identify current scientific literature to support the emerging field of Integrative Health and Healing