

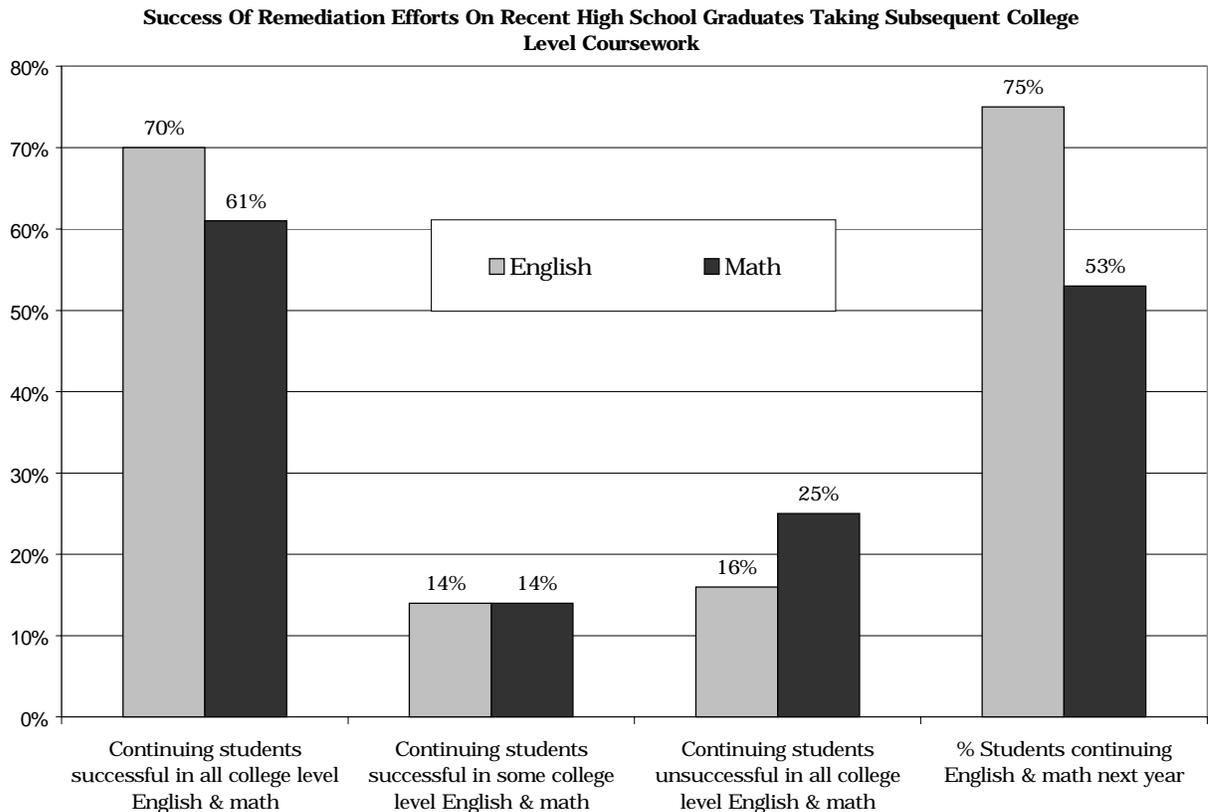
The Success of Remedial Coursework in College

Questions: How successful is college remedial coursework in helping under-prepared students to successfully complete college level coursework? Does the effectiveness of remedial coursework vary by sector or by college or university?

Why ask about the impact of remedial coursework? Despite their ages, or the admissions criteria of campuses, it is reasonable to expect that all prospective students who begin college study under-prepared do expect that successful completion of remedial coursework should prepare them for college study. First-year students who enter Ohio's state-supported colleges and universities vary greatly in their level of preparation to successfully complete college coursework. While some universities in Ohio are selective in their admissions criteria, other colleges or universities are required to be Open to any student who has a valid high school diploma. Some first-year students have not attended high school for many years and may need remedial coursework as a refresher before they can successfully complete college coursework.

National Answers: *There are no known benchmark indicators addressing the success rates of higher education's remediation efforts.*

Statewide Answers: *Remedial coursework in English, provided to entering freshmen in Autumn 1998, was quite effective in helping students successfully complete college coursework. Remedial coursework in mathematics, provided to entering freshmen in Autumn 1998, was only somewhat effective in helping students successfully complete college coursework.*



English Results

- Seventy percent of all recent high school graduates who successfully completed remedial coursework in English were successful in all college level coursework in English the next year.
- Fourteen percent of these students were successful in some but not all college level coursework in English.
- Sixteen percent of these students were unable to successfully complete college level English.
- Seventy-five percent of the recent graduates who successfully completed remedial coursework in English or writing did continue on for college level study in English.
- The success of English remediation is lower for older first-year students (those older than age twenty) than for recent high school graduates.

Mathematics Results

- Sixty-one percent of all recent high school graduates who successfully completed remedial coursework were successful in all college level coursework in mathematics in the subsequent year.
- Fourteen percent of these students were successful in some but not all college level coursework in mathematics.
- Twenty-five percent of students were unable to successfully complete college level English during the subsequent year.
- Only fifty-three percent of the recent graduates who successfully completed remedial coursework in English or writing continued on for further study in the next year.
- Remediation in mathematics is more successful for older first-year students than for recent high school graduates; unfortunately, the continuation rate of these students appears to be lower than their younger counterparts.

Student Success in College Level English Coursework in 1998-1999 Following Autumn 1998 Remediation

| Statewide Impact of Remedial Coursework | Recent High School Grads (age 20 and under) | Older First-Year Students (over 20) |
|---|---|-------------------------------------|
| Continuing students successful in all college level English | 70% | 62% |
| Continuing students successful in some college level English | 14% | 15% |
| Continuing students unsuccessful in all college level English | 16% | 23% |
| All continuing students | 100% | 100% |
| % remediation students continuing English next year | 75% | 59% |

Student Success in College Level Math Coursework in 1998-1999 Following Autumn 1998 Remediation

| Statewide Impact of Remedial Coursework | Recent High School Grads (age 20 and under) | Older First-Year Students (over 20) |
|--|---|-------------------------------------|
| Continuing students successful in all college level math | 61% | 70% |
| Continuing students successful in some college level math | 14% | 10% |
| Continuing students unsuccessful in all college level math | 25% | 21% |
| All continuing students | 100% | 100% |
| % remediation students continuing mathematics next year | 53% | 41% |

Sector Answers: *The success rate for English remediation is greatest for the recent high school graduates at university branch campuses (76%). The success rate for English remediation is lowest for older high school graduates at university main campuses (54%). State community colleges are showing the greatest success rate for recent high school graduates in mathematics (75%) and for older first-year students (78%).*

English Results

- The success rate for English remediation for older students is lower than for recent high school graduates in all types of colleges and universities.
- The continuation rate, these are students who successfully complete remedial coursework in English and continue on to take college level study in English.

Mathematics Results

- The continuation rate of recent high school graduates at state community colleges is forty-nine percent indicating a large percentage of recent high school graduates who successfully complete remediation in state community colleges and then take no college level mathematics at any state-supported institution during the next year.
- This pattern of low continuation rates for older students in mathematics is evident on all types of campuses, ranging from thirty-seven percent continuation rate for older students in mathematics on community colleges and at university branch campuses, to sixty-two percent continuation rate for recent high school graduates on university main campuses.

Student Success in College Level English Coursework in 1998-1999 Following Autumn 1998 Remediation

| English | % Remediation Students Continuing College Level English | Continuing Students Successful All College Level English | Continuing Students Successful Some College Level English | Continuing Students Unsuccessful All College Level English | All Continuing Students English |
|--|---|--|---|--|---------------------------------|
| Community Colleges: HS Grads age 20-less | 68% | 65% | 17% | 18% | 100% |
| Community Colleges: HS Grads over 20 | 52% | 66% | 12% | 22% | 100% |
| State Community Colleges: HS Grads age 20-less | 73% | 72% | 12% | 16% | 100% |
| State Community Colleges: HS Grads over 20 | 58% | 62% | 18% | 20% | 100% |
| Technical Colleges: HS Grads age 20-less | 66% | 67% | 12% | 21% | 100% |
| Technical Colleges: HS Grads over 20 | 63% | 59% | 15% | 26% | 100% |
| University Branch Campuses: HS Grads age 20-less | 78% | 76% | 10% | 14% | 100% |
| University Branch Campuses: HS Grads over 20 | 65% | 71% | 10% | 19% | 100% |
| University Main Campuses: HS Grads age 20-less | 85% | 71% | 15% | 14% | 100% |
| University Main Campuses: HS Grads over 20 | 70% | 54% | 20% | 26% | 100% |

**Student Success in College Level Math Coursework in 1998-1999
Following Autumn 1998 Remediation**

| Mathematics | % Remediation Students Continuing College Level Math | Continuing Students Successful All College Level Math | Continuing Students Successful Some College Level Math | Continuing Students Unsuccessful All College Level Math | All Continuing Students Math |
|--|---|--|---|--|-------------------------------------|
| Community Colleges: HS Grads age 20-less | 50% | 56% | 14% | 30% | 100% |
| Community Colleges: HS Grads over 20 | 36% | 63% | 10% | 26% | 100% |
| State Community Colleges: HS Grads age 20-less | 47% | 75% | 9% | 15% | 100% |
| State Community Colleges: HS Grads over 20 | 42% | 78% | 9% | 13% | 100% |
| Technical Colleges: HS Grads age 20-less | 49% | 60% | 9% | 31% | 100% |
| Technical Colleges: HS Grads over 20 | 51% | 70% | 6% | 24% | 100% |
| University Branch Campuses: HS Grads age 20-less | 49% | 61% | 12% | 27% | 100% |
| University Branch Campuses: HS Grads over 20 | 36% | 71% | 8% | 21% | 100% |
| University Main Campuses: HS Grads age 20-less | 60% | 57% | 18% | 25% | 100% |
| University Main Campuses: HS Grads over 20 | 44% | 57% | 15% | 30% | 100% |

Campus Answers: *Campus remediation success rates vary greatly. For brevity the following tables reflect campus outcomes only for students age twenty and under.*

English Remediation Outcomes (Recent High School Graduates)

Community Colleges

| Institution | Campus | % Remediation Students Continuing College Level English | Total # Remediation Students Continuing College Level English | Continuing Students Successful All College Level English | Continuing Students Successful Some College Level English | Continuing Students Unsuccessful All College Level English | All Continuing Students English |
|---------------------------------|----------------|--|--|---|--|---|--|
| Cuyahoga Community College | Eastern Campus | 59% | 65 | 55% | 18% | 26% | 100% |
| | Metro Campus | 65% | 115 | 63% | 17% | 20% | 100% |
| | Western Campus | 76% | 240 | 61% | 21% | 18% | 100% |
| Jefferson Community College | | 84% | 69 | 67% | 19% | 14% | 100% |
| Lakeland Community College | | 88% | 35 | 74% | 17% | 9% | 100% |
| Lorain County Community College | | 69% | 159 | 61% | 12% | 27% | 100% |
| Rio Grande Community College | | 74% | 126 | 88% | 7% | 5% | 100% |
| Sinclair Community College | | 61% | 477 | 64% | 18% | 18% | 100% |

English Remediation Outcomes (Recent High School Graduates)

State Community Colleges

| Institution | Campus | % Remediation Students Continuing College Level English | Total # Remediation Students Continuing College Level English | Continuing Students Successful Some College Level English | Continuing Students Unsuccessful All College Level English | All Continuing Students English |
|--|----------------|---|---|---|--|---------------------------------|
| Cincinnati State Technical & Community College | | 78% | 199 | 57% | 23% | 100% |
| Clark State Community College | | 71% | 29 | 69% | 14% | 100% |
| Columbus State Community College | | 65% | 236 | 86% | 6% | 100% |
| Edison State Community College | | 54% | 35 | 94% | 6% | 100% |
| Northwest State Community College | | 59% | 35 | 77% | 14% | 100% |
| Owens State Community College | Findlay Campus | 91% | 49 | 65% | 14% | 100% |
| | Toledo Campus | 79% | 259 | 70% | 9% | 100% |
| Southern State Community College | Central Campus | 82% | 14 | 57% | 14% | 100% |
| | North Campus | 92% | 11 | 64% | 9% | 100% |
| | South Campus | 67% | 8 | 38% | 25% | 100% |
| Terra State Community College | | 73% | 47 | 66% | 17% | 100% |
| Washington State Community College | | 80% | 41 | 73% | 10% | 100% |

Technical Colleges

| | | | | | | |
|-----------------------------------|-----|-----|-----|-----|-----|------|
| Belmont Technical College | 52% | 75 | 83% | 11% | 7% | 100% |
| Central Ohio Technical College | 76% | 28 | 96% | 0% | 4% | 100% |
| Hocking Technical College | 75% | 185 | 56% | 19% | 24% | 100% |
| Lima Technical College | 82% | 32 | 78% | 3% | 19% | 100% |
| Marion Technical College | 50% | 14 | 7% | 21% | 71% | 100% |
| Muskingum Area Technical College | 64% | 87 | 82% | 6% | 13% | 100% |
| North Central State College | 61% | 50 | 52% | 10% | 38% | 100% |
| Stark State College of Technology | 65% | 64 | 67% | 8% | 25% | 100% |

ENGLISH REMEDIATION OUTCOMES (Recent High School Graduates) (Continued)

University Branch Campuses

| Institution | Campus | % Remediation Students Continuing College Level English | Total # Remediation Students Continuing College Level English | Continuing Students Successful All College Level English | Continuing Students Successful Some College Level English | Continuing Students Unsuccessful All College Level English | All Continuing Students English |
|--------------------------------|----------------------------------|--|--|---|--|---|--|
| Bowling Green State University | Firelands Campus | 88% | 14 | 64% | 0% | 36% | 100% |
| Kent State University | Ashtabula Campus | 70% | 14 | 86% | 7% | 7% | 100% |
| | East Liverpool Campus | 85% | 22 | 59% | 14% | 27% | 100% |
| | Geauga Campus | 86% | 6 | 100% | 0% | 0% | 100% |
| | Salem Campus | 83% | 10 | 60% | 30% | 10% | 100% |
| | Stark Campus | 75% | 36 | 69% | 8% | 22% | 100% |
| | Trumbull Campus | 86% | 51 | 61% | 18% | 22% | 100% |
| | Tuscarawas Campus | 83% | 38 | 79% | 13% | 8% | 100% |
| Miami University | Hamilton Campus | 90% | 111 | 86% | 5% | 9% | 100% |
| | Middletown Campus | 83% | 40 | 88% | 5% | 7% | 100% |
| The Ohio State University | Agricultural Technical Institute | 68% | 41 | 78% | 10% | 12% | 100% |
| | Lima Campus | 70% | 14 | 71% | 14% | 14% | 100% |
| | Mansfield Campus | 78% | 57 | 81% | 5% | 14% | 100% |
| | Marion Campus | 59% | 19 | 79% | 5% | 16% | 100% |
| | Newark Campus | 62% | 16 | 94% | 0% | 6% | 100% |
| Ohio University | Chillicothe Campus | 62% | 8 | 100% | 0% | 0% | 100% |
| | Eastern Campus | 75% | 12 | 100% | 0% | 0% | 100% |
| | Lancaster Campus | 72% | 68 | 79% | 6% | 15% | 100% |
| | Southern Campus | 50% | 3 | 67% | 0% | 33% | 100% |
| | Zanesville Campus | 78% | 38 | 95% | 0% | 5% | 100% |
| University of Akron | Wayne Campus | 73% | 29 | 76% | 10% | 14% | 100% |
| University of Cincinnati | Clermont Campus | 86% | 12 | 58% | 25% | 17% | 100% |
| | Raymond Walters Campus | 81% | 67 | 39% | 37% | 24% | 100% |
| Wright State University | Lake Campus | 75% | 9 | 100% | 0% | 0% | 100% |

ENGLISH REMEDIATION OUTCOMES (Recent High School Graduates) (Continued)

University Main Campuses

| Campus Admissions Criteria | Institution | % Remediation Students Continuing College Level English | Total # Remediation Students Continuing College Level English | Continuing Students Successful All College Level English | Continuing Students Successful Some College Level English | Continuing Students Unsuccessful All College Level English | All Continuing Students English |
|----------------------------|--------------------------------|---|---|--|---|--|---------------------------------|
| Selective | Bowling Green State University | 94% | 182 | 71% | 9% | 19% | 100% |
| Open | Cleveland State University | 89% | 67 | 85% | 15% | 0% | 100% |
| Selective | Kent State University | 95% | 144 | 87% | 9% | 4% | 100% |
| Selective | The Ohio State University | 84% | 81 | 88% | 4% | 9% | 100% |
| Open | Shawnee State University | 80% | 136 | 62% | 19% | 19% | 100% |
| Open | University of Akron | 78% | 235 | 80% | 7% | 13% | 100% |
| Selective | University of Cincinnati | 88% | 439 | 49% | 31% | 21% | 100% |
| Open | University of Toledo | 66% | 41 | 44% | 10% | 46% | 100% |
| Open | Wright State University | 85% | 370 | 81% | 11% | 8% | 100% |
| Open | Youngstown State University | 82% | 301 | 74% | 14% | 12% | 100% |

MATHEMATICS REMEDIATION OUTCOMES (Recent High School Graduates)

Community Colleges

| Institution | Campus | % Remediation Students Continuing College Level Math | Total # Remediation Students Continuing College Level Math | Continuing Students Successful All College Level Math | Continuing Students Successful Some College Level Math | Continuing Students Unsuccessful All College Level Math | All Continuing Students Math |
|---------------------------------|----------------|--|--|---|--|---|------------------------------|
| Cuyahoga Community College | Eastern Campus | 36% | 55 | 56% | 7% | 36% | 100% |
| Cuyahoga Community College | Metro Campus | 32% | 61 | 62% | 3% | 34% | 100% |
| Cuyahoga Community College | Western Campus | 47% | 282 | 71% | 7% | 22% | 100% |
| Jefferson Community College | | 40% | 23 | 78% | 0% | 22% | 100% |
| Lakeland Community College | | 53% | 127 | 61% | 17% | 23% | 100% |
| Lorain County Community College | | 43% | 120 | 59% | 7% | 33% | 100% |
| Rio Grande Community College | | 52% | 91 | 74% | 8% | 19% | 100% |
| Sinclair Community College | | 63% | 390 | 35% | 25% | 40% | 100% |

MATHEMATICS REMEDIATION OUTCOMES (Recent High School Graduates) Continued

State Community Colleges

| Institution | Campus | % Remediation Students Continuing College Level Math | Total # Remediation Students Continuing College Level Math | Continuing Students Successful All College Level Math | Continuing Students Successful Some College Level Math | Continuing Students Unsuccessful All College Level Math | All Continuing Students Math |
|--|----------------|--|---|---|--|---|---------------------------------------|
| Cincinnati State Technical & Community College | | 57% | 126 | 60% | 19% | 21% | 100% |
| Clark State Community College | | 23% | 40 | 65% | 20% | 15% | 100% |
| Columbus State Community College | | 50% | 351 | 90% | 4% | 5% | 100% |
| Edison State Community College | | 28% | 36 | 92% | 6% | 3% | 100% |
| Northwest State Community College | | 34% | 91 | 80% | 4% | 15% | 100% |
| Owens State Community College | Findlay Campus | 40% | 36 | 69% | 11% | 19% | 100% |
| | Toledo Campus | 47% | 241 | 64% | 10% | 26% | 100% |
| Southern State Community College | Central Campus | 50% | 3 | 67% | 0% | 33% | 100% |
| | North Campus | 75% | 6 | 33% | 17% | 50% | 100% |
| | South Campus | 43% | 3 | 67% | 0% | 33% | 100% |
| Terra State Community College | | 74% | 56 | 64% | 13% | 23% | 100% |
| Washington State Community College | | 62% | 23 | 83% | 9% | 9% | 100% |

Technical Colleges

| | | | | | | | |
|-----------------------------------|--|-----|-----|-----|-----|-----|------|
| Belmont Technical College | | 38% | 69 | 80% | 3% | 17% | 100% |
| Central Ohio Technical College | | 36% | 18 | 39% | 22% | 39% | 100% |
| Hocking Technical College | | 47% | 114 | 53% | 11% | 36% | 100% |
| Lima Technical College | | 40% | 44 | 64% | 11% | 25% | 100% |
| Marion Technical College | | 64% | 16 | 38% | 0% | 63% | 100% |
| Muskingum Area Technical College | | 81% | 42 | 69% | 12% | 19% | 100% |
| North Central State College | | 33% | 21 | 67% | 10% | 24% | 100% |
| Stark State College of Technology | | 85% | 67 | 52% | 9% | 39% | 100% |

MATHEMATICS REMEDIATION OUTCOMES (Recent High School Graduates) (Continued)

University Branch Campuses

| Institution | Campus | % Remediation Students Continuing College Level Math | Total # Remediation Students Continuing College Level Math | Continuing Students Successful All College Level Math | Continuing Students Successful Some College Level Math | Continuing Students Unsuccessful All College Level Math | All Continuing Students Math |
|--------------------------------|------------------------|---|---|--|---|--|---|
| Bowling Green State University | Firelands Campus | 63% | 22 | 64% | 5% | 32% | 100% |
| Kent State University | Ashtabula Campus | 28% | 18 | 67% | 6% | 28% | 100% |
| | East Liverpool Campus | 22% | 11 | 55% | 18% | 27% | 100% |
| | Geauga Campus | 32% | 11 | 64% | 9% | 27% | 100% |
| | Salem Campus | 24% | 19 | 63% | 11% | 26% | 100% |
| | Stark Campus | 37% | 66 | 59% | 5% | 36% | 100% |
| | Trumbull Campus | 43% | 60 | 78% | 5% | 17% | 100% |
| | Tuscarawas Campus | 42% | 57 | 74% | 4% | 23% | 100% |
| Miami University | Hamilton Campus | 77% | 43 | 37% | 12% | 51% | 100% |
| | Middletown Campus | 65% | 35 | 51% | 11% | 37% | 100% |
| The Ohio State University | Lima Campus | 74% | 42 | 74% | 5% | 21% | 100% |
| | Mansfield Campus | 82% | 73 | 47% | 25% | 29% | 100% |
| | Marion Campus | 71% | 56 | 52% | 14% | 34% | 100% |
| | Newark Campus | 64% | 46 | 54% | 17% | 28% | 100% |
| Ohio University | Chillicothe Campus | 53% | 21 | 48% | 19% | 33% | 100% |
| | Eastern Campus | 66% | 19 | 74% | 16% | 11% | 100% |
| | Lancaster Campus | 57% | 33 | 73% | 6% | 21% | 100% |
| | Southern Campus | 58% | 28 | 64% | 14% | 21% | 100% |
| | Zanesville Campus | 55% | 23 | 61% | 9% | 30% | 100% |
| University of Akron | Wayne Campus | 59% | 41 | 56% | 27% | 17% | 100% |
| University of Cincinnati | Clermont Campus | 35% | 41 | 71% | 17% | 12% | 100% |
| | Raymond Walters Campus | 38% | 50 | 64% | 8% | 28% | 100% |
| Wright State University | Lake Campus | 86% | 6 | 50% | 33% | 17% | 100% |

MATHEMATICS REMEDIATION OUTCOMES (Recent High School Graduates) (Continued)

University Main Campuses

| Campus Admissions Criteria | Institution | % Remediation Students Continuing College Level Math | Total # Remediation Students Continuing College Level Math | Continuing Students Successful All College Level Math | Continuing Students Successful Some College Level Math | Continuing Students Unsuccessful All College Level Math | All Continuing Students Math |
|----------------------------|--------------------------------|--|--|---|--|---|------------------------------|
| Selective | Bowling Green State University | 72% | 222 | 81% | 7% | 12% | 100% |
| Selective | Kent State University | 39% | 292 | 59% | 8% | 33% | 100% |
| Selective | The Ohio State University | 82% | 164 | 50% | 29% | 21% | 100% |
| Selective | Ohio University | 73% | 66 | 82% | 14% | 5% | 100% |
| Open | Shawnee State University | 90% | 43 | 49% | 16% | 35% | 100% |
| Open | University of Akron | 58% | 268 | 44% | 21% | 36% | 100% |
| Selective | University of Cincinnati | 90% | 97 | 26% | 37% | 37% | 100% |
| Open | University of Toledo | 60% | 204 | 65% | 15% | 20% | 100% |
| Open | Wright State University | 90% | 158 | 39% | 30% | 31% | 100% |
| Open | Youngstown State University | 42% | 129 | 67% | 19% | 15% | 100% |