

## **The Preparedness of Recent High School Graduates Entering Ohio's State-Supported Colleges and Universities**

**Questions:** How many first-year students, who are recent high school graduates, are enrolling for remedial coursework in state-supported colleges and universities throughout the state? How successful is college remedial coursework in helping under-prepared recent high school graduates to complete college level coursework? Does the effectiveness of remedial coursework vary by type of college or university?

**Why ask about the frequency and effectiveness of remedial education for recent high school graduates in state-supported colleges and universities?** Recent high school graduates who enter Ohio's state-supported colleges and universities vary greatly in their level of preparation to complete college coursework. Many recent high school graduates enter Ohio's state-supported colleges and universities without having completed a college preparatory curriculum while in high school (30%) or without taking a college entrance exam (20%). A college preparation curriculum would include four years of English, and three years each of mathematics, science, and social studies. Recent high school graduates entering college without benefit of a core curriculum, and recent high school graduates who enter college without taking a college preparation exam are typically more likely to need remediation once in high school than are students who take a college preparation exam and take the core curriculum while in high school.

While preparing students for college study is largely the responsibility of the K-12 sector, prospective students and their families should be prepared for the possibility that remedial coursework may be required in college before students can begin college level coursework. It is reasonable to expect that all prospective students who begin college study under-prepared believe that completion of remedial coursework will prepare them for college study.

**Note:** While some university main campuses in Ohio are selective in their admissions criteria, other colleges or universities (or university branch campuses) admit any student who has a valid high school diploma. Many recent high school graduates require remedial coursework at a college or university before they can successfully complete college level coursework. There are variations between campuses in implementing statewide criteria established for the distinction between remedial and college-level work. Each campus interprets the standards for such distinctions, and this renders campus comparisons on this subject difficult. Additionally, 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. Campuses vary in the degree to which they "require" or "suggest" that under-prepared students take remedial coursework, but with the exception of one campus (Central State University), all state-supported colleges and universities in Ohio offered remedial coursework to entering freshmen in autumn 2001. This remediation is typically either in English (including both reading and writing) or in mathematics, and some students require remediation in both English and mathematics.

**First Question:** What percentage of recent high school graduates requires remediation in college?

**National Answers:** Ohio's need for remediation of first-year students is quite similar to the national pattern.

- The U.S. Department of Education released a 1996 report\* indicating that there is variation nationally in the extent to which campuses "require" or simply "suggest" that under-prepared students enroll in remedial coursework. This is also true in Ohio.
- In 1995, 20% of all first-time first-year students in the United States enrolled in remedial coursework in reading and 25% of all first-year students enrolled in remedial coursework in writing.
- In 1995, 27% of all first-time first-year students in the United States enrolled in remedial coursework in mathematics.

\***Remedial Education at Higher Education Institutions in fall 1995, U.S. Department of Education, NCES 97-584. (October 1996)**

**Statewide Answers:** In autumn of 2001, one-fifth of all recent high school graduates enrolling in college (called traditional students in this report) enrolled in remedial English, including reading and writing, before they pursued college level coursework. In addition, nearly one-third of all traditional first-year students enrolled in remedial mathematics. However, students who completed a core curriculum in high school tended to enroll in remedial coursework at a much lower rate than their peers who did not complete a core curriculum, or who did not take a college entrance exam. Overall, the statewide percentage of traditional first-year students who enrolled in remedial coursework in autumn of 2001 was 37%. The remediation rate of traditional first-year students who did not complete a core curriculum in high school was nearly double the remediation rate of students who completed a core curriculum. The remediation rate of traditional first-year students who did not take a college entrance exam is nearly triple the remediation rate of students who completed a core curriculum.

- Thirty percent of traditional students entering college for the first time in summer or fall of 2001 enrolled in remedial coursework in mathematics during the 2001-2002 academic year. Eighteen percent of traditional first-year students who completed a core curriculum in high school enrolled in remedial coursework in mathematics compared to 37% for similar students who did not complete a core curriculum.
- Twenty percent of traditional students entering college for the first time in summer or fall of 2001 enrolled in remedial coursework in English during the 2001-2002 academic year. Eleven percent of traditional first-year students who completed a core curriculum in high school enrolled in remedial coursework in English compared to 24% for similar students who did not complete a core curriculum.
- Thirty-seven percent of traditional students entering college for the first time in summer or fall of 2001 enrolled in remedial coursework in either English or mathematics during the 2001-2002 academic year. Twenty-four percent of traditional first-year students who completed a core curriculum in high school enrolled in remedial coursework in either English or mathematics compared to 46% for similar students who did not complete a core curriculum.
- Thirty percent of traditional, first-time students who took a college entrance exam and for whom we have valid core data entered college in summer or fall of 2001 without having taken a complete college preparation curriculum while in high school. Such a curriculum would include four years of English, and three years each of mathematics, science, and social studies.

### Math and English Remediation Rates and High School Core Status\* of Traditional, First-Year Students who Entered College in Summer or Fall 2001

#### Academic Year 2001-2002

First-Year Students Entering With:			MATH REMEDIATION		ENGLISH REMEDIATION		MATH OR ENGLISH REMEDIATION		MATH AND ENGLISH REMEDIATION	
	Number Enrolled	% Enrolled	# Taking	% Taking	# Taking	% Taking	# Taking	% Taking	# Taking	% Taking
High School Core	26,580	49%	4,859	18%	2,957	11%	6,319	24%	1,497	6%
No High School Core	16,265	30%	6,082	37%	3,900	24%	7,412	46%	2,570	16%
No Entrance Exam or Core Unknown	10,867	20%	5,126	47%	3,869	36%	6,255	58%	2,740	25%
<b>Total</b>	<b>53,712</b>	<b>100%</b>	<b>16,067</b>	<b>30%</b>	<b>10,726</b>	<b>20%</b>	<b>19,986</b>	<b>37%</b>	<b>6,807</b>	<b>13%</b>

\*Data come from ACT and SAT College Entrance Assessments completed by many high school students while in high school.

**Sector Answers:** Remediation rates vary greatly depending on the type of campus attended. At two-year campuses, remediation rates are greater than the national average, while at the university main campuses, remediation rates are similar to the national average. Remediation rates also vary greatly depending on the type of high school curriculum taken. Across all campus types, one consistent theme emerges: students who completed a core curriculum in high school have a lesser need for remediation than do students who did not complete a core curriculum or who did not take a college entrance exam.

- Traditional, first-year students entering two-year colleges and universities are more likely to enroll in remedial coursework in mathematics (38%-52%) prior to pursuing college study than are their counterparts entering the main campuses of four-year universities (17%). Across all campus types traditional, first-year students who enter college having completed a core curriculum are less likely to enroll in remedial mathematics courses (12%-42%) than their counterparts who have not completed a core curriculum (26%-59%).
- Traditional, first-year students entering two-year colleges and universities are more likely to enroll in remedial coursework in English (19%-45%), prior to pursuing college study, than are their counterparts entering the main campuses of four-year universities (13%). Across all campus types traditional, first-year students who enter college having completed a core curriculum are less likely to enroll in remedial English courses (9%-28%) than their counterparts who have not completed a core curriculum (18%-44%).
- Across Ohio, a large percentage of traditional, first-year students entering two-year colleges report not having completed a college preparation curriculum while in high school.
- Across Ohio, a large percentage of traditional, first-year students entering Community Colleges, State Community Colleges, and Technical Colleges enter college without having taken a college entrance exam.

**Math and English Remediation Rates and High School Core Status\* of Traditional, First-Year Students who Entered College in Summer or Fall 2001 - Academic Year 2001-2002**

			MATH REMEDIATION		ENGLISH REMEDIATION		MATH OR ENGLISH REMEDIATION		MATH AND ENGLISH REMEDIATION			
First-Year Students Entering With:			Number Enrolled	% Enrolled	# Taking	% Taking	# Taking	% Taking	# Taking	% Taking		
Community Colleges	High School Core		2,089	29%	839	40%	455	22%	966	46%	328	16%
	No High School Core		1,831	26%	1,077	59%	711	39%	1,223	67%	565	31%
	No Exam or Core Unknown		3,205	45%	1,781	56%	1,344	42%	2,068	65%	1,057	33%
	Total		7,125	100%	3,697	52%	2,510	35%	4,257	60%	1,950	27%
State Community Colleges	High School Core		1,666	28%	698	42%	255	15%	776	47%	177	11%
	No High School Core		1,777	30%	1,039	58%	542	31%	1,164	66%	417	23%
	No Exam or Core Unknown		2,538	42%	1,391	55%	947	37%	1,646	65%	692	27%
	Total		5,981	100%	3,128	52%	1,744	29%	3,586	60%	1,286	22%
Technical Colleges	High School Core		534	21%	117	22%	151	28%	200	37%	68	13%
	No High School Core		824	32%	292	35%	362	44%	475	58%	179	22%
	No Exam or Core Unknown		1,204	47%	577	48%	635	53%	829	69%	383	32%
	Total		2,562	100%	986	38%	1,148	45%	1,504	59%	630	25%
University Branch Campuses	High School Core		3,223	45%	980	30%	421	13%	1,178	37%	223	7%
	No High School Core		2,720	38%	1,318	48%	618	23%	1,509	55%	427	16%
	No Exam or Core Unknown		1,278	18%	647	51%	352	28%	746	58%	253	20%
	Total		7,221	100%	2,945	41%	1,391	19%	3,433	48%	903	13%
University Main Campuses	High School Core		19,068	62%	2,225	12%	1,675	9%	3,199	17%	701	4%
	No High School Core		9,113	30%	2,356	26%	1,667	18%	3,041	33%	982	11%
	No Exam or Core Unknown		2,642	9%	730	28%	591	22%	966	37%	355	13%
	Total		30,823	100%	5,311	17%	3,933	13%	7,206	23%	2,038	7%

- Data come from ACT and SAT College Entrance Assessments completed by many high school students while in high school.

**Campus Answers:** Significant variation exists across campuses in the instance of remedial coursework for traditional, first-year students. However, across nearly all campuses the need for remediation is highest for students who did not complete a high school core curriculum or did not take a college entrance exam.

**Math and English Remediation Rates and High School Core Status\* of Traditional, First-Year Students who Entered College in Summer or Fall 2001**

**Community Colleges\***

**Academic Year 2001-2002**

Institution	First-Year Students Entering With:	Number Enrolled	% Enrolled	MATH REMEDIATION		ENGLISH REMEDIATION		MATH OR ENGLISH REMEDIATION		MATH AND ENGLISH REMEDIATION	
				# Taking	% Taking	# Taking	% Taking	# Taking	% Taking	# Taking	% Taking
Cuyahoga Community College, Eastern Campus	Core	219	36%	59	27%	28	13%	65	30%	22	10%
	No Core	138	22%	86	62%	55	40%	90	65%	51	37%
	No Exam or Core Unknown	257	42%	137	53%	115	45%	159	62%	93	36%
	Total	614	100%	282	46%	198	32%	314	51%	166	27%
Cuyahoga Community College, Metro Campus	Core	136	24%	60	44%	46	34%	69	51%	37	27%
	No Core	115	20%	61	53%	51	44%	68	59%	44	38%
	No Exam or Core Unknown	316	56%	175	55%	170	54%	197	62%	148	47%
	Total	567	100%	296	52%	267	47%	334	59%	229	40%
Cuyahoga Community College, Western Campus	Core	612	34%	284	46%	111	18%	299	49%	96	16%
	No Core	477	27%	324	68%	190	40%	339	71%	175	37%
	No Exam or Core Unknown	705	39%	452	64%	282	40%	492	70%	242	34%
	Total	1794	100%	1060	59%	583	32%	1130	63%	513	29%
Jefferson Community College	Core	76	30%	35	46%	26	34%	44	58%	17	22%
	No Core	81	32%	48	59%	43	53%	63	78%	28	35%
	No Exam or Core Unknown	98	38%	51	52%	49	50%	69	70%	31	32%
	Total	255	100%	134	53%	118	46%	176	69%	76	30%
Lorain County Community College	Core	243	28%	117	48%	46	19%	129	53%	34	14%
	No Core	236	27%	152	64%	81	34%	167	71%	66	28%
	No Exam or Core Unknown	398	45%	273	69%	171	43%	307	77%	137	34%
	Total	877	100%	542	62%	298	34%	603	69%	237	27%
Lakeland Community College	Core	357	32%	117	33%	13	4%	118	33%	12	3%
	No Core	304	27%	155	51%	32	11%	162	53%	25	8%
	No Exam or Core Unknown	460	41%	216	47%	61	13%	238	52%	39	8%
	Total	1121	100%	488	44%	106	9%	518	46%	76	7%
Rio Grande Community College	Core	122	28%	55	45%	49	40%	69	57%	35	29%
	No Core	144	33%	86	60%	91	63%	119	83%	58	40%
	No Exam or Core Unknown	168	39%	29	17%	30	18%	39	23%	20	12%
	Total	434	100%	170	39%	170	39%	227	52%	113	26%
Sinclair Community College	Core	324	22%	112	35%	136	42%	173	53%	75	23%
	No Core	336	23%	165	49%	168	50%	215	64%	118	35%
	No Exam or Core Unknown	803	55%	448	56%	466	58%	567	71%	347	43%
	Total	1463	100%	725	50%	770	53%	955	65%	540	37%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

**State Community Colleges\***

**Academic Year 2001-2002**

Institution	First-Year Students Entering With:	Number Enrolled	% Enrolled	MATH REMEDIATION		ENGLISH REMEDIATION		MATH OR ENGLISH REMEDIATION		MATH AND ENGLISH REMEDIATION	
				# Taking	% Taking	# Taking	% Taking	# Taking	% Taking	# Taking	% Taking
Clark State Community College	Core	70	22%	23	33%	12	17%	29	41%	6	9%
	No Core	79	25%	32	41%	26	33%	43	54%	15	19%
	No Exam or Core Unknown	163	52%	75	46%	67	41%	104	64%	38	23%
	Total	312	100%	130	42%	105	34%	176	56%	59	19%
Cincinnati State Technical & Community College	Core	45	31%	17	38%	21	47%	25	56%	13	29%
	No Core	38	26%	20	53%	16	42%	23	61%	13	34%
	No Exam or Core Unknown	62	43%	30	48%	33	53%	43	69%	20	32%
	Total	145	100%	67	46%	70	48%	91	63%	46	32%
Columbus State Community College	Core	635	29%	455	72%	113	18%	470	74%	98	15%
	No Core	636	29%	488	77%	189	30%	509	80%	168	26%
	No Exam or Core Unknown	905	42%	672	74%	315	35%	725	80%	262	29%
	Total	2176	100%	1615	74%	617	28%	1704	78%	528	24%
Edison State Community College	Core	132	32%	28	21%	6	5%	29	22%	5	4%
	No Core	97	23%	44	45%	14	14%	48	49%	10	10%
	No Exam or Core Unknown	184	45%	62	34%	31	17%	71	39%	22	12%
	Total	413	100%	134	32%	51	12%	148	36%	37	9%
Northwest State Community College	Core	140	35%	35	25%	8	6%	40	29%	3	2%
	No Core	144	36%	78	54%	21	15%	81	56%	18	13%
	No Exam or Core Unknown	121	30%	53	44%	23	19%	58	48%	18	15%
	Total	405	100%	166	41%	52	13%	179	44%	39	10%
Owens State Community College, Findlay Campus	Core	72	28%	17	24%	12	17%	22	31%	7	10%
	No Core	108	42%	74	69%	54	50%	84	78%	44	41%
	No Exam or Core Unknown	77	30%	45	58%	46	60%	55	71%	36	47%
	Total	257	100%	136	53%	112	44%	161	63%	87	34%
Owens State Community College, Toledo Campus	Core	342	23%	113	33%	62	18%	133	39%	42	12%
	No Core	463	32%	266	57%	174	38%	309	67%	131	28%
	No Exam or Core Unknown	651	45%	377	58%	330	51%	463	71%	244	37%
	Total	1456	100%	756	52%	566	39%	905	62%	417	29%
Southern State Community College, Fayette Campus	Core	18	43%	0	0%	1	6%	1	6%	0	0%
	No Core	10	24%	2	20%	2	20%	4	40%	0	0%
	No Exam or Core Unknown	14	33%	4	29%	7	50%	7	50%	4	29%
	Total	42	100%	6	14%	10	24%	12	29%	4	10%
Southern State Community College, Central Campus	Core	52	34%	0	0%	6	12%	6	12%	0	0%
	No Core	41	27%	7	17%	9	22%	11	27%	5	12%
	No Exam or Core Unknown	58	38%	12	21%	19	33%	24	41%	7	12%
	Total	151	100%	19	13%	34	23%	41	27%	12	8%
Southern State Community College, North Campus	Core	23	29%	0	0%	1	4%	1	4%	0	0%
	No Core	23	29%	0	0%	4	17%	4	17%	0	0%
	No Exam or Core Unknown	33	42%	4	12%	5	15%	7	21%	2	6%
	Total	79	100%	4	5%	10	13%	12	15%	2	3%
Southern State Community College, South Campus	Core	38	49%	1	3%	3	8%	3	8%	1	3%
	No Core	18	23%	2	11%	5	28%	6	33%	1	6%
	No Exam or Core Unknown	21	27%	3	14%	4	19%	6	29%	1	5%
	Total	77	100%	6	8%	12	16%	15	19%	3	4%
Terra State Community College	Core	65	22%	6	9%	2	3%	8	12%	0	0%
	No Core	85	29%	18	21%	21	25%	30	35%	9	11%
	No Exam or Core Unknown	145	49%	36	25%	41	28%	55	38%	22	15%
	Total	295	100%	60	20%	64	22%	93	32%	31	11%
Washington State Community College	Core	34	20%	3	9%	8	24%	9	26%	2	6%
	No Core	35	20%	8	23%	7	20%	12	34%	3	9%
	No Exam or Core Unknown	104	60%	18	17%	26	25%	28	27%	16	15%
	Total	173	100%	29	17%	41	24%	49	28%	21	12%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

**Technical Colleges\***

**Academic Year 2001-2002**

Institution	First-Year Students Entering With:	Number Enrolled	% Enrolled	MATH REMEDIATION		ENGLISH REMEDIATION		MATH OR ENGLISH REMEDIATION		MATH AND ENGLISH REMEDIATION	
				# Taking	% Taking	# Taking	% Taking	# Taking	% Taking	# Taking	% Taking
Belmont Technical College	Core	38	14%	12	32%	12	32%	18	47%	6	16%
	No Core	74	28%	44	59%	43	58%	50	68%	37	50%
	No Exam or Core Unknown	152	58%	119	78%	107	70%	134	88%	92	61%
	Total	264	100%	175	66%	162	61%	202	77%	135	51%
Central Ohio Technical College	Core	36	21%	10	28%	7	19%	12	33%	5	14%
	No Core	38	22%	16	42%	16	42%	22	58%	10	26%
	No Exam or Core Unknown	98	57%	55	56%	58	59%	77	79%	36	37%
	Total	172	100%	81	47%	81	47%	111	65%	51	30%
Hocking Technical College	Core	144	18%	54	38%	59	41%	79	55%	34	24%
	No Core	235	29%	128	54%	111	47%	158	67%	81	34%
	No Exam or Core Unknown	430	53%	251	58%	235	55%	327	76%	159	37%
	Total	809	100%	433	54%	405	50%	564	70%	274	34%
Muskingum Area Technical College	Core	39	23%	5	13%	9	23%	10	26%	4	10%
	No Core	63	37%	16	25%	27	43%	28	44%	15	24%
	No Exam or Core Unknown	69	40%	37	54%	37	54%	46	67%	28	41%
	Total	171	100%	58	34%	73	43%	84	49%	47	27%
Marion Technical College	Core	34	23%	5	15%	3	9%	5	15%	3	9%
	No Core	44	29%	16	36%	10	23%	20	45%	6	14%
	No Exam or Core Unknown	72	48%	25	35%	24	33%	36	50%	13	18%
	Total	150	100%	46	31%	37	25%	61	41%	22	15%
North Central State College	Core	63	24%	13	21%	21	33%	26	41%	8	13%
	No Core	81	31%	17	21%	44	54%	51	63%	10	12%
	No Exam or Core Unknown	120	45%	23	19%	59	49%	67	56%	15	13%
	Total	264	100%	53	20%	124	47%	144	55%	33	13%
James A. Rhodes State College	Core	78	30%	13	17%	7	9%	17	22%	3	4%
	No Core	115	44%	37	32%	17	15%	47	41%	7	6%
	No Exam or Core Unknown	71	27%	30	42%	20	28%	39	55%	11	15%
	Total	264	100%	80	30%	44	17%	103	39%	21	8%
Stark State College of Technology	Core	102	22%	5	5%	33	32%	33	32%	5	5%
	No Core	174	37%	18	10%	94	54%	99	57%	13	7%
	No Exam or Core Unknown	192	41%	37	19%	95	49%	103	54%	29	15%
	Total	468	100%	60	13%	222	47%	235	50%	47	10%

*\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.*

University Main and Branch Campuses \*

Academic Year 2001-2002

Institution	First-Year Students Entering With:	Number Enrolled	% Enrolled	MATH REMEDIATION		ENGLISH REMEDIATION		MATH OR ENGLISH REMEDIATION		MATH AND ENGLISH REMEDIATION	
				# Taking	% Taking	# Taking	% Taking	# Taking	% Taking	# Taking	% Taking
Bowling Green State University Main Campus	Core	2056	63%	205	10%	164	8%	332	16%	37	2%
	No Core	1037	32%	174	17%	109	11%	241	23%	42	4%
	No Exam or Core Unknown	194	6%	26	13%	37	19%	55	28%	8	4%
	Total	3287	100%	405	12%	310	9%	628	19%	87	3%
Bowling Green State University, Firelands Campus	Core	68	36%	30	44%	5	7%	31	46%	4	6%
	No Core	74	40%	52	70%	17	23%	55	74%	14	19%
	No Exam or Core Unknown	45	24%	31	69%	14	31%	34	76%	11	24%
	Total	187	100%	113	60%	36	19%	120	64%	29	16%
Central State University	Core	72	33%	0	0%	0	0%	0	0%	0	0%
	No Core	102	47%	0	0%	0	0%	0	0%	0	0%
	No Exam or Core Unknown	42	19%	0	0%	0	0%	0	0%	0	0%
	Total	216	100%	0	0%	0	0%	0	0%	0	0%
Cleveland State University	Core	459	50%	121	26%	156	34%	201	44%	76	17%
	No Core	309	34%	138	45%	158	51%	194	63%	102	33%
	No Exam or Core Unknown	153	17%	55	36%	68	44%	84	55%	39	25%
	Total	921	100%	314	34%	382	41%	479	52%	217	24%
Kent State University Main Campus	Core	1871	61%	515	28%	106	6%	556	30%	65	3%
	No Core	976	32%	395	40%	100	10%	430	44%	65	7%
	No Exam or Core Unknown	212	7%	88	42%	27	13%	96	45%	19	9%
	Total	3059	100%	998	33%	233	8%	1082	35%	149	5%
Kent State University, Ashtabula Campus	Core	57	36%	29	51%	8	14%	29	51%	8	14%
	No Core	67	43%	41	61%	15	22%	47	70%	9	13%
	No Exam or Core Unknown	33	21%	24	73%	6	18%	25	76%	5	15%
	Total	157	100%	94	60%	29	18%	101	64%	22	14%
Kent State University, East Liverpool Campus	Core	20	29%	8	40%	2	10%	9	45%	1	5%
	No Core	26	38%	21	81%	6	23%	21	81%	6	23%
	No Exam or Core Unknown	23	33%	18	78%	6	26%	19	83%	5	22%
	Total	69	100%	47	68%	14	20%	49	71%	12	17%
Kent State University, Geauga Campus	Core	37	41%	19	51%	5	14%	19	51%	5	14%
	No Core	32	36%	23	72%	5	16%	24	75%	4	13%
	No Exam or Core Unknown	21	23%	12	57%	4	19%	12	57%	4	19%
	Total	90	100%	54	60%	14	16%	55	61%	13	14%
Kent State University, Salem Campus	Core	49	33%	29	59%	9	18%	30	61%	8	16%
	No Core	70	47%	56	80%	23	33%	58	83%	21	30%
	No Exam or Core Unknown	30	20%	25	83%	16	53%	27	90%	14	47%
	Total	149	100%	110	74%	48	32%	115	77%	43	29%
Kent State University, Stark Campus	Core	296	48%	140	47%	20	7%	143	48%	17	6%
	No Core	231	37%	146	63%	33	14%	151	65%	28	12%
	No Exam or Core Unknown	92	15%	56	61%	16	17%	58	63%	14	15%
	Total	619	100%	342	55%	69	11%	352	57%	59	10%
Kent State University, Trumbull Campus	Core	93	33%	51	55%	18	19%	57	61%	12	13%
	No Core	132	47%	85	64%	54	41%	94	71%	45	34%
	No Exam or Core Unknown	55	20%	36	65%	25	45%	40	73%	21	38%
	Total	280	100%	172	61%	97	35%	191	68%	78	28%
Kent State University, Tuscarawas Campus	Core	125	43%	59	47%	17	14%	62	50%	14	11%
	No Core	128	44%	93	73%	33	26%	97	76%	29	23%
	No Exam or Core Unknown	35	12%	25	71%	8	23%	27	77%	6	17%
	Total	288	100%	177	61%	58	20%	186	65%	49	17%
Miami University Main Campus	Core	1725	75%	11	1%	0	0%	11	1%	0	0%
	No Core	482	21%	7	1%	0	0%	7	1%	0	0%
	No Exam or Core Unknown	93	4%	3	3%	0	0%	3	3%	0	0%
	Total	2300	100%	21	1%	0	0%	21	1%	0	0%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

**University Main and Branch Campuses\* (Continued)**

**Academic Year 2001-2002**

Institution	First-Year Students Entering With:	Number Enrolled	% Enrolled	MATH REMEDIATION		ENGLISH REMEDIATION		MATH OR ENGLISH REMEDIATION		MATH AND ENGLISH REMEDIATION	
				# Taking	% Taking	# Taking	% Taking	# Taking	% Taking	# Taking	% Taking
Miami University, Hamilton Campus	Core	263	53%	137	52%	49	19%	147	56%	39	15%
	No Core	156	31%	99	63%	53	34%	107	69%	45	29%
	No Exam or Core Unknown	79	16%	63	80%	41	52%	67	85%	37	47%
	Total	498	100%	299	60%	143	29%	321	64%	121	24%
Miami University, Middletown Campus	Core	206	51%	109	53%	34	17%	116	56%	27	13%
	No Core	125	31%	81	65%	24	19%	83	66%	22	18%
	No Exam or Core Unknown	76	19%	39	51%	18	24%	42	55%	15	20%
	Total	407	100%	229	56%	76	19%	241	59%	64	16%
Ohio State University Main Campus	Core	3661	72%	133	4%	45	1%	153	4%	25	1%
	No Core	1153	23%	57	5%	22	2%	73	6%	6	1%
	No Exam or Core Unknown	247	5%	19	8%	5	2%	21	9%	3	1%
	Total	5061	100%	209	4%	72	1%	247	5%	34	1%
Ohio State University, Agricultural Technical Institute	Core	102	33%	8	8%	7	7%	14	14%	1	1%
	No Core	149	48%	14	9%	23	15%	36	24%	1	1%
	No Exam or Core Unknown	60	19%	7	12%	15	25%	19	32%	3	5%
	Total	311	100%	29	9%	45	14%	69	22%	5	2%
Ohio State University, Lima Campus	Core	185	53%	26	14%	15	8%	36	19%	5	3%
	No Core	138	39%	46	33%	18	13%	51	37%	13	9%
	No Exam or Core Unknown	27	8%	13	48%	7	26%	15	56%	5	19%
	Total	350	100%	85	24%	40	11%	102	29%	23	7%
Ohio State University, Mansfield Campus	Core	218	54%	45	21%	24	11%	58	27%	11	5%
	No Core	143	35%	54	38%	42	29%	71	50%	25	17%
	No Exam or Core Unknown	42	10%	19	45%	13	31%	24	57%	8	19%
	Total	403	100%	118	29%	79	20%	153	38%	44	11%
Ohio State University, Marion Campus	Core	172	48%	48	28%	26	15%	63	37%	11	6%
	No Core	130	37%	61	47%	35	27%	73	56%	23	18%
	No Exam or Core Unknown	53	15%	26	49%	8	15%	29	55%	5	9%
	Total	355	100%	135	38%	69	19%	165	46%	39	11%
Ohio State University, Newark Campus	Core	309	52%	65	21%	20	6%	76	25%	9	3%
	No Core	196	33%	83	42%	17	9%	90	46%	10	5%
	No Exam or Core Unknown	90	15%	35	39%	9	10%	40	44%	4	4%
	Total	595	100%	183	31%	46	8%	206	35%	23	4%
Ohio University Main Campus	Core	2177	70%	128	6%	0	0%	128	6%	0	0%
	No Core	757	24%	69	9%	0	0%	69	9%	0	0%
	No Exam or Core Unknown	174	6%	17	10%	0	0%	17	10%	0	0%
	Total	3108	100%	214	7%	0	0%	214	7%	0	0%
Ohio University, Chillicothe Campus	Core	90	39%	10	11%	11	12%	19	21%	2	2%
	No Core	104	46%	36	35%	18	17%	43	41%	11	11%
	No Exam or Core Unknown	34	15%	13	38%	10	29%	14	41%	9	26%
	Total	228	100%	59	26%	39	17%	76	33%	22	10%
Ohio University, Eastern Campus	Core	96	61%	17	18%	11	11%	24	25%	4	4%
	No Core	48	30%	24	50%	12	25%	25	52%	11	23%
	No Exam or Core Unknown	14	9%	6	43%	3	21%	7	50%	2	14%
	Total	158	100%	47	30%	26	16%	56	35%	17	11%
Ohio University, Lancaster	Core	131	49%	20	15%	48	37%	59	45%	9	7%
	No Core	90	33%	29	32%	39	43%	50	56%	18	20%
	No Exam or Core Unknown	48	18%	19	40%	18	38%	26	54%	11	23%
	Total	269	100%	68	25%	105	39%	135	50%	38	14%
Ohio University, Southern Campus	Core	49	32%	7	14%	9	18%	14	29%	2	4%
	No Core	64	42%	22	34%	23	36%	35	55%	10	16%
	No Exam or Core Unknown	38	25%	14	37%	13	34%	20	53%	7	18%
	Total	151	100%	43	28%	45	30%	69	46%	19	13%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

University Main and Branch Campuses\* (continued)

Academic Year 2001-2002

Institution	First-Year Students Entering With:	Number Enrolled	% Enrolled	MATH REMEDIATION		ENGLISH REMEDIATION		MATH OR ENGLISH REMEDIATION		MATH AND ENGLISH REMEDIATION	
				# Taking	% Taking	# Taking	% Taking	# Taking	% Taking	# Taking	% Taking
Ohio University, Zanesville Campus	Core	164	59%	15	9%	25	15%	35	21%	5	3%
	No Core	86	31%	33	38%	34	40%	50	58%	17	20%
	No Exam or Core Unknown	29	10%	6	21%	4	14%	9	31%	1	3%
	Total	279	100%	54	19%	63	23%	94	34%	23	8%
Shawnee State University	Core	235	46%	33	14%	42	18%	63	27%	12	5%
	No Core	175	34%	45	26%	52	30%	76	43%	21	12%
	No Exam or Core Unknown	102	20%	30	29%	49	48%	54	53%	25	25%
	Total	512	100%	108	21%	143	28%	193	38%	58	11%
University of Akron Main Campus	Core	1288	50%	169	13%	83	6%	213	17%	39	3%
	No Core	979	38%	397	41%	203	21%	454	46%	146	15%
	No Exam or Core Unknown	307	12%	129	42%	75	24%	147	48%	57	19%
	Total	2574	100%	695	27%	361	14%	814	32%	242	9%
University of Akron, Wayne Campus	Core	121	42%	16	13%	6	5%	20	17%	2	2%
	No Core	135	47%	51	38%	15	11%	56	41%	10	7%
	No Exam or Core Unknown	31	11%	13	42%	3	10%	15	48%	1	3%
	Total	287	100%	80	28%	24	8%	91	32%	13	5%
University of Cincinnati Main Campus	Core	1866	59%	270	14%	352	19%	456	24%	166	9%
	No Core	944	30%	268	28%	310	33%	398	42%	180	19%
	No Exam or Core Unknown	351	11%	129	37%	118	34%	170	48%	77	22%
	Total	3161	100%	667	21%	780	25%	1024	32%	423	13%
University of Cincinnati, Clermont Campus	Core	112	27%	31	28%	10	9%	36	32%	5	4%
	No Core	176	42%	83	47%	24	14%	93	53%	14	8%
	No Exam or Core Unknown	132	31%	61	46%	25	19%	70	53%	16	12%
	Total	420	100%	175	42%	59	14%	199	47%	35	8%
University of Cincinnati, Raymond Walters Campus	Core	183	37%	61	33%	36	20%	75	41%	22	12%
	No Core	153	31%	83	54%	45	29%	89	58%	39	25%
	No Exam or Core Unknown	161	32%	83	52%	66	41%	102	63%	47	29%
	Total	497	100%	227	46%	147	30%	266	54%	108	22%
University of Toledo	Core	1718	59%	372	22%	314	18%	534	31%	152	9%
	No Core	912	31%	384	42%	297	33%	477	52%	204	22%
	No Exam or Core Unknown	288	10%	130	45%	94	33%	160	56%	64	22%
	Total	2918	100%	886	30%	705	24%	1171	40%	420	14%
Wright State University Main Campus	Core	1162	55%	106	9%	178	15%	241	21%	43	4%
	No Core	637	30%	152	24%	127	20%	223	35%	56	9%
	No Exam or Core Unknown	306	15%	35	11%	41	13%	59	19%	17	6%
	Total	2105	100%	293	14%	346	16%	523	25%	116	6%
Wright State University, Lake Campus	Core	77	44%	0	0%	6	8%	6	8%	0	0%
	No Core	67	39%	2	3%	10	15%	10	15%	2	3%
	No Exam or Core Unknown	30	17%	3	10%	4	13%	5	17%	2	7%
	Total	174	100%	5	3%	20	11%	21	12%	4	2%
Youngstown State University	Core	778	49%	162	21%	235	30%	311	40%	86	11%
	No Core	650	41%	270	42%	289	44%	399	61%	160	25%
	No Exam or Core Unknown	173	11%	69	40%	77	45%	100	58%	46	27%
	Total	1601	100%	501	31%	601	38%	810	51%	292	18%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

\* Data come from ACT and SAT College Entrance Assessments completed by many high school students while in high school.

**Second Question:** What is the success of remedial coursework once it is passed?

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

**Statewide Answers:** While math is a more difficult subject, the remediation done in English is more effective in preparing students for advanced level coursework than it is in math.

There are two measures of success to consider when evaluating the impact of remedial coursework, once it has been passed. The first of these measures is the percentage of students who go on to take college level coursework in English or mathematics once they have passed their remedial coursework in the area. To answer this question, recent high school graduates (called traditional students in this report) taking college remedial coursework in fall 2000 were identified, and their subsequent pattern of taking college level coursework through spring 2002 in the area of their remediation (English or mathematics) was assessed. The percentage of students passing remedial coursework in English who go on to take college-level English courses is much higher than the percentage of students passing remedial mathematics who go on to take college-level mathematics courses.

**Percent of Fall 2000 Traditional, First-Year Students Taking Remedial Coursework who Continue with College Level Coursework in the Same Field at Least One Term after Fall 2000 through Spring 2002**

English	80%
Math	55%

The second measure of success to consider when evaluating the impact of remedial coursework is whether students who take and pass remedial coursework are able to pass subsequent college level coursework in the same area. To provide context in answering this second question, traditional, first-year students taking remedial coursework in fall 2000 were identified, and their success in college level coursework in the same area of remediation was assessed. A comparison group of traditional, first-year students that did not take remedial coursework in fall 2000 was also identified, and their ability to complete college level coursework was also measured. Students who take and pass remedial coursework in English or mathematics continue to exhibit poorer academic progress than do their peers who did not require remedial coursework. Furthermore, while 68% of students requiring remedial coursework in English go on to successfully complete all college level English courses, only 59% of students requiring remedial coursework in mathematics go on to successfully complete all college level mathematics courses

**Percent of Fall 2000 Traditional, First-Year Students who Successfully Complete All College Level Coursework in the Same Field through Spring 2002**

English	Non-Remedial Students	79%
	Students who took and passed remedial coursework	68%
Math	Non-Remedial Students	68%
	Students who took and passed remedial coursework	59%

**Sector Answers:** The percentage of students who successfully pass remedial coursework in English and then take college-level coursework in the same area is highest at university main campuses (86%). The percentage of students who successfully pass remedial coursework in mathematics and then take college-level coursework in the same area is highest at university main campuses (64%) and lowest at university branch campuses (46%).

**Percent of Fall 2000 Traditional, First-Year Students Taking Remedial Coursework who Continue with College Level Coursework in the Same Field at Least One Term after Fall 2000 through Spring 2002**

English	Community College	77%
	State Community College	77%
	Technical College	74%
	University Branch Campus	78%
	University Main Campus	86%
Math	Community College	56%
	State Community College	48%
	Technical College	61%
	University Branch Campus	46%
	University Main Campus	64%

**Percent of Fall 2000 First-Year Students who Successfully Complete All College Level Coursework in the Same Field through Spring 2002**

**English**

Community college	Remedial students	65%
	Non-remedial students	66%
State community college	Remedial students	62%
	Non-remedial students	67%
Technical college	Remedial students	64%
	Non-remedial students	65%
University branch campus	Remedial students	82%
	Non-remedial students	82%
University main campus	Remedial students	70%
	Non-remedial students	83%

**Mathematics**

Community college	Remedial students	54%
	Non-remedial students	57%
State community college	Remedial students	60%
	Non-remedial students	66%
Technical college	Remedial students	62%
	Non-remedial students	67%
University branch campus	Remedial students	69%
	Non-remedial students	69%
University main campus	Remedial students	56%
	Non-remedial students	69%

**Campus Answers:** Campus patterns of success for remediation vary greatly. The following charts combine the question of success as measured by percent of students going on to take college level coursework and the percent of students passing college level coursework.

### Community Colleges – English Remediation\*

	% of traditional, first-year remedial students who continue with college level coursework in the same field at least one term after fall 2000	Continuing with college level coursework in same field		Successful in all college level coursework in same field	
		# of remedial students	# of non-remedial students	Remedial Students	Non-remedial Students
Cuyahoga Community College, Eastern	65%	70	135	59%	59%
Cuyahoga Community College, Metro	73%	83	127	48%	52%
Cuyahoga Community College, Western	82%	333	825	63%	67%
Jefferson Community College	89%	58	129	84%	73%
Lakeland Community College	78%	60	951	73%	69%
Lorain County Community College	74%	128	711	58%	67%
Rio Grande Community College	83%	143	119	77%	84%
Sinclair Community College	74%	467	679	64%	60%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

### State Community Colleges – English Remediation\*

Cincinnati State Technical & Community College	78%	196	336	55%	59%
Clark State Community College	83%	55	214	69%	72%
Columbus State Community College	76%	382	1,450	58%	60%
Edison State Community College	78%	36	332	83%	91%
Northwest State Community College	65%	41	357	61%	73%
Owens State Community College, Findlay	83%	49	98	73%	64%
Owens State Community College, Toledo	79%	325	485	62%	65%
Southern State Community College, Central	58%	14	91	86%	81%
Southern State Community College, North	58%	11	75	64%	84%
Southern State Community College, South	100%	11	73	91%	86%
Terra State Community College	81%	42	287	62%	69%
Washington State Community College	88%	35	185	71%	72%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

### Technical Colleges – English Remediation\*

Belmont Technical College	68%	99	94	74%	78%
Central Ohio Technical College	74%	32	72	81%	94%
Hocking Technical College	90%	157	352	44%	31%
Marion Technical College	68%	13	54	77%	65%
Muskingum Area Technical College	74%	73	102	67%	56%
North Central State College	83%	64	169	63%	79%
James A. Rhodes State College	84%	27	222	74%	83%
Stark State College of Technology	54%	68	196	76%	83%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

**University Main and Branch Campuses – English Remediation\***

	% of traditional, first-year remedial students who continue with college level coursework in the same field at least one term after fall 2000	Continuing with college level coursework in same field		Successful in all college level coursework in same field	
		# of remedial students	# of non-remedial students	Remedial Students	Non-remedial Students
<b>Bowling Green State University Main</b>	93%	242	2,989	73%	67%
Bowling Green State University, Firelands	87%	27	179	63%	74%
<b>Cleveland State University</b>	77%	260	561	75%	85%
<b>Kent State University Main</b>	86%	214	2,791	87%	80%
Kent State University, Ashtabula	94%	30	150	67%	79%
Kent State University, East Liverpool	85%	17	70	76%	70%
Kent State University, Geauga	82%	9	82	89%	77%
Kent State University, Salem	75%	21	66	76%	77%
Kent State University, Stark	72%	42	497	71%	73%
Kent State University, Trumbull	85%	44	182	80%	82%
Kent State University, Tuscarawas	78%	40	253	70%	80%
<b>Miami University Main</b>	N/A				
Miami University, Hamilton	69%	101	348	95%	97%
Miami University, Middletown	77%	58	371	90%	98%
<b>Ohio State University Main</b>	90%	38	4,449	68%	92%
OSU, Agricultural Technical Institute	78%	28	258	86%	79%
Ohio State University, Lima	83%	19	297	74%	79%
Ohio State University, Mansfield	70%	63	322	89%	84%
Ohio State University, Marion	79%	38	162	95%	89%
Ohio State University, Newark	56%	14	531	86%	85%
<b>Ohio University Main</b>	N/A				
Ohio University, Chillicothe	86%	24	123	100%	89%
Ohio University, Eastern	94%	15	159	80%	94%
Ohio University, Lancaster	82%	67	175	96%	95%
Ohio University, Southern	76%	28	103	75%	83%
Ohio University, Zanesville	66%	35	198	91%	88%
<b>Shawnee State University</b>	85%	113	359	65%	69%
<b>University of Akron Main</b>	86%	213	1,985	77%	82%
University of Akron, Wayne	90%	27	213	85%	79%
<b>University of Cincinnati Main</b>	90%	485	2,478	47%	63%
University of Cincinnati, Clermont	80%	36	245	56%	58%
University of Cincinnati, Raymond Walters	89%	57	236	60%	56%
<b>University of Toledo</b>	77%	165	2,417	90%	83%
<b>Wright State University Main</b>	86%	323	1,261	75%	81%
Wright State University, Lake	88%	7	156	86%	92%
<b>Youngstown State University</b>	89%	387	989	68%	68%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

### Community Colleges – Mathematics Remediation\*

	% of traditional first-year remedial students who continue with college level coursework in the same field at least one term after fall 2000	Continuing with college level coursework in same field		Successful in all college level coursework in same field	
		# of remedial students	# of non-remedial students	Remedial Students	Non-remedial Students
Cuyahoga Community College, Eastern	36%	54	33	61%	79%
Cuyahoga Community College, Metro	28%	41	21	61%	57%
Cuyahoga Community College, Western	59%	364	139	55%	55%
Jefferson Community College	55%	52	61	79%	74%
Lakeland Community College	61%	141	342	67%	63%
Lorain County Community College	45%	108	304	56%	42%
Rio Grande Community College	60%	99	48	74%	83%
Sinclair Community College	68%	349	499	35%	56%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

### State Community Colleges – Mathematics Remediation\*

Cincinnati State Technical & Community College	66%	128	317	52%	51%
Clark State Community College	32%	18	56	61%	57%
Columbus State Community College	40%	406	295	64%	59%
Edison State Community College	32%	30	89	93%	91%
Northwest State Community College	37%	59	153	63%	66%
Owens State Community College, Findlay	49%	28	57	54%	74%
Owens State Community College, Toledo	62%	238	410	55%	67%
Southern State Community College, Central	53%	8	81	63%	63%
Southern State Community College, North	60%	6	57	83%	75%
Southern State Community College, South	83%	5	49	20%	84%
Terra State Community College	73%	44	212	64%	72%
Washington State Community College	78%	31	150	58%	75%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

### Technical Colleges – Mathematics Remediation\*

Belmont Technical College	60%	89	42	74%	83%
Central Ohio Technical College	56%	27	36	70%	89%
Hocking Technical College	62%	139	284	48%	47%
Marion Technical College	74%	14	51	64%	82%
Muskingum Area Technical College	83%	25	105	76%	64%
North Central State College	43%	13	131	77%	89%
James A. Rhodes State College	44%	35	78	63%	82%
Stark State College of Technology	73%	60	228	60%	64%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.

**University Main and Branch Campuses – Mathematics Remediation\***

	% of traditional first-year remedial students who continue with college level coursework in the same field at least one term after fall 2000	Continuing with college level coursework in same field		Successful in all college level coursework in same field	
		# of remedial students	# of non-remedial students	Remedial Students	Non-remedial Students
<b>Bowling Green State University Main</b>	74%	227	1,619	74%	69%
Bowling Green State University, Firelands	67%	52	50	90%	78%
<b>Cleveland State University</b>	67%	194	462	56%	73%
<b>Kent State University Main</b>	43%	427	1,329	59%	64%
Kent State University, Ashtabula	36%	30	34	37%	91%
Kent State University, East Liverpool	11%	<5	22		77%
Kent State University, Geauga	39%	17	37	65%	59%
Kent State University, Salem	43%	26	19	62%	84%
Kent State University, Stark	40%	89	156	43%	69%
Kent State University, Trumbull	54%	61	63	75%	70%
Kent State University, Tuscarawas	36%	42	99	79%	75%
<b>Miami University Main</b>	49%	21	1,953	95%	97%
Miami University, Hamilton	33%	92	101	97%	95%
Miami University, Middletown	37%	91	71	92%	99%
<b>Ohio State University Main</b>	88%	70	5,137	51%	63%
OSU, Agricultural Technical Institute	77%	10	256	40%	66%
Ohio State University, Lima	80%	32	246	59%	63%
Ohio State University, Mansfield	81%	63	264	62%	61%
Ohio State University, Marion	76%	47	172	62%	67%
Ohio State University, Newark	63%	41	438	56%	47%
<b>Ohio University Main</b>	81%	65	2,440	74%	82%
Ohio University, Chillicothe	60%	18	76	50%	62%
Ohio University, Eastern	63%	15	108	87%	81%
Ohio University, Lancaster	66%	37	203	65%	84%
Ohio University, Southern	53%	17	86	47%	81%
Ohio University, Zanesville	51%	26	178	58%	83%
<b>Shawnee State University</b>	83%	25	473	44%	60%
<b>University of Akron Main</b>	64%	226	1,521	42%	61%
University of Akron, Wayne	47%	19	154	63%	75%
<b>University of Cincinnati Main</b>	71%	410	1,912	45%	53%
University of Cincinnati, Clermont	30%	31	70	71%	66%
University of Cincinnati, Raymond Walters	45%	51	75	73%	56%
<b>University of Toledo</b>	70%	272	2,098	77%	77%
<b>Wright State University Main</b>	90%	171	1,568	25%	56%
Wright State University, Lake	100%	8	108	50%	76%
<b>Youngstown State University</b>	77%	78	995	53%	62%

\*Note: campus policies and procedures for determining remediation rates can and do vary by institution.