THE UNIVERSITY OF NORTH CAROLINA REMEDIAL/DEVELOPMENTAL ACTIVITIES REPORT, 2010-11



The University of North Carolina General Administration

April 2012

Preface

To improve the quality of the 2010-11 Remedial/Developmental Activities Report, it has been updated with the following:

- UNC adopted the common definition of remediation described in Appendix A. Historical remedial course, enrollment numbers, and remedial expenditure were not adjusted for the new definition.
- Guidelines were established in 2008 to ensure that the UNC Summer Bridge program excluded remedial courses. The previously reported expenditures for the Summer Bridge program were adjusted based on these guidelines for 2007-08 through 2009-10.
- The retention and graduation rates for students who took remedial courses are tracked for the first time and presented in this report.

Remedial/Developmental Activities in UNC Institutions

2010-11

Executive Summary

2010-11 Remedial/Developmental Activities and Expenditures

- In 2010-11, the annual unduplicated enrollment in remedial instruction was 4,635, a decrease of 894, or 16%, from the previous year.
- Total expenditures for remediation in 2010-11 were 8.5% lower than the previous year, \$2,445,367, compared with \$2,673,193 for 2009-10. Of the amount in 2010-11, 55%, or \$1,340,319, was spent on remedial courses.
- State funds provided \$2,046,182, or 84%, to the total amount expended for remediation. This amount represents less than one tenth of a percent, 0.06%, of the total system-wide state fund budget. Non-state funds provided an additional \$399,185 in remedial support.
- State funds dedicated to remediation are taken from the institution's instructional budgets and are not appropriated as a separate line item.
- Students who took only English remedial course(s) had the lowest retention rates, 71.2% compared with 83.1% for students who took no remedial courses.
- Students who took remedial course(s) had lower graduation rates. Nevertheless, a non-trivial percentage, 41%, of those who took any remedial course(s) do achieve their degree objectives in six years.

Long-term Trends in Remedial/Developmental Activities and Expenditures 1991-92 – 2010-11

- Expenditures for remedial education (in inflation-adjusted dollars) declined by 37%.
- Over the past nineteen years, total fall undergraduate enrollment increased by 44%.
- The sum of fall and spring duplicated enrollment in remedial instruction declined from 9,043 to 6,343 (30%).
- The sum of fall and spring unduplicated enrollment in remedial education declined from 7,802 to 4,635 (41%).
- The remediation rate of first-time freshmen who graduated from high school the previous year taking remedial education courses declined from 14.6% in 1993-94 (the earliest year with data available) to 8.4% in 2010-11.

Remedial/Developmental Instruction in UNC Institutions, 2010-11

Introduction

Remediation for UNC students responds to gaps in high school preparation and performance in order to ensure full opportunity for the success of the students in college. In many instances the instruction is developmental since the students may need to develop better learning skills as well as master content. Classroom remediation is only part of the effort on the campus, with other remedial/developmental activity unrelated to a specific course. A system-wide common definition is provided in Appendix A.

Placement in remedial classes is determined by the individual institutions. Remediation provides the set of educational activities that will best prepare a given student to be successful in achieving educational goals based on past experience with similarly qualified students. The campuses may use standardized or institutionally developed tests, records of high school performance, early-semester college course performance, or consultation with the student to arrive at their placement decision. Remedial/developmental instruction may take many forms, including specially scheduled classes, additional break-out sections, required or voluntary participation in skill labs, special tutorial sessions, and other activities felt to be appropriate to assist the student in achieving his or her educational goals. Remediation may be offered by university personnel or contracted with a local community college, where the instruction may be delivered either at the university or at the community college.

The method of delivery on remedial/developmental instruction is determined by each UNC constituent institution. Most often, remediation is provided to incoming freshmen in their first year of attendance at a UNC institution, but it may also be taken by transfer students and students continuing their studies after some lapse of time in postsecondary attendance.

The incidence of remediation is greater in the fall than in the spring, and traditionally greater in mathematics than in English. Remedial English courses emphasize a variety of reading, composition, grammar, and other skills. Remedial math traditionally constitutes the study of college algebra or a higher level of mathematics. Enrollments in remedial courses in addition to English and mathematics occur at North Carolina A&T State University, where remedial chemistry is offered, and at North Carolina Central University, where other (reading) remedial courses are offered through the School of Education.

Enrollment in remedial/developmental sections and scheduled support sections is counted in the student's course load, but not counted toward degree completion.

In this report, four measures of remediation are provided: course sections, enrollments (duplicated and unduplicated), expenditures for all remedial activities, and retention and graduation rates of first-time full-time fall freshmen who took remedial courses.

Remedial activities include more than remedial courses per se. Thus, total expenditures include both the costs of the actual course delivery and related student academic and other student support services. Remedial/developmental education enrollments include students receiving services offered by contract with the community colleges; however, expenditure data do not.

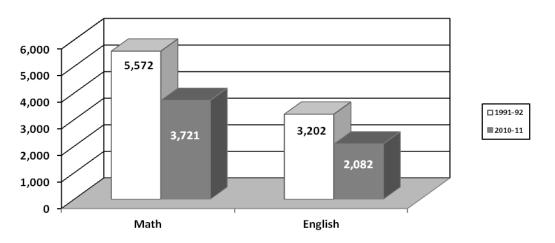
2010-11 Course Sections and Enrollments

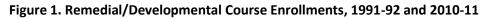
The data in Table 1 show that in fall 2010 ninety-two sections of remedial English, enrolling 1,734 students, and 85 sections of mathematics, enrolling 2,394 students, were offered university-wide. An additional 415 students enrolled in 21 sections of remedial chemistry and other remedial courses. In total, 198 sections of remedial/developmental instruction, with a combined (duplicated) enrollment of 4,543, were provided. Since 1,061 students took a remedial class in more than one discipline, the number of individual (unduplicated) students in remedial classes was 3,482 University-wide in the fall of 2010, down 875, or 20%, from the previous fall.

The data in Table 1 also show that in spring 2011, thirty-two sections of English were provided University-wide, with an enrollment of 348 students. In mathematics, 55 sections had an enrollment of 1,327 students, with six additional sections enrolling 125 students in remedial chemistry and other remedial courses. In total, during the spring semester, 93 sections of remedial instruction, with a combined (duplicated) enrollment of 1,800, were provided. Since 146 students took a remedial class in more than one discipline, the number of individual (unduplicated) students in remedial classes was 1,654 University-wide in spring 2011, down 164, or 9%, from the previous spring.

Enrollment Trends

The data in Figure 1 indicate that duplicated enrollment in both remedial/developmental mathematics and English instruction declined from 1991-92. Annual enrollment in remedial/developmental mathematics declined 33%, from 5,572 in 1991-92 to 3,721 in 2010-11. Annual enrollment in remedial/developmental English declined 35%, from 3,202 in 1991-92 to 2,082 in 2010-11.





As shown in Figure 2, enrollment in remedial/developmental mathematics decreased 19%, from 4,582 in 2009-10 to 3,721 in 2010-11. Furthermore, enrollment in remedial/developmental English decreased 8%, from 2,272 in 2009-10 to 2,082 in 2010-11.

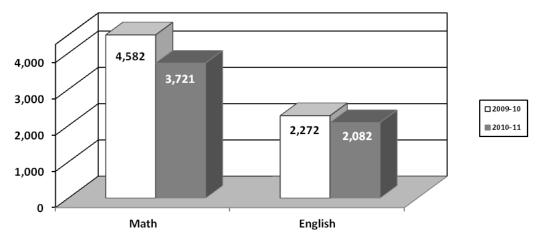


Figure 2. Remedial/Developmental Course Enrollments, 2009-10 and 2010-11

The data in Table 2 indicate that the unduplicated enrollment in all remedial courses during the last two decades was at a high in both the fall and spring semesters of 1991-92, with a fall enrollment of 5,280 and a spring enrollment of 2,522. The decline in remedial instruction since 1991-92 occurred at the same time that enrollments among total undergraduates, freshmen, and transfer students were increasing. For example, unduplicated enrollment in remedial instruction in fall 2010 was 66% of what it was in fall 1991, while total fall undergraduate enrollment increased by 44% during the same period, freshman enrollment increased by 54%, and the number of undergraduate transfers increased by 41%.

Expenditures

As shown in Table 3, the total expenditures for remedial instruction University-wide during 2010-11 was \$2,445,367, down 8.5%, or \$227,826, from the previous year. When adjusted for inflation (using the Consumer Price Index), the expenditure in 2010-11 was \$1,110,405, which is \$123,261 less than inflation-adjusted expenditures in 2009-10, and \$640,294 less than inflation-adjusted expenditures in 1991-92.

The data in Figure 3 show that the proportion of remedial expenditures spent on remedial courses has increased from 52% in 2009-10 to 55% in 2010-11. Other expenditures on remedial activities, such as skill labs and special services programs have decreased from the previous year.

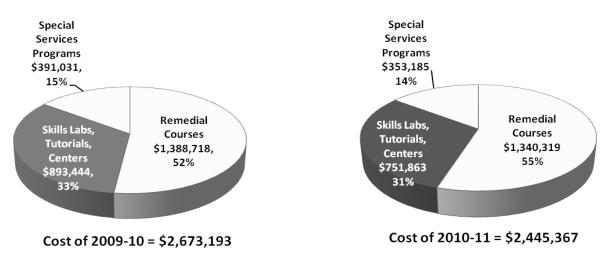


Figure 3. Remedial/Developmental Course Expenditures, 2009-10 and 2010-11

The funds that UNC campuses use to support remedial instruction are not received as a special appropriation. Rather, the campuses direct some of their general instructional funds to support this requirement. Moreover, the funds used to support remedial instruction come from both state and non-state sources. As Figure 4 shows, state funds used for remedial instruction in 2010-11 amounted to \$2,046,182 (or 84%) of total expenditures, while non-state funds provided an additional \$399,185 (or 16%).

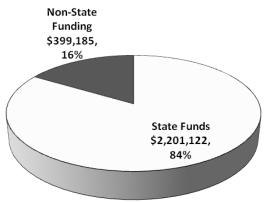


Figure 4. Distribution of Remedial/Developmental Expenditures by Source, 2010-11

Remedial/Developmental Activities Trend

The data in this report show that during the two decades under consideration there was a general decline in the number of sections of remedial instruction, unduplicated enrollment in remedial instruction, and both actual and inflation-adjusted expenditures for remedial instruction. As Figure 5 shows, since 1991-92 the fall unduplicated remedial enrollment has declined 34% and inflation-adjusted expenditures for remedial education have declined by 37%, while total fall undergraduate enrollment has increased by 44%.

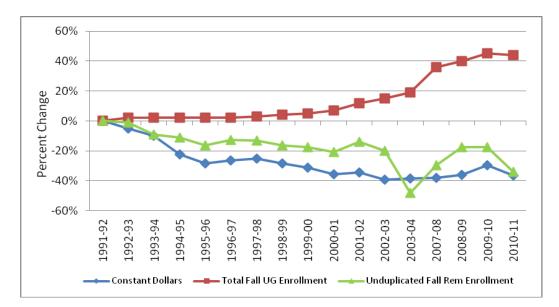


Figure 5. Percentage of Change in Fall Unduplicated Remedial/Developmental Instruction Enrollments and Inflation-Adjusted Expenditures on Remedial/Developmental Instruction Compared with Fall Undergraduate Enrollments, 1991-92 to 2010-11. (Note: 2004-05 through 2006-07 are not represented.)

Retention and Graduation Rates

In order to measure the success of those who took remedial courses, the retention and graduation rates of first-time full-time freshmen who took remedial course(s) are tracked. Data in Table 4 show the retention and graduation rates of those who took remedial math only, remedial English only, both remedial math and remedial English, or any remedial course(s). The rates for all first-time full-time freshmen and those who did not take any remedial courses are also provided for comparison purpose.

As shown in Figure 6, those who took only remedial English tended to have the lowest retention rate, followed by those who took both remedial math and English. Among all of these first-time full-time freshmen who took remedial courses, those who took only remedial math tended to have the highest retention rate. As expected, those first-time full-time freshmen who did not take any remedial courses had the highest retention rate over the years.

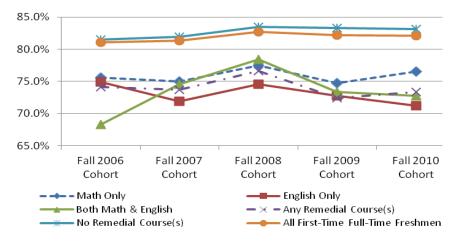


Figure 6. Retention Rate of First-Time Full-Time Freshmen Who Took Remedial Course(s)

When 6-year graduation rates were examined, those who took both remedial math and English had the lowest rate, followed by those who took English only. Among all of these first-time full-time freshmen who took remedial courses, those who took remedial math only had the highest 6-year graduation rate. As expected, those first-time full-time freshmen who did not take any remedial courses had the highest 6-year graduation rate over the years (Figure 7).

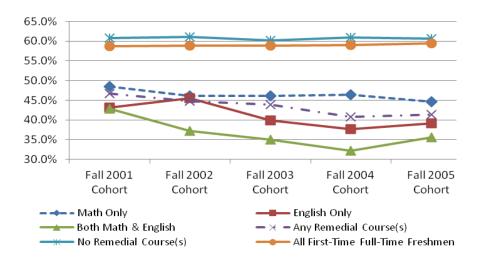


Figure 7. Six-Year Graduation Rate of First-Time Full-Time Freshmen Who Took Remedial Course(s)

Although there is a higher need for remedial math than for remedial English, the need for English remediation appears to more strongly impact retention and graduation rates than math. The reasons for this are unclear. It could be that we have made more progress in creating effective remedial math courses/pedagogies. Future research is needed in this area. While remedial students do have lower retention and graduation rates, a non-trivial percentage (41%) do achieve their degree objectives in six years from their initial entering institution. An additional 3% graduated from another UNC institution within six years.

Table 1. Summary Report on UNC Remedial/Developmental Course Enrollment by Institution Fall 2010 and Spring 2011

		English			Mathematics			Other			Total		
		No. of	Credit		No. of	Credit		No. of	Credit		No. of	Duplicated	Unduplicate
nstitution	Term	Sections	Given	Enrollment	Sections	Given	Enrollment	Sections	Given	Enrollment	Sections	Enrollment	Enrollment
ASU	Fall 2010	2	3	8	4	3	97	n/a	n/a	n/a	6	105	105
	Spring 2011	1	3	8	2	3	69	n/a	n/a	n/a	3	77	76
												182	174
ECU ¹	Fall 2010	0	0	0	18	2	449	n/a	n/a	n/a	18	449	449
	Spring 2011	0	0	0	15	2	318	n/a	n/a	n/a	15	318	318
												767	719
ECSU	Fall 2010	13	2	388	9	3	337	n/a	n/a	n/a	22	725	444
	Spring 2011	5	2	57	2	3	49	n/a	n/a	n/a	7	106	85
					_			_				831	484
FSU	Fall 2010	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
	Spring 2011	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
NCA&T	Fall 2010	28	2,3	570	22	3	542	1	3	24	51	1,136	851
	Spring 2011	11	2,3	144	6	3	153	1	3	24	18	321	278
					_							1,457	1,001
NCCU	Fall 2010	14	3	263	24	3	787	20	1	391	58	1,441	1,057
	Spring 2011	4	3	56	15	3	464	5	1	101	24	621 2,062	560 1,388
	5 11 2010	<u>^</u>	<u>^</u>	0	-		50	· · ·	,	1	_		
NCSU	Fall 2010 Spring 2011	0 0	0 0	0 0	2 2	4 4	52 23	n/a n/a	n/a n/a	n/a n/a	2	52 23	52 23
	Shiilig 2011	0	0	U	2	4	25	li/d	II/d	II/d	2	23 75	25 75
UNCA	Fall 2010	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
UNCA	Spring 2011	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
UNC-CH	Fall 2010	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
	Spring 2011	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
											-		
UNCC ²	Fall 2010 Spring 2011	0 0	0 0	0 0	0 9	0 2	0 205	n/a n/a	n/a n/a	n/a n/a	0 9	0 205	0 205
	Spring 2011	0	0	0	5	Z	205	ny a	ny a	ny a	3	205	205
UNCG	Fall 2010	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
oned	Spring 2011	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
UNCP	Fall 2010	17	3	203	1	3	31	n/a	n/a	n/a	18	234	225
oner	Spring 2011	4	3	28	1	3	15	n/a	n/a	n/a	5	43	42
	1 0											277	248
UNCW	Fall 2009	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
	Spring 2010	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
UNCSA	Fall 2010	1	0	2	0	0	0	n/a	n/a	n/a	1	2	2
	Spring 2011	1	0	3	0	0	0	n/a	n/a	n/a	1	3	3
												5	3
WCU	Fall 2010	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
	Spring 2011	0	0	0	0	0	0	n/a	n/a	n/a	0	0	0
WSSU	Fall 2010	17	3	300	5	3	99	n/a	n/a	n/a	22	399	297
	Spring 2011	6	3	52	3	3	31	n/a	n/a	n/a	9	83	64
												482	338
UNC Total	Fall 2010	92		1,734	85		2,394	21		415	198	4,543	3,482
	Spring 2011	32		348	55		1,327	6		125	93	1,800	1,654
												6,343	4,635

Source: RemEd.PR002 Notes: 1. ECU con

1. ECU contracts with Pitt Community College to offer remedial/developmental mathematics instruction.

2. Math0900 is a 3 hour contact course in which only one hour of credit is given that counts towards graduation.

	Undupl	icated Enrollmen	t in Remed	lial Courses &							
	Support Services				Fall Undergraduate Enrollment						
	Fall		Spring		Total		First-Time Freshmen		Transfer		
Academic Year	Enroll.	% of Base Yr.	Enroll.	% of Base Yr.	Enroll.	% of Base Yr.	Enroll.	% of Base Yr.	Enroll.	% of Base Yr.	
1991-92	5,280	100%	2,522	100%	121,569	100%	20,467	100%	9 <i>,</i> 952	100%	
1992-93	5,226	99%	2,476	98%	124,047	102%	21,303	104%	10,006	101%	
1993-94	4,792	91%	1,871	74%	124,328	102%	21,309	104%	10,360	104%	
1994-95	4,692	89%	1,889	75%	124,366	102%	21,361	104%	10,386	104%	
1995-96	4,410	84%	1,858	74%	124,588	102%	21,950	107%	9,898	99%	
1996-97	4,609	87%	1,794	71%	123,574	102%	22,472	110%	9,774	98%	
1997-98	4,581	87%	1,912	76%	125,478	103%	23,206	113%	10,003	101%	
1998-99	4,425	84%	1,944	77%	125,860	104%	23,810	116%	9,438	95%	
1999-2000	4,350	82%	2,052	81%	127,083	105%	24,431	119%	9,273	93%	
2000-01	4,184	79%	1,952	77%	130,671	107%	25,067	122%	9,942	100%	
2001-02	4,541	86%	1,959	78%	135,567	112%	26,183	128%	10,463	105%	
2002-03	4,222	80%	1,681	67%	140,331	115%	26,684	130%	10,645	107%	
2003-04 ¹	2,742	52%	1,561	62%	145,153	119%	28,332	138%	11,160	112%	
2007-08	3,719	70%	1,428	57%	165,452	136%	31,638	155%	12,898	130%	
2008-09	4,350	82%	1,679	67%	170,472	140%	31,927	156%	13,025	131%	
2009-10	4,357	83%	1,818	72%	176,133	145%	32,149	157%	13,549	136%	
2010-11 ²	3,482	66%	1,654	66%	175,281	144%	31,553	154%	14,054	141%	

Table 2. Remedial/Developmental Trends in the University of North Carolina, 1991-92 through 2010-11

UNC-GA IRA/RemEd.TT006B.U/2-21-12

1. There is no report for 2004-05 through 2006-07.

2. Definition of remedial education and remedial expenditure were modified in 2011.

		Total Expenditures on Remedial Activity						
	Cur	rent	Constant ¹					
Academic Year	Current \$	% of Base Yr.	Constant \$	% of Base Yr.				
1991-92	\$2,417,716	100%	1,750,699	100%				
1992-93	\$2,367,339	98%	1,660,126	95%				
1993-94	\$2,302,180	95%	1,574,679	90%				
1994-95	\$2,040,909	84%	1,357,890	78%				
1995-96	\$1,940,850	80%	1,257,027	72%				
1996-97	\$2,054,689	85%	1,291,445	74%				
1997-98	\$2,120,649	88%	1,312,283	75%				
1998-99	\$2,062,922	85%	1,255,582	72%				
1999-2000	\$2,030,311	84%	1,202,791	69%				
2000-01	\$1,973,917	82%	1,127,308	64%				
2001-02	\$2,030,929	84%	1,146,770	66%				
2002-03	\$1,929,178	80%	1,061,738	61%				
2003-04 ²	\$2,000,206	83%	1,080,025	62%				
2007-08 ³	\$2,285,970	95%	1,082,987	62%				
2008-09	\$2,369,817	98%	1,122,375	64%				
2009-10	\$2,673,193	111%	1,233,666	70%				
2010-11 ⁴	\$2,445,367	101%	1,110,405	63%				

Table 3. Remedial/Developmental Expenditure Trends in UNC1991-92 through 2010-11

UNC-GA IRA/RemEd.TT006B.U/4-4-12

- 1. Consumer Price Index for Urban Consumers- January value of 1982-84.
- 2. There is no report for 2004-05 through 2006-07.
- 3. The "no remediation" guideline was established in 2008 to the UNC Summer Bridge program. Adjustments were made to the cost of the Summer Bridge program previously reported by campuses in this table for 2007-08 through 2009-10.

4. Definition of remedial education and remedial expenditure were modified in 2011.

	Took Remedial Course(s)					All First-Time
		English	Both Math &	Any Remedial	No Remedial	Full-Time
	Math Only	Only	English	Course(s)	Course(s)	Freshmen
Origial Institution	•	•				
Retention Rate						
Fall 2006 Cohort	75.6%	74.9%	68.3%	74.1%	81.5%	81.1%
Fall 2007 Cohort	75.0%	71.9%	74.6%	73.7%	81.9%	81.3%
Fall 2008 Cohort	77.5%	74.6%	78.4%	76.6%	83.5%	82.7%
Fall 2009 Cohort	74.7%	72.8%	73.4%	72.4%	83.3%	82.2%
Fall 2010 Cohort	76.5%	71.2%	72.8%	73.4%	83.1%	82.1%
4-Year Graduation Rate						
Fall 2003 Cohort	18.4%	13.1%	13.3%	17.2%	36.5%	34.9%
Fall 2004 Cohort	21.2%	10.6%	9.3%	15.9%	37.0%	35.0%
Fall 2005 Cohort	19.6%	11.3%	7.7%	14.9%	36.6%	35.2%
Fall 2006 Cohort	18.2%	12.0%	6.3%	14.4%	37.4%	36.1%
Fall 2007 Cohort	18.9%	13.8%	11.4%	16.0%	38.9%	37.4%
6-year Graduation Rate						
Fall 2001 Cohort	48.5%	43.2%	42.9%	46.7%	60.7%	58.7%
Fall 2002 Cohort	46.1%	45.5%	37.2%	44.8%	61.1%	58.8%
Fall 2003 Cohort	46.1%	39.9%	35.0%	43.9%	60.2%	58.8%
Fall 2004 Cohort	46.4%	37.7%	32.2%	40.7%	60.9%	59.0%
Fall 2005 Cohort	44.6%	39.2%	35.5%	41.4%	60.6%	59.4%
Any UNC Institution						
Retention Rate						
Fall 2006 Cohort	78.2%	77.4%	70.7%	76.6%	84.4%	84.0%
Fall 2007 Cohort	77.2%	75.3%	76.3%	76.2%	84.8%	84.2%
Fall 2008 Cohort	79.9%	77.9%	80.1%	79.4%	86.4%	85.6%
Fall 2009 Cohort	77.0%	75.4%	75.5%	75.1%	86.3%	85.1%
Fall 2010 Cohort	78.6%	73.5%	73.9%	75.6%	85.7%	84.7%
4-Year Graduation Rate						
Fall 2003 Cohort	19.1%	13.4%	13.7%	18.0%	38.0%	36.3%
Fall 2004 Cohort	21.8%	11.0%	9.3%	16.4%	38.6%	36.6%
Fall 2005 Cohort	19.9%	12.3%	7.7%	15.4%	38.1%	36.7%
Fall 2006 Cohort	18.9%	12.8%	6.3%	15.1%	38.8%	37.5%
Fall 2007 Cohort	19.7%	14.7%	11.9%	16.8%	40.4%	38.8%
6-year Graduation Rate						
Fall 2001 Cohort	52.4%	45.5%	45.0%	50.1%	65.6%	63.4%
Fall 2002 Cohort	50.1%	47.9%	39.8%	48.3%	66.0%	63.5%
Fall 2003 Cohort	49.2%	42.8%	36.9%	46.8%	65.0%	63.4%
Fall 2004 Cohort	49.5%	40.9%	33.9%	43.6%	65.6%	63.5%
Fall 2005 Cohort	47.1%	42.5%	38.2%	44.4%	65.3%	64.0%

Table 4. Retention and Graduation Rates of First-Time Full-Time Freshmen Who Took Remedial Course(s)

UNC-GA IRA/RemEd.UT001/3-13-12

Source: Persist.ER001

Note: Any remedial course(s) refer to remedial math, English, both math and English, and/or remedial other.

Appendix A

Note on the 2012 Remedial/Developmental Activities Report

Covering the 2010-11 Academic Year

The need for remedial instruction has been defined, determined, and delivered as defined at the institutional level since the inception of this report. In order to create a University-wide definition of "remedial instruction" to be used when determining the extent of such instruction across UNC, the campus Chief Academic Officers and General Administration agreed in September 2011 to adopt a common definition for future reports. This University-wide definition consists of two parts:

- Remedial courses shall be defined as "courses in reading, writing, or mathematics for collegelevel students lacking those skills necessary to perform college-level work at the level required by the institution. Students participating in remedial education while in college may not earn credit toward their degrees by completion of these courses." (Note: Courses in other disciplines, such as chemistry, that are classified as remedial by a campus should be reported as remedial education courses.)
- In addition to "remedial courses," there are related services such as academic skill labs, tutorials, learning assistance centers, and special services programs. Only those services that are provided exclusively for the purposes of supporting students needing remediation shall be included in cost summaries. Support services provided to any student are excluded. For example:
 - Excluded is the cost of student advising, placement testing, and tutoring that are provided to undergraduates generally.
 - Included would be the cost of any additional advising and testing services provided only to students needing remedial assistance.
 - Salaries of regular administrators such as vice chancellors, deans, and directors are excluded unless they have direct responsibility for some aspect of remedial instruction or associated services.

This definition will guide the remedial instruction practice on campuses and the generation of the Remedial/Developmental Activities Report beginning with this 2012 report, which contains information on the 2010-11 academic year.