## Oklahoma State University Annual Assessment Report, 2002 – 2003

# **Executive Summary**

#### **Entry-Level Assessment**

Three methods are used for entry-level assessment at Oklahoma State University (OSU): the ACT, a locally-developed predictive statistical model called Entry Level Placement Analysis (ELPA), and COMPASS, the ACT Computer Adaptive Placement and Support System placement tests. The first stage of entry-level assessment is the ACT subject area test scores; an ACT subscore of 19 or above (or SAT equivalent) automatically qualifies a student for college-level coursework in that subject area. The ACT Reading subscore is used to indicate readiness for courses in reading-intensive introductory courses in Sociology, Political Science, Psychology, History, Economics, and Philosophy. The second stage of entry-level assessment is ELPA; it is a multiple regression model that uses high school grades, high school class rank and size, and ACT scores to predict student grades in entry-level courses. Students scoring below a 19 on the ACT subject area test and with predicted grades from ELPA of less than "C" in a particular subject area are recommended for remedial coursework. All first-time OSU students are assessed using the ACT and ELPA prior to enrollment. The third level of assessment is the COMPASS placement tests; students who are not cleared for enrollment in college level courses via their ACT scores or ELPA results may waive a remedial course requirement by passing a COMPASS test. Students who are missing ACT information or high school grade information needed for ELPA may also take the COMPASS placement test to waive a remedial course requirement.

In 2002-2003, entry-level assessment was conducted for all admitted and enrolled new freshmen and new transfer students with fewer than 24 credit hours (n=3,764). After all stages of entrylevel assessment were completed, 566 new students (14.8% of the total number enrolled) were recommended to take at least one remedial course. Of these, 70 (1.9%) were recommended to enroll in remedial English (ENGL 0123); 434 (11.5%) needed remedial math (MATH 0123); 188 (5.0%) needed remedial science (UNIV 0111), and 99 (2.6%) in a course focused on reading and study skills (CIED 1230) (note: some students are required to take remedial courses in more than one subject area). Institutional Research and University Academic Services track success of students in remedial courses each semester. These results were consistent with findings from previous years.

Additional entry-level assessments used at OSU include the CIRP Freshman Survey and the Noel-Levitz College Student Inventory. The CIRP Freshman Survey was conducted in fall 2002; 2,117 OSU freshmen participated in this survey during their first week at OSU. The College Student Inventory by Noel-Levitz, Inc., is a retention-management tool that may be used to identify potential problem areas for new students and is used each year in the College of Human Environmental Sciences (n= 289). Residential Life also uses this survey on a limited basis for students in some residence areas.

#### **General Education Assessment**

OSU's assessment program uses three tools to evaluate student achievement of the expected learning outcomes for general education and the effectiveness of the general education curriculum: (1) institutional portfolios, (2) university-wide surveys, and (3) a general education course content database. Each of these three methods is aimed at evaluating expected student

learning outcomes that are articulated in the OSU General Education Course Area Designations Criteria and Goals document. General education assessment is also guided by the university's mission statement and the purpose of general education as articulated in the OSU catalog.

Institutional Portfolios directly assess student achievement of the primary learner goals for general education. Separate portfolios are developed to evaluate each general education learner goal, and each portfolio includes students' work from course assignments collected throughout the undergraduate curriculum. Faculty members (including Committee members and additional faculty members involved in undergraduate teaching) work in groups to evaluate the work in each portfolio and assess student achievement relative to the learner goal that is being assessed by using standardized scoring rubrics. The results provide a measure of the extent to which students are achieving OSU's general education competencies.

In 2002 – 2003, institutional portfolios were developed to evaluate student written communication skills, math problem solving skills, and science problem solving skills. The portfolios included student work from 562 OSU students from all classes (freshmen through seniors) and disciplines. Each 'artifact' of student work in the Institutional Portfolio is evaluated by a team of faculty reviewers and scored using a 5-point rubric, where a score of 5 represents excellent work. For writing assessment, 67% of students received a score of 3 or higher (representing acceptable, good, or very good work). Portfolio results show that seniors demonstrate significantly better writing skills than freshmen. For math assessment, 64% of students received a score of 3 or higher, and for science assessment, 55% of students received a score additional general education student learner goals.

University-wide surveys such as the National Survey of Student Engagement and OSU Alumni Surveys indirectly assess student achievement of general education learner goals and are used to corroborate evidence collected from the institutional portfolio process. For example, results from the National Survey of Student Engagement (conducted in 2000 and 2002) have been used in conjunction with institutional portfolio results to assess the general education program and to promote new standards to increase opportunities for students to develop written communication skills in general education courses.

The web-based General Education Course Database is used to evaluate how each general education course is aligned with the overall expected learning outcomes for the general education program. Instructors are asked to submit their course information online via a web-based form, and the General Education Advisory Council reviews the submitted information during regular course reviews. The database form requests information about what general education learning goals are associated with the course and how the course provides students with opportunities to achieve those learning goals. In 2002-2003, all courses with an 'A - Analytical and Quantitative Thought', 'H - Humanities', and 'I – International Dimension' were added to the database. When completed, the database will provide a tool for summarizing general education course offerings and evaluating the extent to which the overall general education goals are targeted across the curriculum.

OSU's general education assessment methods are aimed at holistically evaluating student achievement of general education outcomes and critically evaluating the curriculum itself by evaluating how each course incorporates general education learner goals. Institutional portfolios and university-wide surveys are implemented such that student participants are anonymous; therefore, these methods do not permit tracking individual students into future semesters. Information from general education assessment is shared annually with the faculty via a new

'General Education Assessment Newsletter' and is formally presented to the General Education Advisory Council, Assessment Council, Instruction Council, and Faculty Council. The process has generated attention to student learning, general education outcomes, and how individual general education courses provide opportunities for students to develop general education knowledge and skills. After three years of implementation, these assessments are yielding interesting results and effecting change at several institutional levels.

# **Program Outcomes Assessment**

All OSU degree programs, including undergraduate and graduate programs, must have an outcomes assessment plan, and assessment activity for each degree program is described in annual assessment reports. Assessment plans and reports may be submitted by colleges, schools, departments, or by individual degree programs depending on the organizational level that faculty from these programs have elected to use for assessment. The Assessment Council reviews all assessment plans and reports on a 3-year cycle.

Academic units use a broad range of methods to assess student achievement of the learning outcomes articulated in assessment plans, and these are described in detail in the individual assessment reports submitted by each unit. The most commonly used program outcomes assessment methods reported in 2002-2003 were:

- Capstone course projects, papers, presentations evaluated by faculty or by outside reviewers
- Senior-level projects & presentations
- Course-embedded assessments & Classroom Assessment Techniques
- Exams local comprehensive exams, local entry-to-program exams
- Exams standardized national exams, certification or licensure exams,
- Exit interviews
- Internships evaluations from supervisors, faculty members, student participants
- Portfolios reviewed internally or externally

- Professional jurors or evaluators to evaluate projects, portfolios, exhibits, or performances
- Student performance in intercollegiate competitions
- Surveys alumni
- Surveys employers / recruiters
- Surveys students, esp. seniors
- Surveys faculty
- Tracking enrollment data, student academic performance in particular courses, student participation in extracurricular activities relation to the discipline, degree completion rates, timeto-degree-completion
- Alumni employment tracking

Graduate programs reported the following outcomes assessment methods *in addition to* the methods described above:

- Qualifying exams
  - Theses / dissertations / creative component papers, projects, presentations, and defenses
- Comprehensive exams
- Tracking research activity / publications / professional presentations / professional activity

In addition to these outcomes assessment methods, the Office of University Assessment coordinates alumni and student surveys and provides program-specific results of these surveys to academic programs so that faculty may use this information for program outcomes assessment.

In keeping with the guidelines of the Higher Learning Commission of the North Central Association and the policy of the OSU Assessment Council, faculty are encouraged to develop effective program outcomes assessment methods that will provide meaningful information for program development and improvement. The Assessment Council reviews of outcomes assessment programs show that most degree programs are satisfactorily implementing their assessment plans and using assessment results for program development and improvement. Academic units are encouraged, but not required, to use assessment methods that may provide comparison of student performance with statewide or national norms. Programs that use such assessments report their findings in their individual annual outcomes assessment reports (Appendix I).

The number of individuals who participate in each outcomes assessment method within each academic unit is shown in Table 12.1 and is described in detail in the individual assessment reports submitted by each academic unit (Appendix I). Academic units are required to report the number of individuals assessed *in each assessment method*. Because the same students are assessed by multiple methods, the reporting process does not provide an accurate count of the total number of students that participated in outcomes assessment. Outcomes assessment reports demonstrate that every academic program uses multiple assessment methods and a majority of students within each program participate in outcomes assessment measures. The sum of all individuals who participated in all assessment methods is 17,040, but this total includes multiple counts of the same students (because students participate in multiple assessment methods) and also may include non-students (because, the 'number of individuals assessed' in an alumni survey or employer survey, for example, would reflect numbers of alumni or employers, respectively, rather than current students).

Uses of assessment results are unique to each program but can be generally categorized as sharing assessment information with faculty members, developing curriculum changes in response to assessment findings, and using assessment results to justify curriculum changes that have recently been implemented. The most commonly cited uses of assessment results in 2002-2003 were:

- Changes in course content
- Addition / deletion of courses
- Changes in degree requirements or degree sheet options
- Development of tutorial and academic services for students
- Justification of past curriculum changes and to show program improvement resulting from those changes
- To further refine the assessment methods or to implement new assessment methods

- Changes in course sequences
- Changes in advising processes
- To facilitate curriculum discussions at faculty meetings, curriculum committee meetings, and faculty retreats
- Changes to student facilities such as computer labs and science labs
- Development of program-based websites to provide students with academic and program information

## Student and Alumni Satisfaction Assessment

Student and alumni surveys are conducted to evaluate student and alumni perceptions of academic and campus programs and services, and the results are used in developing and improving those programs and services. The surveys compliment program outcomes assessment because they are designed to provide feedback from students and alumni for use in continuous quality improvement in academic and student programs.

The Graduate Student Satisfaction Survey was conducted in spring 2002. From a target population of 3,610 graduate students enrolled as of January 2002, 908 students participated in the survey (response rate = 25%). Forty-six percent of graduate students indicated that they were satisfied with their educational experiences at OSU, and an additional 41.5% indicated that they were "somewhat satisfied." Ninety percent of students indicated that their education at OSU is adequately preparing them for a career in academia; of those preparing for non-academic careers, 83% of students indicated that their OSU education is adequately preparing them. Alumni surveys are conducted every year at OSU; undergraduate program alumni and graduate program alumni are surveyed in alternate years. The surveys are intended to identify institutional strengths and areas for improvement as perceived by recent graduates; to track the careers and continuing education of recent OSU graduates; and to evaluate achievement of learning outcomes as perceived by alumni from individual academic programs. The alumni surveys target alumni who are 1- and 5-years post-graduation. The surveys are conducted as telephone interviews, and the questionnaire covers employment, continued education, and general satisfaction. Also, individual academic programs may include program-specific questions in the questionnaire for their program alumni; these data are used in program outcomes assessment as well as assessing alumni satisfaction. Alumni surveys have become a cornerstone of assessment at the university-, college- and program- level by providing regular feedback from OSU graduates about their perceptions of their educational experiences at OSU and its impact on their career and personal development.

The Graduate Program Alumni Survey was conducted in January 2003, and 785 alumni responded to the survey out of a target population of 1,912 graduates (response rate = 41.1%). Over 95% of alumni stated that they were satisfied or very satisfied in their educational experiences at OSU, and 92% indicated that their graduate program prepared them very well or adequately for their current career. About 65% of the alumni contacted for the survey were residing in Oklahoma, and about 35% were contacted out of state.

OSU participated in the National Survey of Student Engagement (NSSE) in 2000 and 2002. The NSSE was administered to a random sample of 3,000 OSU freshmen and seniors in spring 2002, and 622 OSU students completed the survey. Results from 2002 were consistent with NSSE findings reported for 2000. OSU's benchmark scores for providing a Supportive Campus Environment are very high compared to peer institutions (90<sup>th</sup> percentile for first year students and 60<sup>th</sup> percentile for seniors). For first-year students, scores are also higher then expected for benchmarks for Level of Academic Challenge, Student-Faculty Interaction, and Active and Collaborative Learning. The Assessment Council spent considerable time in 2002 reviewing NSSE results and produced recommendations that included increased efforts to communicate NSSE results to a wide range of faculty members and a call for colleges to address the survey items related to Level of Academic Challenge for seniors and Enriching Educational Experiences for all students. NSSE results have stimulated a great deal of discussion among university-level committees that address curriculum issues, and three of the six undergraduate colleges have completed or initiated efforts to collect additional college- and program-level data on NSSE survey items. In addition, an expansive website has been developed for OSU faculty that describes OSU's NSSE results and related resources (www.okstate.edu/assess/nsse).

#### **Graduate Student Assessment**

Student outcomes assessment in graduate programs is part of Program Outcomes Assessment and is reported in that section of this report. In addition, the Graduate College conducts the Graduate Student Satisfaction Survey in alternate years and the Office of University Assessment conducts

the Survey of Alumni of Graduate Programs in alternate years. These university-wide assessments provide university- and program-level assessment information about graduate students. The third Survey of Alumni of Graduate Programs will be conducted in spring 2005.