Oklahoma State System
of
Higher Education

ANNUAL STUDENT REMEDIATION REPORT

February 12, 2009

OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION

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Oklahoma State Regents for Higher Education

ANNUAL STUDENT REMEDIATION REPORT

2007-2008

Executive Summary

BACKGROUND:

- In 1991, the State Regents adopted the Student Assessment Policy that required each institution to develop and implement a comprehensive assessment program with mandatory student placement in fall 1994. This is the seventeenth annual student remediation report.
- Remedial education is not a recent phenomenon in higher education. As early as the 17th Century, Harvard College provided remedial instruction for inadequately prepared students. In 1849, the University of Wisconsin established the first preparatory program for students with inadequate preparation. Remedial education was needed when World War II veterans came to college and for first-generation college students who gained access to higher education due to the Civil Rights Act of 1964.
- Societal, demographic, and technological changes have contributed to increased demands for access to higher education with minorities and immigrants overrepresented among those who need remediation.
- The widespread need for college remediation has brought about efforts to prepare students while still in high school. National and regional studies report approximately one-third of new freshmen enroll in remedial courses, and states with mandatory assessment and placement programs, such as Oklahoma, report higher remediation rates.
- Nationally, little change in the number of students enrolled in remedial courses has taken place in the last few years. Community colleges report the greatest percentage of remediation, with mathematics being the most cited area of deficiency.
- Current debate about remedial education incorrectly assumes that remediation is proportionately taught among all colleges and universities. In fact, 60 percent of all remediation is conducted by community colleges nationally. Oklahoma community colleges have over 79 percent of the State System's remedial enrollments.
- Financial costs of remediation are being addressed in different ways by various states, with some requiring additional fees from the remediated student. Others have proposed that the remediation costs be borne by the secondary schools that graduated the student needing remediation. Nationally, remediation costs are less than 1 percent of the total public higher education budget.
- Oklahoma students pay more for remedial courses at State System institutions. Those remedial fees, set by the individual institution, generated $2.2 million in 2007-08.

OKLAHOMA INITIATIVES:

- The State Regents, in addition to managing the costs of remedial education, have taken multiple initiatives to reduce remediation, among them: 1) enhancing teacher preparation, 2) increasing standards for college preparation, 3) establishing better communication with and feedback to Oklahoma high schools, and 4) facilitating cooperation between various state education entities to increase the number of students who go to college directly from high school.
- Legislation passed in 2005 established a college preparatory track with strengthened graduation

requirements and made it the default curriculum. It also created the Achieving Classroom Excellence (ACE) Task Force to study testing requirements for eighth-graders and high school students.

- Reports by *Education Week* and the National Center for Public Policy and Higher Education cited Oklahoma for efforts to improve teacher quality, standards and accountability, policy alignment and resource equity.
- Oklahoma public institutions report that remediation has resulted in significant improvement in student success.

FINDINGS:

- 38,215 students enrolled in remedial courses in 2007-08: 3.3 percent (1,268 students) at the research universities, 17.5 percent (6,682 students) at the regional universities, and 79.2 percent (30,265 students) at the community colleges.
- Of fall 2007 first-time freshmen, 36.8 percent enrolled in remedial courses.
- Of fall 2007 first-time freshmen who did not meet the State Regents' 15-unit high school core curriculum, 46.2 percent enrolled in remedial courses, compared to 23.2 percent of freshmen who completed the high school core curriculum.
- Remediation by subject for fall 2007 first-time freshmen was as follows: 31.8 percent mathematics, 17.5 percent English, 4.8 percent reading, and 2.3 percent science.
- From fall 1997 to fall 2007, the percentage of freshmen with an ACT score below 19 decreased in mathematics, from 27.7 to 27.4 percent; in English, from 22.6 to 20.3 percent; in science, from 17.7 to 16.0 percent; and increased in reading, from 18.1 to 18.2 percent.
- From 1997-98 to 2007-08, the remediation rate for first-time freshmen direct from Oklahoma high schools decreased from 37.3 percent to 36.9 percent. The 2007-08 rate of 36.9 percent is higher than the 36.8 percent for all first-time freshmen.
- Older freshmen require more remediation. During the 2007-08 academic year, a higher percentage of first-time freshmen 21 years of age and older (44.7 percent) enrolled in remedial courses than freshmen less than 21 years of age (34.8 percent).
- A study of six cohorts of first-time freshmen indicates that math remediation increases the chances of success in college algebra.
- In 2007-08, Oklahoma State System institutions generated $2.2 million from student-paid remedial course fees.

CONCLUSIONS:

- Community colleges continue to be the primary source of remediation in the State System. This is consistent with the community college's mission.
- Students enrolling soon after high school (17 to 20 year-olds) are less likely to need remediation than older students (34.8 and 44.7 percent, respectively). Those students graduating directly from Oklahoma high schools (17, 18 and 19 year-olds) have a remediation rate of 36.9 percent.
- Colleges and universities are encouraged to continue monitoring the relationship between cut-scores for course placement, remediation effectiveness and the academic success of the remedial student.
- The financial costs associated with remediation are small in comparison to total higher education budgets and are negligible when compared to the alternatives, which can range from falling levels of degree attainment to employment in low paying jobs.
- Remedial coursework enables underprepared high school students to learn the value of achievement while acquiring the skills necessary to succeed in college-level work and benefits adult students who seek retraining at colleges and universities in their local communities.

Oklahoma State Regents for Higher Education

ANNUAL STUDENT REMEDIATION REPORT
2007-08

INTRODUCTION

In 1991, the State Regents adopted and implemented the "*Policy Statement on the Assessment of Students for Purposes of Instructional Improvement and State System Accountability,"* which requires Oklahoma's public higher education institutions to administer comprehensive assessment programs. The policy was modified in 1993, with remediation made mandatory for under-prepared students and requires institutions to use an ACT score of 19 in the subject areas of English, mathematics, science reasoning, and reading as the "first cut" in determining whether a student needs remediation. Students scoring below 19 in an ACT subject area must either enroll in a remedial course or undergo secondary assessment. Students who score below the designated levels on these secondary tests must successfully complete remedial courses.

This is the seventeenth annual student remediation report. This report describes remedial activity during the 2007-08 academic year and provides comparisons to previous years.

BACKGROUND

Quick

Remedial education is not a recent phenomenon in higher education. As early as the 17th Century, Harvard College provided remedial instruction for inadequately prepared students. In 1849, the University of Wisconsin established the first preparatory program for students with inadequate preparation in reading, writing, and arithmetic. The program remediated students so they could succeed in the university's agricultural and mechanical science degree programs. The generation of World War II veterans who entered colleges and universities on the G.I. Bill required remedial coursework to refresh their skills. Students, who for the first time gained access to higher education because of the passage of the Civil Rights Act of 1964 and the Higher Education Act of 1965, created increased demands for remedial coursework (Institute for Higher Education Policy (IHEP), 1998). The National Center for Education Statistics (NCES) reports that, in fall 2000, 98 percent of public two-year and 80 percent of public four-year institutions offered remedial reading, writing, or mathematics courses (NCES, 2003).

Burgeoning technologies and changing populations are playing roles in the number of

Nationally, who is taking remedial classes?

- Over 80 percent are U.S. citizens.
- Majority are white; however, minority groups are overrepresented.
- One in five is married.
- Two in five receive some form of financial aid.
- One in 10 is a veteran.
- One in three works 35 hours or more per week.
- Three in five are 24 years old or younger.
- Despite an increase in student enrollment from 1989 to 1995, the number of incoming freshmen requiring remediation remained roughly the same.
- 66 percent completed their remedial course.
- 45 percent who took two remedial courses achieved at least an associate degree.
- 35 percent who took five or more remedial courses earned at least an associate degree.

-NCES, 1996

- The percentage of students needing remediation in two-year colleges has not changed significantly across the United States in at least two decades.

-Roueche and Roueche, 1999

- Students with a reading deficiency are at a greater disadvantage than those with a math deficiency.

-McCabe, 2000

"As higher education continues to educate an ever-growing proportion of the population, including older students returning to college, there is every reason to conclude that remediation will continue to be a function of colleges and universities" (IHEP, 1998.p. vi).

students needing remediation. Rapidly changing job needs drive the demand for workers with more education. Computer skills are being required for jobs that previously called for no education beyond high school. Almost half of all workers report that as job skills change, they are forced to acquire more training to keep the jobs they have. According to the NCES, 31 percent of all entering freshmen who took a remedial class in 1992-93 were 19 years or younger, while 46 percent were over 22 years of age (NCES, 1996). A combination of higher birthrates among minorities and immigrants plus expanded opportunities are creating increased enrollments in higher education for first-generation students. These students tend to be less prepared. Minorities and immigrants are overrepresented among those who need remediation (McCabe, 2000).

Quick

What are the deficiencies?

- Of those students requiring remedial work:
  - ✓ 62 percent of remedial education students are deficient in mathematics
  - ✓ 37.7 percent in reading
  - ✓ 44.6 percent in writing
- In community colleges nationally, 41 percent of entering students are underprepared in at least one of the basic skills:
  - ✓ reading, 20 percent
  - ✓ writing, 25 percent
  - ✓ mathematics, 34 percent

-McCabe, 2000

The apparent widespread need for college remediation of recent high school graduates concerns policymakers, business leaders, and educators. A survey of professors, college officials, and business leaders found that all three groups agreed "*that too many students are taking remedial classes in college because of poor preparation*" (Trombley, 1999). Four studies by the Southern Regional Education Board (SREB) (1991, 1997, 1998, and 2000) and three NCES studies (1991, 1996, and 2003) reported that approximately one-third of new freshmen in public institutions enroll in remedial courses. However, the SREB studies found that states with mandatory assessment and placement programs, such as Oklahoma, reported higher percentages of students enrolled in remedial courses. *"As standards are established, remedial rates rise initially - sometimes substantially"* (SREB, 2000, p. 9). These standards and their application vary from state to state. A State Higher Education Executive Officers (SHEEO) policy study reported that at least seven states (Arkansas, Georgia, Nevada, New York, Oklahoma, South Dakota, and West Virginia) require placement of all freshmen (Crowe, 1998). Oklahoma has established statewide standards and requires a minimum ACT score of 19 before students can enroll in college-level courses.

Quick

Summary of State Remediation Policies

- 27 states have mandated remediation policies.
- 49 states fund remediation through student contributions.
- 23 states use ACT/SAT exams for placement.
- 27 states use institutional exams for placement.
- 41 states permit remedial courses concurrent with college-level courses.
- 39 states permit financial aid to be used for remedial courses.
- 14 states have a time limit for completion of remedial coursework.
- 29 states track the percentage of students who enroll in remedial courses.

-ECS, 2002

- Nationally, of the two-year public institutions, 97 percent offer remedial courses in mathematics, 96 percent in remedial writing, and 96 percent in remedial reading.
- Of the four-year public institutions, 78 percent offer remedial courses in mathematics, 67 percent in remedial writing and 49 percent in reading.
- Of the two-year institutions that offered at least one remedial course in fall 2000, 37 percent offered remedial courses in academic subject areas other than reading, writing, or mathematics, compared to 15 percent of four-year public institutions. These courses include science, English as a second language, study skills, and basic computer skills.

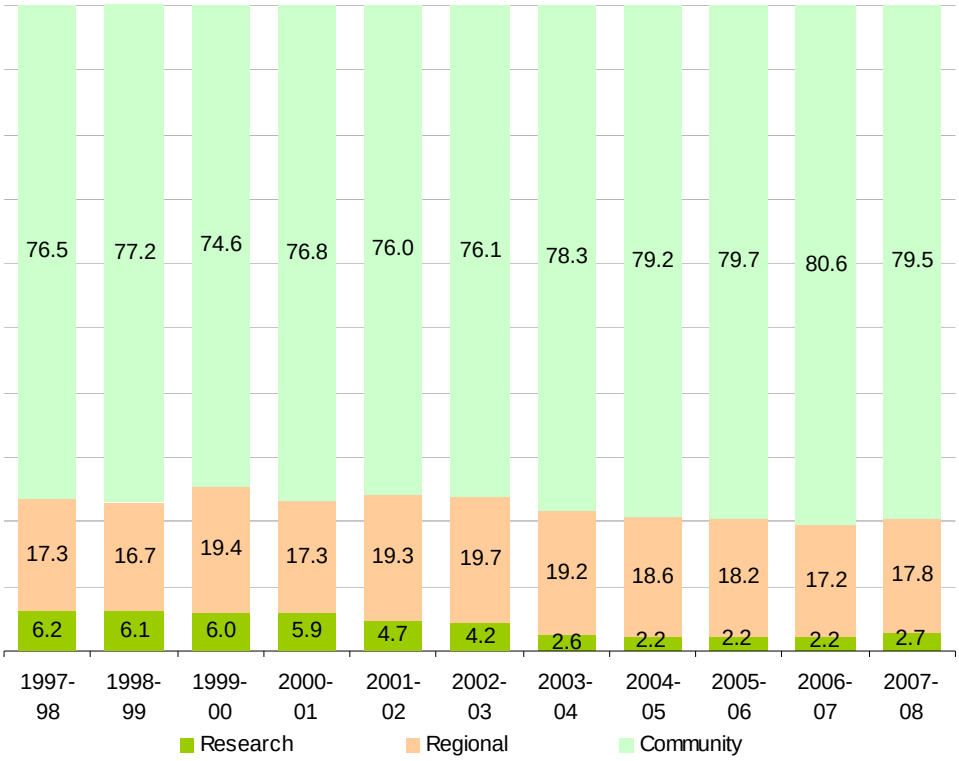
-NCES, 2003

Remediation is not proportionately spread out among all levels of institutions. The SREB reports that, nationally, 60 percent of remediation enrollments are at the community college level (SREB, 2000). In Oklahoma, the percentage is 79 percent. Nationally, 95

percent of community colleges offered remedial education compared with 80 percent of public four-year institutions (NCES, 2003).

In their latest national survey on remediation, the NCES also reports that remedial course delivery methods are changing. In fall 1995, 6 percent of public two-year institutions and 4 percent of public four-year institutions offered remedial courses through distance education. These percentages increased to 25 percent for public two-year institutions and 8 percent for public four-year institutions in fall 2000.

Percentage of Remediation Enrollments in Oklahoma Higher Education



Nationally, of the types of distance education used by public and private institutions to deliver remedial courses, 64 percent used email and Web-based courses, 26 percent used two-way interactive video, 27 percent used one-way prerecorded video, and 25 percent used internet-based computer conferencing or relay chat (NCES, 2003). In Oklahoma for fall 2007, a total of 230 remedial courses were offered via distance education: 11.3 percent by interactive video, 79.1 percent were computer-based, and 9.1 percent through correspondence. Ninety-nine percent of these courses originated from two-year colleges.

Financial cost of remedial education continues to be a concern. Policymakers in New Jersey, Montana, Florida, and Oregon, among others, have proposed making public secondary schools pay the cost of college remedial courses taken by their graduates (Merisotis and Phipps, 2000). In some states, students must pay a remedial course fee in addition to their tuition.

Quick

Remedial Course Delivery By Distance Education

Nationally

- delivered by 25 percent of public two-year colleges
- delivered by 8 percent of public four-year institutions

-NCES, 2003

In Oklahoma

- delivered by 75 percent of public community colleges
- delivered by 25 percent of public four-year institutions
- 7 percent of remedial classes

-Oklahoma State Regents, 2008

The SREB asserts that, "*Some remedial assistance and courses are essentially unavoidable and are a wise investment*" (SREB, 2000, p. 3). Both for societal and economic reasons, the SREB recommends that higher education support adult students who return to education after an interval and recent high school graduates who either did not prepare for college and changed their minds or did poorly in high school and deserve a second chance.

There is a growing body of research showing that the costs of providing remedial education are not as great as once believed. A Government Accounting Office (GAO) study determined that no more than 4 percent of the federal financial aid granted to freshmen and sophomores in the fall of 1995 paid for remedial courses (GAO, 1997). The most recent accounting of remediation costs suggests that remediation consumes approximately $1 billion annually out of a public higher education budget of $115 billion – less than 1 percent of expenditures (Breneman and Haarlow, 1999).

In a study prepared for the League for Innovation in the Community College, it was found that in cases where there are revenues generated by remedial education, the revenue fully covered the costs of delivering the service. There were no reports of remedial programs that operated at a loss. It was concluded that remedial courses seldom cost more than they received in revenues, especially at community colleges (Saxon & Boylan, 1999).

- Onondaga Community College in New York reported that each $1 million spent on remediation generated $1.3 million in revenue for the college (Testone, 1997).
- The state of Kentucky reported that remediation at its universities was fully covered by tuition revenue (Breneman & Haarlow, 1998).
- A moderate-sized midwestern community college reported that tuition revenue generated significantly more than the salary costs of remedial instruction. When combined with state aid revenue, the program generated $580,000 in revenue over and above remedial instruction salaries (McGinley, 1999).
- In a proposal on financing remediation at City University of New York, the average revenue per full-time equivalent (FTE) generated at community colleges was reported to be $9,130 in 1997. Compared to an average cost of remediation per FTE of $4,660, it was inferred that remedial education was generating as much as $4,500 in net revenues (Hauptman, 1999).

Oklahoma public colleges and universities charge additional fees for remediation. Those remedial course fees, set by the individual institution, generated $2.2 million in 2007-08 to offset costs of providing remedial courses.

OKLAHOMA INITIATIVES

In addition to managing the costs of remedial education, The Oklahoma State System for Higher Education has undertaken multiple initiatives to reduce remediation.

Since 1991, the State Regents have aggressively pursued remediation reduction on several fronts: 1) improving teacher preparation, 2) increasing standards for college preparation, 3) establishing better communication with and feedback to Oklahoma high schools, 4) initiating programs that enhance cooperation between various state education entities to increase the number of students who go to college directly from high school, and 5) improving Oklahoma college and university graduation rates.

The State Regents supported legislation passed in 2005 that established a new "college preparatory" track as a subset of the current "standard" high school curriculum and graduation requirements that become effective for the Class of 2010 (today's tenth graders). These new college preparatory requirements of 17 units become the default curriculum.

Hunter Boylan, who has studied remediation at length, concluded that "*Those who place in remedial courses in only one subject area...are as likely as anyone else to graduate*" (Boylan, 1999). The U.S. Department of Education concluded that, "*Increasingly, state and local policy seeks to constrict -if not eliminate -the amount of remedial work that takes place in 4-year colleges. But there is a class of students whose deficiencies in preparation are minor and can be remediated quickly*" (Adelman, 1999, p. ix) without driving up costs or damaging degree completion rates. The majority of students with academic deficiencies require only one remedial course.

In the same legislation, the Achieving Classroom Excellence (ACE) Task Force was created. The Chancellor for Higher Education is one of 19 members that will study testing requirements for eighth grade and high school students.

Education Week, in their annual report *Quality Counts 2006*, lauded Oklahoma for secondary school improvement in three of four categories. The state scored above average in standards and accountability, efforts to improve teacher quality, and resource equity. Among the areas earning full credit were school accountability; professional support and training for teachers; and "wealth-neutrality," meaning that poorer districts in the state tend to have higher per-pupil funding levels than do wealthier districts. Only ten states exhibit this equity in funding.

In *Quality Counts 2009*, the latest report from *Education Week*, Oklahoma earned an "A-" grade for standards, assessments, and accountability in secondary schools. Also in the same report an evaluation of state efforts concerning the teaching profession resulted in a grade of "B-", mainly for accountability for quality, and incentives and allocations. Other areas where Oklahoma scored above average include early-childhood education transitions, workforce transitions, K-12 achievement equity, and school finance equity.

Quick

The High School Transcript Study

High School Graduates earned an average of
23.6 credits in 1990
26.2 credits in 2000

In the core academic subject fields of mathematics, science, English, and social studies they earned
13.7 credits in 1990
15.0 credits in 2000

Their Grade Point Average (on a 4.00 scale) was
2.68 in 1990
2.94 in 2000

Educational Achievement

High school graduates in the High School Transcript Study who earned mathematics course credits during the 12th grade earned higher scores on the National Assessment of Educational Progress (NAEP) 2000 mathematics assessment than graduates who last earned mathematics course credits before the 12th grade.

-NAEP, 2004

According to a recent report by ACT, Inc., only 40 percent of 2004 high school graduates are ready for their first course in college algebra, and only 68 percent are ready for college-level English composition. They assert that taking the core courses recommended for two decades (four years of English and three years each of math, science, and social studies) is not enough. The nature and quality of the courses determine whether students are adequately prepared for college and work.

Taking rigorous mathematics coursework beyond the core greatly increases students' success in meeting the benchmark for college algebra. Students taking the core plus trigonometry and calculus outscored core-takers by 6.9 points. Taking more social studies increases reading test scores and more science courses increased the likelihood of readiness for college biology.

Despite ACT's long-standing recommendations on the minimum coursework needed for college readiness and ample proof that preparation results in success in college, only 56 percent of ACT-tested high school graduates took the core curriculum. -*Crisis at the Core*, 2004

State Regents' Initiatives

- Educational Planning and Assessment System (EPAS)—a voluntary student assessment and instructional support program that provides feedback to middle and high schools about their performance in preparing students for college. EPAS also provides individual students with information about the probability of the scores they would make on their ACT based on their EXPLORE and PLAN performance. Currently, 97.5 percent of all K-12 public school districts and 48 private schools participate in EPAS, reaching more than 91 percent of the state's eighth and tenth graders. EPAS reports that, from 1993 to 2008, the number and percent of Oklahoma students taking the ACT has increased as has the average score.
- High School Indicators Project -annually distributed to school boards, superintendents, and high school principals; reports on ACT scores, college-going rates, first-year college performance, and remediation.
- The State Regents in 2001, also joined with the Oklahoma Business and Education Coalition, the Oklahoma State Department of Education, and the Governor's Office to sponsor an external review of the state's efforts to establish a standards-based system of education goals. The report, issued in August, 2002 by Achieve, Inc., found that standards, assessments, and accountability were central in Oklahoma's efforts in improve its schools.
- Brain Gain 2010: Building Oklahoma Through Intellectual Power—a comprehensive plan to increase the proportion of Oklahoma's population with a college degree from 25 to 35 percent by 2010. This initiative contains specific recommendations for enhancing student preparation for college. Using Brain Gain Improvement Grants, the State Regents support campus-based initiatives designed to increase retention. Connors State College is using one of those grants for a pilot project to improve student success in remedial math courses.
- Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP)—a federal program designed to better prepare middle and high school students for college through mentoring programs, scholarships, and new academic preparation and awareness programs for students and parents.
- ACT Standards for Transition—a feedback tool allowing school districts to see as early as the eighth and tenth grades, a clear picture of core academic skills that students need to succeed in postsecondary education. Additionally, individual students will be informed of specific areas that will enhance preparation for college.
- 15-unit high school core curriculum—In 1997, the State Regents increased the number of academic high school courses required for admission from 11 to 15.
- Assessment Policy Reports—Since 1991, the State Regents require institutions to systematically collect, interpret, and use information about student learning and achievement to improve instruction.
- Oklahoma Higher Education Task Force on Student Retention—Recommendations of this group, appointed in February 2000, included strengthening the intensity and quality of the secondary school curriculum and adding a fourth mathematics course equal to or above Algebra II. It also called for increased collaboration between higher education institutions and secondary schools, and for continued recognition by the State Regents of individual schools that demonstrate improvement in ACT scores, high school-to-college going rates, and low college remediation rates.
- Oklahoma Higher Learning Access Program (OHLAP)—Since 1996, in a program administered by the State Regents, Oklahoma high school students have been able to earn scholarships to attend state public institutions by taking rigorous courses in high school. The remediation rates of OHLAP students are consistently lower than for all high school graduates.
- The State Regents strongly support the State Scholars Program, sponsored by the Oklahoma Business and Education Coalition. This program is an affiliated national strategy to encourage high school students to take a more rigorous core curriculum.

Measuring Up 2008, the fifth national higher education report card from the National Center for Public Policy and Higher Education investigates state performance in several areas including Preparation. Since 1992, Oklahoma has improved in High School Completion rate, K-12 Course Taking, K-12 Achievement, and Teacher Quality. Despite those improvements, Oklahoma lagged behind other states in all areas of Preparation.

The proportion of Oklahoma high school students taking upper-level math courses increased from 35 percent in 1992 to 49 percent in 2008. Currently, among top states, 64 percent of high school students took upper-level math courses. The percent of Oklahoma seventh to twelfth graders taught by teachers with a major in their subject increased from 53 percent in 1992 to 62 percent in 2008. Among top states, 83 percent of seventh to twelfth graders were taught by teachers with a major in their subject.

Sound educational practice demands mandatory assessment and mandatory course placement. John and Suanne Roueche found that:

> *"information from . . . colleges that make assessment and placement mandatory, together with data reporting the performance of all students taking remedial work, suggest that remediation correlates with improved performance over the rest of the college experience."* In addition, *"colleges in states that require assessment and placement report that student retention and success levels improved when mandatory policies were enforced"* (Roueche and Roueche, 1999, p. 47).

Mandatory assessment and placement have been policy in Oklahoma since 1993.

In the latest Annual Student Assessment Report (2006-07), Oklahoma public institutions report that remediation has resulted in significant improvement in student success. Institutions tracking student performance in their first college level course after remediation report success rates between 54 and 89 percent. Several schools indicated that remediated students performed as well in their first college-level course as did those not requiring remediation.

This report contains an analysis of student performance in college algebra, commonly the first college-level math course. Using data collected from the State Regents' Unitized Data System (UDS), comparisons were made between college algebra students who took and passed a mathematics remediation course with those who did not take such a course prior to enrolling in college algebra. Grades earned in and percentage passing college algebra as well as the number of each group of first-time freshman students were examined for the cohort years of 1998-99, 1999-00, 2000-01, 2001-02, and 2002-03.

METHODOLOGY

In 1991, the State Regents began collecting remediation data from institutions via annual "paper and pencil" surveys. In 1997-98, data collection was automated to reduce the number of staff hours needed to complete the surveys and to improve the reporting and tracking of remediation data. Most of the data for this report were collected from the UDS. Institutions separately provided information about secondary assessment for placement in college-level courses because this information is not available in the UDS.

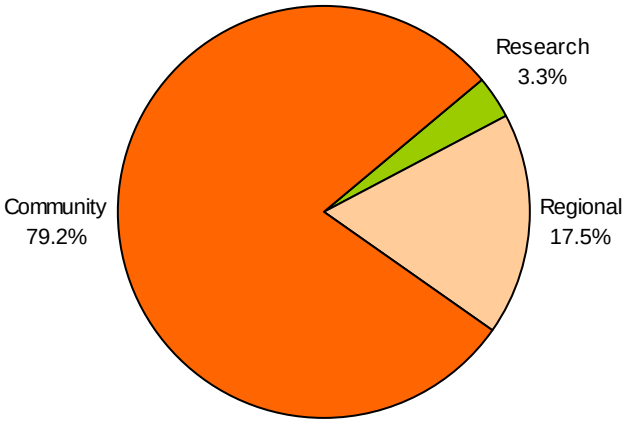
FINDINGS

Number of Students Enrolled in Remedial Courses (Table 1)

- During the 2007-08 academic year, 38,215 students enrolled in remedial courses: 1,268 (3.3 percent) at research universities, 6,682 (17.5 percent) at regional universities, and 30,265 (79.2 percent) at community colleges.

- Because some students enrolled in more than one course, these students generated 50,913 remedial enrollments: 1,360 (2.7 percent) at research universities, 9,079 (17.8 percent) at regional universities, and 40,474 (79.5 percent) at community colleges.

- About half (54.1 percent) of the students enrolled in remedial courses in the fall, 37.0 percent in the spring, and 8.9 percent in the summer.

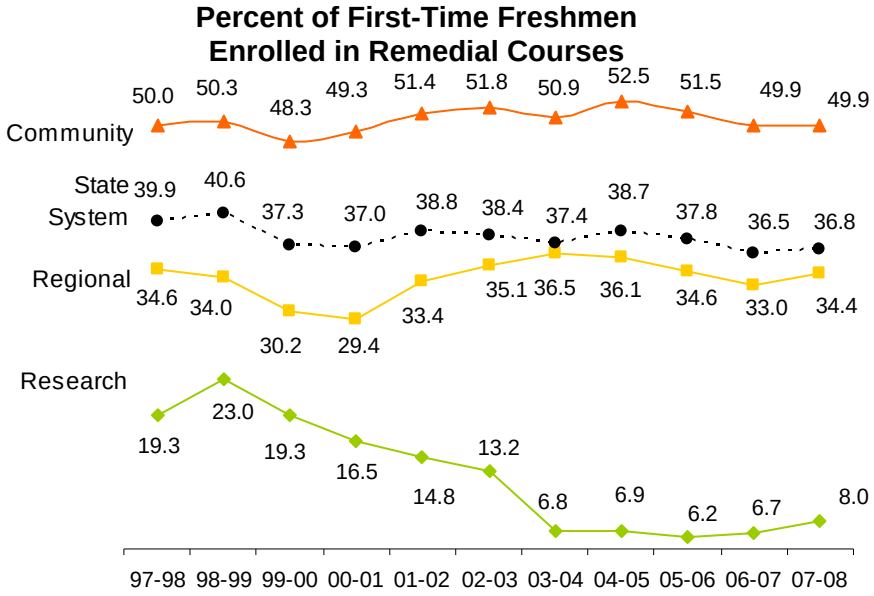


Institutional Distribution of Oklahoma Students Taking Remedial Courses

First-Time Freshmen Enrolled in Remedial Courses (Tables 2 and 3)

- Of the 31,490 fall 2007 first-time freshmen, 11,591 (36.8 percent) enrolled in remedial courses sometime during the 2007-08 academic year: 562 (8.0 percent) of research university freshmen, 2,607 (34.4 percent) of regional university freshmen, and 8,422 (49.9 percent) of community college freshmen.

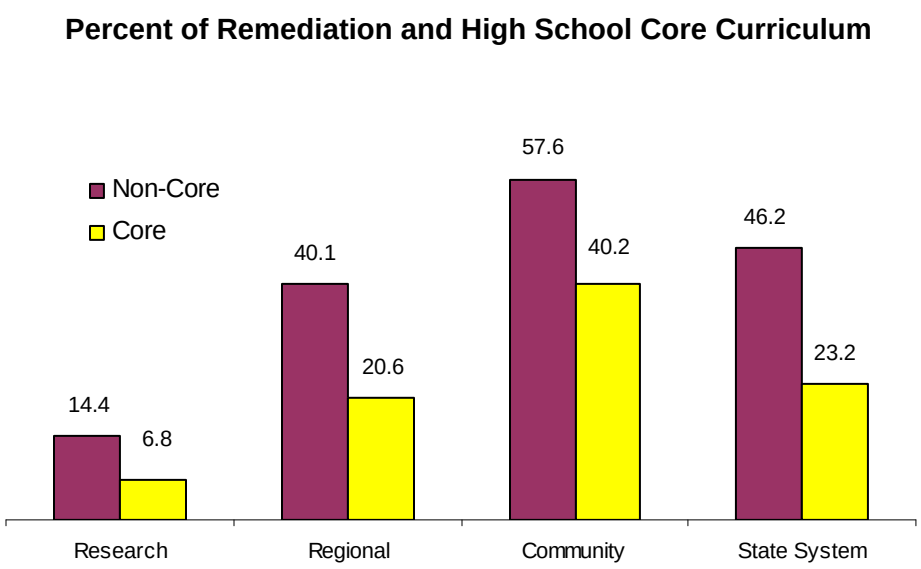
- From 1997-98 to 2007-08, the percentage of first-time freshmen enrolled in remedial courses decreased from 39.9 percent to 36.8 percent for the State System. The percentage dropped from 19.3 to 8.0 percent at research universities and from 34.6 to 34.4 percent at regional universities. At community colleges the percent dropped from 50.0 to 49.9 percent.



- From 2006-07 to 2007-08, the percentage of first-time freshmen enrolled in remedial courses increased from 36.5 percent to 36.8 percent for the State System. The percentage increased from 33.0 to 34.4 percent at regional universities and from 6.7 to 8.0 percent at research universities. The percentage remained the same at 49.9 percent at community colleges.

Remediation and High School Core Curriculum (Table 4)

When taking the ACT, students are asked to respond to a series of questions pertaining to their high school curriculum. This information was combined with UDS data on remedial courses to determine whether completing the State Regents' 15-unit high school core curriculum affects remedial enrollments. ACT data were not available for out-of-state applicants and many special non-degree-seeking, adult, and international students.

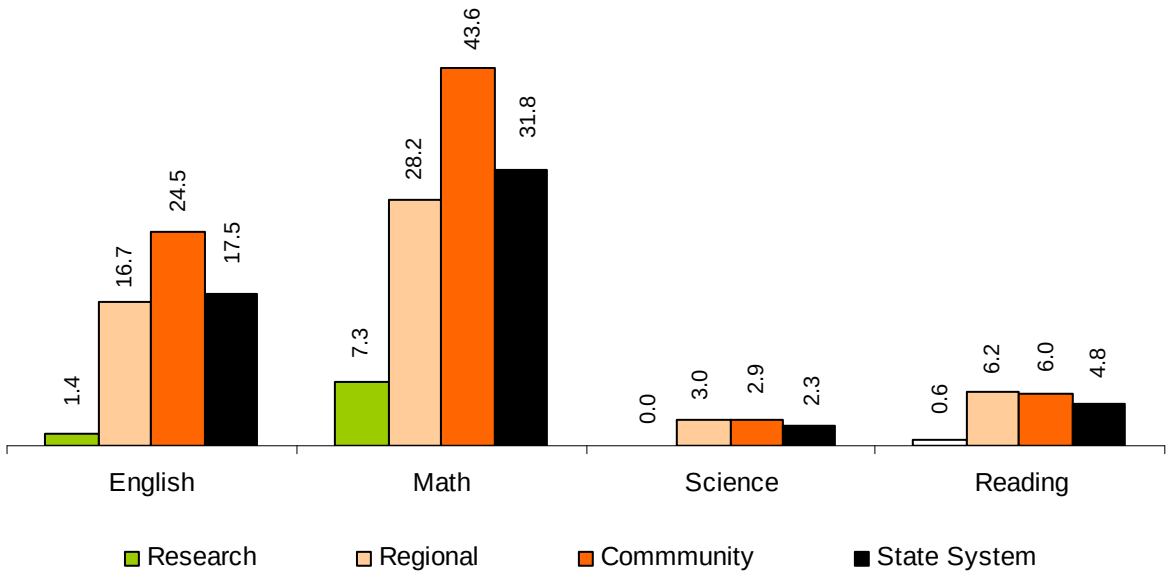


- A smaller percentage of fall 2007 first-time freshmen who met the high school core curriculum (23.2 percent) enrolled in remedial courses than freshmen who did not meet the core curriculum (46.2 percent).

- At research universities, 6.8 percent of those students who met the core curriculum enrolled in remediation compared to 14.4 percent of those who did not meet the core. At regional universities, 20.6 percent who met the core curriculum enrolled in remediation compared to 40.1 percent who did not meet the core. At community colleges, 40.2 percent who met the core curriculum enrolled in remediation compared to 57.6 percent who did not meet the core.

First-Time Freshmen Enrolled in Remedial Courses by Subject Area (Tables 5 and 6)

- Of the 31,490 fall 2007 first-time freshmen, 31.8 percent enrolled in at least one remedial mathematics course, 17.5 percent in a remedial English course, 4.8 percent in a remedial reading course, and 2.3 percent in a remedial science course sometime during the 2007-08 academic year.

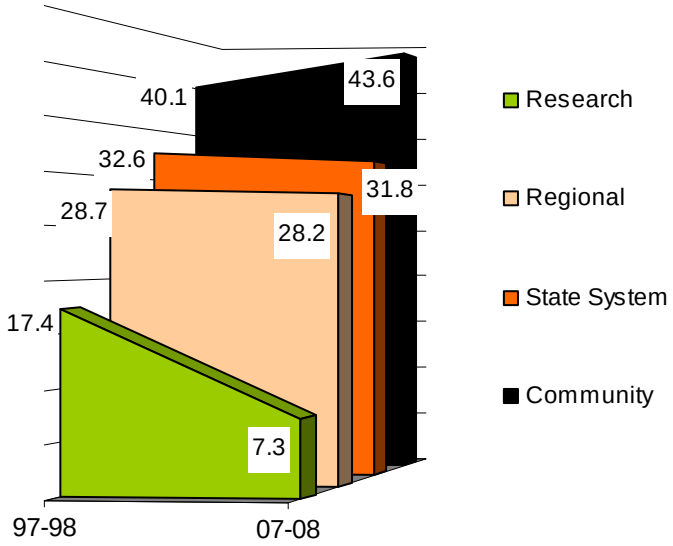


Percent of First-Time Freshmen Enrolled in Remedial Courses by Subject

- At research universities, 7.3 percent enrolled in a remedial mathematics course, 1.4 percent in a remedial English course, 0.6 percent in a remedial reading course, and none enrolled in a remedial science course.

- At regional universities, 28.2 percent enrolled in a remedial mathematics course, 16.7 percent in a remedial English course, 6.2 percent in a remedial reading course, and 3.0 percent in a remedial science course.

- At community colleges, 43.6 percent enrolled in a remedial mathematics course, 24.5 percent in a remedial English course, 6.0 percent in a remedial reading course, and 2.9 percent in a remedial science course.



Percent of First-Time Freshmen Enrolled in Remedial Math

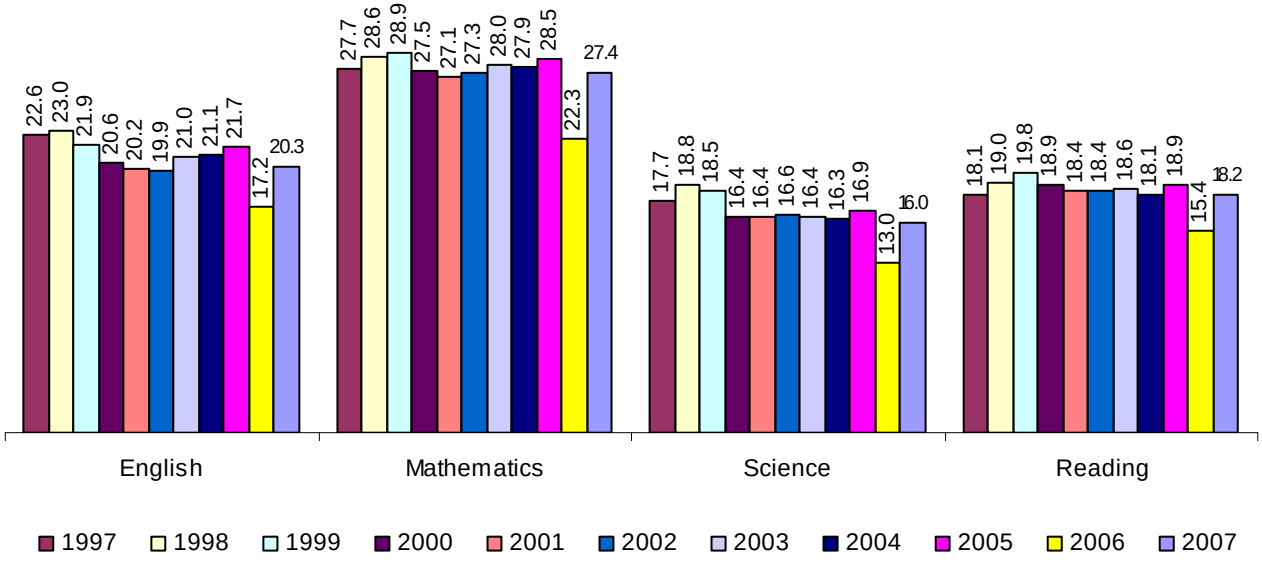
- From 1997-98 to 2007-08, the percentage of first-time freshmen enrolled in remedial courses declined from 32.6 to 31.8 percent in mathematics, from 5.7 to 2.3 percent in science, and from 5.6 to 4.8 percent in reading. The remediation rates increased from 17.3 to 17.5 percent in English.

- From 2006-07 to 2007-08, the percentage of first-time freshman remedial enrollments increased for science, English, and reading, and remained the same for mathematics.

First-Time Freshmen Scoring Below 19 on ACT Subject Tests and Passing Secondary Tests (Table 7)

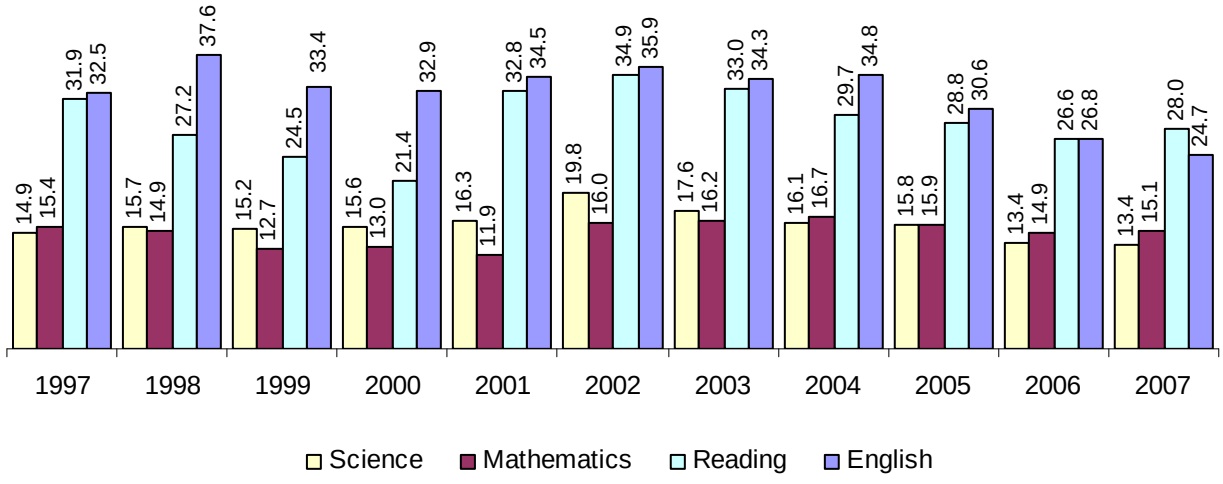
- From fall 1997 to fall 2007, the percentage of State System first-time freshmen with an ACT subject score below 19 decreased from 22.6 to 20.3 percent in English, from 17.7 to 16.0 percent in science, from 27.7 to 27.4 percent in mathematics, and increased from 18.1 to 18.2 percent in reading.

Percent of First-Time Freshmen Enrolled System-Wide Scoring Below 19 on ACT



- From fall 1997 to fall 2007, the percentage of students scoring below 19 on ACT and passing secondary tests decreased from 14.9 to 13.4 percent in science, from 15.4 to 15.1 percent in mathematics, from 31.9 to 28.0 percent in English, and from 32.5 to 24.7 percent in reading.

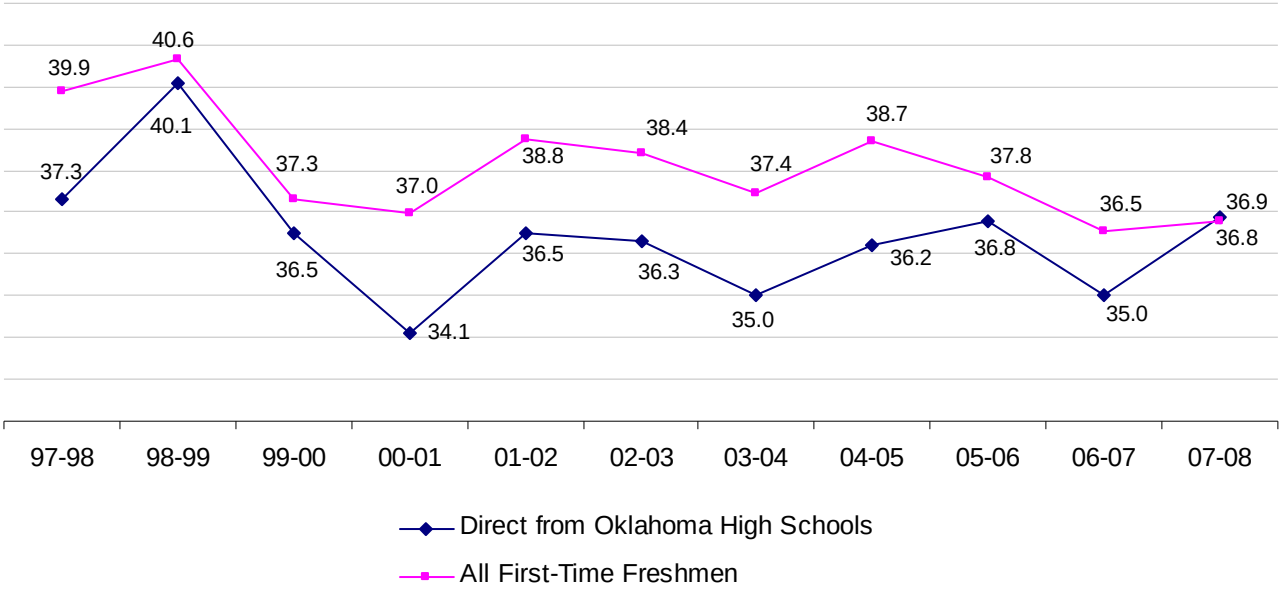
Percent of Fall First-Time Freshmen Enrolled System-Wide Scoring Below 19 on ACT and Passing Secondary Tests



First-Time Freshmen Direct from Oklahoma High Schools (Table 8)

- The remediation rate for first-time freshmen direct from Oklahoma high schools decreased from 37.3 percent in fall 1996 to 36.9 percent in fall 2007. This is higher than the 36.8 percent of all fall first-time freshmen. From 1997-98 to 2007-08, the remediation rate for first-time freshmen direct from Oklahoma high schools decreased 10.0 percentage points at research universities and 1.3 percentage points at regional universities. The remediation rate increased 5.8 percentage points at the community colleges.

Percent of All Fall First-Time Freshmen and Fall First-Time Freshmen Direct from Oklahoma High Schools Enrolled in Remediation



- From 2006-07 to 2007-08 the remediation rate for first-time freshmen direct from Oklahoma high schools increased from 35.0 percent to 36.9 percent. The remediation rate increased at all tiers: from 6.7 percent to 8.5 percent at research universities; from 29.7 percent to 30.0 percent at regional universities; and from 54.7 percent to 56.4 percent at community colleges.

First-Time Freshmen by Age (Table 9)

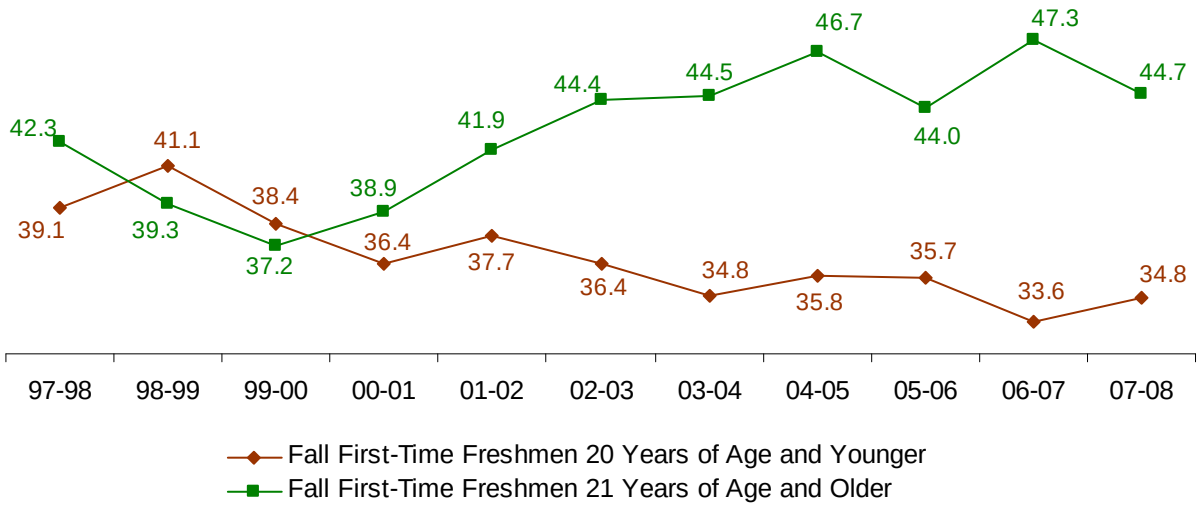
- From 1997-98 to 2007-08, the remediation rate for first-time freshmen less than 21 years of age decreased from 39.1 percent to 34.8 percent.

- From 2006-07 to 2007-08, the percentage of freshmen less than 21 years of age enrolled in remedial courses increased from 33.6 to 34.8 percent for the State System. The remediation rate for this age group increased from 6.7 percent in 2006-07 to 7.9 percent in 2007-08 at the research universities, from 30.3 percent to 32.2 percent at the regional universities, and from 50.9 percent to 52.4 percent at the community colleges.

- From 1997-98 to 2007-08 the remediation rate for first-time freshmen 21 years of age and older increased from 42.3 to 44.7 percent.

- From 2006-07 to 2007-08, the percentage of first-time freshmen 21 years of age and older enrolled in remedial courses decreased from 47.3 to 44.7 percent for the State System, increased from 7.0 to 10.4 percent at research universities, from 48.8 to 49.0 percent at regional universities, and decreased from 48.0 percent to 44.7 percent at community colleges.

Percent of First-Time Freshmen Enrolled in Remedial Courses by Age
Fall 1997 to Fall 2007

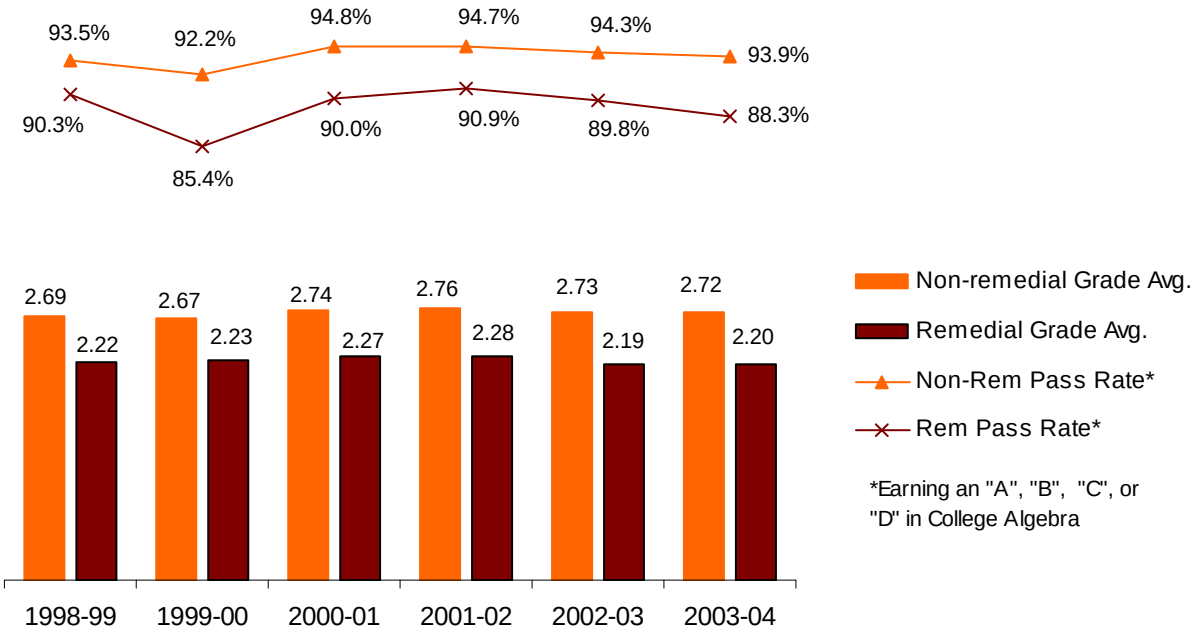


Comparison of Remedial Math and Non-Remedial Math Student Success in College Algebra (Table 10)

College algebra grades of six first-time freshman cohorts, 1998-99, 1999-00, 2000-01, 2001-02, 2002-03, and 2003-04 were examined to compare those earned by students who were first required to complete a mathematics remediation course before enrolling in a college-level math course and those earned by students who were not. A comparison was also made of their respective pass rates. Passing was defined as earning a grade of "A," "B," "C," or "D" in the course.

- Non-remedial students earned between 0.44 and 0.54 higher grade average than those required to take a remedial math course before enrolling in college-level math.

Average Grade and Pass Rate Comparison of Remedial and Non-Remedial Student Success in College Algebra by Cohort Years 1998-99 to 2003-04



- The percentage of non-remedial students who passed college algebra averaged between 3.2 and 6.8 percentage points higher than those required to take a remedial math course first.

- Approximately one-third of students taking college algebra had first completed a remedial math course.

CONCLUSIONS

The remediation rate of fall 2007 first-time freshmen increased 0.3 percentage points from the previous year. The percentage of State System students enrolling in remedial courses is consistent with national reports. Other remediation studies show what is also true in Oklahoma, that students enrolling soon after high school (17 to 20 year-olds) are less likely to need remediation than older students (34.8 and 44.7 percent, respectively). Those students graduating directly from Oklahoma high schools (17 to 19 year-olds) have a remediation rate of 36.9 percent, a increase of 1.9 percentage points from 2006-07.

Remedial coursework enables underprepared high school students to learn the value of achievement while acquiring the skills necessary to succeed in college-level work. One way of measuring the effectiveness of remediation is to compare the success rate of students who have completed a remediation course in a certain subject with those who were allowed to enroll directly in a college-level course in that subject. It is clear that, while remedial students perform at a slightly lower level than non-remedial students, the results of this study demonstrate that math remediation increases the chances of success in college algebra. A more recent study of California community colleges found that students who remediate successfully in math exhibit attainment comparable to students requiring no math remediation (Bahr, 2008). Colleges and universities are encouraged to continue monitoring the relationship between cut-scores for placement, remediation effectiveness and the subsequent academic success of the remedial student.

Another remediation factor that impacts student success is the number of remediation courses required. Studies have shown that students needing just one remediation course have much better retention and graduation rates than those requiring multiple remedial coursework. Future plans for this report include an analysis of multiple remediation courses and student success.

Remediation has always been and remains a function of all higher education institutions; however, most (79.2 percent) students are taught in community colleges, consistent with their missions. Some students will continue to need remedial courses, so they may succeed in college-level coursework; as higher education attracts more first-generation and adult students, the need may increase. Although critics of remediation complain that the costs drain valuable state resources, such costs are negligible when compared to the alternatives, which can range from falling levels of degree attainment to employment in low paying jobs. In Oklahoma, remedial education at two- and four-year institutions currently serves students needing remedial courses without placing a financial drain on state appropriated funding of higher education.

Remedial education benefits place-bound, adult students who seek retraining at colleges and universities in their local communities. The availability of remediation also provides the immigrant and the first-generation college student the opportunity to overcome obstacles of circumstance. *"The fact that it is never too late to go to college is one of the greatest strengths of American higher education"* (Walda, 1999, p. 5). Continuing to *"provide effective remedial education would do more to alleviate our most serious social and economic problems than any other action we could take"* (Astin, 1998).

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Annual Student Remediation Report

Tables

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Table 1
Number of Students Enrolled in Remedial Courses
2007-08

Tier	Number of Students Enrolled in Remedial Courses: Sum 07	Fall 07	Spr 08	Total	Percent of Total	Number of Enrollments in Remedial Courses: Sum 07	Fall 07	Spr 08	Total	Percent of Total
Research	64	809	395	1,268	3.3	76	884	400	1,360	2.7
Regional	449	3,795	2,438	6,682	17.5	503	5,437	3,139	9,079	17.8
Community	2,883	16,080	11,302	30,265	79.2	3,225	22,965	14,284	40,474	79.5
State System	3,396	20,684	14,135	38,215	100.0	3,804	29,286	17,823	50,913	100.0
Percent of State System	8.9	54.1	37.0	100.0		7.5	57.5	35.0	100.0	

Table 2
First-Time Freshmen Enrolled in Remedial Courses
2007-08

Tier	Number of Fall 07 First-Time Freshmen	Number Enrolled in Remedial Courses: Sum 07	Fall 07	Spr 08	Total*	Percent Enrolled in Remedial Courses: Sum 07	Fall 07	Spr 08	Total
Research	7,045	24	508	172	562	0.3	7.2	2.4	8.0
Regional	7,578	81	2,435	1,098	2,607	1.1	32.1	14.5	34.4
Community	16,867	528	7,722	3,494	8,422	3.1	45.8	20.7	49.9
State System	31,490	633	10,665	4,764	11,591	2.0	33.9	15.1	36.8

* Unduplicated annual headcount reported (i.e. students are counted only once regardless of the number of times they enroll in remedial courses).

Table 3
First-Time Freshman Enrollments in Remedial Courses
1997-98 to 2007-08

Tier	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08
Research	1,012	1,313	1,167	1,053	1,021	932	492	472	420	441	562
Regional	2,125	2,242	2,120	2,138	2,602	2,729	2,882	2,883	2,744	2,557	2,607
Community	6,905	7,494	7,019	7,408	8,422	7,854	8,620	9,030	9,011	8,378	8,422
State System	10,042	11,049	10,306	10,599	12,045	11,515	11,994	12,385	12,175	11,376	11,591

												Changes	
	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	1-Yr	10-Yr
Research	19.3	23.0	19.3	16.5	14.8	13.2	6.8	6.9	6.2	6.7	8.0	1.3	-11.3
Regional	34.6	34.0	30.2	29.4	33.4	35.1	36.5	36.1	34.6	33.0	34.4	1.4	-0.2
Community	50.0	50.3	48.3	49.3	51.4	51.8	50.9	52.5	51.5	49.9	49.9	0.0	-0.1
State System	39.9	40.6	37.3	37.0	38.8	38.4	37.4	38.7	37.8	36.5	36.8	0.3	-3.1

Table 4
Remediation and High School Core Curriculum
2007-08

	Number of Fall 07 First-Time Freshmen and Status of 15-Unit High School Core			Number Enrolled in Remedial Courses by Status of 15-Unit High School Core			Percent Enrolled in Remedial Courses by Status of 15-Unit High School Core		
Tier	Did Not Meet	Met	No Info.*	Did Not Meet	Met	No Info.*	Did Not Meet	Met	No Info.*
Research	797	3,404	2,844	115	230	217	14.4	6.8	7.6
Regional	1,675	2,782	3,121	672	572	1,363	40.1	20.6	43.7
Community	3,124	3,713	10,030	1,800	1,491	5,131	57.6	40.2	51.2
State System	5,596	9,899	15,995	2,587	2,293	6,711	46.2	23.2	42.0

* Data not provided for students who chose not to report on ACT application, out-of-state, most special non-degree seeking, adult admission, and international students.

Table 5

Number and Percent of First-Time Freshmen Enrolled in Remedial Courses by Subject Area
2007-08

Tier	Number of Fall 07 First-Time Freshmen	Number* Enrolled in Remedial Courses by Subject Area				Percent Enrolled in Remedial Courses by Subject Area			
		English	Math	Science	Reading	English	Math	Science	Reading
Research	7,045	97	514	0	42	1.4	7.3	0.0	0.6
Regional	7,578	1,264	2,137	226	469	16.7	28.2	3.0	6.2
Commmunity	16,867	4,136	7,348	492	1,007	24.5	43.6	2.9	6.0
State System	31,490	5,497	9,999	718	1,518	17.5	31.8	2.3	4.8

Note: Some reading remediation is reported as English remediation and vice versa.
* Unduplicated annual headcount within each subject because some students enrolled in the same remedial course more than once or more than one remedial course per subject area.

Table 6

Percent of First-Time Freshmen Enrolled in Remedial Courses by Subject Area

1997-98 to 2007-08

Tier	97-98				07-08				Ten-Year Difference			
	English	Math	Science	Reading	English	Math	Science	Reading	English	Math	Science	Reading
Research	2.8	17.4	1.4	1.3	1.4	7.3	0.0	0.6	-1.4	-10.1	-1.4	-0.7
Regional	14.3	28.7	4.7	11.4	16.7	28.2	3.0	6.2	2.4	-0.5	-1.7	-5.2
Community	24.2	40.1	7.8	4.6	24.5	43.6	2.9	6.0	0.3	3.5	-4.9	1.4
State System	17.3	32.6	5.7	5.6	17.5	31.8	2.3	4.8	0.2	-0.8	-3.4	-0.8

Note: Some reading remediation is reported as English remediation and vice versa.

2006-07 to 2007-08

Tier	06-07				07-08				One-Year Difference			
	English	Math	Science	Reading	English	Math	Science	Reading	English	Math	Science	Reading
Research	0.8	6.1	0.0	0.8	1.4	7.3	0.0	0.6	0.6	1.2	0.0	-0.2
Regional	15.1	27.5	3.2	5.6	16.7	28.2	3.0	6.2	1.6	0.7	-0.2	0.6
Community	24.4	43.9	2.0	5.3	24.5	43.6	2.9	6.0	0.1	-0.3	0.9	0.7
State System	17.0	31.8	1.9	4.4	17.5	31.8	2.3	4.8	0.5	0.0	0.4	0.4

Note: Some reading remediation is reported as English remediation and vice versa.

Table 7

First-Time Freshmen Scoring Below 19 on ACT Subject Tests
and Passing Secondary Tests
Fall 1997 to Fall 2007

English

Tier	Percent of Fall First-Time Freshmen Scoring Below 19 on ACT											Percent of Fall First-Time Freshmen Scoring Below 19 on ACT and Passing Secondary Tests										
	97	98	99	00	01	02	03	04	05	06	07	97	98	99	00	01	02	03	04	05	06	07
Research	8.9	8.3	7.5	8.6	8.2	7.1	7.0	6.3	6.0	6.8	6.3	60.3	45.7	48.6	49.5	48.8	57.7	58.5	49.4	46.0	36.1	37.6
Regional	26.0	26.8	24.7	23.1	23.5	23.9	26.4	24.6	25.2	20.7	23.5	30.2	28.1	31.1	30.4	32.9	36.6	35.7	37.4	30.5	29.5	20.7
Community	26.3	26.9	26.7	24.5	23.6	23.8	24.5	25.3	26.1	19.7	24.7	30.0	40.8	32.6	31.5	33.2	32.6	30.6	32.1	29.3	24.3	25.0
State System	22.6	23.0	21.9	20.6	20.2	19.9	21.0	21.1	21.7	17.2	20.3	32.5	37.6	33.4	32.9	34.5	35.9	34.3	34.8	30.6	26.8	24.7

Note: Some English remediation is reported as reading remediation and vice versa.

Mathematics

Tier	Percent of Fall First-Time Freshmen Scoring Below 19 on ACT											Percent of Fall First-Time Freshmen Scoring Below 19 on ACT and Passing Secondary Tests										
	97	98	99	00	01	02	03	04	05	06	07	97	98	99	00	01	02	03	04	05	06	07
Research	12.7	12.5	13.9	13.8	13.0	12.9	12.5	10.9	10.6	10.3	11.1	18.8	27.7	29.8	30.5	34.7	41.2	38.5	35.3	34.4	36.0	41.4
Regional	33.5	34.3	34.2	33.0	34.3	34.3	36.2	34.5	35.1	28.2	32.8	26.9	19.9	21.9	22.6	18.7	19.8	18.6	18.3	19.5	14.6	14.6
Community	30.7	32.2	32.7	30.6	29.5	30.5	30.7	31.5	32.4	24.4	31.8	9.4	10.7	5.0	4.7	3.8	8.9	11.0	13.4	11.8	11.6	11.5
State System	27.7	28.6	28.9	27.5	27.1	27.3	28.0	27.9	28.5	22.3	27.4	15.4	14.9	12.7	13.0	11.9	16.0	16.2	16.7	15.9	14.9	15.1

Science

Tier	Percent of Fall First-Time Freshmen Scoring Below 19 on ACT											Percent of Fall First-Time Freshmen Scoring Below 19 on ACT and Passing Secondary Tests										
	97	98	99	00	01	02	03	04	05	06	07	97	98	99	00	01	02	03	04	05	06	07
Research	6.9	6.1	6.8	5.6	6.1	5.8	4.8	4.5	4.7	4.4	4.6	33.9	13.8	18.7	18.4	20.7	24.7	26.2	22.6	22.5	18.4	13.2
Regional	20.0	21.4	20.9	18.6	19.6	19.3	18.6	18.6	19.9	15.7	18.5	14.8	14.8	20.7	23.3	21.7	27.5	24.2	24.9	23.3	21.7	16.7
Community	20.7	22.6	22.3	19.9	19.2	20.2	20.3	19.9	20.2	15.1	19.7	12.5	16.2	12.3	11.7	13.2	15.5	13.9	11.6	11.9	8.9	12.0
State System	17.7	18.8	18.5	16.4	16.4	16.6	16.4	16.3	16.9	13.0	16.0	14.9	15.7	15.2	15.6	16.3	19.8	17.6	16.1	15.8	13.4	13.4

Reading

Tier	Percent of Fall First-Time Freshmen Scoring Below 19 on ACT											Percent of Fall First-Time Freshmen Scoring Below 19 on ACT and Passing Secondary Tests										
	97	98	99	00	01	02	03	04	05	06	07	97	98	99	00	01	02	03	04	05	06	07
Research	7.1	6.9	8.8	9.2	8.5	8.6	7.4	6.6	6.4	6.9	6.6	48.9	39.4	42.8	39.7	43.1	43.1	45.5	39.4	34.5	29.5	33.6
Regional	20.4	20.9	21.9	21.4	21.3	21.5	22.7	21.4	22.3	18.5	21.2	25.8	22.7	21.7	19.7	27.8	34.1	31.1	24.7	25.4	25.8	26.1
Community	21.3	22.8	23.5	21.7	21.1	21.4	21.5	21.2	22.2	17.4	21.6	32.4	27.6	22.9	18.9	33.5	33.7	32.1	30.8	29.8	26.6	28.1
State System	18.1	19.0	19.8	18.9	18.4	18.4	18.6	18.1	18.9	15.4	18.2	31.9	27.2	24.5	21.4	32.8	34.9	33.0	29.7	28.8	26.6	28.0

Note: Some reading remediation is reported as English remediation and vice versa.

Table 8
First-Time Freshmen Direct from Oklahoma High Schools*
1997-98 to 2007-08

Number of First-Time Freshmen Enrolled in Remedial Courses

Tier	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08
Research	724	973	830	767	685	672	349	387	318	296	396
Regional	1,297	1,443	1,255	1,253	1,456	1,588	1,873	1,842	1,811	1,743	1,541
Community	3,750	4,162	4,040	3,994	4,559	4,076	4,100	4,387	4,535	4,380	4,854
State System	5,771	6,578	6,125	6,014	6,700	6,336	6,322	6,616	6,664	6,419	6,791

*New freshmen who are 17, 18, or 19 years old are defined as direct from high school.

Source: Oklahoma State Regents 2007-08 Oklahoma High School Indicators Report

Percent of First-Time Freshmen Enrolled in Remedial Courses												Changes	
97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08		1-Yr	10-Yr
18.5	22.7	18.5	15.7	13.9	13.4	6.9	8.5	7.1	6.7	8.5		1.8	-10.0
31.3	31.9	26.3	25.2	28.2	29.9	31.8	30.7	30.8	29.7	30.0		0.3	-1.3
50.6	54.9	53.8	51.3	55.2	57.1	57.6	57.0	58.4	54.7	56.4		1.7	5.8
37.3	40.1	36.5	34.1	36.5	36.3	35.0	36.2	36.8	35.0	36.9		1.9	-0.4

Table 9
Student Enrollment in Remedial Courses by Age
1997-98 to 2007-08

Fall First-Time Freshmen 20 Years of Age and Younger

	Number Enrolled in Remedial Courses											Percent Enrolled in Remedial Courses											Changes	
Tier	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	1-Yr	10-Yr
Research	902	1,210	1,080	980	943	865	464	443	402	436	548	18.3	22.4	18.5	16.0	14.2	12.7	6.6	6.6	6.2	6.7	7.9	1.2	-10.4
Regional	1,649	1,786	1,658	1,614	1,990	2,138	2,179	2,189	2,141	2,017	2,123	32.8	32.6	29.0	27.0	31.2	32.7	32.6	32.6	32.0	30.3	32.2	1.9	-0.6
Community	4,798	5,303	5,247	5,286	5,920	5,132	5,458	5,836	6,009	5,740	6,010	54.1	57.0	56.6	55.5	56.6	56.8	57.0	57.0	55.7	50.9	52.4	1.5	-1.8
State System	7,349	8,299	7,985	7,880	8,853	8,135	8,101	8,468	8,552	8,193	8,681	39.1	41.1	38.4	36.4	37.7	36.4	34.8	35.8	35.7	33.6	34.8	1.2	-4.3

Fall First-Time Freshmen 21 Years of Age and Older

	Number Enrolled in Remedial Courses											Percent Enrolled in Remedial Courses											Changes	
Tier	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	1-Yr	10-Yr
Research	110	103	87	73	78	67	28	29	18	10	14	34.6	35.2	36.7	31.7	28.2	25.5	12.5	20.7	6.7	7.0	10.4	3.3	-24.2
Regional	476	456	462	524	612	591	703	694	603	522	484	42.8	40.6	35.6	41.8	43.7	48.0	57.7	54.1	48.7	48.8	49.0	0.3	6.2
Community	2,107	2,191	1,978	2,122	2,502	2,722	3,182	3,194	3,002	2,623	2,412	42.6	39.3	37.6	38.5	35.7	44.5	43.3	45.8	44.6	48.0	44.7	-3.3	2.1
State System	2,693	2,750	2,527	2,719	3,192	3,380	3,913	3,917	3,623	3,155	2,910	42.3	39.3	37.2	38.9	41.9	44.4	44.5	46.7	44.0	47.3	44.7	-2.6	2.4

Table 10

Comparison of Remedial and Non-Remedial Student Success
In College Algebra by Cohort Years 1998-99 to 2003-04

	Cohort Year																	
	1998-99			1999-00			2000-01			2001-02			2002-03			2003-04		
Student Groupings	Num.	GPA in College Algebra	Pass	Num.	GPA in College Algebra	Pass	Num.	GPA in College Algebra	Pass	Num.	GPA in College Algebra	Pass	Num.	GPA in College Algebra	Pass	Num.	GPA in College Algebra	Pass
Non-remedial	4338	2.69	93.5%	4968	2.67	92.2%	4924	2.74	94.8%	5,539	2.76	94.7%	5,418	2.73	94.3%	5,913	2.72	93.9%
Remedial	1990	2.22	90.3%	1803	2.23	85.4%	1968	2.27	90.0%	2,921	2.28	90.9%	2,343	2.19	89.8%	2,657	2.20	88.3%
Differences: Grade Point		0.47			0.44			0.47			0.48			0.54			0.52	
Percentage Points Passing			3.2			6.8			4.8			3.8			4.5			5.6

Annual Student Remediation Report

Appendix

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3.20 ASSESSMENT

3.20.1 Purpose

Accountability to the citizens of Oklahoma within a tax-supported educational system is very important. Improvement in student learning, measurable through assessment programs, is an achievable outcomes, and the responsibility of the State System.

3.20.2 Definitions

The following words and terms, when used in the Chapter, shall have the following meaning, unless the context clearly indicates otherwise:

"Assessment of Student Satisfaction" are measures of perceptions of student and alumni satisfaction with campus programs and services.

"Basic Academic Skills: Minimum required skills for college success in English, mathematics, science, and reading."

"Basic Academic Skills Deficiencies: Assessment requirements that have not been met by either the minimum ACT subject scores (English, math, science reasoning, or reading) or institutional secondary assessments required for a student to enroll in college-level courses in the subject area."

"Curricular Deficiencies: High school curricular requirements for college admission that have not been met by the student in high school."

"Curricular Requirements: The 15 units of high school course work required for college admission to public colleges and universities in the State System. These include four units of English, three units of mathematics, two units of laboratory science, three units of history and citizenship skills and three units of elective course that fit into one of the categories above or foreign language or computer science."

"Elective Courses: Those courses that fulfill the additional three high school units to meet the total of 15 required by the State Regents for college admission."

"Entry Level Assessment and Placement" is an evaluation conducted prior to enrollment which assists institutional faculty and counselors in making decisions that give students the best possible chance of success in attaining academic goals.

"General Education Assessment" are measures of competencies gained through the student's general education program.

"Graduate Student Assessment" are measures of student learning and evaluations of student satisfaction with instruction and services beyond the standard assessment requirements for admission to and graduation from a graduate program.

"Program Outcomes Assessment (or major field of study assessment)" are measures of how well students are meeting institutionally stated program goals and objectives.

"Remedial/Developmental Courses: Zero-level courses that do not carry college credit and are designed to raise students' knowledge competency in the subject area to the collegiate level."

"Remediation: Process for removing curricular or basic academic skills deficiencies through remedial/developmental course work or supplemental instruction or other interventions that lead to demonstration of competency."

"Student Assessment" is a multi-dimensional evaluative process that measures the overall educational impact of the college/university experience on students and provides information for making program improvements.

3.20.3 Institutional Requirements

Each college and university shall assess individual student performance in achieving its programmatic objectives. Specifically, each institution will develop criteria, subject to State Regents' approval, for the evaluation of students at college entry to determine academic preparation and course placement; general education assessment to determine basic skill competencies; program outcomes assessment to evaluate the outcomes in the student's major; and student perception of program quality including satisfaction with support services, academic curriculum, and the faculty. Such evaluation criteria must be tied to stated program outcomes and learner competencies. Data at each level of assessment will be reported to the State Regents annually and will include detailed information designed to ensure accountability throughout the system. Detailed information on assessment reporting is available in the Academic Affairs Procedures Handbook available upon request.

In recognition of varying institutional missions and clientele served, assessment components will be campus based under the leadership of the local faculty and administrators providing the procedures meet the requirements detailed in the following sections. Assessment programs should consider the needs of special populations in the development of policies and procedures. Finally, as institutions develop criteria and select assessment mechanisms, each program component should be coordinated and complement the whole.

3.20.4 Entry Level Assessment and Placement

A. Minimum Basic Academic Skills Requirements

Each institution will use established ACT scores at or above the State Regents' established minimum in the four subject areas of science reasoning, mathematics, reading, and English as the initial determinant for individual student readiness for college level course work. These minimum ACT subscores provide a standard for measuring student readiness across the State System and are evaluated by the State Regents on an annual basis.

Students scoring below the minimum level, will be required to undergo additional testing to determine the level of readiness for college level work consistent with the institution's approved assessment plan, or successfully complete remedial/ developmental course work in the subject area. Students must remediate basic academic skills deficiencies at the earliest possible time but within the first 24 college-level hours attempted. Students continuously enrolled in courses designed to remove deficiencies may be allowed to continue enrollment beyond the 24 hour limit. More information concerning removing curricular deficiencies may be found in the State Regents' *Remediation and Removal of High School Curricular Deficiencies Policy*. Similarly, institutions may, within their approved assessment plans, establish higher standards by requiring additional testing of those students meeting or exceeding the minimum ACT subject test score requirement.

These minimum subject test score requirements will be communicated regularly to college bound students, parents, and common schools for the purpose of informing them of the levels of proficiency in the basic academic skills areas needed to be adequately prepared for college level work.

Students admitted under the special adult admission provision may be exempt from entry-level assessment requirements consistent with the institution's approved assessment plan.

B. Concurrently Enrolled High School Students

For high school students wishing to enroll concurrently in college courses the established ACT score in the four subject areas will apply as follows: A high school student not meeting the designated score in science reasoning, mathematics, and English will not be permitted enrollment in the corresponding college subject area. A student scoring below the established ACT score in reading will not be permitted enrollment in any other collegiate course (outside the subjects of science, mathematics, and English). Secondary institutional assessments and remediation are not allowed for concurrent high school students.

C. Institutional Programs

Institutional entry level assessment programs should include an evaluation of past academic performance, educational readiness (such as mental, physical, and emotional), educational goals, study skills, values, self-concept and motivation. Student assessment results will be utilized in the placement and advisement process to ensure that students enroll in courses appropriate for their skill levels. Tracking systems should be implemented to ensure that information from assessment and completion of course work is used to evaluate and strengthen programs in order to further enhance student achievement and development. The data collection activities should be clearly linked to instructional improvement efforts.

3.20.5 General Education Assessment

The results of general education assessment should be used to improve the institution's program of general education. This assessment is designed to measure the student's academic progress and learning competencies in the areas of reading, writing, mathematics, critical thinking, and other areas of general education.

General education assessments will normally occur after the student has completed 45 semester hours and prior to the end of the degree program for associate degree programs and prior to the completion of 70 semester hours for students in baccalaureate programs.

Examples of appropriate measures include academic standing, GPA, standardized and institutionally developed instruments, portfolios, etc.

3.20.6 Program Outcomes Assessment

Selection of the assessment instruments and other parameters (such as target groups, when testing occurs, etc.) for program outcomes assessment is the responsibility of the institution subject to State Regents' approval. Preference should be given to nationally standardized instruments. The following criteria are guidelines for the section of assessment methodologies:

A. Instrument(s) should reflect the curriculum for the major and measure skills and abilities identified in the program goals and objectives.

B. Instrument(s) should assess higher level thinking skills in applying learned information.

C. Instrument(s) should be demonstrated to be reliable and valid.

Nationally normed instruments required for graduate or professional study, or those that serve as prerequisites to practice in the profession, may be included as appropriate assessment devices. Examples are the Graduate Record Exam (GRE), National Teacher Exam (NTE), and various licensing examinations.

3.20.7 Assessment of Student Satisfaction

Perceptions of students and alumni are important in the evaluation of and the enhancement of academic and campus programs and services. Such perceptions are valuable because they provide an indication of the students' subjective view of events and services which collectively constitute their undergraduate experiences. Evaluations of student satisfaction can be accomplished via surveys, interviews, etc. Resulting data are to be used to provide feedback for the improvement of programs and services.

Examples of programs/activities to be included in this level of assessment are satisfaction with student services, quality of food services, access to financial aid, residence hall facilities, day care, parking, etc.

3.20.8 Graduate Student Assessment

Higher education institutions that charge graduate students the student assessment fee must perform graduate student assessment. An institution that charges the assessment fee will include a description of graduate student assessment and assessment fee usage in its institutional assessment plan. Graduate student assessment results will be included in the institution's annual assessment report to the State Regents. In addition to the annual reporting requirements described above, graduate programs should attempt to present instrument data that compare graduate student performance with statewide or national norms.

The institution's plan for graduate student assessment will explain each graduate program's assessment process, including stages of assessment, descriptions of instruments used, methods of data collection, the relationship of data analysis to program improvement, and the administrative organization used to develop and review the assessment plan. The institution will adopt or develop assessment instruments that augment pre-assessment fee instruments (i.e. grade transcripts, GRE scores, course grades, and comprehensive exams). Departmental pre-tests, capstone experiences, cohort tracking, portfolios, interviews, and postgraduate surveys are some commonly used assessment methods.

Approved October 4, 1991. Revised April 15, 1994; June 28, 1995; June 28, 1996.

3.21 REMEDIATION

3.21.1 Purpose

This policy specifies how students who lack the 15 required high school curricular units for college admission or competency in the basic academic skills areas of English, mathematics, science, and reading may satisfy them within the State System.

3.21.2 Definitions

The following words and terms, when used in the Chapter, shall have the following meaning, unless the context clearly indicates otherwise:

"Basic Academic Skills: Minimum required skills for college success in English, mathematics, science, and reading."

"Basic Academic Skills Deficiencies: Assessment requirements that have not been met by either the minimum ACT subject scores (English, math, science reasoning or reading) or institutional secondary assessments required for a student to enroll in college-level courses in the subject area."

"Curricular Deficiencies" are high school curricular requirements required for college admission that have not been met by the student in high school."

"Curricular Requirements" are the 15 units of high school course work required for college admission to public colleges and universities in the State System. These include four units of English, three units of mathematics, two units of laboratory science, three units of history and citizenship skills, and three units of elective courses that fit into one of the categories above or foreign language or computer science.

"Elective Courses" are those courses that fulfill the additional three high school units to meet the total of 15 required by the State Regents for college admission.

"Entry Level Assessment and Placement: An evaluation conducted prior to enrollment which assists institutional facilities and counselors in making decisions that give students the best possible chance of success in attaining academic goals."

"Remedial/Developmental Courses" are zero-level courses that do not carry college credit and are designed to raise students' knowledge competency in the subject area to the collegiate level."

"Remediation: Process for removing curricular or basic academic skills deficiencies through remedial/developmental course work or supplemental instruction or other interventions that lead to demonstration of competency."

3.21.3 Principles

A. High School Curricular Requirements

The State Regents' *Institutional Admission and Retention Policy* lists 15 units of high school curricular requirements for admission to programs leading to associate

in arts, associate in science, and baccalaureate degrees. As defined in the policy, students must meet all high school curricular requirements to be admitted to the research or regional institutions. The only exceptions are noted in the special admission and summer provisional admission options. The policy requires institutions admitting students with one or more curricular deficiencies in the special admission categories to provide the means to satisfy those deficiencies and to remediate these deficiencies within the first 24 college-level credit hours attempted.

The high school curricular admission requirements were adopted by the State Regents to help ensure adequate high school academic preparation. It is the expectation of the State Regents that students applying for college entry will have successfully completed, at a minimum, the required high school course work. Research indicates that the academic preparation a student receives in high school correlates with success in college. Specifically, students who take more high school core subjects generally score higher on the ACT and earn better grades in college than students who take a minimum number of core courses. High school students should consider the prescribed 15 unit high school core curriculum a minimum standard. Students are encouraged to take additional core courses.

Some students will lack these requirements upon entering Oklahoma colleges and universities; others will have taken the required courses but will remain unskilled in the disciplines. The following principles are the foundation for this policy:

B. Basic Academic Skills Requirements

The State Regents' *Assessment Policy* requires that each college and university assess individual students at college entry to determine academic preparation and course placement. Each institution uses established ACT scores at or above the State Regents' established minimum in the four subject areas of science reasoning, mathematics, reading, and English as the initial determinant for individual student readiness for college level course work. These minimum ACT subscores provide a standard for measuring student readiness across the State System and are evaluated by the State Regents on an annual basis. Students scoring below the minimum level are required to undergo additional testing to determine the level of readiness for college level work consistent with the institution's approved assessment plan, or successfully remediate in the subject area.

C. The following principles are the foundation for this policy:

1. Certain disciplines, most notably mathematics, English, and science, build on requisite knowledge. College courses in such disciplines assume a student knowledge base gained in high school or other previous academic experiences. It is therefore imperative that students not enter collegiate courses in these fields lacking that knowledge.

2. Students should not enroll in collegiate courses in history or other elective courses without a necessary foundation in reading and writing.

3. Students who can demonstrate competency in an academic field even though they did not take the required course(s) in high school will have the curricular deficiency waived for purposes of remediation. Such students will be allowed to enter the respective discipline's collegiate courses.

4. Within the State System, the community college tier is officially designated as responsible for the remedial/developmental education function. While institutions in other tiers, with the exception of regional universities with assigned community college functions, do not have this remedial/ developmental responsibility, such schools may offer remedial courses if fully supported through student fees.

3.21.4 Student Demonstration of Competencies

A. Systemwide Procedures

Student competency may be demonstrated and deficiencies removed in basic academic skills courses—science, English, and mathematics—through the use of system ACT scores in the three subject areas of science reasoning, English, and mathematics respectively. Institutions may, within their approved assessment plans, establish higher standards by requiring additional testing of those students meeting or exceeding the minimum ACT subject test score requirement. The system ACT subscores are set by the State Regents and communicated annually. Students who are successful in demonstrating competency in all deficiency areas and who meet the required institutional performance criteria may be regularly admitted and will not count against the Alternative Admission Category's enrollment limit (see the State Regents' *Institutional Admission and Retention Policy*).

B. Institutional Procedures

Student competencies may be demonstrated and deficiencies removed by an entry-level, institutionally developed or adopted assessment procedure in the appropriate discipline area consistent with the institution's approved assessment plan. Such an assessment procedure/instrument must be uniformly applied, have demonstrated content validity, and be a reliable measure of student competence. Students are required to score at a level which equates to the systemwide ACT score requirement for the basic skills subjects.

Institutional procedures for demonstration of student competencies and for removing curricular deficiencies do not apply to concurrently enrolled high school students. Concurrently enrolled high school students may only enroll in curricular areas where they have met the ACT assessment requirements for college placement as stated in the State Regents' *Assessment Policy*. A high school student not meeting the designated ACT score in science reasoning, mathematics, and English will not be permitted enrollment in the corresponding college subject area. A student scoring below the established ACT score in reading will not be permitted enrollment in any other collegiate course (outside the subjects of science, mathematics, and English). Secondary institutional assessments and remediation are not allowed for concurrent high school students. Additionally, concurrently admitted high school students will not be allowed to enroll in any remedial/developmental courses offered by colleges and universities designed to remove high school curricular or skills deficiencies.

C. Student Remediation in Basic Academic Skills

Students with deficiencies in mathematics, English, reading, and science who fail to demonstrate adequate curricular competence through a minimum ACT subject score or institutional secondary assessment will be required to enroll in remedial/

developmental courses or participate in remedial activities designed to remedy the deficiency. Students must receive a grade equivalent to a "C" or better to remove the deficiency.

D. Student Procedures for Removal of Curricular Deficiencies in History, Citizenship Skills, and/or Elective (Additional) Courses

Students with a curricular deficiency in history or citizenship skills who present an ACT reading subject score at or above the specified level or who score at the designated level on any approved secondary institutional reading assessment instrument may be admitted as regular admission students. These students will be required to complete an additional three-hour collegiate history or citizenship skills course to make up the high school deficiency. Students with an elective deficiency may also be admitted as regular admission students as specified in the State Regents' *Institutional Admission and Retention Policy*, but will be required to take an additional three-hour collegiate course in an elective subject area(s).

E. Reading Competency

To successfully complete college courses, students must be able to read at a minimum level. While high school reading courses are not specifically required, student reading competency is expected and assessed. (See the State Regents' *Assessment Policy* for assessment requirements in the area of reading.)

F. Limits

Students with basic academic skills deficiencies or lacking curricular requirements must remove the basic academic skills deficiencies at the earliest possible time but within the first 24 college-level hours attempted. Students continuously enrolled in courses designed to remove deficiencies may be allowed to continue enrollment beyond the 24 hour limit. Students must also remove deficiencies in a discipline area before taking collegiate level work in that discipline. Students admitted to AAS programs must remove deficiencies prior to taking collegiate level work in that discipline.

The president or the president's designee may allow a deserving student who failed to remediate a basic academic skills deficiency in a single subject to continue to enroll in collegiate level courses in addition to remedial course work beyond the 24-hour limit providing the student has demonstrated success in collegiate courses to date. Such exceptions must be appropriately documented.

Approved November 15, 1991. Revised August 16, 1994; June 28, 1995; June 28, 1996.