New Mexico Junior College Assessment of Student Learning / Fall 2008 – Spring 2009 Annual Report

New Mexico Junior College (NMJC) continues its strategy for assessing student learning outcomes on three levels: institutional, department/program, and course. This document reports on the status of assessment activities at each level for the 2008-2009 academic year as well as other activities associated with assessment at NMJC.

Oversight for assessment activities at NMJC is performed by the Student Learning Outcomes Assessment Committee (SLOAC). The SLOAC is comprised of eight voting members, including seven faculty members and the Coordinator of Assessment and Quality Improvement, plus the Vice President for Instruction (VPI) and five academic deans in ex-officio capacities, and a support staff recorder. The committee meets on the first Monday of each month of the academic year.

Institutional Level Assessment

There are three student learning outcomes at the institutional level of assessment:

Communication – The student should be able to:

- Comprehend information to summarize, analyze, evaluate, and apply to a specific situation.
- Communicate in an accurate, correct, and understandable manner.

Critical Thinking and Problem Solving – The student should be able to:

- Define a problem and arrive at a logical solution.
- Use appropriate technology and information systems to collect, analyze, and organize information.
- Apply critical thinking, analysis, and problem solving to data.

Self and Community – The student should be able to:

- Analyze and reflect on the ethical dimensions of legal, social, and/or scientific issues.
- Communicate an awareness of a variety of perspectives of ethical issues.
- Interact with individuals and within groups with integrity and awareness of others' opinions, feelings, and values.

The evaluation process for this level involves collecting student work samples (artifacts) from pre-determined classes in one semester for scoring by pre-appointed faculty teams the following semester and/or evaluating surveys completed by students enrolled in pre-selected classes.

The first artifacts were collected for the communication outcome from the fall 2006 semester and scored in spring 2007. The critical thinking and problem solving outcome was first assessed in fall 2007 using artifacts collected in spring 2007. The self and community outcome has been assessed using two different tools, a survey and a rubric. Surveys completed by students

in spring 2008 were compiled and analyzed in fall 2008. A rubric was applied to fall 2008 student work which was evaluated in spring 2009. Hence, the communication outcome has been assessed four times to date, critical thinking and problem solving three times, and self and community two times using the survey and one time using the rubric.

Communication

The three components measured with regard to the communication outcome are: 1) information is expressed in a concise way; 2) information is structured and organized; and, 3) information is appropriate to audience, purpose, and topic. The benchmark established by the SLOAC for this outcome is: 80% of students will score 3 or higher on all components.

Communication Outcome Scoring Scale:

- 5 = Exemplary: Excellent; the paper exceeds all expectations.
- 4 = Proficient: Strong; the essay shows control and skill in the trait under consideration.
- 3 = Moderate: Competent; the strengths outweigh the weaknesses; revisions needed.
- 2 = Developing: Weak; weaknesses outweigh strengths; clear points are isolated.
- 1 = Beginning: Very weak; the essay is simply incoherent; writer shows no control.

The scoring team used a rubric approved by SLOAC. Artifacts were not collected in the spring 2008 semester for scoring in fall 2008.

Results:

| Communication | Fall 2006 / | Spring 2007 / | Fall 2007 / | Fall 2008 / |
|------------------|-------------|---------------|-------------|-------------|
| Outcome | Spring 2007 | Fall 2007 | Spring 2008 | Spring 2009 |
| Total # of | 51 | 48 | 50 | 50 |
| Artifacts scored | | | | |
| # of Artifacts | 32 | 40 | 21 | 23 |
| scoring ≥ 3 | | | | |
| % of Artifacts | 63% | 83% | 42% | 46% |
| <u>≥</u> 3 | | | | |

Resulting Action:

As a result of low scores, in the spring of 2009 the SLOAC called upon full-time faculty to create a Communications Toolbox—a collection of best practice tools to be used by faculty across all disciplines to help students develop better communication skills. Included in the toolbox are a compilation of faculty's responses to questions designed to inform all toolbox users how communication is used in classes across campus, rubrics for grading five-paragraph essays, one each for critiquing reports on research-based articles and on non-research based articles, and checklists for students' use when writing five-paragraph and cause and effect essays. The toolbox also contains forms for use by reviewers to provide feedback and a link to the Essay Writing Center to share with students to help them improve their writing skills. The Communications Toolbox is attached as an appendix to the Assessment Handbook (currently in draft form) and is available through the NMJC website.

Critical Thinking and Problem Solving

The critical thinking and problem solving components that are measured are: 1) define a problem; 2) use appropriate technology and information systems; 3) collect information; 4) analyze information; 5) organize information; 6) apply to a specific situation; and, 7) arrive at a logical solution. The benchmark established by the SLOAC is: 80% of students will exhibit at least a moderate skill level on 3 or more of the 4 pre-selected components. The four components represented in the following scores are 1, 3, 4, and 6. The scoring scale is the same for this outcome as it is for the communication outcome shown above. The scoring teams used a rubric approved by the SLOAC.

Results:

| Critical Thinking and | Spring 2007 / | Spring 2008 / | Fall 2008 / |
|------------------------|---------------|---------------|-------------|
| Problem Solving | Fall 2007 | Spring 2008 | Spring 2009 |
| Total # of Artifacts | 50 | 50 | 50 |
| scored | | | |
| # of Artifacts scoring | 20 | 31 | 24 |
| ≥ Moderate Skill | | | |
| Level | | | |
| % of Artifacts | | | |
| ≥ Moderate Skill | 40% | 62% | 48% |
| Level | | | |

Resulting Action:

No actions have been taken to date as a result of this data. The SLOAC has discussed taking the same approach as for the Communications Toolbox, i.e., to create a critical thinking and problem solving toolbox of best practice tools from full-time faculty contributions for use by faculty to help students develop better critical thinking and problem solving skills.

Self and Community

The self and community outcome was initially assessed using a survey. After two cycles of assessment by survey, the SLOAC added a rubric for assessing student artifacts. The self and community results based on the survey measured the following component: Interact with individuals and within groups with integrity and awareness of others' opinions, feelings, and values. The benchmark established by the SLOAC is: 80% of students will agree to 6 of the 8 statements on the survey. The survey statements are categorized as follows:

Statements 1-3: Self-reflection on participation in activities

Statements 4 – 7: Reflection on class/group dynamics
Statement 8: Increased awareness of diverse opinions

Using the rubric approved by the SLOAC the scoring team measured two components associated with the self and community outcome: 1) analyze and reflect on the ethical

dimensions of legal, social, and/or scientific issues; and, 2) communicate an awareness of a variety of perspectives on ethical issues. The established benchmark is: 70% of students will score 2 or 3 on both components of the rubric. Each component has a separate scoring scale as follows:

Component 1: Analyze and Reflect on the Ethical Dimensions of Legal, Social, and/or Scientific Issues – Scoring Scale

- 3 = The student's work analyzes contrasting perspectives of ethical issues.
- 3 = The student's work objectively and thoroughly examines all sides of the issues.
- 3 = If applicable, the student's position is clearly communicated.
- 2 = The student's work identifies some sides of the ethical issues.
- 2 = The student's work addresses some sides of the issue subjectively, but lacks detailed explanations.
- 1 = The student's work identifies one side of the ethical issues.
- 1 = The student's work states only one side of the issue subjectively and without detail.

Component 2: Communicate an Awareness of a Variety of Perspectives on Ethical Issues – Scoring Scale

- 3 = The student's work describes contrasting perspectives of ethical issues.
- 3 = The student's work objectively compares and contrasts a variety of perspectives of the issues.
- 2 = The student's work identifies and defines some perspectives of ethical issues.
- 1 = The student's work lists some perspectives of ethical issues.

Results:

| Self and Community Outcome | Spring 2008 / | Fall 2008 / |
|---------------------------------|---------------|-------------|
| | Fall 2008 | Spring 2009 |
| Survey | | |
| # of Surveys Evaluated | 26 | 30 |
| # Agreed to 6 out of 8 stmts. | 22 | 30 |
| % Agreed to 6 out of 8 stmts. | 85% | 100% |
| | | |
| Artifacts / Rubric | | |
| Total # of Artifacts Scored | | 49 |
| # of Artifacts ≥ 2 on both | | 23 |
| Components | | |
| | | 47% |

Resulting Action:

No action has been taken through the spring 2009 as a result of these data.

Department/Program Level Assessment

Department chairs and program directors are responsible for communicating with their respective faculty to define the student learning outcomes and assessment plans within their own areas. The department chair or the chair's designee was responsible for capturing the assessment plan and the subsequent results (observations) in the TracDat assessment system. Following is the list of departments/programs expected to assess student learning outcomes. Thirteen department/ programs of the 34 listed in the TracDat system are current as of spring 2009 in recording their assessment plans and observations through spring 2009 as demonstrated by the summary of results.

| NMJC Department/Program Assessment Summary of Results | |
|---|---|
| Department / Program | Summary of Results |
| Communication | |
| Computer Information Systems | Student learning was measured using pre/post-tests, a spreadsheet design project, an online survey, and a capstone final project. The benchmark was met in one of the four courses assessed. It was noted for one of the classes that the result was inconclusive as the result of the small sample size. Action plans included requiring students to complete practice tests until they score 100, structuring training for the following assessment period, modifying the class by incorporating more online discussion and video conferencing, and re-evaluating |
| | benchmarks. |
| Education | |
| English | Department Chair's Statement for the Record: Due to problems with having faculty report data from their courses in a consistent way, the English Department Assessment Plan has never gotten off the ground even though course level assessment in quite strong. With the help of the Office of Institutional Effectiveness, we are standardizing the way faculty report assessment data and hope to begin aggregating data from the course level assessment as of fall 2009. |
| Independent Automotive | |
| Technology | |
| Languages Mathematics | The department used common questions on tests for its assessment method. The benchmark was met in only two courses of the seven courses assessed in fall 2008. Action plans include continuation of collection of data for comparison to determine a pattern. |
| Music | |
| Physical Education | |
| Science | Assessment methods included capstone/final projects, oral presentations, and problem/solution papers. Benchmarks were |

| | met in all courses assessed in fall 2008. Action plans include refining of rubrics, guidelines, offering tutoring, providing study tips, encouraging attendance at review sessions, reevaluating alignment of assessment questions with course objectives, and adjusting instructional methods. |
|---|---|
| Social & Behavioral Sciences/ Government | Assignment rubrics* were used to measure student learning. Benchmarks were met in all courses assessed in fall 2008 and spring 2009. Action plans include continuing with the current pedagogy. |
| Social & Behavioral Sciences/ Psychology | Student learning was measured using composition/writing samples, standardized tests, pre-test/post-test, "successful completion of all assignments," and final exam. The benchmark was not met using the composition/writing samples. The benchmarks were met using the standardized tests, but not the pre-test/post-test or final exam. Action plans include modifying assessment methods, modifying teaching strategies, examining frequently missed questions for possible change in wording or presentation of materials in classes, or continuing the current pedagogy. |
| Social & Behavioral Sciences/ Sociology | Standardized tests and assignment rubrics were the assessment methods. The benchmark was met in all courses assessed in fall 2008 and spring 2009. Action plans include examining test questions for possible rewording or change in classroom presentation or continuing with current pedagogy. |
| Theatre | presentation of continuing with current poundes; |
| Visual Arts (Fine Arts & Design) | |
| ACT: Cosmetology | |
| ACT: Nursing | |
| ACT: Welding | |
| Adult Basic Education | The program met its benchmarks in achieving state goals. Benchmarks were not met concerning enrollment/retention and hours of instruction. Action plans include enhanced marketing and recruiting activities, and retention incentives. |
| ASEP – GM | |
| ASSET – Ford | |
| Business | Assessment methods included capstone/final projects, oral presentations, and compositions/writing samples. The benchmark was not met in accounting. The benchmark was met in business communications. Action plans include modifying project outlines, spending more instructional time on problem areas, or continuing with the current pedagogy. |

| Cosmetology | Student learning was measured through scores on final exams, daily practical sheets, and circle sheets. Benchmarks were met on final exam scores and daily practical sheets, but not met with regard to licensure. Action plans include continuing to administer the written/practical final exam, to continue the use of practical sheets, and monitoring future test results with a view toward providing study sheets to students. |
|------------------------------|---|
| Criminal Justice | |
| Emergency Medical Technician | |
| Law Enforcement Academy | |
| Nursing | Assessment methods included completion rate, graduate satisfaction survey, and annual survey. The benchmark was not met for fall 2008 for completion rate. The benchmark was met in spring 2009 for employment outcome. Action plans include monitoring attrition rates and determining factors and continuing to monitor job placement rates. |
| Office Technology | |
| Paralegal | |
| SENM Corrections Academy | |
| TS: Freshman Seminar | |
| TS: Reading | Assessment methods included final exam in fall 2008 and pretest/post-test in spring 2009. The benchmark was not met in fall 2008. The benchmark was met in spring 2009. Action plans include evaluating the current textbook in fall 2008 and monitoring test scores in spring 2009. |
| TS: Writing | Assessment methods included assignment rubrics. The benchmarks were met in both semesters. Action plans included continuing with current pedagogy. |
| Welding | |

^{*}Assignment rubrics are provided to students with or as part of their assignments. Some of the assignment rubrics are checklists for students to follow in completing their assignments. Some of the assignment rubrics provide grading criteria to the students for their consideration in completing the assignments. The difference is in the individual instructor's preference.

Course Level Assessment

Assessment at the course level began in spring 2008. The two categories of course level assessment are general education courses and all other courses. All full-time faculty are required to assess at least two classes per semester. In the event a faculty member teaches only one general education class, he/she must then also assess one other course for the semester.

General Education:

The New Mexico Higher Education Department (NMHED) mandated student learning competencies for courses in the general education core. The competencies are divided into the following five areas:

Area I -- Communications (six competencies)

Area II -- Mathematics / Algebra (four competencies)

Mathematics / Calculus I (four competencies)

Mathematic / Other College-Level (five competencies)

Area III -- Laboratory Science (five competencies)

Area IV -- Social and Behavioral Sciences (four competencies)

Area V -- Humanities and Fine Arts (four competencies)

The VPI identified when the general education courses were to be assessed per a General Education Assessment Three-Year Rotation schedule. When a general education course is required to be assessed per its location on the schedule, the full-time faculty teaching that course were required to assess every competency within the applicable area in every section of the course. When EN 113 Composition and Rhetoric is required to be assessed for reporting to the NMHED, for example, all applicable full-time faculty must assess all six competencies for Area I Communications. The reports submitted to the NMHED in fall 2008 and fall 2009 are available for viewing on the NMJC website homepage and are summarized below.

| Assessment of General Education Courses/Rotation One—Fall 2008 | | |
|--|---|--|
| Area I—Communications: | Assessment methods included composition / | |
| | writing samples, portfolios, quizzes, oral | |
| EN 113; EN 123; EN 123A | presentations, pre-test/post-test, and outlines. | |
| | Results met acceptable levels. Action plans | |
| | included placing more emphasis on writing | |
| | style, on critical thinking, on organization, | |
| | adding vocabulary building exercises, | |
| | requiring draft copies of papers, and otherwise | |
| | to continue with the current pedagogy. | |
| Area II—Mathematics / Algebra: | A capstone/final project was used to measure | |
| MA 113 | student learning for each competency. | |
| | Acceptable results were attained for one | |
| | competency out of four. The action plan is to | |
| | provide instructional packets to students at the | |
| | beginning of the semester and to have students | |
| | work in groups to check each other's answers. | |
| Area II—Mathematics / Calculus I: | Assessment methods included assignment | |
| MA 154 | rubrics and tests. Results met acceptable levels. | |
| | Action plans included encouraging students to | |
| | use MyMathLab, to require more pre-test | |
| | homework, and to require students to work in | |
| | groups. | |

| Area II—Mathematics / Other College Level MA 113D | Student learning was measured using a final exam. Results were below acceptable levels. Action plans included requiring more homework to be completed "by hand" rather than by computer, more class time on instruction, more in-class group work, and more quizzes. |
|--|--|
| Area III—Laboratory Sciences: BI 124 | Assessment methods included writing assignments, pre-test/post-test, and oral presentation. Results met acceptable levels. Action plans included requiring students in future semesters to describe/apply the process of scientific inquiry, review of questions missed by 50% or more students and spending more time on instruction in those areas, providing well-defined rubrics and presentation guidelines to students 10 days before date of presentation, and moving assignments toward the end of the semester in order to incorporate more classroom discussion. |
| Area IV—Social/Behavioral Sciences: EC 213; EC 223; GO 213 | Student learning was measured using writing assignments. Results met acceptable levels in all courses assessed except one which consistently scored below acceptable levels for each competency. Action plans included enhanced instruction, stronger writing requirements, and incorporating small group activities. |
| Area V—English/Humanities/Fine Arts: MU 213; MU 213A; MU 223A; DR 113 | Assessment methods included report writing, exams, and quizzes. Results met acceptable levels in the music classes, but were below acceptable levels in the theatre classes. Action plans included enhanced instruction, providing study guides to students prior to testing, and incorporating group discussions. |

| Assessment of General Education Courses/Rotation Two—Fall 2009 | | |
|--|--|--|
| Area I–Communications: | Assessment methods included writing | |
| SE 113; SE 123 | assignments, oral presentations, exams, and | |
| | pre-tests/post-tests. Results met acceptable | |
| | levels. Action plans included enhanced | |
| | instruction, placing additional emphasis on | |
| | written communication, and otherwise | |
| continuing with current pedagogy. | | |
| Area II—Mathematics / Algebra | Not assessed this time. | |
| Area II—Mathematics / Calculus I: | Assessment methods included graphing | |

| MA 144 | problems, homework assignments, and exams. |
|--|--|
| | Results were below acceptable levels. Action |
| | plans included requiring students to watch |
| | videos and completing assignments in |
| | MyMathLab as well as reading supplemental |
| | materials, and tutoring. |
| Area II—Mathematics / Other College-Level | Assessment methods included homework |
| MA 113D | assignments, exams, and a survey question on |
| IVII I I I I I | the final exam. Results were below acceptable |
| | levels, with the exception of the responses to |
| | the survey question. Action plans included |
| | adopting a new textbook, requiring individual |
| | homework after every section as opposed to as |
| | a group, and continuing with the survey |
| | question. |
| Area III—Laboratory Sciences: | Student learning was measured through oral |
| CH 114; CH 114A; CH 124 (CH 124A); PH | quizzes, exams, problem sets, laboratory |
| 114A | experiments, and homework assignments. |
| 11771 | Results met acceptable levels in all but one |
| | course. |
| Area IV—Social and Behavioral Sciences | Assessment methods included writing |
| PS 113; PS 213; PS 213F (ED 213F); PS 223; | assignments, exams, journal writing, critical |
| AN 123 | review project, pre-tests/post-tests, and |
| 7111 123 | discussion board participation for online |
| | students. Reported results span the spectrum |
| | from below acceptable levels to meeting |
| | acceptable levels. |
| Area V—Humanities and Fine Arts: | Assessment methods included examinations, |
| EN 213; EN 213A; EN 213C; EN 213D; EN | research papers, class discussions, writing |
| 213E; EN 213F; EN 213G; EN 223; EN 223A; | assignments, and oral presentations. Results |
| EN 223C; EN 223D; AR 113; AR 113B; SP | met acceptable levels in all but one course. |
| 114; SP 124 | Action plans included textbook review, class |
| 111,01121 | handouts, enhanced instruction, modification |
| | to assessment methods, alteration to exam |
| | format, or continuing with the current |
| | pedagogy. |
| | podugogy. |

All Other Courses:

Full-time faculty for all other courses each select two classes to assess every semester. When full-time faculty who teach general education courses are not required to assess specific courses according to the rotation schedule, they are required to assess two other classes and are encouraged to assess the general education courses to meet this requirement. Full-time faculty were encouraged to assess three to five outcomes (competencies) per semester. The voluntary average was two outcomes.

The following tables set forth the number of full-time faculty who participated in the course level assessment activities at NMJC in the fall 2008 and spring 2009 semesters and the number of courses assessed.

| Full-Time Faculty Participation in Course Level Assessment | | |
|--|----|----|
| Fall 2008 Spring 2009 | | |
| Total Full-Time Faculty | 74 | 74 |
| Full-Time Faculty Participation | 49 | 53 |
| Non-Participating Full-Time | 25 | 21 |
| Faculty | | |

| Courses Assessed | | |
|-------------------------|-----------|-------------|
| | Fall 2008 | Spring 2009 |
| Total Number of Courses | 66 | 79 |
| Assessed | | |
| General Education | 12 | 16 |
| Other | 54 | 63 |
| Courses Assessed in | 24 | 24 |
| Consecutive Semesters | | |

NOTE: Of the other courses assessed 24 were assessed consecutively in fall 2008 and spring 2009 by 17 full-time faculty. One of these faculty was also involved in required General Education Course assessment. Three of these faculty also voluntarily assessed one additional course each in fall 2008, and seven of these faculty also voluntarily assessed one additional course each in spring 2009.

Other Activities Associated with Assessment

- NMJC submitted its annual general education assessment reports to NMHED in September, 2008 and September 2009.
- NMJC submitted a Progress Report on Assessment to the Higher Learning Commission in December, 2008. The HLC replied that the report was acceptable and another progress report is not necessary at this time.
- SLOAC has drafted an Assessment Handbook for use by faculty. The final version of the report is expected to be completed by spring 2010.
- NMJC's website includes a page dedicated to assessment activity at the campus which provides links to the general education reports, the Progress Report on Assessment submitted to HLC, and resources materials for use by faculty including assessment activity due dates, informative power points, and the Communications Toolbox.