SUBMITTED TO THE OKLAHOMA

STATE REGENTS FOR HIGHER EDUCATION

December 2009

TCC Contact: Dr. Ric Baser
Vice President & Chief Academic Officer
TULSA COMMUNITY COLLEGE
ANNUAL STUDENT ASSESSMENT REPORT
2008-2009
EXECUTIVE SUMMARY

Entry-Level Assessment

Entry-Level assessment at Tulsa Community College (TCC) has been an ongoing process since the College opened 39 years ago (1970). The American College Test (ACT) has been the primary test used to measure levels of student achievement and subsequent entry-level placement at TCC. The College Board Computerized Placement Tests (CPT) is the secondary test for entry-level assessment. The CPT is used by TCC to supplement the ACT for purposes of assisting students in selecting levels of college courses for which they have the greatest chance for success. Beginning Fall 2009, TCC has adopted use of the ACT Compass for entry-level assessment and will evaluate cut scores accordingly.

More than two-thirds (68.3%) of Fall 2008 first-time freshmen at TCC scored at the college reading level. This is similar to past years and includes increased numbers of first-time freshmen in the Tulsa Achieves program, which provides free college tuition for direct-from-high-school freshmen from Tulsa County. Nearly one-third (31.8%) of Fall 2008 first-time freshmen at TCC enrolled in developmental reading courses.

Three-fourths (74.8%) of first-time freshmen scored at the college level in English/writing. The remaining 25.2% of first-time freshmen enrolled in developmental writing, with 16.2% in Writing II (ENGL 0923), one level below Freshman Composition I (ENGL 1113), and 9.0% in Writing I (ENGL 0933), two levels below Freshman Composition I. These results are similar to previous first-time freshmen cohorts at TCC.

More than one-third of first-time freshmen cohort (36.1%) placed in College Algebra (MATH 1513) or higher. Of the 63.9% of students who tested into developmental mathematics, over half (55.3%) placed in Basic Math (MATH 0003), 6.5% placed in Beginning Algebra (MATH 0013), and 2.0% (MATH 0123) placed in Intermediate Algebra. There is a tendency for students to place/perform better when they have completed high school algebra more recently, and results bear this out.

Students who completed Writing II in Fall 2008 were tracked through Freshman Composition I in Spring 2009. They succeeded at a rate of 63.6%, compared to an average success rate of 64% for prior first-time freshmen cohorts. Students who completed Intermediate Algebra in Fall 2008 were tracked through College Algebra in Spring 2009. They succeeded at a rate of 55.6%,
compared to an average success rate of 57% for prior first-time freshmen cohorts. The national average success rate for College Algebra is approximately 50%.

**Mid-Level Assessment**

TCC’s mid-level assessment process, used for the past several years, centered around evaluation of one of the institution’s general education goals college-wide each year on a rotating basis. During the 2008-2009 academic year, faculty assessed Engaged Learning. A total of 4,372 students participated in the assessment of this general education goal, TCC Gen Ed Goal #3, and 97% success rate was indicated.

Additionally, during the 2008-2009 academic year, each general education goal was assessed by one or more disciplines or initiatives. Reading faculty, Math faculty, College Strategies faculty, and all program/discipline faculty in the Critical Thinking Initiative (CTI) at the West Campus linked curriculum to specific general education program competencies and assessed them accordingly.

To assess the transition from entry-level to college mid-level, student measures of success were identified and progress was evaluated for students enrolled in ENGL 1003, College Strategies, students who enrolled in ENGL 0963, College Survival, and first-time freshmen who enrolled in neither course during the 2008-2009 academic year. Of these 3,655 students, 1,712 enrolled in College Strategies, 92 enrolled in College Survival, and 1,851 enrolled in neither course.

To evaluate student success in both developmental courses and gateway courses, assessments were conducted between course grades of students who enrolled in Strategies, students who enrolled in College Survival, and first-time freshmen who enrolled in neither course. Few students from the College Survival course took college level course work, and most significant results are between students who enrolled in Strategies and first-time freshmen who did not. Strategies students earned significantly higher grades than non-Strategies first-time freshmen in:

- Basic Math
- Writing II
- College Algebra
- Biology for Majors
- US History 1492 to Civil War Era
- Introduction to Psychology

These results suggest that during the 2008-2009 academic year, student success was positively affected in College Strategies, increasing in persistence from fall to spring and persistence from fall to fall, increasing success (“C” or better) in six developmental and gateway courses, and increasing the efficacy of student self-testing and information processing abilities.
Program Outcomes Assessment

Tulsa Community College has implemented a course-embedded discipline and program outcomes assessment process that parallels that of mid-level (general education) assessment. Faculty members have defined learning outcome goals and competencies for each specific discipline or program, and on an annual basis they are asked to assess student performance toward one of their discipline’s or program’s goals. Student performance was evaluated against established criteria determined by the instructor for the particular goal assessed.

All instructors submitted their results via a standardized web-based reporting tool to the Office of Planning and Institutional Research. Elements of the report include the assessment activity administered, the performance criteria for evaluation, the number of students assessed, the number of student performing successfully, and finally any action the instructor and/or the institution should take as a result of the assessment data.

A total of 192 faculty members contributed to the course-embedded assessment of discipline goals and/or program competencies. The number of contributors represents approximately 20% participation by full and part-time faculty. A total of 4,503 students were assessed. Of those students, 83.1% successfully demonstrate the goal or competency assessed.

In addition to the course-embedded assessment of student performance outcomes, Each university transfer discipline is required to perform an overall discipline self-study every three years. This study analyzes all aspects of the discipline, including student learning goals, enrollment and retention data, media holdings, curriculum design, etc. Each discipline then proposes actions based on this review. For 2008-2009 discipline studies, English, Engineering, and Psychology recommended curriculum changes based upon assessment results. Further, Biology, English, and Mathematics are working to develop and/or refine common assessment tools college-wide.

Several programs, particularly in Allied Health and Nursing, require licensure or certification. Programs tracked student licensure results, with overall success rates ranging from 78% in Medical Laboratory Technology to 100% in Phlebotomy and Dental Hygiene.

Additionally, TCC conducted an annual student exit survey, alumni survey, and employer survey. Results indicate that eight out of ten TCC graduates believed that TCC course work emphasized critical thinking and analytical thinking. Ninety-two percent believed that they had acquired a broad, general education. Two-thirds of alumni were continuing their education at other universities and colleges six months or more after graduation from TCC, and two-thirds of alumni reported that they were employed. Most recent employer survey results indicate employers believe 75% of their employees who are TCC graduates are above average in ability to analyze and identify problems, and 86% are above average in quality of work performed.

Student Satisfaction Assessment

The assessment of student satisfaction at Tulsa Community College is intended to generate
student feedback and appraisal regarding the extent to which TCC is meeting students’ educational needs. Furthermore, this information is directly utilized by many referent groups within TCC to improve instruction, create new programs or services, identify dysfunctional elements, and improve or adjust existing program delivery systems.

The Community College Survey of Student Engagement (CCSSE) was administered in Spring 2009 to a random, stratified sample of all students enrolled. Credit classes were randomly selected—stratified by time of day (morning, afternoon, and evening) from institutional class data files to participate in the survey. A total of 338 students completed the CCSSE, and demography included gender, age, racial identification, international students, enrollment status (full-time or part-time), education attainment, and credit hours earned. Results indicated that TCC students were actively engaged at the College equal to the national average of community college students. Additionally, TCC full-time students were significantly more likely than the national average to be employed, and part-time students were significantly more likely than the national average to be simultaneously enrolled in other institutions. These results suggest TCC students are actively engaged in college, employment, and the community.
Section I – Entry Level

Administering Assessment

I-1. How were instruments administered?

Entry-level assessment at Tulsa Community College (TCC) has been an ongoing process since the College opened in 1970. The American College Test (ACT) is the primary test used to measure levels of student achievement and subsequent entry-level placement at TCC. The ACT, as an admission requirement for degree-seeking students in Oklahoma colleges and universities, provides extensive normative data useful as one indicator of students’ readiness for college level courses.

In the 1991 Fall Semester, TCC began administering the College Board Computerized Placement Tests (CPT), a computer-adapted achievement test. The Oklahoma State Regents for Higher Education (OSRHE) approved the use of the CPT as a secondary test for use by TCC in entry-level assessment. The CPT has been used by TCC to supplement the ACT to assist students in selecting levels of college courses for which they have the greatest chance for success. Beginning with the Fall 2009 semester, TCC began administering the ACT Compass for entry-level placement and diagnosis.

I-2. Which students were assessed?

All incoming students, regardless of age, must demonstrate proficiency either by testing (ACT and/or CPT) or by documentation of prior college-level work for transfer students. Test score information is used as a guideline by academic advisors to place students in various courses at TCC. Beginning with the Fall 2009 semester, TCC began using the ACT Compass for secondary placement, and analysis will subsequently ensure to validate cut scores.

I-3. Describe how and when they were assessed, including options for the students to seek retesting, tutoring, or other academic support.

The primary entry-level assessment instrument used by TCC is the ACT. The College administers both the national and the residual ACT at its Northeast Campus. Students who have taken the national ACT elsewhere may provide documented scores to the College through the registrar’s offices.

As mentioned, the CPT was used as a secondary testing strategy for assessing student achievement reflected in entry-level course placement. The intention of this testing strategy was to compensate for the following situations: (1) designated cut-score levels on the ACT were not attained; (2) ACT scores were not available; (3) ACT scores were in question based upon length of time since tested; (4) student was identified as an “adult learner;” or (5) the validity and/or reliability of the individual’s ACT scores was questioned. The CPT, when administered, was
given usually only once. However, students were allowed to take the test twice in a given semester. Additionally, the College provides tutorial and laboratory centers to assist students who demonstrate skill deficiency in English and Mathematics.

Analysis and Findings

I-4. What were the analyses and findings from the 2008-2009 entry-level assessment?

Placement in Reading

More than two-thirds (68.3%) of Fall 2008 first-time freshmen at TCC scored at the college reading level, with 41.1% placing using the ACT and 27.2% placing using the Accuplacer CPT. This is similar to past years and includes increased numbers of first-time freshmen in the Tulsa Achieves program, which provides free college tuition for direct-from-high-school freshmen from Tulsa County. Nearly one-third (31.8%) of Fall 2008 first-time freshmen at TCC enrolled in developmental reading courses. This disaggregated into 18.0% enrolling in Reading I (ENGL 0903), two levels below college-level reading, and 13.8% enrolling in Reading II (ENGL 0913), one level below college-level reading.

Placement in Writing

Three-fourths (74.8%) of first-time freshmen scored at the college level in English/writing. This was split between 38.3% placing at college-level using the ACT and 36.5% placing at college-level using the Accuplacer CPT. The remaining 25.2% of first-time freshmen enrolled in developmental writing, with 16.2% in Writing II (ENGL 0923), one level below Freshman Composition I (ENGL 1113), and 9.0% in Writing I (ENGL 0933), two levels below Freshman Composition I. These results are similar to previous first-time freshmen cohorts at TCC.

Placement in Mathematics

More than one-third of the first-time freshmen cohort (36.1%) placed in College Algebra (MATH 1513) or higher. A total of 34.5% placed in college-level mathematics using the ACT. An additional 1.6% of the cohort placed in College Algebra using the Accuplacer CPT. Of the 63.9% of students who tested into developmental mathematics, over half (55.3%) placed in Basic Math (MATH 0003), 6.5% placed in Beginning Algebra (MATH 0013), and 2.0% (MATH 0123) placed in Intermediate Algebra. There is a tendency for students to place/perform better when they have completed high school algebra more recently, and these results bear this out.
I-5. How was student progress tracked?

Student success rates (earning a C or better) in remedial courses was reported, as was student success (earning a C or better) in subsequent college course work. Because TCC is an Achieving the Dream (AtD) college, all five AtD goals were measured: [1] successfully complete remedial courses; [2] successfully complete gateway course; [3] complete course work with a C or better; [4] persist from one semester to the next; and [5] earn more degrees and completions.

I-6. 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 result of findings.

First-time freshmen who enrolled in Writing II (one level below college-level writing) or Writing I (two levels below college-level writing) succeeded in their remediation with a “C” or better at a rate of 48.1% and 51.6%, respectively, during the Fall 2008 semester. Further, first-time freshmen who completed Writing II in Fall 2008 had a 63.6% success rate in Comp I during spring 2009 compared to a 62.5% success rate for Fall 2008 first-time freshmen who did not require remediation. This is on par with previous cohort data, and Table 1 below displays results of all remediation.

### Table 1
Remedial Course Success Rates
For Fall 2008

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course Number</th>
<th>Percent Earning “C” or Better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing II</td>
<td>ENGL 0933</td>
<td>48.1%</td>
</tr>
<tr>
<td>Writing I</td>
<td>ENGL 0923</td>
<td>51.6%</td>
</tr>
<tr>
<td>Reading II</td>
<td>ENGL 0913</td>
<td>61.6%</td>
</tr>
<tr>
<td>Reading I</td>
<td>ENGL 0903</td>
<td>56.2%</td>
</tr>
<tr>
<td>Intermediate Algebra</td>
<td>MATH 0123</td>
<td>47.5%</td>
</tr>
<tr>
<td>Beginning Algebra</td>
<td>MATH 0013</td>
<td>57.7%</td>
</tr>
<tr>
<td>Basic Math</td>
<td>MATH 0003</td>
<td>58.0%</td>
</tr>
</tbody>
</table>

First-time freshmen who enrolled in Reading II (one level below college-level reading) or Reading I (two levels below college level reading) succeeded in their remediation with a “C” or better at a rate of 61.6% and 56.2%, respectively, during the Fall 2008 semester. Those who repeated Reading I or II in Spring 2009 were more likely to succeed, and these results are consistent with benchmarked data.
First-time freshmen who enrolled in Intermediate Algebra in Fall 2008 (one level below College Algebra) succeeded with a “C” or better at a rate of 47.5%. Those who enrolled in Beginning Algebra (two levels below College Algebra) succeeded with a “C” or better at a rate of 57.7%. Those who enrolled in Basic Math (three levels below College Algebra) succeeded with a “C” or better at a rate of 57.3%. These data are consistent with benchmark data.

Students who completed Writing II in Fall 2008 were tracked through Freshman Composition I in Spring 2009. They succeeded at a rate of 63.6%, compared to an average success rate of 64% for prior first-time freshmen cohorts. Students who completed Intermediate Algebra in Fall 2008 were tracked through College Algebra in Spring 2009. They succeeded at a rate of 55.6%, compared to an average success rate of 57% for prior first-time freshmen cohorts. The national average success rate for College Algebra is approximately 50%.

Through Summer 2009, students who were 21 years of age or older were allowed to “opt out” of remedial courses into which they have been placed. This institutional practice created a confounding variable in analyzing student success as a result of placement. TCC has rectified this issue beginning with Fall 2009, and consistent with OSRHE policy, students may not “opt out” of proper remedial placement.

Because TCC simultaneously terminated use of the Accuplacer CPT in Summer 2009 and began use of the ACT Compass for Fall 2009 placement, cut score analysis is underway during the 2009-2010 academic year. Results will be reported in the 2009-2010 Annual Student Assessment Report.

Although research through the American Association of Community Colleges (AACC) and the Achieving the Dream initiative indicate that success rates achieved at TCC are commonly experienced at community colleges, TCC is not satisfied with these results and wishes to increase student success. Consequently, remedial reading was selected for analysis and intervention during the 2008-2009 academic year, with remedial math to be highlighted in 2010-2011, and remedial writing to follow in 2011-2012. This study is described in Section I-7.

Other Assessment Plans

I-7. What other studies of entry-level assessment have been conducted at the institution?

The Career Services at Tulsa Community College uses a variety of assessment tools to provide guidance with students in development of their career paths. The college uses online versions of Sigi and Discover as well as in-office paper versions. Professional staff members meet directly with students to help formulate strategic career maps. Working with staff in office or online, students use this information to make degree major and individual coursework decisions.
In pursuing Achieving the Dream student goals, TCC examined reading placement results and investigated reasons why students experience barriers to success in Reading I and II. To determine why TCC students experience challenges succeeding in remedial reading, a total of 36 student focus groups and one faculty focus group (included all full-time Reading faculty and was open to part-time faculty) were conducted in Fall 2008 to determine student barriers to remedial reading. Results were analyzed, and a total 444 student barriers ensued, which mapped to 16 major student barrier types. Results are described in Section I-8.

I-8. Describe results.

The College does not currently track program placement per career assessment, but plans to do so after the implementation of its new ERP system.

Regarding results of Reading I and II student focus groups, 59% of barriers named were actually student persistence-related issues, indicating the prevalence of outside challenges that remedial students in particular are faced with in staying in college. Of the 41% of barriers that were specific to reading, no statistically significant differences were found as a result of course level (Reading I or Reading II), campus (TCC has four campuses), course time (day or evening), or faculty status (full-time or part-time).

The four major reading barrier types/categories were:

- Insufficient reading skill
- Negative (student) attitudes
- Amount/Scheduling of work
- Reading lab work

I-9. What instructional changes occurred or are planned due to entry-level assessment?

In response to the Achieving the Dream data collected in Fall 2008 and analyzed in Spring 2009, Reading I and Reading II lab curricula were modified. TCC purchased software designed to build reading comprehension and vocabulary for Reading students. These assignments are accessible online, and students can access from home or on-campus computer labs. Increased reading skills attained in Reading I and Reading II may affect student success in all subsequent course work. Results will be analyzed and reported in the 2009-2010 Annual Student Assessment Report.

Developmental mathematics was selected for a goal in Fall 2009, and student focus groups have been conducted during Fall 2009 to enable data-informed decision making. Results will be reported in the 2009-2010 Annual Student Assessment Report.
Section II – Mid-Level/General Education

Administering Assessment

II-1. Describe how assessment activities were linked to the institutional general education program competencies.

The assessment process, used for the past several years, centered around one of the institution’s general education goals college-wide each year on a rotating basis. During the 2008-2009 academic year, faculty assessed Engaged Learning of students.

Additionally, during the 2008-2009 academic year, each general education competency was assessed by one or more programs or initiatives. Reading faculty, Math faculty, College Strategies faculty, and all program/discipline faculty in the Critical Thinking Initiative (CTI) at the West Campus linked curriculum to specific general education program competencies and assessed them accordingly.

II-2. Describe how the instruments were administered and how students were selected.

The traditional vehicle for assessing general education throughout the institution has been context-specific, with faculty members assessing the current year’s goal according to the methods chosen to be most appropriate by each participating faculty member. The assessment instrument has been an Internet-based database application that faculty members complete one time per year during the fall semester, as the goal applies to any course they teach.

Although this method was used during Fall 2008, it has since been suspended and the Learning Effectiveness Council is pursuing a revitalized method for assessing general education competencies for the current academic year.

For the assessment of general education goals in co-curricular activities, a small, specific population was chosen consisting of 160 students in a TRIO grant funded cohort. The dean of Student Services at the Metro campus in conjunction with the TRIO grant director, a team of student services advisors, and the director of Planning and Institutional Research, developed and implemented the goal of critical thinking in specific co-curricular activities. A matched control group was used to compare results.

Other assessments across the college were conducted as well. Critical Thinking was assessed among College Algebra across the College with a 10-item common end-of-semester instrument developed by TCC math faculty.

The Nelson-Denny Reading test was used a pre and post measure for all Reading I and II students at the Northeast Campus. This pilot study was implemented college-wide in Fall 2009.
Additionally, all first-time freshmen enrolled in College Strategies were administered the Learning and Study Strategies Inventory (LASSI) to pretest and posttest student self-perceptions of a number of college success skills.

II-3. Describe strategies to motivate students to participate meaningfully.

With regard to the college-wide use of the Assessment Wizard, individual faculty members were allowed to choose which course, which activity and which students to assess. Consequently, student motivation and meaningful participation are inherent to the context of the learning experience chosen by the faculty member.

For purposes of the Assessment Academy project measuring general education goals in co-curricular activities, these students are already incentivized to participate in the TRIO grant. They receive $100 a semester for participation, and they receive individualized counseling and advising.

For other assessment initiatives, activities and testing were course-embedded, and students were motivated to participate as part of their course grade.

II-4. What instructional changes occurred or are planned in the programs due to mid-level assessment?

Assessment results from the Critical Thinking Initiative (CTI) have been shared college-wide as well as state-wide. Faculty involved in this initiative hosted a critical thinking conference at the West Campus in October 2009, and faculty at other campuses at TCC have made plans to adopt similar curricular structures into their programs and courses. Further, after reviewing a psychometric analysis of the CTI assessment instrument, faculty are modifying the instrument for the coming year.

With regard to assessment results of the College Strategies course, lead faculty have determined that additional faculty training is needed to standardize curriculum and course delivery methodologies. Further, online course resources have been developed for all faculty. Other instructional changes include modifying the End of Course essay which measures student critical thinking.

After review of assessment results, College Algebra faculty are revising their 10-item assessment instrument to add additional items and increase internal consistency of the instrument.

Analyses and Findings

II-5. and II.6. How was student progress tracked into future semesters and what were the findings, and what were the analyses and finding from the 2008-09 mid-level/general education assessment?
Measures of success were identified and evaluated for students who enrolled in ENGL 1003, College Strategies, for students who enrolled in ENGL 0963, College Survival, and for first-time freshmen who enrolled in neither course during the 2008-2009 academic year. Of these 3,655 students, 1,712 enrolled in College Strategies, 92 enrolled in College Survival, and 1,851 enrolled in neither course.

Student who enrolled in College Strategies persisted from fall to spring at a rate significantly higher than other groups.

- 85% fall to spring persistence rate for College Strategies students
- 66% fall to spring persistence rate for College Survival students.
- 59% fall to spring persistence rate for first-time freshmen who took neither course.

Fall to Spring retention for students requiring remediation in Reading but who took neither College Strategies nor College Survival was 55%. When compared to the 66% retention rate of College Survival students, this is of statistical significance at the 99% confidence level.

- 61% fall to fall persistence rate for College Strategies students
- 39% fall to fall persistence rate for College Survival students.
- 41% fall to fall persistence rate for first-time freshmen who took neither course.

Fall to Fall retention for students requiring remediation in Reading but who took neither College Strategies nor College Survival was 37%. Although not statistically significant, there is practical significance in that College Survival students are equally at-risk and persisted at a rate of 2% better.

This same comparison holds true when accounting for student age. Specifically, in comparing persistence between Tulsa Achieves scholarship students (direct-from-high-school) and 18-19 year old first-time freshmen who were not a part of the 2008 Tulsa Achieves cohort, the success rates held true. This is also significant for the 20-29 age bracket and the 30 and older age bracket.

- There was no statistically significant difference in cumulative GPA or semester GPA based upon College Strategies enrollment.
- There was a statistically significant difference in Course in Reflection essay scores between students who persisted and those who did not. Students who scored higher on the essay were more likely to persist.
- Student scores for all ten LASSI scales increased significantly at the 99% confidence level from the pretest to the posttest.
- LASSI mean scale posttest scores were in the mid-level range.
- Student scores on the Self-testing scale had the highest mean increase from pre to posttest. The Information Processing scale resulted in the highest mean posttest score and the second highest increase in pre to posttest.
• Student scores on the Attitude scale showed the lowest increase from pre to posttest and also resulted in the lowest mean posttest score.

To evaluate student success for the Achieving the Dream goals of developmental course and gateway course success, comparisons were made between course grades of students who enrolled in Strategies, students who enrolled in College Survival, and first-time freshmen who enrolled in neither course. Few students from the College Survival course took college level course work, and most significant results are between students who enrolled in Strategies and first-time freshmen who did not. Strategies students earned significantly higher grades than non-Strategies first-time freshmen in:

• Basic Math
• Writing II
• College Algebra
• Biology for Majors
• US History 1492 to Civil War Era
• Introduction to Psychology

These results suggest that during the 2008-2009 academic year, the College Strategies course was effective in increasing persistence from fall to spring and persistence from fall to fall, increasing success in six developmental and gateway courses, and increasing the efficacy of student self-testing and information processing abilities.

Section III – Program Outcomes

III-1. List, in table format, assessment measures and number of individuals assessed for each major field of study.

Administering Assessment

Assessment Measures & Number of Individuals Assessed for Degree Program/Department

Table 2

<table>
<thead>
<tr>
<th>Discipline/Program (# of Submissions)</th>
<th># Students Assessed</th>
<th># Students Successful</th>
<th>% Students Successful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Associate (7)</td>
<td>115</td>
<td>105</td>
<td>91.3%</td>
</tr>
<tr>
<td>Art (4)</td>
<td>46</td>
<td>34</td>
<td>73.9%</td>
</tr>
<tr>
<td>Biology (16)</td>
<td>536</td>
<td>472</td>
<td>88.1%</td>
</tr>
<tr>
<td>Biotechnology (4)</td>
<td>14</td>
<td>14</td>
<td>100.0%</td>
</tr>
<tr>
<td>Business (2)</td>
<td>28</td>
<td>25</td>
<td>89.3%</td>
</tr>
</tbody>
</table>
### Analysis and Findings

**III-2. What were the analyses and findings from the 2008-09 program outcomes assessment?**

**Course-embedded Assessment**

Tulsa Community College implemented a course-embedded discipline and program outcomes assessment process that parallels that of mid-level (general education) assessment. Faculty members have defined learning outcome goals and competencies for each specific discipline or program, and on an annual basis they assess student performance toward one of their discipline or program goals. Student performance was evaluated against established criteria determined by the instructor for the particular goal assessed.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Students</th>
<th>Passes</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry (7)</td>
<td>176</td>
<td>146</td>
<td>83.0%</td>
</tr>
<tr>
<td>Child Development (1)</td>
<td>19</td>
<td>15</td>
<td>78.9%</td>
</tr>
<tr>
<td>Computer Information Systems (11)</td>
<td>175</td>
<td>158</td>
<td>90.3%</td>
</tr>
<tr>
<td>Dental Hygiene (2)</td>
<td>26</td>
<td>26</td>
<td>100.0%</td>
</tr>
<tr>
<td>Developmental Studies in Communication (6)</td>
<td>119</td>
<td>106</td>
<td>89.1%</td>
</tr>
<tr>
<td>Drafting and Design Engineering Technology (1)</td>
<td>7</td>
<td>7</td>
<td>100.0%</td>
</tr>
<tr>
<td>Economics (4)</td>
<td>124</td>
<td>105</td>
<td>84.7%</td>
</tr>
<tr>
<td>Engineering (2)</td>
<td>19</td>
<td>15</td>
<td>78.9%</td>
</tr>
<tr>
<td>English (40)</td>
<td>788</td>
<td>667</td>
<td>84.6%</td>
</tr>
<tr>
<td>English as a Second Language (1)</td>
<td>11</td>
<td>11</td>
<td>100.0%</td>
</tr>
<tr>
<td>Fire and Emergency Services Technology (2)</td>
<td>46</td>
<td>40</td>
<td>87.0%</td>
</tr>
<tr>
<td>Geography (1)</td>
<td>52</td>
<td>30</td>
<td>57.7%</td>
</tr>
<tr>
<td>Geology (1)</td>
<td>30</td>
<td>28</td>
<td>93.3%</td>
</tr>
<tr>
<td>History (11)</td>
<td>201</td>
<td>150</td>
<td>74.6%</td>
</tr>
<tr>
<td>Human Services (1)</td>
<td>15</td>
<td>15</td>
<td>100.0%</td>
</tr>
<tr>
<td>Humanities (7)</td>
<td>110</td>
<td>97</td>
<td>88.2%</td>
</tr>
<tr>
<td>Interior Design (1)</td>
<td>15</td>
<td>12</td>
<td>80.0%</td>
</tr>
<tr>
<td>International Languages (6)</td>
<td>35</td>
<td>34</td>
<td>97.1%</td>
</tr>
<tr>
<td>Interpreter Education (4)</td>
<td>48</td>
<td>37</td>
<td>77.1%</td>
</tr>
<tr>
<td>Law Enforcement (1)</td>
<td>25</td>
<td>23</td>
<td>92.0%</td>
</tr>
<tr>
<td>Management (1)</td>
<td>63</td>
<td>63</td>
<td>100.0%</td>
</tr>
<tr>
<td>Marketing / E-business (1)</td>
<td>32</td>
<td>30</td>
<td>93.8%</td>
</tr>
<tr>
<td>Mathematics (14)</td>
<td>691</td>
<td>446</td>
<td>64.5%</td>
</tr>
<tr>
<td>Medical Laboratory/Phlebotomy Technology (1)</td>
<td>11</td>
<td>11</td>
<td>100.0%</td>
</tr>
<tr>
<td>Music (1)</td>
<td>1</td>
<td>1</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
While each instructor may define his/her own means of assessment, all instructors submit their results via a standardized web-based reporting tool to the Office of Planning and Institutional Research. Elements of the report include the assessment activity administered, the performance criteria for evaluation, the number of students assessed, the number of students performing successfully, and finally any action the instructor and/or the institution should take as a result of the assessment data.

Results from the course embedded assessment process are as follows:

- A total of 192 faculty members contributed to the course-embedded assessment of discipline goals and/or program competencies. The number of contributors represents approximately 20% participation by full and part-time faculty.
- The records submitted reflect that a total of 4,503 students were assessed. Of those students, 83.1% successfully demonstrate the goal or competency assessed.

Discipline Self-studies and Program Certifications

Additionally, seven disciplines conducted self-studies. These disciplines included: Biology (pretested and posttested 249 Biology majors), Engineering (number of Engineering majors tested not reported), Mathematics (posttested 864 students taking College Algebra), English (number of English majors tested not reported), Psychology (tested 178 psychology majors), and History (number of History majors assessed not reported).

Several TCC programs requiring license or certification, and programs who reported licensure results to the Office of Planning and Institutional Research are presented below with pass rates.

<table>
<thead>
<tr>
<th>Program</th>
<th># Taking Exam</th>
<th># Passing Exam</th>
<th>Percent Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Hygiene</td>
<td>12</td>
<td>12</td>
<td>100%</td>
</tr>
<tr>
<td>Respiratory Care</td>
<td>25</td>
<td>23</td>
<td>92%</td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>7</td>
<td>7</td>
<td>100%</td>
</tr>
<tr>
<td>Medical Lab Technology</td>
<td>9</td>
<td>7</td>
<td>78%</td>
</tr>
<tr>
<td>Nursing</td>
<td>107</td>
<td>103</td>
<td>96%</td>
</tr>
</tbody>
</table>

Exit Surveys

Exit Surveys are requested annually of all TCC graduates during the semester prior to graduates. This instrument measures the extent to which potential graduates agree to Items along two distinct dimensions: Dimension 1: The extent to which TCC experience contributed to knowledge, skills, and personal development; and Dimension 2: The extent to
which TCC coursework emphasized critical thinking skills. A total of 1,727 potential graduates responded to the Exit Survey with the following results:

- 80% of the respondents agreed or strongly agreed that the TCC experience contributed to their knowledge, skills, and personal development.
- 79% of the respondents agreed or strongly agreed that TCC coursework emphasized thinking critically and analytically.
- The lowest agreement (65%) occurred in response to the question: “Contributing to the welfare of your community.”
- The highest agreement (92%) occurred in response to the question: “Acquiring a broad general education.”
- Developmental Students: Students who took at least one developmental course reported slightly higher agreement to Dimension 1 and Dimension 2 items than those students who did not take developmental courses; however, the difference was small and not statistically significant.
- No statistically significant differences in responses were found between students who did and who did not take service-learning, internet, study skills, ESL, or honors courses.

**Graduate/Alumni Surveys**

Surveys were mailed to all 2,121 graduates from the 2007-2008 academic year approximately six months after graduation. These alumni were asked about their current educational objectives with the following results:

- 67% of the respondents were continuing their education.
- 21% planned to continue, but are not yet enrolled.
- 67% of all respondents indicated that they were employed. (Of those who indicated employment, 75% worked full-time; 24% worked part-time)
- 86% of those were employed in the Tulsa area.
- Among respondents who were employed, 65% were either working in their major field or in a discipline that is closely related to their area of study at TCC.
- 41% of the employed respondents indicated annual incomes of $30,000 or more per year.
- 50% of respondents who were employed full-time in their major field or a field related to their area of study while at TCC reported annual incomes of $30,000 or more per year.
III-3. What instructional changes occurred or are planned in the programs due to program outcomes assessment?

“If ours the faults, the virtues too are ours.” -- Royall Tyler, The Contrast

Course-embedded assessment resulted in 21% of faculty indicating specific changes to pedagogy to improve the potential for student learning. Approximately three-fourths (79%) indicated that no changes were necessary based on assessment results. Requests for institutional intervention focused primarily on: Professional Development; Academic Support Lab; Instructional Equipment Prerequisites/Curriculum; Computer Technology/Software; Guest Speakers/Field Trips; Media Resources; Improved Communication; and Student Advisement/Placement.

Discipline self-studies were conducted in six academic disciplines: Biology; English; Mathematics; Engineering; Psychology; and History. Results are summarized as follows:

**Biology:** No major curriculum changes were identified. A discipline-wide pretest and posttest will be created for use beginning 2009-2010 academic year. Results of assessment instrument will be used to better determine needed curricular change.

**English:** A discipline-wide, common assessment tool of general education and discipline goals and course objectives in core classes needs to be created to better evaluate English major progress and a draft will be completed during Fall 2009. Curriculum changes were recommended for Creative Writing.

**Mathematics:** Faculty identified three major issues that need to be addressed in College Algebra: [1] inconsistent course delivery; [2] inconsistent policy on technology; and [3] inconsistent practices regarding assessment. Possible solutions included the following and are to be finalized in the 2009-2010 academic year.

- Institutional textbook and technology policy.
- Establishing a minimum course duration of eight weeks.
- Common final exam.
- Fewer sections taught by part-time faculty.
- More faculty involvement in hiring and monitoring of part-time faculty.

**Engineering:** Upon review of self-study results, faculty agreed that curriculum could be enhanced with more real world engineering examples and problems presented in most Statics, Dynamics, Engineering Mechanics and Electrical Science Courses.

**History:** No major curriculum changes were recommended. Full-time faculty recommended continued practice of allowing individual instructors to select assessment measures that are most meaningful to their specific classes. They also recommended more stringent hiring criteria for part-time faculty.
Psychology: Faculty changed curriculum in Introduction to Psychology in order to improve students’ understanding of the relevance of psychological studies and human concerns. Examples include the use of discussion board to augment class discussions; the use of current events tied to research findings and the use of students’ own lives in relating issues to practice.

Section IV – Student Satisfaction

Administration of Assessment

IV-1. How were the students selected?

The Community College Survey of Student Engagement (CCSSE) was administered in Spring 2009 to a random, stratified sample of all students enrolled. Credit classes were randomly selected—stratified by time of day (morning, afternoon, and evening) from institutional class data files to participate in the survey. A total of 338 students completed the CCSSE, and demography included gender, age, racial identification, international students, enrollment status (full-time or part-time), education attainment, and credit hours earned.

IV-2. What were the analyses and findings from the 2008-2009 student satisfaction assessment?

TCC CCSSE results indicated that students were actively engaged at TCC equal to the national average of community colleges. This holds true for the following scales:

- College Activities
  - Academic, Intellectual and Social Experiences
  - Character of Mental Activities
  - Reading and Writing
  - Nature of Exams
- Opinions about TCC
  - Institutional Emphasis
  - Quality of Relationships
  - Knowledge, Skills & Personal Development
- Student Services
- College Experiences

Specific survey items for which TCC scored above the mean included:

- Number of written papers or reports of any length (full-time students)
- Working for pay (full-time students)
- How many classes students took simultaneously with OTHER institutions (part-time students)
Specific survey items for which TCC scored below the mean included:

**Opinions About Your School**
- Encouraging students to spend significant amounts of time studying (part-time students)
- Providing the support students need to thrive socially (full-time students)

**Educational and Personal Growth**
- Understanding self (both full-time and part-time students)
- Understanding people of other racial and ethnic backgrounds (both full-time and part-time students)
- Developing a personal code of values and ethics (both full-time and part-time students)
- Developing clearer career goals (both full-time and part-time students)
- Gaining information about career opportunities part-time students

**Student Services**
- Job placement assistance (full-time students)
- Peer or other tutoring (part-time students)
- Career counseling (part-time students)

**IV-3. What changes occurred or are planned due to student satisfaction assessment?**

The Office of Planning and Institutional Research, in conjunction with the Office of Student Affairs, is communicating CCSSE results to College faculty, staff and administrators in open forums and team meetings. All reporting/communication will be complete by February 2009. Faculty and staff feedback, including recommendations for institutional change, will be garnered, compiled and reported to the College Cabinet for implementation beginning Fall 2010.

A new college policy has been established to implement the CCSSE every other spring semester, alternating with the Noel-Levitz Student Satisfaction Survey (SSI). The CCSSE will be implemented during odd numbers years, and the SSI will be implemented during even numbers years. Results will be shared college-wide each year, and recommendations for institutional change will be shared with the Cabinet for possible implementation.