# Oklahoma State University Assessment Report 1998-1999

Submitted to
The Oklahoma State Regents for Higher Education
September 1999

Prepared by Julie Wallin
Office of University Assessment
210 PIO Building
Oklahoma State University
Stillwater, OK 74078-6043
405-744-6687

email: wallinj@okstate.edu

## Oklahoma State University Assessment Report 1998-1999

## **Contents**

Executive Summary	3
Entry-Level Assessment	7
Mid-Level Assessment	15
Program Outcomes Assessment	21
Student Satisfaction Assessment	33
Special Assessment Projects	37
Program Outcomes Assessment Reports for Individual Colleges and Departments	39

# Oklahoma State University Assessment Report 1998-1999

submitted to
The Oklahoma State Regents for Higher Education
September 1999

## **Executive Summary**

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

The purpose of entry-level assessment is to assist academic advisors and faculty in making placement decisions that will give students the best possible chance of academic success. Three methods assess student's readiness for college-level coursework at OSU: scores from ACT subject tests, results from a locally developed Entry Level Placement Analysis (ELPA), and scores from COMPASS placement tests. ELPA is a multiple regression model that uses high school GPA, high school class rank and size, and ACT subject area scores to predict student grades in selected entry-level OSU courses. The predictions are based on the success of past OSU freshmen with similar academic records. All new students are assessed using ACT subject area and composite scores (or SAT equivalent) and results of ELPA. Students scoring below the designated cutscores on the ACT and with predicted grades from ELPA of less than "C" in a particular subject area are required to take remedial coursework. Students who are required to take remedial coursework may waive this requirement if they demonstrate proficiency in the subject area by achieving a passing score on the COMPASS placement test. All students undergo entry-level assessment during admission, enrollment, and initial advisement. After all entry-level assessment was completed in 1998-99, 709 enrolled new students (18.8% of the total number enrolled) were required to take at least one remedial course.

No major changes were made to the entry-level assessment process in 1998-99. OSU administrators and consultants from ACT evaluated cutscores for COMPASS placement tests, but no changes were made. The ELPA program was updated this year to utilize current data in the regression equations that predict student grades in entry-level courses; this activity is consistent with our Institutional Assessment Plan.

Additional entry-level assessment studies conducted in 1998-99 include:

- The CIRP Freshman Survey. Approximately 60% of new OSU freshmen participated in this national survey of college freshmen conducted jointly by the American Council on Education and the University of California at Los Angeles. The survey, conducted in the first week of class, provides information about the expectations, attitudes, and experiences of freshmen at OSU and from peer institutions nationwide. Results of the survey showed:
  - 82% of OSU freshmen used the internet for homework in high school (compared to 74% for peer institutions);
  - 62% of OSU freshmen reported average grades of "A" in high school (compared to 38% for peer institutions);
  - 24% of OSU freshmen reported studying more than 6 hours per week in high school (compared to 36% for peer institutions), and

- comparisons with previous years show that freshmen report increasing volunteerism and declining interest in politics. This trend is consistent among freshmen nationwide.
- The College Student Inventory. The College Student Inventory (CSI) measures motivational variables that are closely related to persistence and academic success in college. In 1998-99, the CSI was administered to all freshmen and transfer students in enrolled the College of Agricultural Sciences and Natural Resources (n=257) and the College of Human Environmental Science (n=121). Information from the survey is used to enhance advisement and identify problems that could impede academic success. Overall results are used to develop programs and strategies to enhance student retention.
- Assessment of the Summer Freshmen Enrollment Program. In spring 1999, 220 OSU second-semester freshmen participated in a survey designed to assess the effectiveness of OSU freshmen orientation programs, particularly the Summer Freshmen Enrollment Program. Results of the study showed that 90% of second semester freshmen had positive perceptions of the quantity and quality of the orientation material provided during the summer enrollment program. No major changes to the Summer Freshmen Enrollment Program are planned as a result of this study.

#### **Mid-Level Assessment**

Assessment of general education is currently under revision at OSU. Previously, mid-level assessment at OSU has included use of the *Collegiate Assessment of Academic Proficiency* (CAAP) standardized exam and a locally developed test of writing and critical thinking skills. These methods were used in 1992 - 1995 but were discontinued because of dissatisfaction with the standardized instrument and lack of motivation by students to participate in the assessment and provide a true measure of their abilities. From 1994 through 1997, the Mid-Level Writing Assessment Project was conducted to evaluate OSU student writing competencies at the mid-level. Although the study provided valuable assessment of student writing skills, it did not result in a viable method of assessing mid-level competencies on a continuous basis.

In 1998-99, the faculty Assessment Council worked towards developing a plan for continued mid-level assessment at OSU. The Council developed a list of expected outcomes of general education, studied general education assessment methods used at other institutions, and presented their initial ideas to the General Education Committee. The Assessment Council and General Education Committee will work cooperatively towards developing assessment of general education in 1999-2000.

In addition to the work of the Assessment Council, funding was provided to two academic units to develop mid-level assessment methods within their programs. The College of Human Environmental Science initiated a pilot study to evaluate the critical thinking skills of students who have completed most of their general education requirements. The Zoology Department is mid-way through a study designed to evaluate problem solving skills of students who complete the department's newly revised introductory course as part of their general education requirements. Both of these studies will be completed in 1999-2000.

The final report on the 1994 - 1997 Mid-Level Writing Assessment Project was completed in December 1998. The report consisted of eight separate studies that assessed writing of incoming freshmen, student writing while enrolled in English Composition I and II courses, student writing

in other general education courses, and a longitudinal study of OSU undergraduate writers. Major findings of the study were:

- College writing occurs primarily in Composition I and II and general education courses. This should be commended, supported, and extended wherever possible.
- Efforts should be undertaken to improve the quality of writing instruction students receive relative to all assignments.
- A comprehensive, writing across the curriculum program at OSU would enhance student writing competency.

### **Program Outcomes Assessment**

Program outcomes assessment at OSU is organized and reported by individual colleges, departments, or individual academic units that award undergraduate degrees. Methods used for outcomes assessment vary widely among academic units and include (with number of colleges of departments that used each method):

- Exit interviews (22)
- Alumni surveys (21)
- Student surveys (22)
- Internships (14)
- Capstone courses (13)
- Tracking academic records (12)
- Intercollegiate competitions (10)
- External review of student work (9)
- Standardized exams (15)
- Tracking retention / graduation data (10)

- Portfolios (7)
- Employer surveys (4)
- Tracking student employment status (4)
- Faculty evaluation of student work (3)
- Course-embedded assessment (2)
- Computer assessment software (1)
- Focus groups (1)
- Senior Projects (1)
- Student resumes (1)
- Summer camp evaluation (1)

Findings from outcomes assessment and uses of assessment data were unique for each academic unit and are reported in the assessment reports submitted by each unit. All units reported using information gained through program outcomes assessment for reviewing, revising, and improving their curricula. Sixty percent of academic units reported using the results of program outcomes assessment to implement specific changes within their curricula for undergraduates.

### **Student Satisfaction Assessment**

The Noel-Levitz, Inc., Student Satisfaction Inventory (SSI) has been conducted annually at OSU to provide feedback from undergraduates across campus regarding their perceptions of academic programs and campus services. The *Institutional Priorities Survey* (IPS), which closely parallels the SSI, was also conducted in 1998-99. Whereas the SSI is designed to measure *students*' satisfaction with a wide range of college experiences, the IPS assesses the priority *faculty*, *staff*, and *administrators* believe the institution should place on the same range of student experiences and the agreement that the institution is meeting student expectations. A total of 1,682 undergraduates participated in the 1999 Student Satisfaction Inventory, and 158 faculty, staff, and administrators participated in the Institutional Priorities survey.

The major findings from the 1999 Student Satisfaction and Institutional Priorities surveys were:

- OSU students and faculty/staff indicated highest satisfaction with topics related to
  enjoyment of being part of the OSU community, the friendliness towards students on this
  campus, campus safety and security, and campus appearance. Students and faculty also
  agreed that strengths of OSU included faculty expertise and the variety of courses
  offered.
- Satisfaction scores given by OSU students were consistently higher than responses of students at 4-year, public institutions nationwide.
- Overall, 85% of OSU students said they were satisfied with their college experience so far, and more than half said their college experience so far was 'better than they expected'.
- Areas of concern identified by students and faculty/staff included the ability to register for classes without conflict, students getting the 'run-around' when seeking information, and the unbiased treatment of students by faculty.

#### **Graduate Student Assessment**

Graduate student assessment will resume campus-wide at Oklahoma State University in 1999-2000. In spring 1999, the faculty Assessment Council revised guidelines for graduate student assessment at OSU. Academic units are charged with reviewing and revising their program assessment plans to include graduate programs, and the Assessment Council and Graduate College are charged with developing a campus-wide assessment of graduate student satisfaction. In 1998-99 some graduate students were assessed as part of their academic unit's outcomes assessment program. Results are described in the individual assessment reports or report summaries submitted by each college, department, or degree program.

## **Entry-Level Assessment**

1. What methods were used for entry-level course placement? What were the instruments and cut-scores used for each subject area and course?

The Office of University Assessment (OUA) works cooperatively with Institutional Research and the Admissions Office to conduct entry-level assessment at OSU. Three methods assess student's readiness for college level coursework: the Enhanced ACT assessment test (consisting of four subtests in English, Reading, Mathematics, and Science Reasoning), results of the Entry-Level Placement Analysis (ELPA; developed by OSU), and the COMPASS computerized placement test (produced by ACT).

Each first-time entering student (new freshmen and transfer students with fewer than 24 credit hours) receives a Student Assessment Report. This report summarizes the student's academic information (including ACT scores, high school GPA, high school class rank, and COMPASS scores, if available) and provides each student and their advisor with a summary of recommendations and requirements for course placement. The Student Assessment Report also summarizes curricular or performance deficiencies that require remediation. The recommendations and requirements for course placement follow OSU guidelines and have been approved by the Oklahoma State Regents for Higher Education.

ACT Scores. ACT subscores in Reading, English, Mathematics, and Science Reasoning are used for the first level of assessment. An ACT subscore of 19 or above (or SAT equivalent) automatically qualifies a student for college-level coursework (1000-level university courses) in that subject area. The ACT subscore in Reading is used to indicate readiness for introductory college courses that require extensive reading (Sociology, History, Political Science, Psychology, History, Economics, and Philosophy).

Entry-Level Placement Analysis (ELPA). All students, regardless of ACT subscores, are also assessed using Entry-Level Placement Analysis (ELPA), a multiple-regression model that uses high school grades and high school class rank along with ACT scores to predict student grades in selected entry-level OSU courses. These predictions are based on the success of past OSU freshmen with similar academic records. For each student, ELPA produces a predicted grade index (PGI) that represents the grade that the student is predicted to obtain in selected entry-level courses. A PGI of 2.0 or higher indicates a predicted grade of 'C' or better. The PGI serves to alert the student and advisor of potential problems when predicted grades are low. The PGI is also used to recommend or require college level placement for students with ACT subscores below 19. Students with ACT subscores below 19 may be cleared for enrollment in 1000-level university courses if their predicted grade in the subject area (from ELPA) is 2.0 or higher.

COMPASS. Finally, students with ACT subscores below 19 and with predicted grades of less than 2.0 in a particular subject area (from ELPA) may take the ACT COMPASS computerized placement test to qualify for college-level courses. ACT provides COMPASS placement tests in the subject areas of Mathematics, Reading, and English. Students may also take a science placement test that combines elements from the COMPASS Mathematics and Reading subject tests. The cut-scores for the COMPASS tests in each subject area are described in Table 1.1 (page 8).

Table 1.1. C	Cut-scores for	the COM	IPASS com	puterized 1	placement test.
--------------	----------------	---------	-----------	-------------	-----------------

Subject Area:	Compass Score	Course Placement
Mathematics	Algebra 0-35 Algebra 36-54 Algebra 55-100	Beginning Algebra MATH 0123 MATH 1513, 1483, or 1493
English	English 0-55 English 56-100	ENGL 0123 ENGL 1113
Reading (Sociology, History, Political Science, Psychology, history, Economics, and Philosophy)	Reading 0-70 Reading 71-100	CIED 0123 No restrictions
Science (Biology, Chemistry, Geography, Geology, and Physics)	Science 0-59 Science 60-100	UNIV 0111 No restrictions

Students who take a COMPASS placement test receive an updated Student Assessment Report that incorporates this new information into the requirements and recommendations for course placement.

2. How were instruments administered? Which students were assessed? Describe how and when they were assessed, including options for the students to seek retesting, tutoring, or other academic support.

All first-time entering students (new freshmen and transfer students with fewer than 24 hours) are assessed and provided with a Student Assessment Report during the admission process. Each assessment report contains the student's ACT scores, SAT scores (if available), results of ELPA, COMPASS scores (if applicable), and course placement recommendations and requirements. Personnel in the Admissions Office produce the Student Assessment Reports and include them in each student's file so that the information is available when the student meets with their advisor and enrolls in courses.

Students who are not cleared for 1000-level courses have several options. They may enroll in the remedial (zero-level, non-credit) course that is recommended; they may take the ACT test again, or they may take the COMPASS placement test to demonstrate proficiency in the subject area. Students may take the COMPASS test in any subject area two times free of charge. The ACT or COMPASS tests may be taken at University Testing and Evaluation Services.

Many resources are offered to OSU students for academic support outside the classroom. The *Math Learning Resources Center* provides individual tutoring in mathematics. The *Writing Center* provides tutors, writing coaches, a grammar hotline, and assistance with word processing. *University Counseling* provides services to help students improve their study habits, deal with test anxiety, develop better time management skills, and explore careers. The *College of Engineering, Architecture, and Technology* provides their students with additional academic support by offering special housing assignments, computer facilities, and social events for its students. Their 'Academic Excellence Workshops' provide tutoring in entry-level calculus, physics, chemistry, and engineering science courses for all OSU students enrolled in these classes. *University Academic Services (UAS)* also offers information, support, and free tutoring to students in their program. In 1998-99, UAS offered free tutoring services to all OSU students as part of a special assessment project. This project is described in the section on 1998-99 Special Assessment Projects.

## 3. What were the analyses and findings from the 1998-99 entry-level assessment?

In 1998-99, Student Assessment Reports were produced for all admitted and enrolled students (n=3,771). Each assessment report contained the student's high school data, ACT scores, COMPASS scores (if applicable), results of ELPA, and course placement recommendations and requirements. Table 3.1 shows the number of enrolled students who had performance deficiencies in each subject area based on ACT scores (i.e., ACT subscores <19) and the number of these deficiencies that were cleared using ELPA (i.e., cleared based on high school performance).

Table 3.1. Number of enrolled new students with ACT scores below 19 in each subject area and number of these students who were cleared for college-level coursework by Entry-Level Placement Analysis.

Subject Area	No. of Students with ACT Subscores <19*	No. of Students Cleared for College-Level Coursework by ELPA
English	601	381
Mathematics	797	251
Reading	633	331
Science	596	184

<sup>\*</sup>Some students had ACT subscores <19 in more than one subject area.

Students who were required to take remedial classes after the ELPA assessment had the option of taking a COMPASS placement test in their area(s) of deficiency. The numbers of students who took the COMPASS test each subject area are described in Table 3.2.

Table 3.2. Number of students who took the COMPASS placement test in each subject area.

Subject Area	No. of Students Who took the COMPASS Test*	No. of Students who Passed
Subject Area	COMI ASS TEST	1 asseu
English	14	12
Mathematics	41	3
Reading	32	31
Science	123	18

<sup>\*</sup>Some students took COMPASS tests in more than one area

After all entry-level assessment (including COMPASS testing) was completed, 709 enrolled new students (18.8% of the total number enrolled) were required to take at least one remedial course. Of the 3,771 enrolled new students, 219 (5.8%) were required to enroll in remedial English classes; 546 (14.5%) in remedial math classes; 408 (10.8%) in remedial science classes, and 300 (8.0%) in remedial reading classes.

4. How was student progress tracked? Describe analyses of student success in both remedial and college-level courses, effectiveness of the placement decisions, evaluation of cut-scores, and changes in the entry-level assessment process as a result of findings.

Analysis of student success in remedial and college-level courses. Annual trends in drop, withdraw, and failure rates in common freshman courses are monitored as each new semester of data is added to the database. Freshmen grades in entry-level courses and the percentage of students that make final grades of less than "C" are also monitored. This tracking is conducted jointly by Institutional Research and University Academic Services.

Evaluation of cut-scores. The cut-scores used for the ACT COMPASS placement test were reviewed in a series of meetings held in December 1998 and January 1999. After discussion with ACT consultants, who attended these meetings, it was determined that the current ACT COMPASS cut-scores used at OSU are appropriate because they are equivalent to OSU cut-scores used for the ACT subject tests (ACT scoreμ19). Therefore, no changes were made to the current COMPASS or ACT subject test cut scores.

**Changes in entry-level assessment.** No major changes were made to the entry-level assessment process in 1998-99. The ELPA program was updated this year to utilize more current data in the regression equations that predict student grades in entry-level courses. This is consistent with our approved Institutional Assessment Plan. We anticipate additional minor changes to the ELPA as it is incorporated into the new Student Information System.

## 5. What other studies of entry-level assessment have been conducted at the institution?

- The CIRP Freshman Survey. The CIRP Freshmen Survey is conducted annually at OSU as part of a nationwide survey conducted jointly by the American Council on Education and the University of California at Los Angeles. Approximately 60% (n=1,613) of new OSU freshmen participated in the study during the first week of the Fall 1998 semester. The study provides information about the expectations, attitudes, and experiences of OSU freshmen and college freshmen nationwide. Results of the assessment are used (1) to identify areas that may become problems for students during their first year; (2) as discussion items in orientation classes and by academic advisors working with new freshmen, and (3) in developing programs for students by providing current information about what is important to students, what they hope to accomplish, what they are concerned about, and how they intend to become involved in the campus community.
- The College Student Survey. The College Student Survey (CSS) is a follow-up study to the CIRP Freshman Survey. The survey was mailed to 1,191 OSU seniors who participated in the CIRP Freshman Survey in 1994 or 1995 when they were freshmen and to a random sample of 1,000 seniors who did not participate in the CIRP survey as freshmen. The survey provides a unique opportunity to detect within-cohort changes in student attitudes or activities during their undergraduate experience at OSU and to understand how students are affected by their college experience. Data analyses are not complete at this time; results will be available for the 1999-2000 Annual Report.
- The College Student Inventory. The College Student Inventory (CSI) is part of the Retention Management System developed by Noel-Levitz, Inc.. The survey is given to new students during their first few days on campus and measures specific motivational variables that are closely related to persistence and academic success in college. This survey was administered to all new students in the College of Agricultural Sciences and Natural Resources (n=257) and the College of Human Environmental Science (n=121). Both colleges combine the CSI data with other background and academic information and track the academic success of these students. Information from the survey becomes the centerpiece of student-advisor conferences and is used to enhance advising and identify problems that could impede academic success. Overall results of the CSI are used to identify the factors that contribute to persistence or withdrawal for incoming students and to develop programs and strategies to enhance student retention. Retention of freshmen to sophomores has never been higher.
- Assessment of the Summer Freshmen Enrollment Program. During spring semester, 1999, 220 OSU second-semester freshmen participated in a survey designed to evaluate the Summer Freshman Enrollment Program. The objective of this study was to obtain feedback about the enrollment program and other freshmen orientation experiences from the perspectives of second semester freshmen. Students were also asked to comment on problems that they encountered in their adjustment to college. Results of the study showed that about 90% of students had positive perceptions of the quantity and quality of the orientation material provided during the summer enrollment program. Student comments regarding the academic and social challenges of adjusting to college generated interesting discussion during spring semester meetings of the Presidents Enrollment and Retention Task Force and the Council of Academic Service Directors. No major changes to the Summer Freshmen Enrollment Program were implemented as a result of this study.

• *Other Entry-Level Assessment*. In addition to the entry-level assessment described above, some departments report additional activities directed towards entry-level assessment. For example, the Department of Music requires student auditions for placement decisions in entry-level courses.

## 6. What instructional changes occurred or are planned due to entry-level assessment?

Each college used the results of the CIRP Freshman Survey and the Assessment of the OSU Freshman Enrollment Program in developing their freshmen orientation courses. The College of Human Environmental Science and the College of Agricultural Sciences and Natural Resources also use the results of the College Student Inventory to enhance one-on-one advisement of individual students and to develop courses, programs, and services for new students.

Office of University Assessment has worked towards making assessment information more accessible to faculty, advisors, and other personnel who work with new students. To accomplish this, the results of entry-level assessment studies are presented each semester during meetings of the President's Task Force on Enrollment and Retention and the Council of Academic Service Directors. The OUA has also worked cooperatively with the Office of Student Affairs to develop a brochure entitled 'Freshman Success @ OSU' that summarizes the highlights of several entry-level assessment studies.

## **Mid-Level Assessment**

7. What measures were used to assess reading, writing, mathematics, critical thinking, and other institutionally recognized general education competencies? Describe how assessment activities were linked to the institutional general education program competencies.

Assessment of general education at is currently under revision at OSU. Previously, mid-level assessment at OSU has included use of the *Collegiate Assessment of Academic Proficiency* (CAAP) standardized exam and a locally developed test of writing and critical thinking skills. These methods were used in 1992-95 but were discontinued because of dissatisfaction with the standardized instrument and lack of motivation by students to participate in the assessment and provide a true measure of their abilities. From 1994-97, the Mid-Level Writing Assessment Project was conducted to evaluate OSU student writing competencies at the mid-level. Although the study provided valuable assessment of student writing skills, it did not result in a viable method of assessing mid-level competencies on a continuous basis.

In 1998-99, the faculty Assessment Council worked towards revising and developing a plan for mid-level assessment at OSU. In addition, funding was provided to several colleges and departments to develop mid-level assessment methods within their programs. Also, the final report on the 1994-97 Mid-Level Writing Assessment Project was submitted in December 1998 and was reviewed by the faculty Assessment Council. This work is described below.

Developing a plan for mid-level assessment at OSU. A sub-committee of five faculty from the Assessment Council met five times during the academic year to develop a list of expected outcomes of general education and to initiate a plan for general education assessment. Assessment methods used in general education at other institutions were studied, and further information on general education was obtained from the national American Association of Higher Education's Assessment Conference (June 1999), which was attended by all Assessment Council members. A draft of general education outcomes and initial ideas on assessment methods were presented to the University General Education Committee at the end of spring semester 1999. The Assessment Council and General Education Committee will work cooperatively towards developing an assessment of general education in 1999-2000.

*The Mid-Level Writing Assessment Project.* The Mid-Level Writing Assessment Project was a large-scale, multi-faceted assessment project designed to evaluate several different aspects of student writing experiences at OSU. Dr. Richard Batteiger, Associate Professor of English, coordinated the project. The study was conducted from 1994 through 1997, and a final report was submitted in December 1998. The eight individual studies within this project were:

- A survey of writing skills and experiences of entering freshmen,
- A study of the nature of instruction in English Composition I and II courses,
- A survey of student attitudes towards writing groups,
- A study of the role of native language (L1) in second language (L2) writing,
- A survey of writing assignments in OSU general education courses,
- A study of the OSU Writing Center,
- A longitudinal study for four OSU undergraduate writers, and
- A study of writing by college juniors at OSU.

Major findings of the Mid-Level Writing Assessment Project include:

- College writing occurs primarily in Composition I and II and general education courses. This should be commended, supported, and extended wherever possible.
- Efforts should be undertaken to improve the quality of writing instruction students receive relative to all assignments.
- A comprehensive, writing across the curriculum program would enhance student writing competency.

The final report on this project (284 pp.) is on file in the Office of University Assessment.

**Special mid-level assessment projects**. Individual colleges and departments at OSU also employ assessment methods to evaluate students' mid-level competencies. The following projects related to mid-level assessment were conducted in 1998-99.

- College of Human Environmental Science. The College of Human Environmental Science initiated a pilot study in spring 1999 to evaluate the critical thinking skills and dispositions of students at the mid-level. The development of critical thinking and creative problem solving activities have been established as essential competencies for CHES graduates. During spring 1999, the College implemented an assessment of critical thinking skills using two examination instruments published by the California Academic Press. All juniors from CHES participate in the critical thinking evaluations in an effort to target students who have completed most of their general education requirements. Ninety-two students completed the assessment in 1999. Results are currently being reviewed. This study serves as a pilot, with future exploration of development of a customized assessment relative to each field of study if warranted by the results. Also, many of the students participating in the critical thinking mid-level assessment also completed the College Student Inventory (see Question 5) as an entry level assessment tool. This will allow for tracking from freshmen through junior semesters and also allow for a comparison of the relationship between scales of academic motivation and general coping on the CSI and critical thinking outcomes.
- Department of Zoology. In 1998-99, the Zoology Department conducted an assessment project related to evaluating mid-level problem solving skills in the general education area of natural science. The Zoology Department has recently changed the curriculum of its introductory biology courses by replacing the introductory courses designed for majors and non-majors with a single introductory (general education) biology course focused on the development of critical thinking and problem solving skills. The department has developed several assessment tools to evaluate the impact of this curriculum change on student learning for students who take the course as a general education requirement and for students who take the course as part of their major requirements. The assessment methods include a survey of student attitudes using the Biology Attitude Scale (Russell and Holander 1975), a test of student knowledge base using the NABT/NSTA High School Biology Exam, behavioral observations of students during labs to assess participation, student interviews, a locally-developed survey, and faculty interviews. This study will be completed in 1999-2000.

8. Which and how many students participated in mid-level assessment? Describe how the instruments were administered and how students were selected. Describe strategies to motivate students to participate meaningfully.

This question only applies to the special projects described in Question #7.

- For the College of Human Environmental Science special mid-level assessment project, all juniors from CHES participated in the mid-level assessment. Students participated in the assessment as part of a required course.
- For the Zoology Department special mid-level assessment project, all students enrolled in introductory biology courses participated in the mid-level assessment. Students participated in the assessment as part of the course requirements.

## 9. How was student progress tracked into future semesters and what were the findings?

This question only applies to the two special projects described in Question #7.

- For the College of Human Environmental Science special mid-level assessment project, students are tracked via their advisors into future semesters. In addition to academic records, advisors use data from of the College Student Inventory (entry-level assessment) and the mid-level critical thinking assessment to track student progress into future semesters.
- For the Zoology Department special mid-level assessment project, students who major in Zoology are tracked as a cohort from introductory through upper division courses to evaluate the impact of the new introductory curriculum on performance in the major. Critical thinking and problem solving skills are a major component of this evaluation.

## 10. What were the analyses and findings from the 1998-99 mid-level assessment?

This question only applies to the two special projects described in Question #7.

Mid-level assessment projects conducted in the College of Human Environmental Science and the Zoology Department are ongoing. The Zoology special project will be completed in 1999-2000, and the College of Human Environmental Science project will continue indefinitely. Results will be described in the 1999-2000 annual report.

## 11. What instructional changes occurred or are planned in the general education program due to mid-level assessment?

No instructional changes occurred in OSU's general education program in 1998-99. The faculty on the Assessment Council and General Education Committee are working cooperatively to develop a plan for more broadly assessing the general education program at OSU and evaluate specific mid-level competencies. The special assessment projects conducted by individual departments and colleges are designed to provide information that can be used to enhance the curricula in those academic units. Instructional changes resulting from these assessments were not reported because the projects were not completed in 1998-99.

## **Program Outcomes Assessment**

12. Attach a table listing the assessment measures and number of individuals assessed for the degree program or department.

Tables 12.1 and 12.2 summarize the assessment measures and number of individuals assessed for each undergraduate degree program at OSU. Details of the assessment methods and results are given in the individual assessment reports or report summaries submitted by each college, department, or degree program (this report, pages 33-140).

Table 12.1. Assessment measures and numbers of individuals assessed for each college, department, and degree program at OSU. Only methods used to assessment undergraduate degree programs are included. Details about the assessment methods are described in individual assessment reports and report summaries. The assessment methods listed are only those used in 1998-99. Numbers of individuals assessed may include students, faculty, alumni, employers, or others as appropriate for the method listed.

Degree Program Assessed	Assessment Methods	Numbers of Individuals Assessed
College of Agricultural Sci	iences and Natural Resources	
Agricultural Education, B.S.	<ul> <li>Tracking student academic records: student GPAs</li> <li>Internships</li> <li>Exit interviews</li> <li>Faculty program review</li> </ul>	17
Agricultural Communications, B.S.	<ul> <li>Internships</li> <li>Capstone course</li> <li>Intercollegiate competitions</li> <li>Exit interviews</li> </ul>	41 31 17 33
Agricultural Economics, B.S. and Agribusiness, B.S.	<ul> <li>Exit interviews</li> <li>Tracking student academic records: performance in certain courses and diverse education goals</li> </ul>	60 79
	Employer surveys: informal discussions with employers of graduates	NA
Animal Science, B.S.	<ul><li>Capstone course</li><li>Student satisfaction survey</li><li>Intercollegiate competitions</li></ul>	140
Biochemistry B.S. (CAS) and Biochemistry and Molecular Biology, B.S. (CASNR)	<ul><li>Exit interviews</li><li>Standardized exams (national)</li></ul>	21
Biosystems & Agricultural Engineering, B.S.	<ul> <li>Tracking student academic records: performance in core courses</li> <li>Exit interviews</li> <li>Faculty evaluations</li> </ul>	9
Entomology, B.S.	<ul><li>Exit interviews</li><li>Tracking student academic records</li></ul>	3
Environmental Science, B.S.	<ul> <li>Exit interviews</li> <li>Tracking student academic records</li> <li>Tracking student retention / graduation data</li> </ul>	12 19 19

Degree Program Assessed	Assessment Methods	Numbers of Individuals Assessed
	Capstone course	19
Forestry, B.S.	<ul> <li>Exit interviews</li> <li>Capstone course</li> <li>Tracking student retention / graduation data: post-summer camp experience</li> <li>Alumni survey</li> <li>'Summer camp' experience</li> </ul>	17 15 all students, 1989- 96 80 7
Horticulture and Landscape Architecture, B.S. (options in Horticulture and Turf Management)	<ul> <li>Tracking student retention / graduation data</li> <li>Tracking student academic records: grades in major</li> <li>Intercollegiate competitions</li> <li>Exit interviews</li> <li>Internships</li> </ul>	15 10 8 3 23
Horticulture and Landscape Architecture, Bachelor of Landscape Architecture, B.L.A.	<ul> <li>Tracking student retention / graduation data</li> <li>Tracking student employment status</li> <li>External review of student work: evaluations of visiting lecturers/critics</li> <li>External review of student work: evaluation</li> </ul>	61 61 35
	of projects by professional jurors  • Portfolios  • Capstone course  • Exit interviews  • Intercollegiate competitions  • Internships	11 11 8 11 7
Bachelor Science In Agriculture, B.S., (Landscape Contracting	<ul> <li>Tracking student retention / graduation data</li> <li>Tracking student employment status</li> <li>External review of student work: evaluation of</li> </ul>	26 12
option)	<ul> <li>External review of student work: evaluation of projects by professional jurors</li> <li>External review of student work: evaluations of visiting lecturers/critics</li> </ul>	26
	<ul> <li>Exit interviews</li> <li>Intercollegiate competitions</li> <li>Internships</li> </ul>	2 10 1
Plant & Soil Sciences, B.S.	<ul> <li>Tracking student retention / graduation data</li> <li>Intercollegiate competitions</li> <li>Employer surveys</li> <li>Internship: evaluation by cooperators</li> <li>Exit interviews</li> <li>Course-embedded assessment: evaluation of problem solving and critical thinking</li> <li>Standardized exam (national): unofficial external certification exam</li> </ul>	17

Degree Program Assessed	Assessment Methods	Numbers of Individuals Assessed
College of Arts & Sciences		
Studio Art, B.A. and B.F.A.; Graphic Art, B.F.A., and Art History, B.A.	<ul> <li>Portfolios</li> <li>External review of student work</li> <li>Senior survey</li> <li>Intercollegiate competitions</li> </ul>	27
Botany, B.S.	Senior survey	8
Biology, B.S.	Senior survey	64
Chemistry, B.S.	<ul> <li>Alumni survey</li> <li>Exit interviews</li> <li>Capstone course</li> <li>Faculty evaluation</li> </ul>	
Communication Sciences and Disorders, B.S.	Capstone course     Alumni survey	14
Computing & Information Sciences, B.S.	Tracking student academic records	46
English, B.A.	Senior survey	6
Foreign Languages and Ligeratures: French, German, Russian, Spanish, B.A.	<ul> <li>Tracking student academic records: monitoring grades in required advanced courses</li> <li>Exit interviews</li> <li>Standardized exams (state): Oklahoma State Teacher Certification exams (French, German, and Spanish only)</li> </ul>	129 17 12
Geography, B.A. and B.S.	<ul> <li>Standardized exam (locally-developed)</li> <li>Exit interviews</li> <li>Senior survey</li> </ul>	14
Geology, B.S.	Senior survey	5
History, B.A.	<ul> <li>Tracking student academic records: performance in required courses and analysis of courses taken</li> <li>Capstone course</li> <li>Portfolios</li> </ul>	96
Journalism and Broadcasting , B.A. and B.S.	<ul> <li>Standardized exams: locally-developed midlevel language pre- and post-tests</li> <li>Capstone course</li> <li>Internships</li> </ul>	79 116 83

Degree Program Assessed	Assessment Methods	Numbers of Individuals Assessed
	Alumni survey	74
Mathematics, B.S. and B.A.	<ul> <li>Senior survey</li> <li>Tracking student academic records: grades in core courses</li> </ul>	1
Microbiology, B.S.; Cell and Molecular Biology, B.S., and Medical Technology, B.S.	<ul><li>Exit interviews</li><li>Senior survey</li></ul>	8
Music, B.A.	Intercollegiate competitions	6
	<ul> <li>Internships</li> </ul>	6
	External review of student work: juried auditions	123
Philosophy, B.A.	Capstone course	6
Physics, B.S.	<ul><li>Senior survey</li><li>Alumni survey (informal)</li></ul>	
Political Science, B.A.	*no outcomes assessment activity conducted this year	
Psychology, B.S. and B.A.	Alumni survey	29
	Focus groups	6
Sociology	<ul><li>Exit interviews</li><li>Internships</li></ul>	8
	Tracking student academic records: transcript analysis, grades in core courses	32
Speech Communication, B.S and		
B.A.	Alumni survey	487
Statistics, B.S.	Alumni survey: initial work towards developing a contact list for graduates	108
Theater, B.A.	<ul> <li>Portfolios</li> </ul>	40
	• External review of student work: performance juries and post production reviewers	60
	Intercollegiate competitions	4
	<ul><li>Internships</li><li>Alumni survey</li></ul>	7
Zoology, B.S., and Wildlife and Fisheries Ecology, B.S.	*no outcomes assessment activity conducted this year currently conducting a special project on mid-level ass	

	(Table	12.1.	continued)
--	--------	-------	------------

Degree Program Assessed	Assessment Methods	Numbers of Individuals Assessed
College of Business Admini	<u>stration</u>	
All College of Business	Student satisfaction survey	251
Undergraduate Degrees (Finance,		44
Management, Marketing, Accounting, Economics, MIS)	Alumni survey (BCOMM 3113 alumni only)	204
College of Education		
Aviation Sciences, B.S.	Tracking student academic records	61
Aviation Sciences, B.S.	Professional certification exam	01
	Student resume	
	Student satisfaction survey	
Double of D	D. 46 U.	25
Professional Education Degree	Portfolios     Surveys to access help sessions	35 260
Programs (different programs may use	<ul><li>Surveys to assess help sessions</li><li>Survey to assess student teaching</li></ul>	336
different assessment techniques;	<ul> <li>Survey to assess student teaching</li> <li>Survey to assess residency year</li> </ul>	250
see individual reports for details)	LearningPlus, a computer-based program for	39
/	assessment and tutorial assistance	
Health / Health Promotion	Intomobina	20
Health / Health Promotion	<ul><li>Internships</li><li>Standardized test (locally-developed)</li></ul>	30
	<ul> <li>Tracking student retention / graduation data</li> </ul>	
	Capstone course	
	Alumni surveys	
Leisure Studies	<ul> <li>Internships</li> </ul>	18
Leisure Studies	<ul><li>Internships</li><li>Alumni surveys</li></ul>	10
	<ul> <li>Tracking student retention / graduation data</li> </ul>	
	Professional certification exam	
College of Engineering, Arc	chitecture, and Technology	
Bachelor of Architecture and	Capstone course	36
Bachelor of Architectural	<ul> <li>External review of student work</li> </ul>	
Engineering	• Portfolios	
	Tracking student employment status	
Chemical Engineering, B.S.	Exit interviews	35+
, 2ge, 2	External review of student work	33 :
	Tracking student retention / graduation data:	
	- I racking bracent retention, graduation data.	
	enrollment trends	

(Table 12.1. continued)  Degree Program Assessed	Assessment Methods	Numbers of Individuals Assessed
	Senior Projects	
Civil and Environmental	Professional certification exams	56
Engineering, B.S.	• Student surveys	
	• Employer surveys (informal)	
	Alumni surveys	
Construction Management	Exit interviews	34
Technology	<ul> <li>Internships</li> </ul>	31
	<ul> <li>Tracking student employment status (AIC</li> </ul>	27
	placement surveys)	
	<ul> <li>Professional certification exam (CQE Level I)</li> </ul>	25
	Intercollegiate competitions	18
Electrical Enginerative	Alvani overcov	667
Electrical Engineering	Alumni survey     Standardized event (leastly developed)	667
Technology, B.S.	Standardized exam (locally-developed)	14
Fire Protection and Safety	Alumni survey (informal)	10
Technology, B.S.		
Industrial Engineening and		7
Industrial Engineering and Management, B.S.	Standardized exam (national)	7
Management, B.S.		
Mechanical & Aerospace	• Standardized exam (FOE)	200
Engineering	Capstone course	
	Exit interviews	
	<ul> <li>Tracking student employment status</li> </ul>	
	<ul> <li>Tracking performance of graduates in</li> </ul>	
	graduate school	
	Employer surveys (informal)	
Mechanical Engineering	Alumni survey	
Technology	Professional certification exam	
6)	Exit interviews	
College of Human Enviro	nmental Science	
All Callers CH		
All College of Human Environmental Science	College Student Inventory (for entering	121
	<ul> <li>College Student Inventory (for entering students)</li> </ul>	121
undergraduate degree programs	Alumni survey	126
Design, Housing &	Senior survey	44
Merchandising (B.S.)	Alumni survey	27
	• Internships	37
	Portfolios: sophomore and senior review  Employer (in dyster) surgery	44
	Employer (industry) survey	

Family Relations &		
Child Development (B.S.)	Alumni survey	71
• , , ,	Senior survey	
(Table 12.1. continued)		
College and		
Degree Program		Numbers of
Assessed	Assessment Methods	Individuals Assessed
Hotel & Restaurant	Alumni survey	15
Administration (B.S.)	Employer surveys	10
	Senior survey	7
	Capstone Course: embedded assessment of	
	Business Skills	46
Nutritional Sciences	Exit interviews	13
(B.S.)	Alumni survey	13
	Senior survey	

Table 12.2. Number of academic units using each reported method for program outcomes assessment in 1998-99.

Assessment Method	Number of Academic Units	
Exit interviews	22	
Alumni surveys	21	
Student surveys:	22	
- Senior surveys	14	
- Student satisfaction surveys	3	
- Other types of assessment surveys	5	
Employer surveys	7	
Internships	14	
Capstone courses	13	
Tracking student academic records	12	
Intercollegiate competitions	10	
External review of student work	9	
Standardized exams	15	
- National standardized exams	5	
- State standardized exams	1	
- Locally-developed standardized exams	4	
- Professional certification exams	5	
Tracking student retention / graduation data	10	
Portfolios	7	
Tracking student employment status	4	
Faculty evaluations or faculty review	3	
Course-embedded assessment	2	
Computer tutorial / assessment software	1	
Focus groups	1	
Senior Project	1	
Student Resumes	1	
'Summer camp' experience (Forestry)	1	

## 13. What were the analyses and findings from the 1998-99 program outcomes assessment?

Analyses and findings from the 1998-99 program outcomes assessment activities were unique for each degree program assessed. Details of the analyses and findings from program outcomes assessment are described in the individual assessment reports or report summaries submitted by each college, department, or degree program (this report, pages 33-140).

## 14. What instructional changes occurred or are planned in the programs due to program outcomes assessment?

Instructional and academic program changes that occurred or are planned because of program outcomes assessment also vary widely among degree programs. These are also described in the individual assessment reports or report summaries submitted by each college, department, or degree program (this report, pages 33-140). Every academic unit reported using information gained through program outcomes assessment for reviewing, revising, and improving their curricula. Sixty percent of academic units reported using the results of program outcomes assessment to implement specific curriculum changes.

## **Student Satisfaction Assessment**

15. What assessment activities were used to measure student satisfaction? Describe the measures used, which students were assessed, how many students, and how they were selected.

Noel-Levitz, Inc. Student Satisfaction Inventory and Institutional Priorities Surveys. The Noel-Levitz, Inc., Student Satisfaction Inventory (SSI) has been conducted annually at OSU to provide feedback from undergraduates across campus regarding their perceptions of academic programs and campus services. The Institutional Priorities Survey (IPS), which closely parallels the SSI, was also conducted in 1998-99. Whereas the SSI is designed to measure students' satisfaction with a wide range of college experiences, the IPS assesses the priority faculty, staff, and administrators believe the institution should place on the same range of student experiences and the agreement that the institution is meeting student expectations. The surveys provide feedback on institutional strengths and areas where improvements in campus programs and student services may be needed. The surveys also allow comparison of OSU data with similar institutions nationwide. A total of 1,682 undergraduates completed the 1999 Student Satisfaction Inventory, representing about 9% of the student body. This survey was administered in spring semester classes. A total of 158 faculty, staff, and administrators participated in the Institutional Priorities survey, which was mailed to 450 members of the campus community. For both surveys, sampling effort was stratified so students or faculty/staff from each college or area were represented in proportion to their representation in the OSU community.

Other Assessments of Student Satisfaction. In addition to this university-wide survey, many academic units conduct their own surveys of student satisfaction as part of their program outcomes assessment and report the results as part of their program outcomes assessment. Satisfaction with student services are also assessed by nearly all OSU student service programs using locally-developed survey instruments. Results of these program-specific assessments are not included in this report.

## 16. What were the analyses and findings from the 1998-99 student satisfaction assessment?

The major findings from the 1999 Student Satisfaction and Institutional Priorities surveys were:

- OSU students and faculty/staff indicated highest satisfaction with topics related to enjoyment of being part of the OSU community, the sense of welcome on this campus, campus safety and security, and campus appearance. Students and faculty also agreed that strengths of OSU included faculty expertise and the variety of courses available.
- Satisfaction scores given by OSU students were consistently higher than responses of students at 4-year, public institutions nationwide. Average satisfaction scores of OSU students were significantly higher than the national group averages for almost all items. The only item that was significantly lower in satisfaction than the national comparison group was availability of student parking.
- Overall, 85% of OSU students said they were satisfied with their college experience so far, and more than half said their college experience so far was 'better than they expected'.
- Areas of concern identified by students and faculty/staff included the ability to register for
  classes without conflict, students getting the 'run-around' when seeking information, and the
  unbiased treatment of students by faculty. Additional concerns of students included the
  adequacy of student parking, use of activity fees, availability of financial aid, and billing
  policies. Additional concerns of faculty/staff focused on academic issues, such as the
  commitment of the institution to academic excellence, the quality of instruction, the content
  of courses in majors, and OSU's progress towards helping students develop their writing
  skills.

#### 17. What changes occurred or are planned due to student satisfaction assessment?

No specific changes occurred in 1998-99 as a result of student satisfaction assessment. The Office of University Assessment has worked to strengthen feedback loops so that information from the annual survey of student satisfaction can be integrated into the decision-making process for issues related to academic programs and student services. The report on the 1999 Student Satisfaction and Institutional Priorities Surveys was distributed to administrative and academic units across campus. In addition to the campus-wide report, data were summarized separately for each college and for academic departments and student service units that request additional information so that student satisfaction data could be incorporated into program-specific changes.

## **Special Assessment Projects**

#### 1998 Survey of Academic Advising

The 1998 Survey of Academic Advising was conducted to provide information on student impressions of academic advising during the freshman year or first year after transferring to OSU from another institution. The survey was initiated by the Assessment Council and the Strategic Enrollment Task Force in an effort to evaluate advisement for new students and identify areas for improvement, particularly advising-related opportunities to enhance student retention. A total of 344 students participated in the survey. Results suggest that OSU is performing very well with regard to meeting the advising needs of incoming freshmen and transfer students. Overall, 77% of students responded that the academic advising system was more than adequately meeting their needs and fewer than 2% of respondents suggested that advising was inadequate. Students were most pleased with their advisor's help in dealing with institutional processes (selecting a major, course registration, drop/add, etc.) and gave slightly more neutral scores for advisor's assistance with personal issues or career planning. Students generally believed that their advisors were approachable, helpful, and effective. Results of this study corroborate data from the annual Student Satisfaction Survey. Both surveys show that OSU students regard academic advising as very important and that they are generally pleased with the advisement that they have received.

#### Assessment of the Impact of a University-Wide Tutoring Program for Undergraduates

University Academic Services, the advising office that serves adult, transfer admissions, and undeclared students, assessed the impact of a free tutoring service available to all OSU students in 1998-99. The tutoring service was designed to provide additional academic support to undergraduate students across campus in an effort to improve retention and graduation rates at OSU. Results of the assessment project showed extensive use of the tutoring program as measured by 2,215 total tutoring hours used by over 400 students. Student reported high student satisfaction with the tutoring service in surveys administered to all users. Over 210 transcripts from the fall semester were analyzed to determine if students demonstrated a consistent pattern of improvement. Although qualitative data was overwhelmingly positive as measured by observations, informal interviews, and comments on surveys, quantitative evidence was inconclusive because no specifically defined control group or variables with which to compare results were available. Results of this assessment show that a free tutoring service available from a central location is perceived as beneficial by students and faculty across campus.

#### **Other Assessment Studies**

- In addition to the special assessment projects listed above, the OUA provided financial support for special mid-level assessment projects in the College of Human Environmental Science and the Zoology Department. These projects are described in Question #7.
- The OUA provided funding for an assessment of BCOMM 3113 (Written Business Communication), a study directed by Dr. Zane Quible. A mailed alumni survey was used in this study and resulted in responses from 204 College of Business Administration students. The final report on this project (25 pp.) can be obtained from the OUA.

- The Honors Program conducts an annual assessment of its program by surveying student participants and faculty about the quality of the program. Results of this assessment can be obtained from the University Honors Program or the Office of University Assessment.
- Each unit within the division of Student Affairs (Residential Life, Career Services, Personal Counseling, Student Union, Colvin Center, Wellness Center, and Health Center) conducts assessment of their programs and services. Results of these assessments can be obtained from the Office of the Vice President of Student Affairs.