

The University of North Carolina

**Report on UNC Production
of Teacher Education Graduates
and Alternative Licensure Completers
2006-2007**

June 2008

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Introduction

The University of North Carolina has made important decisions in strengthening our commitment to prepare more and better teachers and school leaders for the public schools of North Carolina. While it is a combination of strategies that will move us closest to achieving this goal, central to the effort is our *Plan to Address the Shortage of Teachers in North Carolina*. This plan is a rolling five-year accountability plan developed in December 2004 for increasing the supply of teacher education graduates and alternative licensure completers UNC institutions produce. The base year for measuring increases in the productivity plan was established as 2002-03 because this was the most recent graduation and licensure completion data available at the time the plan was prepared.

An initial projection model, based on historical data, was developed to determine the annual need for new teachers in North Carolina (NC) based on current and future class sizes at various grade levels and the ratio of teachers to students in NC public schools. The model has been reviewed and updated this year to reflect actuals and adjustments in future projections. The model factors in growth, turnover, and changes in employment within public schools to project the number of new classroom teachers needed. The need ranged from 11,164 teachers in 2005-06 to 11,566 teachers in 2010-2011. The revised model projects that by 2014-2015 NC will need more than 13,000 new teachers.

Within the accountability plan, traditional teacher education graduates and individuals completing an alternative path to licensure are tracked separately. The term “alternative completer” is used to describe individuals who already hold a baccalaureate degree and are enrolled in an alternative preparation program and also those individuals who complete all requirements from a university-based program of study so they can be recommended for licensure to the North Carolina Department of Public Instruction. Traditional graduates are individuals enrolled in a regular undergraduate teacher education program seeking a bachelor’s degree and meeting the minimum state and campus requirements to be recommendation for teacher licensure.

The Department of Public Instruction (DPI) has identified four high-need licensure areas – mathematic education, science education, middle grades education, and special education. The decision was made to track these high need licensure areas in addition to the overall production of teacher education graduates and alternative licensure completers at the system and campus levels. Initial projections for teachers needed in high need areas have been established this year for campus enrollment planning purposes. Campuses have been asked to establish strategies for recruitment and focused growth in these high need areas.

The data for monitoring enrollment and graduation from teacher education programs, and for monitoring enrollment in and completion of alternative entry programs were less than optimal at

the beginning of the project. Significant improvements in understanding and defining the data have occurred through UNC General Administration and with the Institutional Research offices on all campuses. Data improvements are now coordinated with UNC Teacher Education Programs (including the Teacher Licensure Offices), Institutional Research, and Enrollment/Admissions.

UNC teacher education programs vary widely from campus to campus, particularly in the degree programs offered, size of the programs, and the areas of licensure for which they are approved by DPI to offer. It is important to understand in reviewing this report that campuses are at different places with varying capacities to increase productivity of teacher education graduates and alternative licensure completers.

While the initial accountability plan was established prior to an opportunity to assess the recruitment capacity for bring more people into teacher education, the University of North Carolina has since initiated a system-wide teacher recruitment effort to assist campuses in meeting the targets incorporated in the accountability plan. Results from market research conducted by Noel-Levitz and a coordinated system-wide planning effort have been used to identify critical strategies for inclusion in a comprehensive plan for teacher recruitment. Each UNC institution has prepared a campus-based plan that is aligned to the overarching system recruitment plan and also aligned to the enrollment growth targets for their respective campus. Additionally, the General Assembly took positive action in its 2007-09 expansion budget and funded the University's request for teacher recruitment support. Major new teacher recruitment efforts have begun on UNC campuses this year as a result of this support. The UNC Teacher Recruitment Initiative has significantly assisted the campuses in addressing their goals to increase the supply of new teachers available to address the State's needs.

Growth in Traditional Teacher Education Graduates

UNC teacher education programs increased the number of traditional teacher education graduates by 611 between 2002-03 and 2006-07. This is a 30.34% increase over four years (see Table 1). All but four institutions have increased their traditional undergraduate productivity. The largest campus increases are at UNCG (151), ECU (118), ASU (81), NCSU (74), and UNCC (61) all increasing by more than 50 graduates. ECU produced the most traditional teacher education graduates in 2006-07 at 472, with ASU (449), UNCG (369), UNCW (299), and UNCC (274) also producing a significant number.

Another measure of growth is the percentage of increase over the base year which varies widely by campus, reflecting the starting point and the campuses' capacity to rapidly increase enrollment and the number of graduates. By this measure, three campuses (WSSU, UNCG, and NCSU) have all experienced significant growth in productivity of traditional graduates from 2002-2003 to 2006-2007.

Table 1. Traditional Teacher Education Graduates: 2002-2007				
Campus	Base Year 2002-2003	2006-2007	Change Headcount	% Change
ASU	368	449	81	22.01
ECU	354	472	118	33.33
ECSU	28	27	-1	-3.57
FSU	73	73	0	0
NCA&T	39	37	-2	-5.13
NCCU	53	71	18	33.96
NCSU	115	189	74	64.35
UNCA	27	28	1	3.70
UNC-CH	83	78	-5	-6.02
UNCC	213	274	61	28.64
UNCG	218	369	151	69.27
UNCP	78	99	21	26.92
UNCW	252	299	47	18.65
WCU	111	136	25	22.52
WSSU	2	24	22	1,100.00
UNC Total	2,014	2625	611	30.34%

Campus Productivity Goals and Traditional Graduates of Teacher Education Programs

Productivity goals for increasing the number of teacher education graduates were established in consultation with the Provosts and Deans of Education on each campus. Adjustments were made in the first year of measure up (2005-06) after close analysis and discussion identified an inflated baseline (2002-03) being reported 299 above the number of actual teacher education graduates. (See Appendix A).

Table 2. Targets and Graduates of Traditional Teacher Education Programs: 2006-2007				
	Original Target 2006-2007	Actual 2006-2007	Above/ Below Target	% Above/ Below
UNC Totals	2,957	2,625	-332	-11.23%
	Adjusted Target 2006-2007	Actual 2006-2007	Above/ Below Target	% Above/ Below
UNC Totals	2838	2,625	-213	-7.51%
	Planned Increase by 2006-2007	Actual Increase by 2006-07	Above/ Below Planned	% Above/ Below
UNC Totals	644	611	-33	-5.12%

The planned targets are displayed in three ways: against the original targets, against as adjustment of the targets to reflect the correction of the base for 2002-03, and in terms of the planned number of additional teachers that would be produced by 2006-07.

UNC fell 332 students or 11.23% below the planned targets (see Table 2), but if the targets are adjusted to reflect the adjustment of the base, the number of teacher education graduates is 213 below the target. In addition, while UNC initially planned to add 644 more traditional teacher education graduates only 611 were added by 2006-07.

Alternative Completers and MAT/M.Ed Graduates Obtaining Initial Licensure

Alternative licensure completers represent another source of teachers in North Carolina. Typically, these individuals have a baccalaureate degree and are completing the required licensure requirements to become a fully licensed teacher. School districts in North Carolina can hire teachers who have not met the State's licensure requirements. The North Carolina Department of Public Instruction allows these lateral entry teachers three years to complete all the work needed to fully meet the requirements. UNC teacher education programs write programs of study and enroll students to complete university-based alternative licensure programs. Similarly, the NC Department of Public Instruction (NCDPI) Regional Alternative Licensure Centers (RALC) also prepare programs of study in order to qualify lateral entry teachers for licensure in a particular field. The UNC General Administration tracks students enrolled in university-based alternative preparation programs on UNC campuses and other programs like MAT and M.Ed. graduate programs that prepare initially licensed teachers. This year UNC General Administration obtained data from NCDPI on individuals recommended for licensure through a Regional Alternative Licensing Center. The data was run against UNC institutional data files to determine the total head count and credit hours taken by these individuals at UNC institutions. UNC institutions count only the teacher productivity of individuals recommended for a license by a UNC teacher education program. However, UNC campuses spend a significant amount of time and effort in offering coursework to individuals completing licensure requirements through a RALC and ultimately being recommended for full licensure by a RALC.

Table 3 displays university-based alternative completers and MAT/M.Ed. initial licensure completers for 2006-07. A total of 1,378 of these individuals completed a university-based program and were recommended by a UNC institution for licensure. Of these, 333 were in graduate programs that offer an initial licensure track on the way to completing the degree. It is important to note that not all UNC campuses have an approved graduate degree program such as an MAT or M.Ed. Leading all campuses in alternative program completers were UNCC (321) and ECU (264). Other campuses producing over 100 alternative completers were NCSU (131) and UNC-G (123).

Campus	Alternative Completers	MAT/M.Ed Completers	Total
ASU	16		16
ECU	212	53	265
ECSU	23		23
FSU	60	0	60
NCA&T	50		50
NCCU	52	18	70
NCSU	131		131
UNCA	38		38
UNC-CH	30	67	97
UNCC	234	87	321
UNCG	85	38	123
UNCP	43	11	54
UNCW	40	15	55
WCU	26	44	70
WSSU	5		5
UNC Total	1045	333	1378

It has been very difficult to establish a relationship between the number of alternative entry students enrolled and the number completing programs on an annual basis. This is partially

Table 4. Total Headcount & Credit Hours Taken at UNC Institutions by Students Recommended for Licensure by a RALC: 2006-2007

Campus	Headcount	Credit Hours
ASU	61	726
ECU	143	1134
ECSU	20	101
FSU	91	852
NCA&T	46	287
NCCU	58	416
NCSU	50	368
UNCA	10	46
UNC-CH	24	315
UNCC	163	1049
UNCG	57	488
UNCP	130	950
UNCW	13	115
WCU	42	300
WSSU	17	86
UNC Total	925	7233

because programs of study for alternative students vary in the number of credit hours needed based on an individual's prior coursework and degree program. The other complicating issue is an increase in the number of RALC students taking coursework at UNC institutions that are registered as unclassified students in the institutional data system. These individuals, because of their affiliation with the RALC, are not enrolled in a university-based alternative program and consequently are recommended for teacher licensure by a RALC. As a result of this phenomenon, many UNC institutions have experienced a significant increase in headcount and enrollments of alternative route candidates, but a declining completion rate of alternative completers recommended for licensure by the institution. UNC institutions offered a total of 7,233 credit hours to students completing coursework for their RALC plan of study (see Table 4). This represents a total headcount of 925 and an unduplicated headcount of 859 students.

Overall Campus Productivity: Traditional Graduates, Alternative Completers, and MAT/M.Ed Graduates Obtaining Initial Licensure

When traditional graduates from teacher education programs are combined with alternative licensure completers, and graduates from MAT/M.Ed obtaining initial licensure programs, UNC institutions collectively produced a grand total of 4,003 graduates and licensure completers (see Table 5). Productivity varied widely across the campuses in 2006-07. Leading all UNC campuses in overall teacher productivity was ECU with a combined total of 737. One other campus's productivity exceeded 500; UNCC (595). Other institutions producing over 300 traditional graduates and alternative completers were UNCG (492), ASU (465), UNCW (354), and NCSU (320).

Table 5. Traditional Graduates, Alternative Completers, and MAT/M.Ed. Graduates: 2006-2007

Campus	Traditional Graduates	Alternative Completers	MAT/M.Ed Graduates	Total
ASU	449	16		465
ECU	472	212	53	737
ECSU	27	23		50
FSU	73	60	0	133
NCA&T	37	50		87
NCCU	71	52	18	141
NCSU	189	131		320
UNCA	28	38		66
UNC-CH	78	30	67	175
UNCC	274	234	87	595
UNCG	369	85	38	492
UNCP	99	43	11	153
UNCW	299	40	15	354
WCU	136	26	44	206
WSSU	24	5		29
UNC Total	2625	1045	333	4003

High-Need Licensure Areas

UNC campuses established productivity goals for high-need licensure areas and have focused not only on increasing the overall number of teacher education graduates and alternative completers but also the increase of prospective teachers who pursue high-need licensure areas as designated by DPI. Those high-need areas are mathematics education, science education, middle grades education, and special education. In middle grades education there is an overlap with individuals who have a concentration in mathematics or science. In the next four tables there will be some duplication to show graduates or completers in middle grades education that had a concentration in mathematics or science or both.

Tables 6-9 show the campus productivity in mathematics education, science education, middle grades education, and special education. Following those four tables, Table 10 shows the total non-duplicated number of high-need graduates and licensure completers produced. It is important to note that NCA&T does not offer Middle Grades licensure and UNCA does not offer special education licensure. Additionally, FSU, NCCU, and UNC-CH do not offer a special education degree program at the undergraduate level but do offer an alternative preparation track for special education licensure. MAT/M.Ed graduates completing licensure in these high-need areas have been included in the campus totals for alternative completers.

Campus	Traditional Secondary Mathematics (9-12)	Alternative Secondary Mathematics (9-12)	Traditional Middle Grades Mathematics (6-9)	Alternative Middle Grades Mathematics (6-9)	Traditional Combination Math & Science (6-9)	Alternative Combination Math & Science (6-9)	Total Mathematics Graduates & Completers
ASU	18	2	5	4	5	0	34
ECU	16	5	4	8	5	0	38
ECSU	1	0	0	0	1	1	3
FSU	3	2	2	3	0	0	10
NCA&T	4	1	0	0	0	0	5
NCCU	4	0	0	0	0	0	4
NCSU	35	6	5	3	3	0	52
UNCA	4	0	0	0	1	0	4
UNC-CH	0	13	4	5	4	0	26
UNCC	10	8	8	10	10	0	46
UNCG	6	1	0	2	0	0	9
UNCP	3	0	2	1	0	0	6
UNCW	12	1	2	4	3	2	24
WCU	6	0	0	2	5	0	13
WSSU	0	0	0	0	0	0	0
UNC Total	122	39	32	42	37	3	274

Mathematics Education

Overall, UNC institutions produced 274 mathematics education graduates or completers in 2006-07 (see Table 6). It should be noted that NCSU produced the most mathematics education graduates or completers (52), with UNCC (46), ECU (38), and ASU (34) not far behind.

¹ Institutional data files using certification flags for traditional graduates

² Includes licensure only, lateral entry, and MAT/M.Ed graduates receiving initial licensure

Table 7. UNC Traditional Undergraduate Degrees Conferred³ and Alternative⁴ Completers in Science Education: 2006-2007							
Campus	Traditional Secondary Science (9-12)	Alternative Secondary Science (9-12)	Traditional Middle Grades Science (6-9)	Alternative Middle Grades Science (6-9)	Traditional Combination Math & Science (6-9)	Alternative Combination Math & Science (6-9)	Total Science Graduates & Completers
ASU	3	0	4	3	5	0	15
ECU	9	13	2	14	5	0	43
ECSU	0	2	0	0	1	1	4
FSU	1	0	0	3	0	0	4
NCA&T	1	2	0	0	0	0	3
NCCU	0	1	0	2	0	0	3
NCSU	15	14	2	4	3	0	38
UNCA	2	3	0	0	1	0	6
UNC-CH	0	12	3	6	4	0	25
UNCC	2	9	2	1	10	0	24
UNCG	0	4	0	0	0	0	4
UNCP	2	1	1	1	0	0	5
UNCW	3	8	4	2	5	2	24
WCU	3	4	0	1	3	0	11
WSSU	0	0	0	0	0	0	0
UNC Total	41	73	18	37	37	3	209

Science Education

UNC institutions collectively produced 209 science education graduates or completers in 2006-07 (see Table 7), with ECU (43) preparing the most in science education. NCSU (38), UNC-CH (25), UNCC (24), and UNCW (24) also produced a significant number of graduates or completers with science licensure.

Middle Grades Education

In the area of middle grades education, UNC institutions produced 365 graduates or completers in 2006-07 (see Table 8). UNCC (63) and ECU (59) lead all campuses in producing middle grades education graduates and completers. They are followed by NCSU (45), ASU (35), and UNCW (31).

Table 8. Traditional Undergraduate Degrees Conferred⁵ and Alternative Completers⁶ in Middle Grades Education: 2006-2007			
Campus	Traditional Graduates	Alternative Completers	Total
ASU	27	8	35
ECU*	17	42	59
ECSU	1	1	2
FSU	6	17	23
NCA&T*			
NCCU	7	13	20
NCSU	34	11	45
UNCA	1	1	2
UNC-CH	13	15	28
UNCC	24	39	63
UNCG*	14	7	21
UNCP*	8	8	16
UNCW	20	11	31
WCU*	9	9	18
WSSU	2	0	2
UNC Total	183	182	365

³ Institutional data files using certification flags for traditional graduates

⁴ Includes licensure only, lateral entry, and MAT/M.Ed graduates receiving initial licensure

⁵ Institutional data files using certification flags for traditional graduates

⁶ Includes licensure only, lateral entry, and MAT/M.Ed graduates receiving initial licensure

Special Education

In special education, both general and adaptive licensure tracks, UNC institutions produced 366 graduates or completers in 2006-07 (see Table 9). ECU (82) lead all campuses, ahead of UNCC (62), UNCG (47), WCU (43), and ASU (30). Again, not all campuses are approved to offer teacher licensure in all identified high-need areas.

Campus	Traditional Graduates	Alternative Completers	Total
ASU	24	6	30
ECU	47	35	82
ECSU	3	2	5
FSU		23	23
NCA&T	1	10	11
NCCU		24	24
NCSU	0	0	0
UNCA			
UNC-CH		7	7
UNCC	21	41	62
UNCG	31	16	47
UNCP	10	2	12
UNCW	13	1	14
WCU	13	30	43
WSSU	6	0	6
UNC Total	169	197	366

Non-duplicated Traditional Graduates and Alternative Completers in High-Need Licensure Areas

UNC produced 1,006 traditional graduates and alternative licensure completers in 2006-07 in high-need licensure areas (see Table 10 below). This represents an increase of 132 more traditional graduates and alternative licensure completers overall, which is a 15% growth rate over the 2002-03 base year for the combined high-need areas (also see Table 11).

Area	Traditional Graduates	Alternative Completers	Total
Mathematics ⁷	173	83	256
Science ⁵	77	111	188
Middle Grades ⁸	96	100	196
Special Education	169	197	366
Total	515	419	1,006

2002-2003	2006-2007	Change	% Change
874	1,006	132	15%
* Math education, science education, middle grades education, special education			

⁷ Combination of mathematics and science equally divided between categories.

⁸ Middle Grades mathematics and science concentrations included in mathematics and science categories.

Support for New Teachers Once Employed

The Report made it very clear that the production of more teachers was only part of the solution to NC's teacher shortage. The other major factor was improving the retention of teachers employed in the public schools in NC. As the report showed, a 0.5% improvement in retention of teachers each year from 2004-05 through 2009-10 would result in reducing the need for new teachers for 2009-10 from 11,144 to 8,768. This would be accomplished if the turnover rate could be reduced from just under 13% to just under 10% which would require a half percent reduction each year.

A new effort to establish a plan of support for all new teacher education graduates and licensure completers has been initiated this year by the UNC Deans' Council on Teacher Education. We have a request for funding in the UNC Board of Governors' 2008-09 supplemental budget for this important component of our overarching plan.

The overarching goal of UNC's New Teacher Support efforts is to establish a formalized program of support for beginning teachers for all new graduates and licensure completers of UNC teacher education programs that is focused on retention and ensures these new teachers are supported, monitored, and mentored in the first three years of service until a continuing license is issued. The effort is being organized at the state level by the UNC General Administration and UNC Deans' Council on Teacher Education, in consultation with the NC Department of Public Instruction (NCDPI), and will be implemented at a regional/local level to assist school districts in hiring, retaining, and developing high quality teachers.

Conclusions and Next Steps

While it is a combination of recruitment, preparation and new teacher support strategies that will move us closest to realizing our goal, central to the effort is our *Plan to Address the Shortage of Teachers in North Carolina*. This plan is a rolling five-year accountability plan for increasing the supply of teachers UNC institutions produce. An analysis of data indicate that UNC's teacher education programs produce approximately 4,000 new teacher candidates each year; approximately 1,000 teachers are produced by private and independent colleges and universities in the State; about 3,500 teachers are recruited from out-of-state each year; 2,000-2,500 teachers return to teaching after having not taught the previous year; and the Visiting International Program provides 500-700 teachers each year. UNC plans to expand its targets so the state can reduce dependence on out-of-state teachers.

The campuses are in the process of setting expanded productivity goals for three additional years; 2010-2011 through 2012-2013 for overall traditional teacher education graduates, overall alternative licensure completers, and traditional and alternative goals for high need licensure areas. As we take action in expanding these goals, major attention must be given to preparing more teachers in mathematics, science, middle grades and special education. Moving forward with the accountability plan, education and arts & sciences academic units will have a shared responsibility for meeting the goals established for mathematics and science high need licensure areas, as well as a responsibility to assist in meeting the overall campus teacher productivity goals.

Appendix A

Correction of Base Year

Overall, several considerations led to inaccuracies in establishing the base year. Some flags in the data system were not set correctly for some campuses, and non-teacher education physical education majors were included in teacher education graduates on some campuses, particularly at UNC-CH and UNCW. In the case of WCU, they run a teacher education program for Jamaican students that is independent of their preparation of teachers for North Carolina.

Table 12. Difference of Actual Base Year Versus the Number in the Accountability Plan			
Campus	Actual in Base Year 2002-03	Number in Accountability Plan	Difference
ASU	368	372	-4
ECU	354	330	24
ECSU	28	26	2
FSU	73	65	8
NCA&T	39	60	-21
NCCU	53	74	-21
NCSU	115	133	-18
UNCA	27	27	0
UNC-CH	83	194	-111
UNCC	213	236	-23
UNCG	218	199	19
UNCP	78	84	-6
UNCW	252	314	-62
WCU	111	179	-68
WSSU	2	20	-18
UNC Total	2,014	2,313	-299