

y most accounts, North Carolina faces a pressing teacher supply and demand challenge—exacerbated by requirements in the federal No Child Left Behind Act that call for a fully qualified teacher in every classroom by the end of the 2005–06 school year. Given retirements, resignations, and growth in the school-age population, the state must hire about 10,000 teachers each year to staff its public school classrooms, or about 11 percent of its total teaching pool. Yet the state's public and private universities combined produced about 3,100 prospective teachers in 2003, and only 2,200 of these graduates were hired by local school districts.

That means the state also must rely on out-of-state hires and teachers entering the profession through lateral entry to bridge the shortfall. Slightly fewer than one in three new hires complete a traditional teacher education program in the state. A similar percentage of new hires enter through lateral entry, which requires less upfront teacher training, and slightly more than one-third of these come from out-of-state.

North Carolina schools started the 2003–04 school year with 742.5 vacancies out of some 86,000 positions. The turnover rate for 2002–03 was 12.44 percent—an improvement from recent years, and ranged from a staggering 27.6 percent in Hoke County to only 3.2 percent in Clay County.

Though the problem is not unique to North Carolina, the state does seem to suffer more than the nation as a whole. Since 2002, a faltering national economy and weak labor market made teaching a more attractive option for many college graduates, according to the American Federation of Teachers. Even so, there is a great demand for newly minted teachers. The National Education Association reports that 2.4 million teachers will be needed over the next 11 years. Class size reduction efforts across the nation—also one of Gov. Mike Easley's highest priorities in North Carolina—push that projection to as many as 2.7 million.

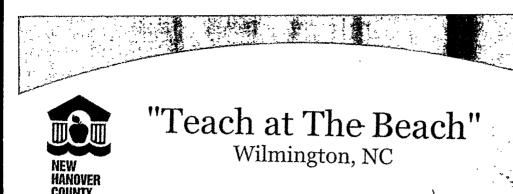
Teacher turnover is a great contributor to the supply and demand crunch. Nearly one in three new teachers leaves the profession after three years on the job, and about 40 percent leave after five years. One in two new teachers in urban districts leave in the first five years. And, only half of the estimated six million people in the United States with teaching credentials or background are teaching, the National Education Association reports.

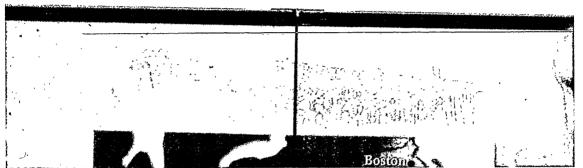
Why does all this matter? Experts say beginning teachers are less effective than those with a few years teaching under their belts. And, difficult-to-staff schools must rely more on beginning teachers. That means students who are already behind the learning curve must rely on inexperienced teachers to help them catch up.

Further, the shortage is so severe in some parts of North Carolina that finding a qualified teacher at all becomes a challenge. No one believes that starting the school year with a non-certified, long-term substitute is the best way to help students learn. Nor is a classroom staffed by a teacher working outside his or her field of certification a desirable option.

Proposed solutions to the teacher shortage problem vary widely. While some believe North Carolina universities and colleges should do more to attract potential teachers to pursue education degrees, others urge a more concentrated effort to retain teachers already in the pipeline. With the mean teacher salary at \$43,076 for 2002–2003, North Carolina ranks 22nd in the nation in pay. The national average was \$45,930. Local teacher pay supplements vary greatly across school districts—from zero in eight counties to an average of \$5,755 annually in the Chapel Hill-Carrboro schools, so pay is not uniform based on education and experience. Some say raising teacher salaries would dramatically reduce the teacher churn. Others say North Carolina needs to invest more in mentoring programs that support new teachers and ensure they stick it out when their expectations clash with the realities of the classroom. A study released by the University of North Carolina Board of Governors in March 2004 recommends a little of each to address the need for competent, qualified teachers in the state's public school classrooms. The recommendations include supply solutions such as increasing enrollment in teacher education programs, more scholarships, in-state tuition for lateral entry candidates, and making it more convenient to get a teaching degree through night and weekend classes, on-line lateral entry programs, and 2 + 2 degree completion community college programs. The recommendations also include retention solutions such as higher pay and steeper increases when teachers are early in their careers and more likely to quit.

Meanwhile, the North Carolina Center for Public Policy Research offers three recommendations. (1) The Governor should ask the Education Cabinet—comprised of the state's highest ranking officers in public education and public and private higher education—to make addressing the teacher shortage its number one priority, with a goal of incrementally increasing teacher production to at least 11,000 per year by 2010; (2) the State Board of Education should require teacher retention improvement plans for school systems with high teacher turnover; and (3) the State Board of Education should seek funds to help low-wealth counties with high teacher turnover and no or low local teacher salary supplements. All of these recommendations deserve serious consideration by the General Assembly as it contemplates how best to address a brewing crisis that could threaten the state's recent gains in improving public school performance.





aren Tam

wo weeks before the start of the 2002–2003 school started last year, retired teacher and administrator Irish Pickett, 63, ran into a principal at her local post office who faced a crisis. School was set to start in a handful of days, and the principal of West Hoke Elementary School still had to fill eight of 30 teaching spots.

The principal pleaded with Pickett, a 36-year education veteran, to return to the classroom. Pickett hated to think what would happen if she said no. "These children will not be able to achieve if they were exposed to subs coming in and out all year," she says. "They need certified teachers to succeed."

Pickett agreed to return as a fourth-grade teacher and she convinced one of her friends to take a spot in first grade. It marked the second time an anxious principal lured Pickett back to the classroom. She returned first in 2000, just one year after retirement, to work at Scurlock Elementary School in Hoke County. The principal called her two months into the school year and said there were four permanent spots open. Pickett stayed for two years.

Hoke County Schools—like others throughout North Carolina and the United States—struggles every year to fill a recurring gap fueled by teacher turnover, retirements, relocations, and burnout. Filling teaching positions is particularly difficult in Hoke County, plagued by the highest teacher turnover in the state and one of five low-wealth counties party to a lawsuit charging that the state fails to provide equal educational opportunities for its poor counties. But with its rapidly growing population, North Carolina routinely is named among the top states with the most pressing teacher supply and demand challenges. Educators say the challenge is exacerbated by requirements in the federal No Child Left Behind Act that call for a highly qualified teacher in every classroom by the end of the 2005–06 school year.³

North Carolina must hire about 10,000 teachers, or about 11 percent of its total teaching pool, each year.⁴ Yet, the state's public and private universities combined produced about 3,100 prospective teachers via the traditional teacher preparation route in 2003.⁵ Thus, the state relies on out-of-state hires and teachers from lateral entry programs to bridge the shortfall.

Dana Damico is a former capital correspondent for the Media General newspaper chain. Photos are by Karen Tam and were taken at a teacher recruitment fair in Chapel Hill, N.C.

The N.C. Department of Public Instruction says that slightly fewer than one in three new hires completed an approved teacher education program in the state. About the same percentage entered the profession through lateral entry, which requires less upfront teacher training, and slightly more than one-third of all new hires came from out-of-state.⁶

North Carolina schools started the 2003–04 school year with 742.5 vacancies out of some 86,000 positions.⁷ When the school year closes, history shows that many teachers won't return to the same position. The turnover rate for 2002–03 was 12.44 percent and ranged from 27.6 percent in Hoke County, where Pickett teaches, to 3.2 percent in Clay County.⁸ (See Table 1, pp. 7–10.)

The N.C. Education Research Council—a consortium of education researchers housed at the University of North Carolina's Center for School Leadership Development—reports that the annual turnover rate among North Carolina state employees during the same period was 15 percent. Among businesses nationwide, the turnover rate was 11 percent.⁹

A National Problem

Nationally, the help-wanted sign hangs outside most schools every year, creating a frustrating,

costly cycle of recruiting, training, and mentoring new teachers. National studies show that the strain has eased somewhat since the late-1990s when the market for college graduates was robust, student enrollments were increasing faster than current rates, and a large number of teachers reached retirement.

Since 2002, a faltering economy and weak labor market made teaching a more attractive option for many college graduates, according to the American Federation of Teachers. Still, the National Education Association reports that 2.4 million teachers will be needed over the next 11 years. 10 Class size reduction efforts push that projection to as many as 2.7 million.11 Governor Mike Easley has led the push for class size reduction in North Carolina, securing funding for class-size reduction to an 18:1 student-teacher ratio in kindergarten, 1st, and 2nd grades and adding 600 teachers to the state payroll despite a significant multi-year budget shortfall. The General Assembly's 2004-2005 budget includes \$51 million for class-size reduction to 18:1 in the third grade, creating demand for still more additional teachers.

Other factors contributing to the North Carolina teacher shortage problem are: (1) growth in the state's school-age population, which the State Data Center projects to increase from the 1.4 million counted in the 2000 U.S. Census (some 1.2 million



Table 1. Teacher Turnover by N.C. School System, 1998–2003

	System Name	Percent Turnover 1998–99	Percent Turnover 1999–00	Percent Turnover 2000–01	Percent Turnover 2001–02	Percent Turnover 2002–03	Av	Year erage ank ()*_
1.	Alamance County/ Burlington City	14.57	18.13	16.43	16.19	15.11	16.09	(26)
2.	Alexander County	8.31	12.58	13.48	17.65	10.93	12.59	(65)
3.	Alleghany County	7.26	8.73	5.60	2.99	9.09	6.73	(112)
4.	Anson County	13.69	23.10	13.68	13.27	10.14	14.78	(38)
5.	Ashe County	6.87	6.28	9.13	3.54	9.62	7.09	(111)
6.	Avery County	9.79	10.09	5.03	7.55	6.22	7.74	(106)
7.	Beaufort County	12.21	11.11	13.57	12.95	10.83	12.13	(74)
8.	Bertie County	18.06	12.72	14.98	20.34	7.69	14.76	(39)
9.	Bladen County	10.07	8.96	11.04	19.8	13.26	12.63	(63)
10.	Brunswick County	12.54	12.55	12.25	13.18	14.45	12.99	(60)
11.	Buncombe County	7.38	8.62	9.95	8.57	9.32	8.77	(103)
12.	Asheville City	12.49	15.38	16.58	13.54	13.38	14.27	(46)
13.	Burke County	16.07	14.81	14.33	13.63	14.73	14.71	(40)
14.	Cabarrus County	13.45	11.42	13.52	12.04	12.14	12.51	(66)
15.	Kannapolis City	19.50	18.49	18.30	14.20	12.57	16.61	(22)
16.	Caldwell County	11.26	12.80	14.89	7.56	12.66	11.83	(78)
17.	Camden County	5.62	14.77	15.22	6.25	7.00	9.77	(96)
18.	Carteret County	9.17	5.72	13.17	6.97	7.50	8.51	(104)
19.	Caswell County	14.29	11.90 -	16.30	13.89	14.34	14.14	(49)
20.	Catawba County	11.23	15.34	18.17	12.52	13.58	14.17	(48)
21.	Hickory City	21.14	19.12	19.00	16.62	14.24	18.02	(12)
22.	Newton-Conover City	18.63	18.57	17.27	17.59	16.81	17.77	(15)
23.	Chatham County	16.35	18.88	17.48	16.09	15.71	16.9	(19)
24.	Cherokee County**	2.02	7.94	4.59	9.67	5.35	5.91	(114)
25.	Chowan County/ Edenton City	13.33	16.40	13.89	13.89	13.89	14.28	(45)
26.	Clay County**	10.00	7.00	5.00	3.16	3.16	5.66	(115)
27.	Cleveland County	11.43	10.37	12.92	14.07	12.59	12.28	(70 tie)
28.	Kings Mountain City	11.43	9.46	10.44	11.41	5.84	9.72	(97)
29.	Shelby City	16.80	17.55	16.41	17.57	20.48	17.76	(16)
30.	Columbus County	13.50	9.98	8.58	6.49	8.13	9.34	(101)
31.	Whiteville City	8.78	11.06	9.09	11.27	10.47	10.13	(92)

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Table 1, continued

	System Name	Percent Turnover 1998–99	Percent Turnover 1999–00	Percent Turnover 2000–01	Percent Turnover 2001–02	Percent Turnover 2002-03	Ave	Year erage ank ()*
32.	Craven County	10.51	10.50	11.46	7.89	6.74	9.42	(100)
33.	Cumberland County	4.89	8.33	11.36	9.71	9.81	8.82	(102)
34.	Currituck County	7.27	9.71	15.07	14.29	5.08	10.28	(90)
35.	Dare County	12.64	8.24	11.11	9.09	8.79	9.97	(94)
36.	Davidson County	10.45	11.36	11.03	9.22	9.11	10.23	(91)
37.	Lexington City	21.40	20.44	18.72	16.25	13.25	18.01	(13)
38.	Thomasville City	12.90	16.67	18.52	18.18	21.14	17.48	(17)
39.	Davie County	11.95	13.22	12.98	13.53	16.10	13.56	(54)
40.	Duplin County	15.07	22.24	15.47	13.22	20.38	17.28	(18)
41.	Durham County	16.26	16.93	18.12	14.21	18.76	16.86	(20)
42.	Edgecombe County	17.12	24.22	23.36	20.04	18.33	20.61	(5)
43.	Forsyth County/ Winston-Salem City	12.26	14.17	13.47	10.19	9.73	11.96	(77)
44.	Franklin County	27.57	15.98	21.23	17.61	21.53	20.78	(4)
45.	Gaston County	11.78	13.81	10.53	9.04	10.03	11.04	(84)
46.	Gates County	6.80	7.36	10.26	5.99	7.10	7.50	(108)
47.	Graham County**	2.13	3.00	1.60	3.92	5.32	3.19	(117)
48.	Granville County	19.04	16.16	17.45	12.17	12.05	15.37	(30)
49.	Greene County	21.39	16.16	18.45	12.90	13.30	16.44	(24)
50.	Guilford County	11.81	12.29	9.77	10.06	9.95	10.78	(87)
51.	Halifax County	14.17	18.67	19.78	13.93	12.81	15.87	(27)
52.	Roanoke Rapids City	16.22	17.19	12.62	11.42	8.87	13.26	(57)
53.	Weldon City	25.00	21.18	20.45	22.34	18.28	21.45	(3)
54.	Harnett County	12.72	12.80	14.08	16.37	18.34	14.86	(36 tie)
55.	Haywood County	7.23	4.01	6.16	9.78	11.00	7.64	(107)
56.	Henderson County	9.74	11.07	11.27	8.76	6.32	9.43	(99)
57.	Hertford County	17.73	11.75	15.64	30.57	18.75	18.89	(9)
58.	Hoke County	24.52	28.21	23.55	23.43	27.59	25.46	(1)
59.	Hyde County	22.08	13.70	12.00	12.16	14.47	14.88	(35)
60.	Iredell County/ Statesville City	10.91	10.78	13.91	10.71	11.50	11.56	(80)
61.	Mooresville City	14.11	11.45	15.81	11.50	9.38	12.45	(68)
62.	Jackson County**	9.80	8.47	9.09	14.40	15.69	11.49	(81)

Table 1, continued

	System Name	Percent Turnover 1998–99	Percent Turnover 1999-00	Percent Turnover 2000-01	Percent Turnover 2001–02	Percent Turnover 2002–03	Av	Year erage ank ()*
63.	Johnston County	14.82	11.66	17.41	11.90	15.81	14.32	(44)
64.	Jones County	19.20	21.49	22.05	18.11	10.00	18.17	(11)
65.	Lee County	14.96	9.52	14.89	15.36	17.12	14.37	(43)
66.	Lenoir County	10.00	12.63	15.14	17.89	20.13	15.16	(32)
67.	Lincoln County	11.77	15.99	14.36	10.10	11.01	12.65	(62)
68.	Macon County**	5.71	8.02	4.73	9.43	8.31	7.24	(110)
69.	Madison County**	9.90	7.73	9.22	9.36	12.96	9.83	(95)
70.	Martin County	9.41	19.86	12.89	13.61	13.03	13.76	(52)
71.	McDowell County	6.90	12.00	13.57	13.46	8.39	10.86	(86)
72.	Mecklenburg County/ Charlotte City	19.18	19.44	21.77	19.31	16.73	19.29	(7)
73.	Mitchell County	4.71	5.75	6.92	5.63	9.20	6.44	(113)
74.	Montgomery County	10.75	17.83	19.44	16.67	18.05	16.55	(23)
75.	Moore County .	16.24	17.84	13.74	14.39	10.53	14.55	(41)
76.	Nash County/ Rocky Mount City	13.97	15.07	18.24	13.76	20.34	16.28	(25)
77.	New Hanover County	15.39	16.48	11.68	13.50	11.50	13.71	(53)
78.	Northampton County	17.19	13.81	17.33	24.71	16.78	17.96	(14)
79.	Onslow County	16.60	18.36	15.60	14.62	13.29	15.69	(29)
80.	Orange County	15.47	13.58	15.32	12.31	13.55	14.05	(50)
81.	Chapel Hill- Carrboro City	17.14	14.58	12.38	14.51	16.43	15.01	(34)
82.	Pamlico County	8.11	12.03	11.80	11.46	11.46	10.97	(85)
83.	Pasquotank County/ Elizabeth City	15.89	13.53	19.03	9.39	18.57	15.28	(31)
84.	Pender County	12.84	15.11	11.84	9.63	10.65	12.01	(75)
85.	Perquimans County	14.49	12.06	10.34	8.28	8.28	10.69	(88)
86.	Person County	19.00	19.45	21.26	20.96	12.97	18.73	(10)
87.	Pitt County	13.10	11.05	9.24	8.58	8.54	10.10	(93)
88.	Polk County	16.57	20.37	16.98	13.77	11.35	15.81	(28)
89.	Randolph County	15.42	13.13	15.12	12.92	13.58	14.03	(51)
90.	Asheboro City	19.81	16.25	15.61	9.84	12.78	14.86	(36 tie)
91.	Richmond County	16.92	10.64	13.52	16.12	10.44	13.53	(55)

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Table 1, continued

	System Name	Percent Turnover 1998–99	Percent Turnover 1999–00	Percent Turnover 2000–01	Percent Turnover 2001–02	Percent Turnover 2002–03	Ave	Year erage ank ()*
92.	Robeson County	14.38	14.15	16.18	13.41	13.97	14.42	(42)
93.	Rockingham County	15.71	14.89	10.09	14.16	11.57	13.28	(56)
94.	Rowan County/ Salisbury City	11.89	12.94	14.41	14.04	12.81	13.22	(58)
95.	Rutherford County	5.02	8.35	8.61	6.46	8.56	7.40	(109)
96.	Sampson County	9.16	11.31	14.77	15.21	13.04	12.70	(61)
97.	Clinton City	11.11	18.72	12.50	11.73	10.95	13.00	(59)
98.	Scotland County	18.46	16.04	9.90	7.75	10.13	12.46	(67)
99.	Stanly County	14.29	11.42	13.46	12.38	9.86	12.28	(70 tie)
100.	Stokes County	14.29	13.64	13.30	10.28	9.69	12.24	(72 tie)
101.	Surry County	8.87	14.21	13.04	10.24	14.83	12.24	(72 tie)
102.	Elkin City	9.89	14.74	13.48	14.77	10.23	12.62	(64)
103.	Mount Airy City	6.85	11.52	19.08	13.01	11.02	12.30	(69)
104.	Swain County**	7.63	9.02	9.56	5.96	8.12	8.06	(105)
105.	Transylvania County	11.81	12.11	14.12	8.27	12.64	11.79	(79)
106.	Tyrrell County	10.81	27.87	20.34	12.07	24.56	19.13	(8)
107.	Union County	16.44	15.91	17.62	11.12	10.08	14.23	(47)
108.	Vance County	19.82	25.38	20.00	13.60	21.04	19.97	(6)
109.	Wake County	13.07	10.78	9.20	9.48	10.22	10.55	(89)
110.	Warren County	31.82	19.80	30.46	13.27	17.21	22.51	(2)
111.	Washington County**	18.32	19.00	11.27	15.34	11.64	15.11	(33)
112.	Watauga County	9.72	12.96	11.5	12.73	9.15	11.21	(83)
113.	Wayne County	14.66	9.70	12.89	7.46	3.57	9.66	(98)
114.	Wilkes County	14.91	6.98	9.63	15.43	12.95	11.98	(76)
115.	Wilson County	17.83	12.34	22.79	16.56	13.57	16.62	(21)
116.	Yadkin County	13.96	10.86	10.44	9.62	11.73	11.32	(82)
117.	Yancey County	4.00	1.65	2.22	2.63	6.12	3.32	(116)
	Statewide Average	13.41%	13.59%	13.96%	12.49%	12.44%	13.18	70

^{*} Ranking of 1 equals school system with highest teacher turnover.

^{**} Denotes counties that do not offer a local teacher salary supplement. Source: N.C. Department of Public Instruction, "System Level Turnover Report 2002-03."

were enrolled in the state's public schools) to 1.6 million by 2010—adding demand for some 1,000 additional teachers annually; and (2) and the need for a highly qualified teacher in every classroom as required by the federal No Child Left Behind school accountability act.¹² (For more on the law and its requirements, see "Pass/Fail: Meeting the Challenges of the State ABC and Federal 'No Child Left Behind' Accountability Programs," pp. 32–57.) All of these factors are expected to increase demand for classroom teachers by some 2,000 positions annually in North Carolina.

But despite these new demands, many educators say improved teacher retention would go a long way toward solving the teacher supply crisis. Nearly one in three new teachers leaves the profession after three years on the job and about 40 percent leave after five years. One in two new teachers in urban districts leave in the first five years. And, only half of the estimated six million people in the United States with teaching credentials or background are teaching, the National Education Association reports. 15

While the American Association for Employment in Education reports an overall balance between teacher supply and demand nationwide, it notes that shortages persist in 26 of the 64 fields it surveyed. A 2003 review revealed a "considerable shortage" in just one field—"multicategorical special education." That is down from seven fields in 2002. The report also shows "some shortage" in 25 fields, including math, science, Spanish, and technology. Surpluses were reported only in the fields of dance, health, and physical education. 16

Supply and demand issues are more acute in the Southeast, however, where 10 fields report considerable shortages and 19 fields report some shortage, according to the association's report.¹⁷ (See Table 2, p. 12.) Only Hawaii reported more shortages among the 11 regions surveyed.

In North Carolina, the shortage areas are, in order of magnitude, high school math, high school science, middle school math, middle school science, special education, middle school language arts, and in some areas foreign languages—particularly Spanish. (See Table 3, p. 13.) "There's a shortage, just

The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires.

---WILLIAM ARTHUR WARD

do the math," says Barbara Armstrong, the personnel director for the Thomasville City Schools. "There's no one set reason. The state gives 15 reasons: some people are moving with their families, some retire. Over the next few years, we're going to have a heavy retirement. That's the thing that hit us big last year."

Thirty-seven of 175 teachers employed by the Thomasville City Schools left in 2002–2003; 13 of them had earned tenure. ¹⁸ The 21.1 percent turnover rate for the small city school system in Davidson County was surpassed by just three other systems: Hoke, Tyrrell, and Franklin counties.

Experts agree with Armstrong that the cause of the supply and demand dilemma is multi-faceted. While student enrollment continues to grow and demand for smaller classes increases, teachers continue to march toward retirement. Nationally, more than 25 percent of teachers are at least 50 years old, and the median age nationally is 44. ¹⁹ In North Carolina, the median age is 42. ²⁰ Likewise, a large number of new teachers leave their jobs to start families, change schools, and take higher-paying positions in other professions. Teachers also say they leave their jobs because they lack professional support, are frustrated by student apathy, or are exasperated by poor behavior. The Public School Forum of North Carolina pointed to these problems



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Table 2. Teacher Supply and Demand by Field, Southeast Region

Considerable Shortage	Some Shortage	Balanced				
Math	Bilingual Education	Agriculture	Curriculum Director—			
Physics	Computer Science	Art/Visual Education	Administration			
Multicategorical—	Middle School	Business Education	Human Resources			
Special Education	English as a Second	Pre-Kindergarten	Director— Administration			
Emotional/Behavioral	Language	Kindergarten	Superintendent—			
Disorders—Special	Classics—Languages	Primary—Elementary	Administration			
Education	German	Education	Audiologist			
Hearing Impaired— Special Education	Japanese	Intermediate—	Counselor			
Learning Disability—	Spanish	Elementary Education	Gifted/Talented			
Special Education	Reading	English/Language Arts	Education			
Mental Retardation—	Biology	Home Economics/ Computer Science	Library Science/Media			
Special Education	Chemistry Earth/Physical Science Education General Science Education	Journalism	Technician			
Visually Impaired—		French	Occupational Therapist			
Special Education		Instrumental—Music	Physical Therapist			
Mild/Moderate Disabilities—		Education	School Psychologist			
Special Education	Early Childhood—	VocalMusic	School Social Worker			
Severe/Profound	Special Education	Education				
Disabilities—	Dual Certificate—	General—Music				
Special Education	Special Education	Education				
	Technology Education	Social Studies				
	Middle School	Speech Education				
	Principal— Administration	Theatre/Drama				
	High School Principal—	Education	Some Surplus			
	Administration	Elementary School Principal—	Dance Education			
	School Nurse	Administration	Driver Education			
	Speech Pathologist	Business Manager—	Health Education			
		Administration	Physical Education			

Source: "Educator Supply and Demand in the United States: 2003 Executive Summary," American Association for Employment in Education, Columbus, OH.

West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, and Florida make up the Southeast Region. The association bases its report on surveys sent to 1,265 teaching colleges. The survey also included a category for "considerable surplus," but no fields were reported to have a considerable surplus in the Southeast.

Table 3. Primary Teacher Shortage Areas in North Carolina, in Order of Magnitude — 2002–2003

1) High School Math	99
2) High School Science	70
3) Middle School Math (grades 6–9)	69
4) Middle School Science (grades 6–9)	59
5) Special Education —Various Categories*	93*
6) Middle School Language Arts	23
7) Second Languages	19

^{*} Combines Behavioral/Emotional, Cross Categorical, Exceptional Children, and Learning Disabilities specialities, in rank order of identified needs.

Source: N.C. Department of Public Instruction, "System Level Turnover Report," October 2003, p. 3. School systems are asked to provide in rank order the five areas for which it is most difficult to recruit teachers.

and more in its 1996 report, "A Profession in Jeopardy—Why Teachers Leave and What We Can Do About It." ²¹

Because there is no one factor driving the teacher shortage, efforts to address it vary. Intense competition for teachers pits school systems—and states—against one another in a high-stakes recruiting war. Administrators use salary supplements, signing bonuses, educational scholarships, low-interest car and mortgage loans, free gym memberships, and dental coverage to woo would-be teachers. They routinely travel out of state to fill their spots.

Why Teachers Quit

Many experts say that stemming the tide of teachers who flee the classroom, especially those within the first five years on the job, should take priority over boosting teacher supply in the immediate future. The argument is that producing more teachers is like pouring water into a leaky bucket if officials don't adopt effective reforms to retain the teachers we have.

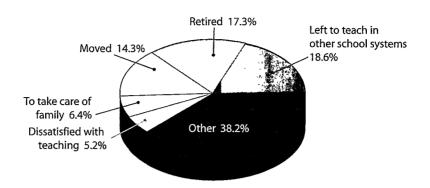
A report by the National Commission on Teaching and America's Future released in 2003 vigorously disputes the notion that the country lacks enough quality teachers. "With the exception of the specific fields of mathematics, science, special education, and bilingual education, the teacher supply

is adequate to meet the demand," it says. For instance, the commission reports that from 1984 to 1999, the number of new graduates earning education degrees increased more than 50 percent to 220,000 a year. In 1999, about 160,000 of those graduates were new teachers with initial licenses, but only half were hired that year, it says.²²

But teacher attrition increased faster than the number of teachers entering the schools during the 1990s, the report concludes. "Our inability to support high quality teaching in many of our schools is driven not by too few teachers entering the profession but by too many leaving it for other jobs," it says. "The ability to create and maintain a quality teaching and learning environment in a school is limited not by teacher supply but by high turnover among the teachers who are already there—turnover that is only aggravated by hiring unqualified and underpaid replacements who leave teaching at very high rates." ²³

About 12.44 percent of North Carolina's 92,688 teachers employed in the 2002–03 school year left their school systems (number of teachers employed reflects teachers who leave their job during the course of the year *and* their replacements and thus is inflated over the daily teaching force). Thirty-three percent of the departing teachers were tenured.²⁴ The turnover rate fell from a five-year high of 14 percent in 2000–01. The bulk of those

Figure 1. Reasons for Teacher Resignation in North Carolina



* Of the 38.2 percent in the "other" category, 12.4 percent resigned for unknown reasons. Other categories in the survey included failure to obtain a license, disability, death, and resignation in lieu of dismissal. Each of these categories surveyed at less than five percent.

Source: North Carolina Department of Instruction, "System Level Teacher Turnover Report 2002–03."

departing teachers, 18.6 percent, left to teach in other school systems. Among the remainder:

- 17.3 percent retired;
- 14.3 percent resigned to move;
- 12.4 percent resigned for unknown reasons;
- 6.4 percent resigned to take care of family; and
- 5.2 percent changed careers because they were dissatisfied with teaching, according to a survey of the state's 117 school systems.²⁵ (See Figure 1.)

How Serious Is the Problem?

Because 18.6 percent of departing teachers resign to take jobs in other school systems, some argue that the debate about the teacher shortage is overblown. This position is supported by Jack Wenders, a University of Idaho economist, who says that 40 percent of teaching hires in a given year are actually returning to the profession after pursuing advanced degrees or raising families. He says turnover in teaching is similar to that in other fields and, while subject to spot shortages in some areas, is not a national problem. Wenders blames cries of a crisis on politics and teachers' unions hoping to increase pay and benefits.

Nonetheless, there is good reason for concern in North Carolina. Retention rates vary among new

teachers in North Carolina, but first-year teachers with no experience generally report the highest retention rates. However, the N.C. Department of Public Instruction has tracked each class of new teacher hires since 1995-1996, noting whether teachers leave the classroom or continue teaching. The department reports that even among first-year teachers with no prior experience, retention rates have declined by several percentage points since 1995. These rates have dropped from 83.7 percent retention after one year on the job in 1995 to 80.6 percent retention after one year on the job in 2001-2002—the latest year available; from 75 percent retention in 1995-1996 to 72.1 percent in 2001-2002 after two years of teaching; from 65.9 percent retention in 1995-1996 to 61.7 percent in 2001-2002 after three years in the classroom; from 60.6 percent in 1995-1996 to 56.1 percent in 2001-2002 after four years; and from 56.2 percent in 1995-1996 to 52.5 percent in 2001–2002 after five years.²⁶ That means only about half of beginning teachers are still teaching after five years on the job.

Retention of newly hired teachers with experience in another school system or state also has dropped since 1995 from 78.4 percent to 69.6 percent after one year; from 65.4 percent to 55.7 percent after two years; from 58.9 percent to 46.3 percent after three years; from 53.5 percent to 41.5 percent after four years; and from 50.4 percent to 38.2 percent after five years.²⁷

By contrast, retention of lateral entry teachers has improved since 1995, though about half still leave after their second year of teaching. Retention after one year jumped from 62.5 percent in 1995-1996 to 76.1 percent in 2001-2002; from 47.5 percent in 1995-1996 to 53.5 percent in 2001-2002 after two years; from 40 percent in 1995-1996 to 46.4 percent in 2001-2002 after three years in the

classroom; from 36 percent in 1995-1996 to 40.6 percent in 2001-2002 after four years in the classroom; and from 31.7 percent in 1995-1996 to 39.7 percent in 2001-2002 after five years.28

"The problems with retention are partly salary, but even more so is the environment of the school and the class more so," said former Gov. Jim Hunt, the chairman of the National Commission on Teaching and America's Future. "It's a matter of teachers feeling like they have a voice in their school. They do need to have help. They do need materials and supplies. . . . They're burning out, but we're mainly losing them because they don't feel fulfilled in their jobs," Hunt says.

A recent survey of teachers and principals in North Carolina bolsters Hunt's view. Only 38 percent say their schools are "a good place to work and learn," 54 percent say they are "recognized for a job well done," and 80 percent believe they have to "follow rules that conflict with their best professional judgment."29

Barnett Berry, the executive director of the Southeast Center for Teaching Quality in Chapel Hill, says poor and minority students suffer the brunt of excessive teacher turnover. [Allthough teacher labor markets are beginning to

change, most are deci-

sively local, with most teachers choosing to teach in schools near where they were raised or attended college," he writes in a paper on recruiting and retaining

teachers for hard-to-staff schools. "Most notably, there is compelling evidence revealing a sufficient supply of available teachers, but poor children and those of color are far more likely to be taught by inexperienced, underprepared, and ineffective teachers."30 Berry adds, "High turnover among new teachers leaves students in hard-to-staff schools facing a revolving door of untried novices who do not have the skills to help them reach higher academic standards," he says.

Nationally, the teacher turnover rate among public school teachers was 12.4 percent and 15.2 percent for teachers in schools with large populations of poor students, according to Richard M. Ingersoll, an associate professor of education and



Teaching is not a lost art, but the regard for

-JACQUES BARZUN

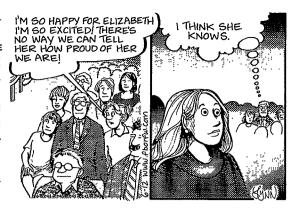
it is a lost tradition.

Karen Tam

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sociology at the University of Pennsylvania. That compares to an overall turnover rate for North Carolina's public schools of 12.44 percent for 2002–2003 (see Table 1, pp. 7–10), and a five-year average of 13.18 percent. However, in relatively poor North Carolina counties such as Edgecombe, Franklin, Hoke, and Warren, turnover routinely exceeds 20 percent. Nationally, Ingersoll pegged the turnover rate at private schools higher than that of public schools at 18.9 percent overall and 22.8 percent for small private schools.³¹

Additionally, Ingersoll found that 40 percent of public school teachers and nearly half of private school teachers who resigned said they left their jobs for such personal reasons as moving or raising families. Twenty-three percent of public school teachers and 34 percent of small private school teachers cited job dissatisfaction, including low salaries and poor administrative support.³² Ingersoll based his report on data from the federal Schools and Staffing Survey of more than 50,000 teachers conducted in 1994 and 1995.

The Easley administration conducted the first statewide teacher working conditions survey in May 2002 and found only moderate satisfaction among teachers, according to Ann McArthur, Easley's education advisor. Teachers had the most complaints about extraneous duties and the need for more time to work on curriculum and with mentors and colleagues. School leadership got high marks overall, but there were disparities in perception of working conditions between teachers and principals at a given school. The intent of the survey-which drew responses from more than 42,000 teachers and principals statewide—is to pinpoint improvements in working conditions that might help teacher retention. A second survey released in July 2004 drew 34,000 responses and produced similar results. McArthur says the administration will use the data to pinpoint improvements

that can be made at individual schools, including professional development programs and other reforms in working conditions.

Sylvia Houser, a retired elementary school teacher in Catawba County, voices a frustration shared by many teachers with increased paperwork and a myopic focus on tests that brings added pressure. "You're expected to give and give and give and do and do and do," said Houser who retired in 2001. "After a while, you just get so stressed. It's like they just keep adding on more and more programs and things to do, but they never take away. There's more and more expected with less and less time."

Houser actually returned from retirement briefly last year when a principal phoned to say she needed a third-grade teacher—and fast. The previous teacher quit just days before school started. "Even though it was my birthday, I went," she said. "I did start the year, and I stayed till after Labor Day."

But, at her family's urging, she left when the principal found a permanent replacement. Her family didn't want to see her stressed and overwhelmed by the daily grind again.

Houser says she regrets the decision and wishes she stuck out the year. But she works part time in the schools now helping students in danger of failing their end-of-grade tests. She likes the hours and small-group setting: 10 hours, three days a week with just four or five students.

Some See Solution in Higher Pay, Others in Better Working Conditions

While some believe North Carolina's 16 public universities and 37 private colleges and universities should do more to attract potential teachers to pursue education degrees, others urge a more concentrated effort to retain teachers already in the pipeline. Some say raising teacher salaries would

dramatically reduce the teacher churn. Others say North Carolina needs to invest more in mentoring programs that support new teachers and ensure they stick it out when their expectations clash with the realities of the classroom.

The UNC Board of Governors recently endorsed a proposal to address teacher supply and demand in the state that includes elements of each. Hannah Gage, a vice chair of the committee that studied supply issues, says it is critical that the study not become one in a series of reports relegated to a dusty shelf. "There are a million of them," she says. "The only thing that will make this different is if we stay on it, we scream when we have to scream. . . . What I hope is that our recommendations don't get lost in a lot of other wonderful things in front of the General Assembly," Gage says. "Ours will get lost if we're not vigilant. That probably translates into driving the legislature and the decisionmakers nuts and staying with it."

John Davis, the managing director of Deutsche Bank Alex. Brown in Winston-Salem and a member of the UNC Board of Governors, says the problem could be solved easily if teacher salaries were increased dramatically, even doubled. "If we would do that, when students go to school they would start seeing it as a real career . . . instead of a sacrifice," he says.

"The U.S. doesn't put enough emphasis on teaching," Davis says. "In this country, money speaks. If we put the money there, we can quit worrying about these problems."

Doubling teacher salaries would add some \$4 billion in salary costs alone to the state's \$15.9 billion budget—well beyond the reach of state policymakers and the taxpayers who put them in office. But Davis says there still is room for improvement. North Carolina ranked 22nd among states in 2002—03 in terms of its average teacher salary of \$43,076. The national average was \$45,930. Teachers in California, Connecticut, New Jersey, Michigan, and New York earned the most.³³

In North Carolina, an entry-level teacher with a bachelor's degree and no experience would make \$25,250 a year, according to the state salary schedule. The salary could vary depending on the salary supplement offered by the school system in which the teacher worked.

For instance, in Madison County, one of eight school systems that does not offer supplements (the others are Cherokee, Clay, Graham, Jackson, Macon, Swain, and Washington), the salary would remain the same. In Nash County, the teacher could make \$26,386 a year with a local supplement of \$1,136, and in the Chapel Hill/Carrboro City Schools, the salary could be \$28,280 with a local





supplement of \$3,030. Both estimates are based on the minimum supplement offered by each school system.

By comparison, a teacher with a master's degree and 30 years experience would make \$49,920 a year. The salary would remain the same in Madison County, but could jump to \$52,416 in Nash County with a supplement of \$2,496, and \$67,452 in the Chapel Hill/Carrboro City Schools with a supplement of \$17,532.³⁴ The latter estimates are based on the maximum supplement each system offers. Teachers certified by the National Board for Professional Teacher Standards qualify for higher pay.

Barnett Berry of the Southeast Center for Teaching Quality, in his report, compared the national teacher salary average of \$43,250 in 2001 to average salaries for mid-level accountants (\$52,664), computer analysts (\$71,155) and engineers (\$74,290).³⁵ "For the most part, it is fairly well accepted that teachers' salaries remain too low to attract and retain enough of the talented and well-prepared people needed to teach," he says.

While many agree with Barnett Berry and John Davis, most say increasing pay in isolation won't solve the problem. For instance, South Carolina used an \$18,000 signing bonus to lure "teacher specialists" to the state's neediest schools several years

ago. Despite the incentive, officials attracted onefifth of the 500 teachers it needed in the program's first year and just 40 percent after three years.³⁶

The Southeast Center for Teaching Quality and others say that administrators should improve mentoring and support services to ensure that teachers tough it out through their first years. Ingersoll, the Pennsylvania researcher, recently reviewed data from the National Center for Education Statistics and found that about 40 percent of new teachers with no support leave after a year compared to 17 percent of teachers with a mentor and other community support who quit.37 "It's the investment you need up front to see the results on the back end," says Tomás Hanna, the director of teacher recruitment and retention for Philadelphia schools. Retention rates in Philadelphia increased from 80 percent to 93 percent in 2003-2004 after the school system hired 65 teacher coaches, instituted a new standard curriculum, and held twice-monthly professional development sessions for young teachers.38

"We're training them and then we're nurturing them," says Philadelphia schools chief Paul Vallas. "From all anecdotes I've gotten, it's been very positive."

A group of four prospective teachers who attended a job fair at Chapel Hill in March all say that they won't be swayed by financial incentives. "I

don't think I'll be looking at salaries or supplements," says Tina Davis, 21, of the University of Tennessee at Martin. "I'm more interested in securing that position, getting that job." Davis and her three friends took a road trip to attend the fair that drew 108 school systems from North Carolina, South Carolina, Georgia, Virginia, Maryland, and Washington D.C. Elizabeth McClain, 21, says she's looking for "friendly faces." Sarah Stolzer, 22, says she wants a school in a welcoming area that feels like home.

The friends nodded in unison when asked whether a strong mentoring program could influence their school choice. "It will be a big help in our starting year having help," McClain says.

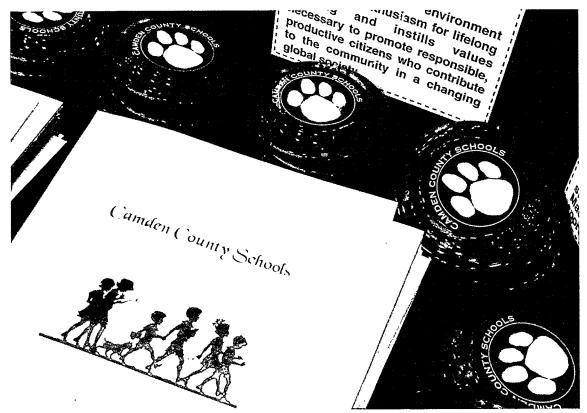
While Pennsylvania generally enjoys a healthy teacher surplus, it reports shortages in some rural and urban districts including the Philadelphia schools. Likewise, the state reflects national trends with declining numbers of new teacher certifications in science, math, special education, and foreign languages, says Ron Cowell of the Education Policy and Leadership Center in Harrisburg, Pa. "We need to be wary of these trends that are a bit disturbing, and as a result, we say to policymakers that this apparent surplus won't last forever," he says.

North Carolina Relies on Lateral Entry and Out-of-State Recruitment To Fill Slots

Sharmaine Butler, human resources director for the Hoke County Schools, says administrators and teachers from her school system will travel to 15 in-state recruiting fairs like the one in Chapel Hill and six out-of-state fairs. The poor, rural school system, which posted the highest turnover rate among the state's 117 school systems in 2002–2003, cannot attract enough applicants otherwise. "We are at a point where we must go out of state," Butler says. "The universities in North Carolina are simply not producing enough applicants or teachers to fill the teacher shortage."

Universities in the UNC system awarded 2,310 undergraduate baccalaureate education degrees in 2002–03, 90 Masters of Arts of Teaching degrees, and 1,218 degrees to graduates who completed their teacher certification while studying another subject, says Alisa Chapman, the assistant vice president for university-school programs and information technology for the UNC system.

North Carolina's 37 independent colleges and universities awarded another 817 graduates with education degrees in 2002–2003, down from 860 in



2001-2002. The N.C. Education Research Council estimates that the state needs about 10,900 teachers a year-9,801 to make up for teacher turnover (of the 11,531 teachers who resigned in 2002-03, 1,701 teachers quit to teach in another district, and 29 went to a North Carolina charter school) and 1,100 due to increased student enrollment.³⁹ The number of graduates from the UNC system does not reflect the total students served on the campuses that are taking courses to satisfy lateral entry or licensure-only requirements, however, Chapman says.

A snapshot survey of students enrolled in traditional and non-traditional teacher preparation programs in the UNC system as of Oct. 1, 2003, shows that more than half sought certification through an alternative path: the universities enrolled 4,909 traditional pathway students and 5,325 students in alternative programs.40

The N.C. Education Research Council reports that of the 3,700 graduates with teacher education degrees produced last year in the state, 95 percent sought a state teaching license and 69 percent actually took a teaching position in North Carolina.41

The group further notes that of the estimated 2,500 who take teaching positions in North Carolina, only 2,000, or 80 percent, are expected to remain after their first year; 1,700, or 68 percent, are likely to remain after two years; and 1,580 new teachers, or 62 percent, would remain after three years.42 The projections are based on data taken from actions taken by teachers hired in 1999-2000 who have been employed three years.

DPI reports that local school systems in North Carolina hired 8,780 new teachers in 2002-03 (see Table 4 below) as follows:

- 3,507 beginning teachers with no experience;
- 2,112 lateral entry teachers—those with experience in another field who move into teaching:
- 527 emergency permit teachers who receive special permission to teach on the condition that they will complete their certification requirements within a given period, and;
- 2,634 experienced teachers teaching for the first time in North Carolina.43

DPI's figures tracking education program graduates from private colleges and the UNC system's record of degrees conferred differ from the N.C. Education Council's projections. DPI reports 2,310 traditional public education program graduates and 817 private program graduates in 2002-2003 for a total of 3,127. (See Table 5, pp. 23-24.)

North Carolina has increasingly relied on lateral entry teachers to fill spots in the classroom. In 2002-03, the schools hired 2,112 lateral entry teachers, up from 833 in 1995-96.44

Deboy Beaman, a North Carolina native who left the state after college to work in the steel industry in Ohio, is one of those. Beaman spent 25 years

Table 4. Number of Teachers Employed for the First Time in N.C., 1995-2003

Type of Teacher	1995–96 School Year	1996–97 School Year	1997–98 School Year	1998–99 School Year	1999-00 School Year	2000–01 School Year	2001-02 School Year	2002-03 School Year
Beginning Teacher/ No Experience	4,201	4,815	5,097	4,915	4,177	3,007	3,628	3,507
Lateral Entry Teacher	833	1,079	1,372	1,186	1,800	1,799	2,023	2,112
Emergency Permit Teacher	NA	NA	13	500	578	805	943	527
First Year in N.C./ With Experience	1,909	2,180	3,053	3,456	4,051	4,804	3,411	2,634
Total Employed as First-Time N.C. Teachers	6,943	8,074	9,535	10,057	10,606	10,415	10,005	8,780

Source: N.C. Department of Public Instruction, "Report on the Review of the Certification Process," January 2004.

in the industry and worked his way to a managerial position before deciding to opt out. He was working 60 hours a week, including weekends, and was on call around the clock. "I reached that point in my life where I wanted to do something different," he says. "It was rewarding financially, but I wanted to do something that was rewarding spiritually."

Beaman resigned, returned to North Carolina with his family, and started working toward an education degree at N.C. A&T State University in June 2002. He finished 35 of the required 49 credit hours that he needed before going to work at Thomasville Middle School as a lateral entry teacher teaching computer skills. Beaman plans to finish his coursework by the summer.

Lateral entry teachers typically do not have as much up-front teacher training as Beaman. Qualified applicants first obtain a teaching position, start work right away, and take classes toward acquiring their license as they teach. They must take at least six credit hours during the school year and complete their testing within two years. Beaman says he could have taken jobs in Forsyth and Guilford counties, which have larger school systems and offer a higher local teacher supplement. But he chose Thomasville. "Because it's a small system," he says. "The superintendent can walk into your room. He knows your name. I like that. It's a family atmosphere. Everybody knows everybody."

Beaman says he has not been discouraged by his first year, though he admits to being frustrated by the attitudes and misbehavior of some students. "I got a lot of good kids, but there's always that handful who you just wish you could show them where they'll be 10 years from now unless they change," he says.

He credits a safety net of experienced, dedicated teachers for buoying him through the tough times. "I've got a lot of support," he says. "Thomasville went a long way to let us know you're not alone. You're going to have those days when you wonder, 'I could be making a lot more money, have less stress.' Then I have those days where the light comes on, the kids pick it up, and it's like magic."

Pennsylvania a Fertile Recruiting Ground

In addition to relying on lateral entry teachers to help meet the demand, North Carolina schools routinely hire from out of state. Sharmaine Butler, human resources director for the Hoke County Schools, said her schools would be taking trips in 2004 to find teachers from Florida, West

Virginia, Ohio, and Pennsylvania—a top-recruiting destination.

Administrators in other school systems joke of filling their vacancies with a pipeline to Pennsylvania, a state with 93 teaching colleges that routinely produces more teachers than it can hire. "We have very, very good luck in Pennsylvania," says Jane-Waring Wheeler, a spokeswoman for the Franklin County Schools. The Franklin school system ranks fourth in turnover among school systems over 5 years, averaging 20.78 percent. "We laugh about starting a Pennsylvania club for our teachers."

The average teacher salary in Pennsylvania in 2001–02 was \$50,599.⁴⁵ "Pennsylvania has a relatively high average teacher salary—one, because there is collective bargaining, and two, because it's a fairly senior staff, so it reflects folks who have already reached the top of the [pay] scale," says Ron Cowell of the Education Policy and Leadership Center in Harrisburg, Pa. Cowell says the state does not track the statewide teacher turnover rate.

While many administrators report success with hiring out-of-state teachers, others say it can be a costly and risky investment. Barbara Armstrong, the personnel director for the Thomasville City Schools, says many of the teachers return home in the first three years after honing their skills and building experience.

Fred Williams, the human resources coordinator for the Durham Public Schools, says his system decided not to travel out of state this year to hire teachers but invested instead in improving technology used to recruit them. Statistics show 90 percent of the Durham system's teachers graduated from North Carolina schools. The University of Virginia was the top ranked out-of-state school, and only about 15 of the system's 3,000 teachers graduated from there. "The district had spent a fair amount of money [on out-of-state recruiting efforts]," he says. "In truth, the return on that had been fairly minimal."

Strengthening Teacher Recruitment and Retention in North Carolina

A wide variety of state and local initiatives have been created to address teacher recruitment and retention issues in North Carolina. They include:

Programs within North Carolina's Community College System: A number of strategic alliances are operating within the state's community college system to encourage more people to pursue teacher certification while remaining in their home communities. These typically pair local community

ROCKDALE COUNTY PUBLIC SCHOOLS



An out-of-state school system recruiting from North Carolina's small pool of teacher education program graduates.

colleges with a university or private college that offers a teacher education program so that would-be teachers get their first two years of education through the community college and the remaining two without leaving their community—through Internet-based classes, seminars, extension courses through the four-year institution, or even university courses taught on the community college campus. N.C. Community Colleges President Martin Lancaster, who calls the program the "home-grown teacher initiative," says, "Studies show teachers teach where they are taught." That makes the program particularly useful in rural areas where teacher retention may be a problem.

Aside from benefitting the schools, the program also provides an avenue to the classroom for older, more mature workers already attached to a community, such as displaced workers, parents who wish to teach while their children are in school, and even small business persons displaced by the latest chain superstore. "It is definitely a major source of new teachers," says Lancaster.

Appalachian State University in Boone operates the largest program. The Appalachian Alliance, in cooperation with 10 regional community colleges, is expected to have produced some 300 teachers by spring of 2005. UNC-Wilmington and

Coastal Carolina Community College in Jacksonville pioneered the concept in the late 1990s and that program has produced 127 teachers-80 percent of them working in Onslow County, Lancaster says. UNC-Wilmington also has partnerships with Brunswick Community College in Supply, Cape Fear Community College in Wilmington, James Sprunt Community College in Kenansville, and Southeastern Community College in Whiteville. Other collaborative efforts include a partnership between Surry County Community College in Dobson and Lees-McRae College in the west, another between Western Carolina University in Cullowhee and Tri-County Community College in Murphy, two programs in the Piedmont linking Stanly County Community College in Albemarle and UNC-Charlotte and Pfeiffer University in Misenheimer and Montgomery Community College in Troy, and the Wachovia Partnership creating three consortia that link 11 eastern North Carolina campuses with East Carolina University. Together, these programs have created a pathway to the classroom for some 1,100 educators, according to the N.C. Department of Community Colleges.

N.C. Teaching Fellows Program: Created in 1986, this state program administered by the Public School Forum of North Carolina awards 400 top-

Table 5. North Carolina Public and Private Teacher Education Program Graduates, 2000–2001 through 2002–2003

Sch	ool	Public or Private?	2000-2001	2001–2002	2002–2003
1)	Appalachian State University	Public	368	337	372
2)	Barton College	Private	36	29	32
3)	Belmont Abbey College	Private	19	13	11
4)	Bennett College	Private	7	17	5
5)	Campbell University	Private	49	58	66
6)	Catawba College	Private	17	12	23
7)	Chowan College	Private	18	18	13
8)	Davidson College	Private	2	N/A *	N/A *
9)	Duke University	Private	29	29	16
10)	East Carolina University	Public	326	388	330
11)	Elizabeth City State University	Public	35	22	26
12)	Elon University	Private	91	89	99
13)	Fayetteville State University	Public	59	67	65
14)	Gardner-Webb University	Private	41	24	30
15)	Greensboro College	Private	16	24	25
16)	Guilford College	Private	13	7	15
17)	High Point University	Private	42	56	47
18)	Johnson C. Smith University	Private	4	8	6
19)	Lees-McRae College	Private	33	59	57
20)	Lenoir-Rhyne College	Private	38	39	26
21)	Livingstone College	Private	8	9	6
22)	Mars Hill College	Private	37	53	51
23)	Meredith College	Private	97	87	82
24)	Methodist College	Private	39	22	24
25)	Montreat College	Private	3	12	10
26)	N.C. A&T University	Public	97	54	60
27)	N.C. Central University	Public	69	64	74
28)	N.C. State University	Public	124	125	133
29)	N.C. Wesleyan College	Private	9	17	11
30)	Pfeiffer University	Private	21	27	21
31)	Queens University	Private	27	17	13
32)	Salem College	Private	50	52	45
33)	Shaw University	Private		5	1

--continued

ranked high school seniors a scholarship worth \$6,500 a year for four years to attend a North Carolina college or university. Students agree to teach in the state's public schools for four years in a low-performing school. Fellows have an average SAT score of 1150, a 3.6 grade point average, and rank in the top 10 percent of their high school class. 46

As of February 2001, 1,988 of the 3,644 program graduates were teaching in North Carolina. About 82 percent of the teachers were still employed after they met their teaching requirement, and 73 percent were still employed between their fifth and tenth years of teaching.⁴⁷

Prospective Teacher Student Loan Program: This is a state program that loans prospective teachers \$2,500 per year for teacher education expenses. Teachers are forgiven \$2,500 of the total loan amount for each year they teach in the N.C. public schools. A similar program is available for teacher assistants who wish to pursue a teaching license, beginning at the community college level. The program currently enrolls 739 students actively pursuing teaching degrees and 370 active teacher assistants enrolled in community colleges.

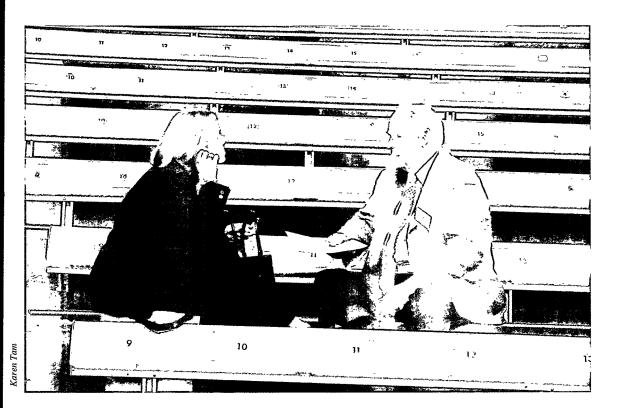
Troops to Teachers: This is a federally funded program created in 1994 to help former military per-

Table 5, continued

School	Public or Private?	2000–2001	20012002	2002–2003
34) Southeastern College at Wake Forest, N.C.	Private	N/A *	N/A *	2
35) St. Andrews Presbyterian College	Private	14	8	9
36) St. Augustine's College	Private	9	19	4
37) UNC-Asheville	Public	20	27	24
38) UNC-Chapel Hill	Public	158	200	194
39) UNC-Charlotte	Public	247	221	236
40) UNC-Greensboro	Public	183	181	199
41) UNC-Pembroke	Public	67	91	84
42) UNC-Wilmington	Public	257	246	314
43) Wake Forest University	Private	30	30	42
44) Warren Wilson College	Private	6	6	10
45) Western Carolina University	Public	176	237	179
46) Wingate University	Private	20	12	15
47) Winston-Salem State University	Public	27	22	20
Total Public		2,223	2,282	2,310
Total Private		825	860	817
GRAND TOTAL		3,048	3,142	3,127

^{*} Not applicable. Davidson College no longer has an education program. The first education majors graduated from a new program at Southeastern College in 2002–2003.

Source: N.C. Department of Public Instruction and University of North Carolina Office of the President. The numbers represent both self-reported data from education programs at the 32 public and private colleges and universities offering teacher education programs in North Carolina and degrees conferred via traditional teacher education programs within the UNC system.



sonnel start teaching careers. Participants receive \$5,000 to cover the cost of getting a teaching certificate. Those who teach in schools with a high percentage of low-income families (50 percent or more of students receive free or reduced-price lunch) can qualify for an extra \$5,000 bonus for a total of \$10,000.

Those who accept the stipend or bonus must agree to teach for three years in either a high-needs school or a high-needs school district where 20 percent or more of the students receive a free or reduced-price lunch. The News & Observer of Raleigh, N.C., reports that more than 6,000 Troopsto-Teachers participants have been hired throughout the country, and 328 teach in North Carolina schools. Graduates of the program have an 80 percent retention rate over five years.48 "Look at the nature of the military career," says Paul Gregg, the coordinator for the N.C. Troops to Teachers. "You're moving every three years. They don't want to go anywhere [once they become teachers]. They find a place they want to stay, and they don't want to leave." They earn a better salary teaching, take more vacation, and work better hours, Gregg says. Gregg adds that the majority of Troops to Teachers participants teach in high-needs areas such as math, science, and special education, and demand for the program is increasing.

N.C. Teach: This program operated by the University of North Carolina in conjunction with the N.C. Department of Public Instruction grooms midcareer recruits who hold a bachelor's degree. Participants attend a six-week intensive summer course at one of 13 regional sites intended to prepare them for teaching. These are operated by East Carolina University in Johnston, Onslow, and Pitt counties; by Fayetteville State University in Cumberland County; by Lenoir-Rhyne College in Catawba County; by N.C. Central University in Durham County; by N.C. State University in Wake County; by UNC-Chapel Hill in Orange County; by UNC Charlotte in Mecklenburg County; by UNC Greensboro in Guilford County; by UNC-Wilmington in New Hanover County; and by Western Carolina University, which operates its program on the UNC-Asheville campus in Buncombe County. Participants attend seminars during their first year of teaching and work with a mentor. At the end of one year, they are eligible to take the state licensure exam. Some 1,000 educators have become licensed through N.C. Teach since it was established in 2000. Thus far, teacher retention is at 80 percent.

The Model Teacher Education Consortium: A "grow-your-own" strategy aimed at "hard-to-staff" schools, the Model Teacher program helps current teachers gain certification and teacher assis-

tants and other paraprofessionals earn teaching degrees.

Since 1970, the program has helped educate nearly 7,000 teachers and aspiring teachers. The program grew out of efforts to address a critical teacher shortage in seven rural northeastern counties. Today, 39 school systems and 37 two- and four-year colleges and universities participate.

Equity Plus: The Winston-Salem/Forsyth County Schools program offers incentive pay to teachers who teach in the system's most challenged schools. Teachers receive a bonus equal to 20 percent of their local salary supplement if they remain at a school for a year.49

Grow Your Own: Franklin County Schools launched a program three years ago to hook local students on teaching. Administrators hope the students who pursue teaching degrees return home to launch their careers.

Spokeswoman Jane Waring Wheeler says three high schools offer teaching courses to interested students. Those students then put their skills to work in the classroom helping second-graders in the county. Wheeler says the school system does not know how many high school students eventually pursue education degrees-a weakness in evaluating the program's success.

Local Salary Supplements: All but seven of the state's 117 school systems offer teachers a local salary supplement. Some calculate supplements based on experience; others offer a flat amount to all. Some pay the supplement all at once; others pay it piecemeal throughout the year. Cherokee, Clay, Graham, Jackson, Macon, Madison, Swain, and Washington counties do not offer supplements.50

The Charlotte-Mecklenburg Schools offer the highest minimum supplement of \$3,283. The highest maximum supplement is \$17,532 for teachers in the Chapel Hill-Carrboro City Schools. In that system, supplements start at 12 percent of the salary and go up every five years for a teacher's first 14 years. Teachers with at least 25 years of service earn a supplement worth 25 percent of their salary.51

Five school systems pay all teachers the same supplement: Alleghany County-\$125; Ashe County-\$150; Mitchell County-\$100; Weldon City-\$200; and Yancey County-\$250. The UNC Board of Governors Task Force on Meeting Teacher Supply and Demand compared teacher turnover rates with local salary supplements and found only a low correlation.52

Signing Bonuses: Many school systems, including the Hoke County Schools, treat new teachers like professional athletes and offer signing bonuses—a practice increasingly common in fields with scarcities of qualified personnel, such as nursing. Butler, the school system's human resources director, says her county used federal money to offer a \$1,500 signing bonus for the first time in 2001-02. That perk helped attract certified teachers, but the incentive worked even better, she says, when officials increased it to \$2,000 in 2003-04. "We saw that there was a large increase in fully certified teachers who had experience," Butler said. "Previously, we had attracted a large number of zero experience teachers. We knew that they [the signing bonuses] made a big difference."

Hiring Retirees: The state continues to reemploy retirees, bringing back 442 former teachers in 2002-2003 alone.

A Smattering of Other Incentives: School systems offer reduced price gym memberships, discounts with local businesses, free dental insurance. tuition reimbursements, low-interest car and mortgage loans, and relocation expenses, among other things.

Elimination of the Praxis Exam for Out-of-State Teachers: The State Board of Education voted in January to drop testing requirements for out-of-state teachers who are deemed "highly qualified" in other states.53 The move was designed to make it easier for experienced teachers to work in North Carolina. Critics warned that the change, which will require legislative action, could signal a move toward lower standards. "Over a 20-year period of time, [North Carolina] . . . has continued to move toward a true professionalization of teaching," Barnett Berry of the Southeast Center for Teaching Quality told the publication Education Week. "I'm seeing backsliding."54

The provision that was removed required all teachers who hold an out-of-state license to take the Praxis II subject-matter exam to get a license in North Carolina. Now, teachers who are fully licensed and highly qualified under the federal No Child Left Behind Act in other states may be exempt from the requirement.

However, Jo Ann Norris, associate executive director of the Public School Forum of North Carolina, says eliminating the Praxis exam for outof-state teachers was part of broader effort to bring consistency to the state's licensure requirements. "Praxis is not about qualifying the veteran teacher," says Norris. "It is an indicator of the knowledge base of the beginning teacher."

Additional Legislative Proposals: A number of other measures have been introduced in the North Carolina General Assembly, including a proposal to ensure that teacher compensation remains at or above the national average;⁵⁵ a bill to allow local schools systems to use local funds sufficient to "attract and retain" teachers in critical shortage areas such as foreign language, mathematics, science, and special education;⁵⁶ a bill that would provide teachers tax credits of up to \$500 based on length of service;⁵⁷ and a mortgage assistance program to help new teachers purchase a home.⁵⁸ Additionally, the Joint Legislative Education Oversight Committee, in its 2004 report to the General Assembly, recommends that a temporary provision be made permanent that allows retired teachers to return to the classroom without a reduction in benefits.

Is North Carolina Doing Enough?

Eric Hirsch, the director of policy and programming at the Southeast Center for Teaching Quality, says North Carolina is doing more than other states to address teacher retention and recruitment. But, he says, "The question is, is that enough to make sure every student has a qualified teacher?"

Like Berry, Hirsch cautions about the long-term effects of relying increasingly on lateral entry teachers with less training and eliminating the Praxis exam. "I worry that not having a test that ensures teachers meet our standards in North Carolina... while again making it easier to find teachers for schools, may have an impact on quality that we later on regret," he says. "What we expect of teachers now is more so, and it should be," he said. "As we've held teachers to higher standards, the question is, looking nationally, have we held to those high standards, or have we in times of shortages lowered standards?"

Hirsch wants state officials to increase funding for mentoring programs to boost retention, use data from the statewide teacher attitude survey to improve working conditions, and pay more attention to the teacher pipeline. He suggests, for instance, offering incentives to schools that produce more special education teachers or simply more teachers overall.

"I think North Carolina has done some things that other states have not done, but we certainly can do more," he says. "Are those solutions going to be free? No."

Norris, of the Public School Forum of North Carolina, argues that retaining teachers is critical to relieving the shortage. North Carolina's classroom teachers are not getting enough support early in their careers, Norris says. "This state has an awful lot invested in hiring a new teacher and watching Dear Monsieur Germain,

I let the commotion around me these days subside a bit before speaking to you from the bottom of my heart. I have just been given far too great an honor, one I neither sought nor solicited. But when I heard the news, my first thought, after my mother, was of you. Without you, without the affectionate hand you extended to the small poor child that I was, without your teaching, and your example, none of all this would have happened. I don't make too much of this sort of honor. But at least it gives me an opportunity to tell you what you have been and still are for me, and to assure you that your efforts, your work, and the generous heart you put into it still live in one of your little schoolboys who, despite the years, has never stopped being your grateful pupil. I embrace you with all my heart.

—Albert Camus

Letter to a former teacher upon winning

The Nobel Prize for literature

them walk two or three years later," she says. "It has to do with teaching assignments, it has to do with support, it has to do with the number of at-risk kids in their classrooms, it has to do with mentoring programs. Teachers have to feel valued."

UNC system President Molly Broad believes strongly in the potential for enhanced retention. "Even a 1 percent improvement would improve the supply by nearly 1,000 teachers each year, or roughly one-third of the number of prospective teachers from UNC's 15 teacher education programs," says Broad. "The evidence is clear that mentoring and professional development programs are part of the key to improving retention."

Besides enhanced retention, Broad believes the 15 education programs in the UNC system must dramatically increase their enrollment, using specific enrollment targets that are now being developed for each campus. At least for the coming

years, says Broad, a substantial part of that growth will come from lateral entry teachers.

"For some years now, we have been developing lateral entry programs that are rigorous, of high quality, and structured to accommodate the time requirements and other responsibilities of mid-career individuals," says Broad. Broad says the university has worked hard to enhance its lateral entry programs and was recently rewarded with a State Innovation Award from the Education Commission of the States. "These new programs are fundamental to closing the gap between the demand and the supply of teachers in North Carolina, because the history of earlier lateral entry programs in other parts of the country has shown that retention of lateral entry teachers is very poor and student achievement is very disappointing. The research literature refers to a 'revolving door.' Fortunately, our own efforts a few years ago to develop different programmatic approaches have proved far more successful."

Broad also recognizes the importance of community colleges in helping to develop teachers through 2 + 2 programs, and says the university Board of Governors would like to see these programs expanded. But more than just increasing the supply of qualified teachers, Broad says efforts must focus on issues such as subject area shortages—middle school math and science, for example—and geographic areas of North Carolina with the greatest needs.

Hannah Gage of the UNC Board of Governors says among the most important recommendations offered by the Board's Task Force on Meeting Teacher Supply and Demand are the ones that make it cheaper and more convenient to get a teaching degree. For instance, the Board recommends a "payment holiday" one month a year for full-time teachers with school loans, expansion of the number of scholarships for Teaching Fellows, and making it simpler for lateral entry teachers to qualify for instate tuition.

"The most important thing is, first don't burden a potential teacher with debt," Gage says. "If there is a way we can expand some of the scholarships and make this a more appealing prospect, I think that's something we should do." Of equal importance from the university's perspective, says Gage, is establishment of enrollment targets for education programs. "We need to know how many teachers we can produce within our system, and the only way to accomplish this is by establishing goals for each campus," says Gage. "In establishing the structure to quantify the university's contribution to the shortage, we formally commit to the role the university

system will play in solving this problem. The Chancellors of each institution will know how many teachers they're responsible for producing; and the Board of Governors will be able to measure each institution's performance. For any university campus that has not reached out to the community colleges, these new targets will no doubt encourage new university-community college partnerships. The teacher shortage problem is an enormous opportunity for the university system and the community college system to show how powerful we are when we work together." The Board of Governors also recommends making late afternoon, night, and weekend classes more convenient for lateral entry teachers, offering the N.C. Teach program for lateral entry teachers online, and expanding opportunities for prospective teachers to get training in nontraditional programs at community colleges.⁵⁹

Other key stakeholders hold strong views on these and a range of issues. Martin Lancaster, President of the North Carolina Community College system, believes that college and university education programs ultimately will have to accept a stronger role for community colleges in preparing lateral entry teachers. But Hope Williams, President of North Carolina Independent Colleges and Universities, believes lateral entry has eroded support for traditional programs by providing an easier route to the classroom. "The state has high standards for teacher education programs and the students who enter them (from standardized test scores to a GPA minimum to student teaching), but lateral entry teachers can walk into a classroom by taking a 10 day orientatiuon program. [B]y far, most of the lateral entry teachers are 23-25 years of age and leave within three years, before they have to pass the Praxis. So while we have high standards for some teachers, we have almost no standards fo rothers." Tim McDowell, the association's vice president for government relations, adds, "I don't know of any [traditional] teacher education progam that is full and turning away students." McDowell believes generous scholarships for would-be teachers, coupled with supports to keep teachers on the job, would do much to alleviate the teacher shortage.

Additional Board of Governors recommendations include encouraging legislators to raise teacher salaries and giving teachers steeper salary increases early in their careers. "We think that will make a difference," Gage says. "I'm hopeful that the legislature will see that it will only cost more in every aspect if we wait [to confront the teacher supply and demand issue]. We get further and further behind the eight ball."