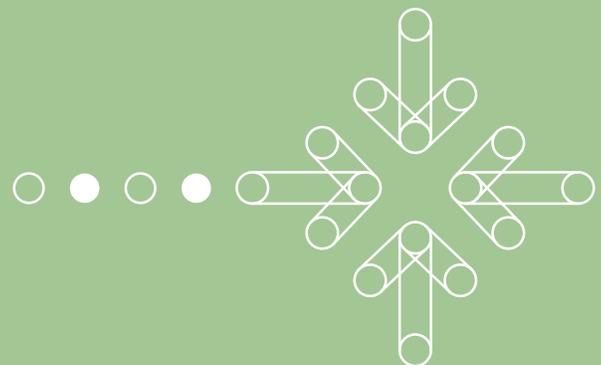


CAREER AND TECHNICAL EDUCATION **DATA PROFILE**

SUMMER 2007



PUBLIC SCHOOLS OF NORTH CAROLINA

State Board of Education | Department of Public Instruction

NC Career-Technical Education DATA PROFILE

<http://www.ncpublicschools.org/cte/publications>

Did you know?

- There were nearly 900,000 middle and high school students enrolled in Career and Technical Education courses in 2005-2006.
- For 2005-2006, 47.3 percent of the students enrolled in high school and middle grades CTE courses were identified as Special Populations, up 5 percent from the previous year.
- In 2005-2006, 63.3 percent of the students reached at least proficiency (Level III) in CTE courses. The federally negotiated target was 60.5 percent. This is an increase from 54.8 percent in 2000-2001, the first year data were available.
- NC concentrators did best on the Elementary Algebra subtest of ASSET, the measure of academic attainment, with 68.4 percent of the test-takers exceeding the subtest's national average. Elementary Algebra has been the highest scoring subtest since NC began use of this measure for Academic Attainment.

The Career and Technical Education Data Profile is your source for information about student enrollment and performance in NC Career and Technical Education. Learn about CTE enrollment trends, performance on Technical and Academic Attainment measures, concentrators' work and educational experiences six months after high school, and other important measures of quality. Access data you can use for recruitment or to set goals for improvement in your school system, school, or classroom.

Download the Summer 2007 Career and Technical Education Data Profile at no charge from <http://www.ncpublicschools.org/cte/publications> or order a printed copy from martini Print Media, Inc., martiniprint@aol.com (contact for pricing).

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Career and Technical Education
DATA PROFILE

Summer 2007

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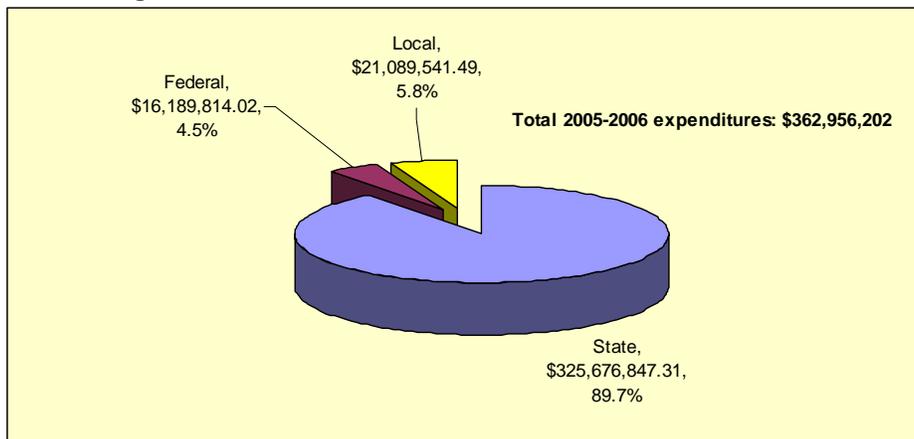
Career and Technical Education in North Carolina

Secondary Career and Technical Education (CTE) courses provided a strong foundation for more than 500,000 North Carolina young people in 2005-2006, setting them on a path to exciting and rewarding careers. Whether students plan to further their education in community colleges, technical schools, or four-year colleges and universities, receive on-the-job training, or pursue careers in the military, secondary Career and Technical Education can be the first step in a pathway toward productive employment and citizenship.

The mission of Career and Technical Education is to help empower students for effective participation in an international economy as world-class workers and citizens. Programs in Career and Technical Education are designed to contribute to the broad educational achievement of students, including basic skills such as reading, writing and mathematics, as well as their ability to work independently and as part of a team, think creatively and solve problems, and utilize technology.

Nearly \$363 million from local, state, and federal sources was spent on CTE courses in North Carolina in 2005-2006. Figure 1 indicates the relative contributions of each funding source. State and local funds are used primarily for salaries, while federal funds are used largely for the purchase of equipment, supplies and other incidental expenses.

Figure 1. How Career and Technical Education Is Funded



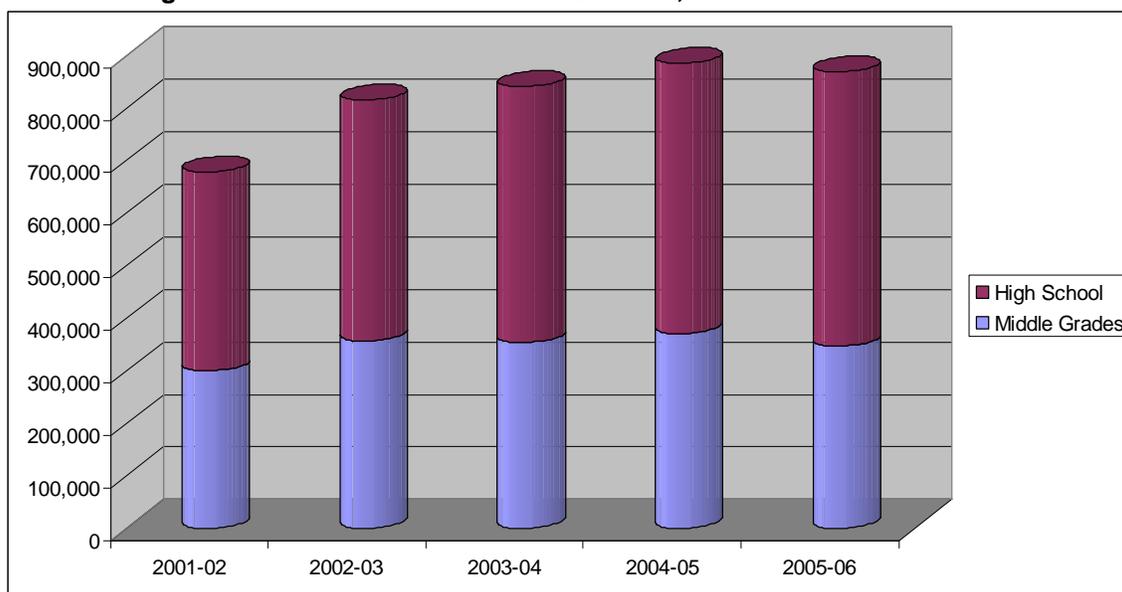
Source: 2006 Fiscal Year End Annual Financial Report Data

In 2005-2006, there were 129 CTE courses available for students in grades 6 through 12 in North Carolina. The program begins with exploratory courses in the middle grades and leads to specialized classroom instruction in grades 11 and 12. These courses were taught by more than 5,531 teachers with the assistance of over 419 support personnel in special populations and career development and 126 CTE administrators. Advanced high school students can also take CTE courses at their local community colleges, where they earn both high school credit toward graduation and community college credit that provides a head start on their postsecondary education.

Enrollment Trends

For the most part, overall CTE enrollment has increased steadily over the past several years. Since 2001-2002, CTE enrollment increased 28.2 percent, from 677,556 to 868,541 courses taken. Note that these enrollment figures are “duplicated,” which means they count students who take more than one CTE class in each class in which they are enrolled. “Unduplicated” data for 2005-2006 show 552,307 students took at least one CTE class. Figure 2 illustrates changes in duplicated enrollment in middle grades and high school CTE courses between 2001 and 2006.

Figure 2. CTE Enrollment in North Carolina, 2001-2002 and 2005-2006



Source: 2002-2006 CTE Performance Data

High school enrollment continues to increase slightly as a percentage of overall CTE enrollment. In 2004-2005, 58.1 percent of the students in CTE, 513,011 young people, were enrolled in high school courses and 41.9 in middle grades. In 2005-2006, the percentage of the students enrolled in high school courses had increased to 60.2 percent, 522,878 students, and middle school had decreased to 39.8 percent, 345,663 students. Overall, enrollment decreased by 1.8 percent between 2004-2005 and 2005-2006. During this period, middle school enrollment dropped by 25,035 students, while high school enrollment increased by 9,178 students.

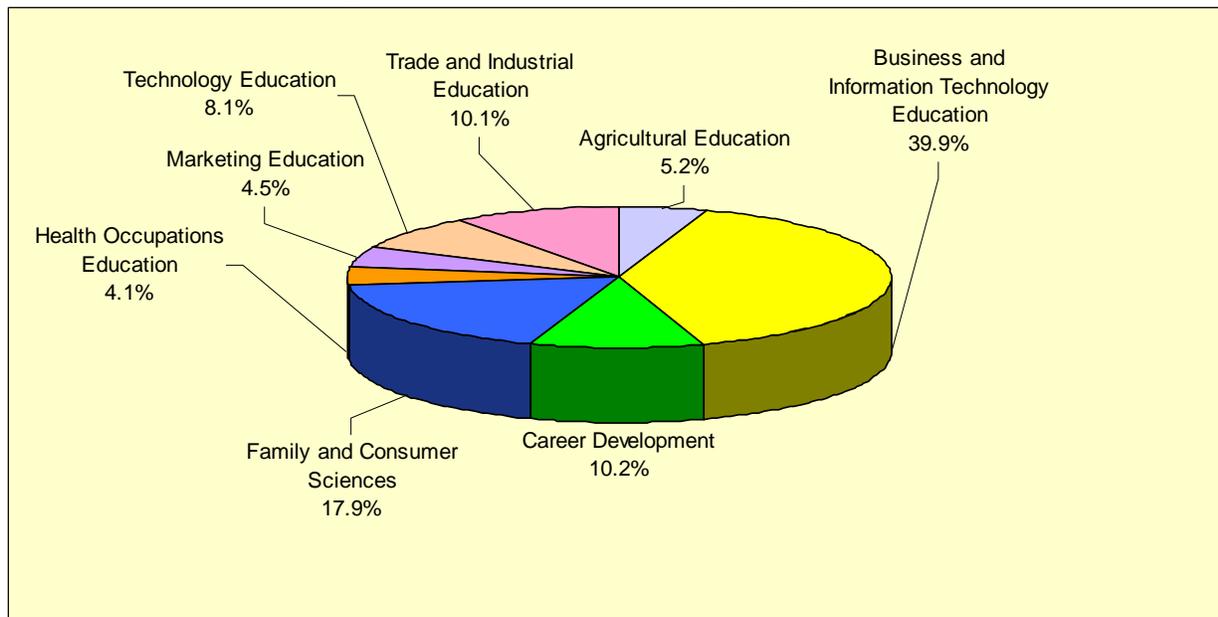
Courses are available in eight program areas: Agricultural Education, Business and Information Technology Education, Career Development, Family and Consumer Sciences Education, Health Occupations Education, Marketing Education, Technology Education, and Trade and Industrial Education. Figure 3 shows 2006 CTE enrollment by program area. The largest program area is Business and Information Technology Education, with 343,026 students. More than half – 181,842 – were enrolled in the three middle grades courses available in Business and Information Technology Education. The smallest program area is Health Occupations Education, with 4.1 percent of the total enrollment, 35,530

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students. However, Health Occupations is growing rapidly, up 60 percent from its 2001-2002 enrollment of 22,110.

An additional 7,797 students not included in Figure 3 were enrolled in community college courses that cannot be assigned to a specific program area. The number of students enrolled in community college courses through CTE has increased phenomenally since 2001-2002, when only 729 were taking such courses.

Figure 3. 2006 CTE Enrollment by Program Area



Source: 2002-2006 CTE Performance Data

Special populations Enrollment

One of the most dramatic trends in CTE enrollment in recent years is the increase in the number of students identified as members of special populations. Special populations students are those who need special services or accommodations to succeed. Students identified as special populations include those with disabilities and those who are at-risk due to academic or economic disadvantages. According to “duplicated” data, which count students in each course in which they are enrolled, the number of students identified as special populations has increased from 248,118 in 2001-2002 to 410,520 in 2005-2006. In high school CTE courses, well over half of the enrollees – 61.2 percent – were identified as members of one or more of the special populations groups. Although the percent of students in middle grades CTE courses who have been identified as special populations is much lower than for high school, this may be due to difficulties in coding rather than an actual difference in enrollment patterns.

Overall, in 2005-2006, special populations students accounted for 47.3 percent of the total enrollment in CTE courses. This is an increase of more than 160,000 students from 2001-2002, when 36.6 percent of the enrollees were identified as members of one of the special populations categories.

Figure 4 shows the percentage of students in grades 6-12 within each program area who have been identified as members of one or more of the special populations groups. The program area with the largest number of special populations students is Business and Information Technology Education, with 147,843 students or 43.1 percent of its enrollment identified as special populations. The lowest number of special populations students is in Health Occupations Education, which has 17,929 students or 50.5 percent of its enrollment identified as special populations. The highest percentage of special populations

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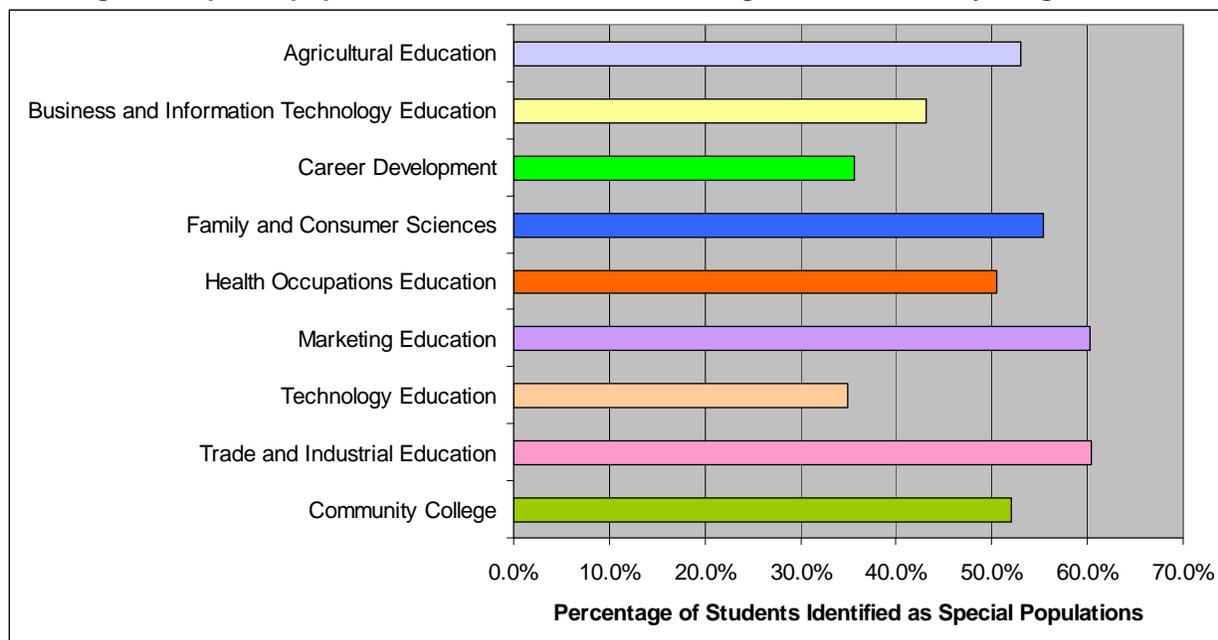
enrollment is in Marketing Education and Trade and Industrial Education, both of which have 60.3 percent. The lowest percentage is in Technology Education, which has 35.0 percent.

Detailed enrollment data for 2001-2002, 2002-2003, 2003-2004, 2004-2005, and 2005-2006 are presented in Chart 1. Data are not yet available for 2006-2007.

Changes in Course of Study Completion

In 2005-2006, graduates were required to meet the standards for at least one of four courses of study: college prep, college tech prep, career prep, or occupational. College prep graduates must meet the minimum course requirements for entry into one of the University of North Carolina member institutions. College tech prep and career prep students must earn at least four credits in a coherent sequence of related CTE courses, including at least one upper level course. In addition, college tech prep students must meet additional academic requirements. The occupational course of study is limited to certain Exceptional Children's students who meet special qualifications. Students who meet the requirements of both college prep and college tech prep courses of study receive credit for both.

Figure 4. Special populations Students as a Percentage of Enrollment by Program Area

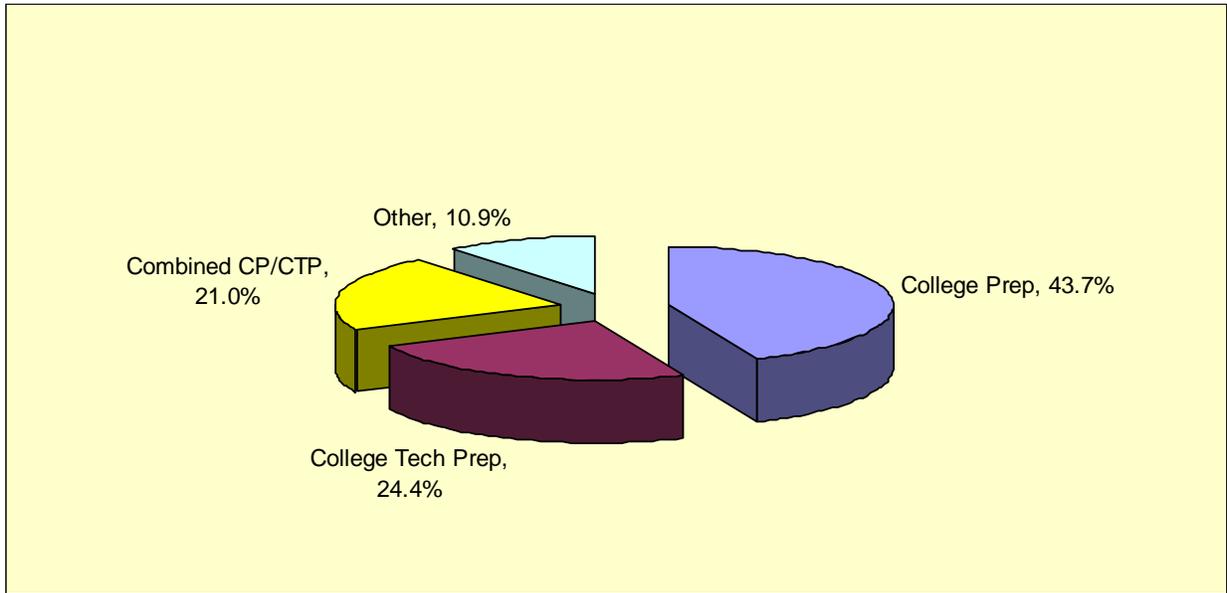


Source: 2002-2006 CTE Performance Data

Figure 5 shows the achieved course of study for the 76,710 2006 NC graduates. Nearly 90 percent of the students met requirements for the college prep course of study, college tech prep, or both. The remaining 10.9 percent includes students who met the requirements for the career prep or occupational courses of study.

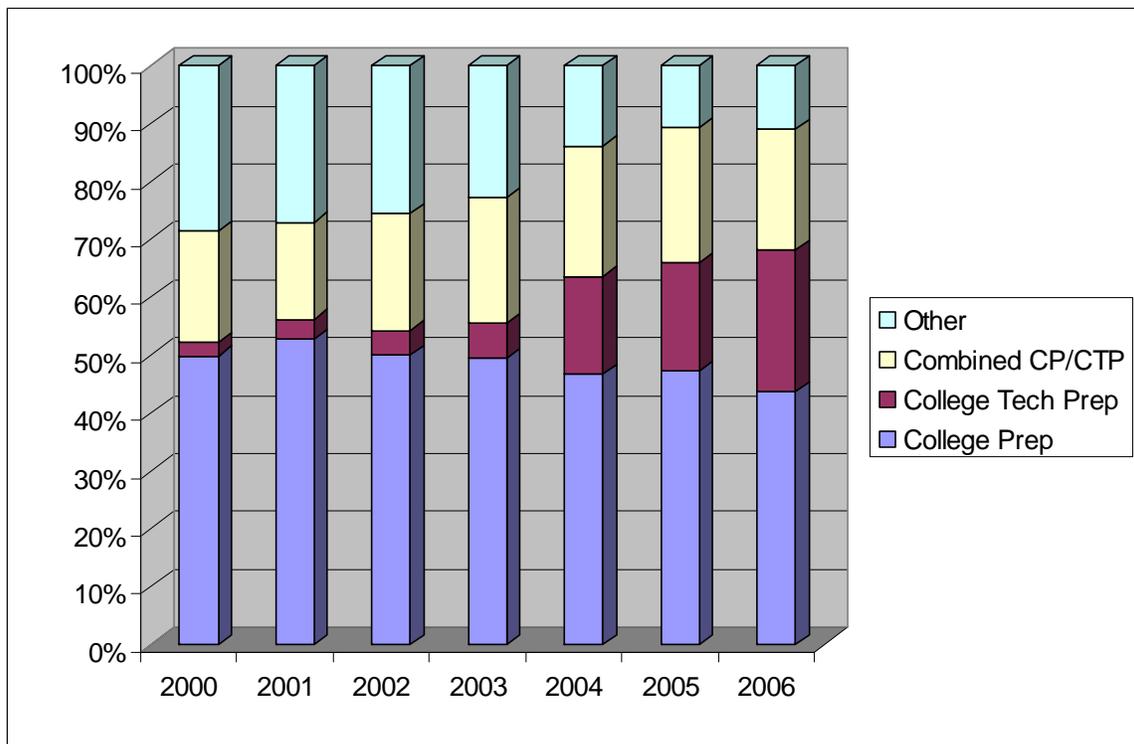
Since 1999-2000, the first year for which these data are available, the percentage of graduates who met the requirements for the college prep or college tech prep course of study or both has increased from 71.5 to 89.1. Figure 6 shows the pattern of achieved course of study from 1999-2000 to 2005-2006. The percentage of students who met the requirements college prep has remained relatively steady at slightly less than half and for students who met both the college prep and college tech prep requirements at about one-fifth. The major changes have occurred in college tech prep, which has increased from 2.3 percent to 24.4 percent, and in the "other" category, which has dropped from 28.5 percent to 10.9 percent.

Figure 5. 2006 NC Graduates' Course of Study



Source: 2001-2006 NC Accountability Data

Figure 6. NC Graduates Course of Study, 1999-2000 to 2005-2006



Source: 2001-2006 NC Accountability Data

Federal proficiency indicators

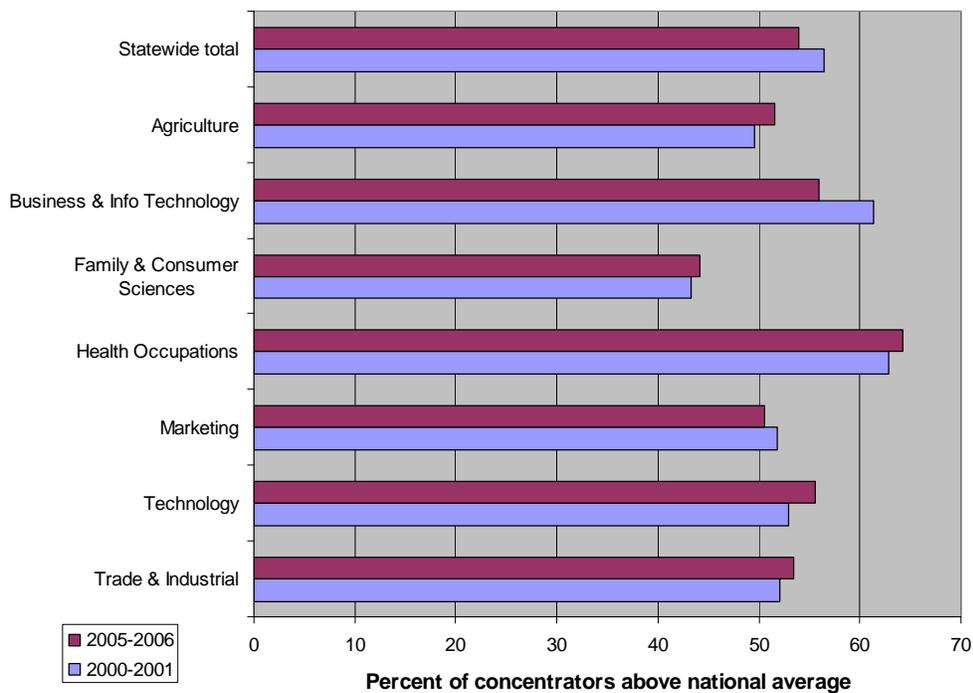
As part of the Carl D. Perkins Vocational and Technical Education Act of 1998, which provided North Carolina with more than \$34 million in 2005-2006, data are collected each year on NC progress on six proficiency indicators that are agreed upon and negotiated with the U.S. Department of Education. Complete information on performance on each of these indicators by school system can be viewed at <http://wdeppms.dpi.state.nc.us/wdeppms.nsf>.

Proficiency Indicator 1: Academic Attainment

The measure of Academic Attainment used in North Carolina is performance on ASSET or ACCUPLACER, two national standardized examinations that are also used by community colleges to determine student placement. CTE concentrators take four ASSET or ACCUPLACER subtests: numerical skills, elementary algebra, writing, and reading. A concentrator is a graduate who has earned at least four credits in a CTE pathway, at least one of which is in an upper level course. Targets are set for each subtest and for a combined measure, for all students and disaggregated by special category and by program area. For the combined category, the numbers of students meeting or exceeding the national average on each subtest were added and then calculated as a percentage of total test takers.

Figure 7 compares the percentage of students who met or exceeded the national average on the combined measure in 2000-2001 and 2005-2006. Performance on the Academic Attainment measure continues to be a significant concern in NC CTE. The combined category target for 2004-2005 was for 60.8 percent of concentrators to score at or above the national average on each of the four subtests. Performance fell far short of that target with only 54.3 percent meeting the goal. Performance on each of the four subtests fell similarly short of the target. Performance disaggregated by special category also fell below the targets in all areas except for students who have identified themselves as working toward the College Tech Prep course of study.

Figure 7. Comparison of Academic Attainment, 2001-2006



Source: 2001-2006 CTE Performance Data

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Detailed reports by program area and other categories for 2000-2001, 2001-2002, 2002-2003, 2003-2004, 2004-2005 and 2005-2006 are presented in Charts 2 and 3. Information is not yet available for 2006-2007.

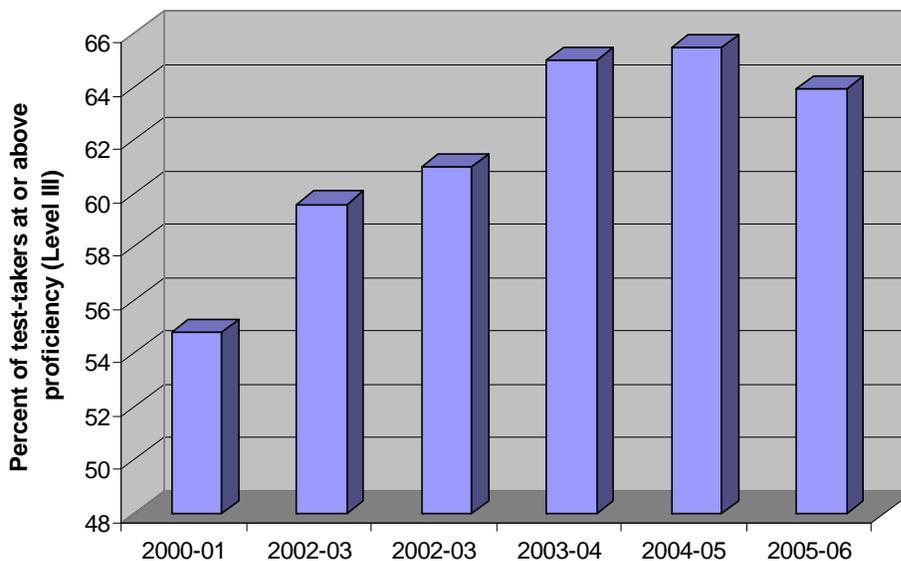
Proficiency Indicator 2: Technical Attainment

Figure 8 shows the progress CTE enrollees have made in Technical Attainment since 2000-2001, the first year for which comparable data are available. The measure used for Technical Attainment is performance of all CTE enrollees on standardized postassessments given at the conclusion of each course. Tests typically contain 100 multiple-choice items. These items are developed in North Carolina and are based upon course blueprints that list specific course objectives and the respective weights of each objective. The examinations are assessed for validity and reliability prior to use in statewide accountability. Reported data show the percent of North Carolina CTE students who scored at or above the Proficient level (Level III) on the postassessment. Although North Carolina enrollees' scores on standardized postassessments are above the target for 2005-2006 of 60.5 percent at or above the Proficient level, they fell slightly from the previous year. For 2004-2005, 65.5 percent of the students scored at or above the Proficient level, but for 2005-2006, only 63.9 percent did so.

Overall, the percentage of students scoring at or above Proficient increased nearly 10 percent between 2000-2001 and 2005-2006. There were also significant increases for the general Special populations category as well as for several subcategories and for students who identified themselves as working toward a College Tech Prep course of study. However, students in several special categories, including Exceptional Children, Limited English Proficient, and Academically Disadvantaged, fell significantly below the overall and subcategory goals.

Chart 5 shows the percentage of CTE enrollees who scored at or above Proficient overall and in disaggregated categories since 2000-2001.

Figure 8. NC CTE Enrollees' Progress on Technical Attainment



Source: 2001-2006 CTE Performance Data

Follow-up Data on CTE Concentrators

Each year, Career and Technical Education also surveys students who graduated the previous year and met the qualifications for concentrators. Concentrators are graduates who earned four or more credits in a career pathway, at least one of which was in a capstone, or second-level, course. This annual survey asks graduates about their experiences in Career and Technical Education, how well these courses prepared graduates for work or for further education or training, and their current educational and employment status.

The 2007 survey, which studied 2006 graduates nine months to one year after they completed high school, found more than three-fourths of the former students pursuing further education or postsecondary training, including on the job training. By program area, graduates pursuing further education or training ranged from 72.5 percent for Agricultural Education to 89.2 for Health Occupations Education. Statewide, 78.7 percent of the concentrators were in some sort of postsecondary education or training. Chart 5 shows graduate educational status at the time the survey was conducted.

Only 3.8 percent of the concentrators reported they were unemployed and seeking full-time work at the time of the survey. This contrasts sharply to the North Carolina Youth Unemployment Rate of 20.0 percent.

The study also found that graduates reported the availability of Career and Technical Education courses was one main reason they stayed in high school, a finding that has been consistent through the years the study has been done. More than half of the concentrators statewide – 53.1 percent – credited their Career and Technical Education courses as being a deciding factor in keeping them in school.

Complete results of the 2007 Follow-up Study as well as disaggregated data by course, program area, and local school system can be found on the Planning and Performance Management site:
<http://wdeppms.dpi.state.nc.us/wdeppms.nsf>.

How to Use this Information

Teachers can work with CTE Administrators and VoCATS Coordinators to obtain data on each of these measures for the school system and even down to the individual classroom. VoCATS Coordinators can also generate reports that highlight the performance by objective of students in individual classrooms. For additional details about this publication, contact the Planning and Performance Management System at rwelfare@dpi.state.nc.us or contact the program area directly.

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Chart 1. Enrollment by Program Area

	Total Enrollment				
	01-02	02-03	03-04	04-05	05-06
Agricultural Education	35,481	41,048	42,255	44,267	44,879
Business and Information Technology Education	260,584	322,134	336,755	349,062	343,026
Career Development	72,654	77,907	73,657	86,620	87,597
Family and Consumer Sciences	129,294	154,871	154,188	157,452	154,459
Health Occupations Education	22,110	27,311	30,784	34,112	35,530
Marketing Education	24,399	29,633	32,534	35,893	39,024
Technology Education	63,625	77,651	81,574	79,910	69,712
Trade and Industrial Education	68,680	80,200	83,405	89,130	86,517
Community College	729	3,557	4,921	7,952	7,797
Middle Grades	299,257	355,985	353,166	370,698	345,663
High School	378,299	458,327	486,907	513,700	522,878
Total	677,556	814,312	840,073	884,398	868,541

	Special populations Enrollment				
	01-02	02-03	03-04	04-05	05-06
Agricultural Education	15,095	18,747	19,934	21,935	23,791
Business and Information Technology Education	89,113	121,652	129,184	134,438	147,843
Career Development	17,054	20,748	19,711	26,076	31,179
Family and Consumer Sciences	55,607	71,808	73,463	78,035	85,616
Health Occupations Education	8,164	11,112	13,304	15,582	17,929
Marketing Education	12,070	15,681	18,007	19,683	23,520
Technology Education	17,498	23,281	25,127	24,549	24,391
Trade and Industrial Education	33,212	42,653	45,341	49,962	52,198
Community College	305	1,614	2,489	4,041	4,053
Middle Grades	68,230	87,141	82,491	85,254	90,434
High School	179,888	240,155	264,069	289,047	320,086
Total	248,118	327,296	346,560	374,301	410,520

Source: NC CTE Performance Data, 2001-2006

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Chart 2. Academic Attainment Data by Category

	00-01	01-02	02-03	03-04	04-05	05-06
All Students						
Reading	50.6	48.3	51.8	47.7	47.2	45.9
Writing	56.3	51.2	53.4	51.1	50.9	49.7
Numerical Skills	50.0	51.1	52.7	51.4	50.2	49.6
Elementary Algebra	68.6	65.8	67.6	68.0	67.8	68.4
Combined	56.4	54.1	56.4	54.4	54.3	53.9
Special populations						
Reading	38.7	36.1	38.5	34.4	34.0	33.9
Writing	43.5	38.5	39.9	37.3	37.3	37.7
Numerical Skills	35.9	37.7	38.5	38.3	36.7	37.9
Elementary Algebra	59.3	55.8	56.1	57.8	57.6	59.7
Combined	44.3	42.0	43.2	42.0	41.4	42.3
Nontraditional						
Reading	55.6	55.3	57.8	51.7	54.7	53.4
Writing	59.1	59.3	59.0	55.2	57.3	57.3
Numerical Skills	47.8	55.2	54.8	51.4	53.1	54.7
Elementary Algebra	68.8	72.2	70.6	69.7	70.8	72.2
Combined	57.8	60.5	60.5	57.0	59.0	59.4
Academically Disadvantaged						
Reading	34.7	29.3	30.7	27.0	27.0	26.5
Writing	40.3	32.4	33.1	30.6	30.7	30.7
Numerical Skills	28.6	29.7	29.9	31.0	29.1	29.8
Elementary Algebra	54.0	48.3	47.4	50.0	50.3	51.6
Combined	39.4	34.9	35.3	34.1	34.1	34.6
Economically Disadvantaged						
Reading	45.9	45.2	41.5	35.4	34.0	34.3
Writing	51.2	47.8	43.6	38.5	38.3	38.7
Numerical Skills	44.9	44.4	40.7	40.0	38.1	39.2
Elementary Algebra	69.2	67.0	61.8	62.0	61.0	63.4
Combined	52.8	51.1	46.9	42.6	42.9	43.8
Limited English Proficient						
Reading	28.3	28.9	29.5	22.2	16.9	15.0
Writing	28.3	24.1	28.4	23.2	21.0	17.1
Numerical Skills	52.8	47.0	48.9	41.1	32.4	31.0
Elementary Algebra	77.4	65.1	68.4	66.4	61.3	63.0
Combined	46.7	41.3	43.8	37.8	32.2	31.0
Exceptional Children						
Reading	21.4	19.4	25.7	20.8	20.1	20.5
Writing	19.7	17.9	18.3	18.5	18.2	18.5
Numerical Skills	28.8	28.2	28.6	26.1	25.2	25.9
Elementary Algebra	43.2	38.7	36.3	42.0	41.6	42.8
Combined	28.3	26.1	27.2	25.5	25.6	26.3
College Tech Prep						
Reading	33.7	33.4	56.6	50.5	49.7	47.6
Writing	40.1	33.9	58.9	54.5	53.7	51.8
Numerical Skills	37.0	35.5	58.1.0	54.8	53.1	51.9
Elementary Algebra	51.4	48.3	74.3	71.7	71.0	70.9
Combined	40.6	37.8	62.0	57.8	57.3	56.1

Source: NC CTE Performance Data, 2001-2006

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Chart 3. Academic Attainment Data by Program Area

	00-01	01-02	02-03	03-04	04-05	05-06
Reading	50.6	48.3	51.8	47.7	47.2	45.9
Agriculture	44.5	43.9	45.8	44.4	44.9	45.1
Business & Info Technology	54.0	52.0	55.6	52.0	50.1	47.9
Family & Consumer Sciences	38.3	41.2	41.5	34.8	35.4	37.4
Health Occupations	59.8	56.5	60.4	56.0	56.4	56.2
Marketing	48.4	48.2	49.1	45.8	45.7	43.3
Technology	45.4	45.8	51.8	48.1	49.5	47.3
Trade & Industrial	44.4	45.3	49.4	45.0	46.6	45.6
Writing	56.3	51.2	53.4	51.1	50.9	49.7
Agriculture	47.4	41.7	44.4	43.9	45.4	45.0
Business & Info Technology	60.9	58.3	58.0	55.4	54.6	52.8
Family & Consumer Sciences	46.5	46.6	46.8	42.5	40.5	41.8
Health Occupations	66.1	62.2	63.9	62.9	64.0	64.0
Marketing	51.5	50.1	50.9	49.5	49.3	48.3
Technology	42.6	43.5	52.9	50.5	49.2	49.0
Trade & Industrial	48.6	45.6	49.4	46.5	47.7	46.4
Numerical Skills	50.0	51.1	52.7	51.4	50.2	49.6
Agriculture	49.6	45.0	49.1	50.5	50.0	51.0
Business & Info Technology	55.3	54.7	54.0	53.5	52.3	51.0
Family & Consumer Sciences	31.3	36.8	36.1	35.0	33.9	36.3
Health Occupations	51.0	53.4	54.3	53.9	55.3	55.9
Marketing	43.9	48.0	49.0	46.8	46.8	45.4
Technology	58.3	55.5	59.1	57.0	55.5	57.1
Trade & Industrial	52.5	55.4	56.9	55.2	56.2	56.2
Elementary Algebra	68.6	65.8	67.6	68.0	67.8	68.4
Agriculture	57.1	55.6	58.5	61.1	62.6	64.7
Business & Info Technology	75.0	73.4	72.4	72.7	71.5	71.9
Family & Consumer Sciences	57.1	58.8	57.9	58.7	58.7	60.8
Health Occupations	74.7	75.7	77.5	77.5	77.9	80.6
Marketing	63.4	63.1	64.9	64.7	63.7	65.3
Technology	65.7	65.9	67.8	67.0	66.8	69.0
Trade & Industrial	62.7	62.3	64.5	65.2	66.9	66.0
Combined Scores	56.4	54.1	56.4	54.4	54.3	53.9
Agriculture	49.6	46.6	49.4	50.0	50.7	51.5
Business & Info Technology	61.3	59.6	60.0	58.4	57.1	55.9
Family & Consumer Sciences	43.3	45.8	45.6	42.8	42.1	44.1
Health Occupations	62.9	62.0	64.0	62.6	63.4	64.2
Marketing	51.8	52.4	53.5	51.7	51.4	50.6
Technology	53.0	52.7	57.9	55.6	55.3	55.6
Trade & Industrial	52.0	52.2	55.1	53	54.3	53.5

Source: NC CTE Performance Data, 2001-2006

Chart 4. Technical Attainment Data for Career and Technical Education

	2000-01	2002-03	2002-03	2003-04	2004-05	2005-06
Overall	54.8	59.6	61.0	65.0	65.5	63.9
Special populations	41.8	47.4	45.9	54.5	55.9	53.3
Nontraditional	54.5	62.6	64.7	61.0	69.1	54.6
Academically Disadvantaged	36.0	40.6	40.4	45.1	45.6	45.6
Economically Disadvantaged	51.8	58.5	49.6	54.6	53.4	53.5
Limited English Proficient	36.3	45.6	37.6	36.2	34.1	33.5
Exceptional Children	26.5	32.1	34.4	38.0	38.2	38.8
College Tech Prep	46.4	50.8	52.8	59.8	60.9	59.4
Agricultural Education	33.8	45.1	60.0	59.3	68.3	71.8
Business & Information Tech	65.3	71.4	71.2	70.6	69.1	61.0
Career Development	41.4	44.9	52.5	56.2	60.0	64.2
Family & Consumer Sciences Education	61.8	63.7	55.6	71.5	67.0	71.0
Health Occupations Education	50.5	52.0	55.3	69.9	74.9	75.3
Marketing Education	44.4	52.6	56.2	55.2	56.7	56.2
Technology Education	41.1	47.5	45.9	48.0	50.6	48.4
Trade & Industrial Education	42.4	45.5	48.8	48.3	59.0	56.2

Source: NC CTE Performance Data, 2001-2006

Chart 5. 2006 Concentrator Education Status

	Post-secondary	4-year college or university	On-the-job training	Total in post-secondary education or training
Agricultural Education	43.6	21.8	6.9	72.5
Business & Information Technology Education	39.7	35.1	5.8	80.6
Family & Consumer Sciences Education	46.4	24.5	3.6	74.5
Health Occupations Education	41.0	46.0	2.2	89.2
Marketing Education	35.0	37.6	6.5	79.1
Technology Education	39.2	33.7	6.8	79.6
Trade & Industrial Education	41.1	23.5	8.4	72.9
Total	41.2	31.9	5.5	78.7

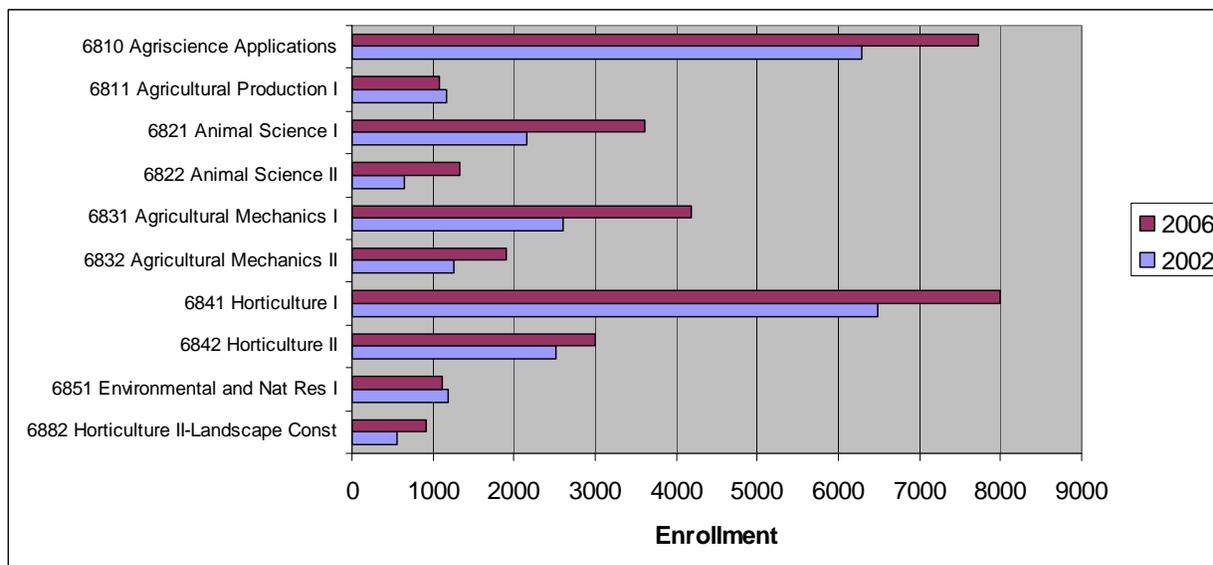
Source: NC CTE Performance Data, 2001-2006

Agricultural Education

Agricultural Education provides students with the opportunity to participate in coordinated group and individual instructional activities that are focused on preparation for future careers in agriculture. The agricultural education program is designed to develop technical, leadership, and management expertise needed by middle and high school students preparing for careers in agricultural occupations and to further education in an agriculturally related field.

The Agricultural Education curriculum in North Carolina includes 18 high school courses and one middle grades course. For 2005-2006, 6,869 students were enrolled in Exploring Biotechnology, while 38,010 students were enrolled in the high school programs. (Note that the middle grades figures also include students taking Exploring Biotechnology as part of a Health Occupations Education program.) Figure 9 illustrates the enrollment for selected courses for Agricultural Education, grades 9-12, between 2000-2001 and 2005-2006.

Figure 9. Changes in Enrollment in Selected High School Agricultural Education Courses between 2001 and 2006



Source: NC CTE Performance Data, 2001-2006

Overall enrollment by course for Agricultural Education is presented in Chart 6. Enrollment by course for special populations students in Agricultural Education is presented in Chart 7.

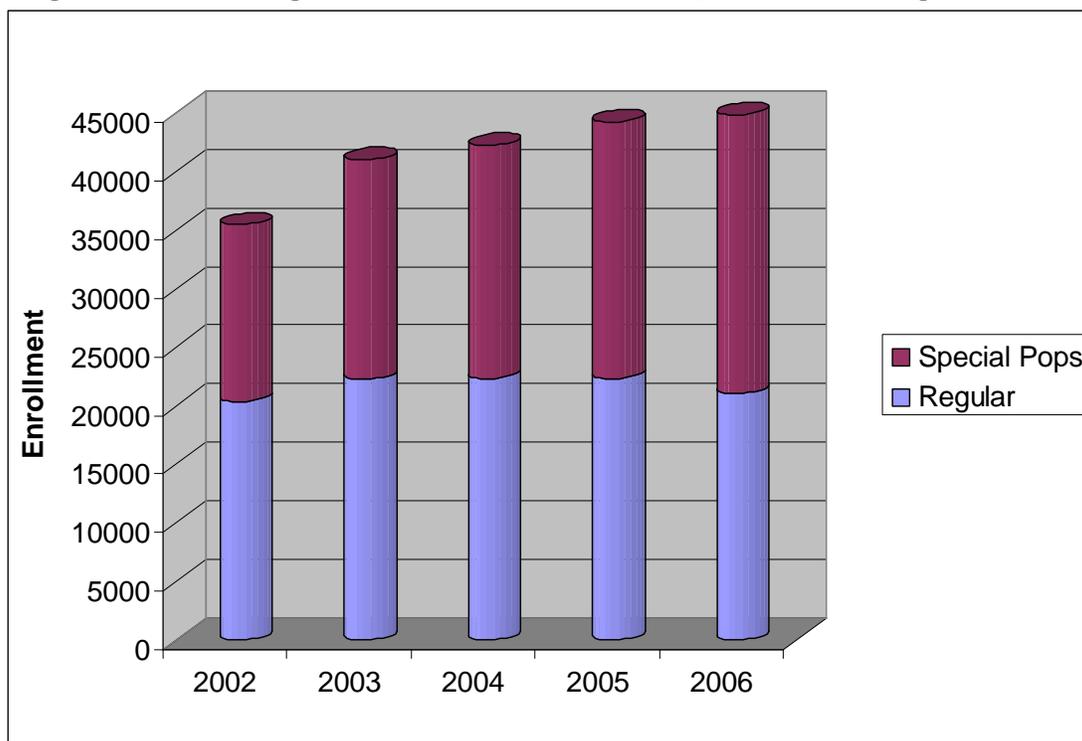
The overall enrollment in Agricultural Education has increased steadily over the past several years. Since 2001-2002, Agricultural Education enrollment increased by more than 9,000 students, from 35,481 to 44,879. (Enrollment in 2001-2002 showed a significant drop, due to a change in the way data were collected.) Of the high school enrollment, 58.9 percent are identified as special populations, indicating special services or accommodations are needed to help these students succeed. Figure 10 illustrates the trend in Agricultural Education enrollment since 2001-2002.

Chart 6. Overall Agricultural Education Enrollment, 2001-2002 through 2005-2006

		2002	2003	2004	2005	2006
High School						
6809	Agriculture Pilot Program	327	394	574	444	537
6810	Agriscience Applications	6285	6611	7457	7428	7722
6811	Agricultural Production I	1175	1290	1088	1190	1070
6812	Agricultural Production II	487	576	542	564	446
6821	Animal Science I	2161	2796	2936	3749	3615
6822	Animal Science II	655	908	1236	1137	1329
6825	Equine Science I	0	0	0	418	483
6826	Equine Science II	0	0	0	64	131
6831	Agricultural Mechanics I	2607	2882	3101	4129	4185
6832	Agricultural Mechanics II	1264	1474	1557	1539	1909
6841	Horticulture I	6486	7697	7962	8268	7994
6842	Horticulture II	2512	3016	3121	3013	3007
6843	Horticulture II-Turf Grass	323	312	315	377	368
6851	Environmental and Nat Res I	1183	1198	1039	1086	1114
6852	Environmental & Nat Res II	421	292	343	405	374
6871	Biotechnology & Agris Res I	0	0	0	297	265
6872	Biotechnology & Agris Res II	66	121	91	37	250
6882	Horticulture II-Landscape Const	552	762	860	1021	920
6896	Agriculture Apprenticeship	59	105	67	61	24
6897	Agriculture Co-op Program	180	192	185	257	270
6898	Agriculture Internship	54	42	113	121	143
6899	Agriculture Advanced Studies	418	533	718	856	878
Other High School Courses		367	438	448	922	976
Middle Grades						
6828	Exploring Biotechnology	7899	9409	8502	6884	6869
Total Agricultural Education		35481	41048	42255	44267	44879

Source: NC CTE Performance Data, 2001-2006

Figure 10. Trend in Agricultural Education Enrollment, 2001-2002 through 2005-2006



Source: NC CTE Performance Data, 2001-2006

Chart 7. Special populations Enrollment in Agricultural Education, 2001-2002 through 2005-2006

		2002	2003	2004	2005	2006
High School						
6841	Horticulture I	3531	4538	4744	4925	5143
6809	Ag Pilot/Local Option	154	166	290	222	310
6810	Agriscience Applications	3206	3521	4129	4143	4731
6811	Agricultural Production I	600	690	608	656	676
6812	Agricultural Production II	223	290	275	316	243
6821	Animal Science I	918	1266	1386	1884	1982
6822	Animal Science II	246	394	535	548	639
6825	Equine Science I	0	0	0	156	216
6826	Equine Science II	0	0	0	17	51
6831	Agricultural Mechanics I	1355	1608	1721	2399	2502
6832	Agricultural Mechanics II	598	786	884	863	1137
6842	Horticulture II	1258	1644	1803	1738	1757
6843	Horticulture II-Turf Grass	132	150	161	205	215
6851	Environmental and Nat Res I	563	626	592	584	667
6852	Environmental & Nat Res II	170	126	184	215	209
6871	Biotechnology & Agris Res I	0	0	0	161	145
6872	Biotechnology & Agris Res II	8	38	23	13	87
6882	Horticulture II-Landscape Const	233	400	410	533	580
6896	Agriculture Apprenticeship	21	36	27	21	7
6897	Agriculture Co-op Program	80	100	88	119	129
6898	Agriculture Internship	14	17	33	53	69
6899	Agriculture Advanced Studies	170	221	301	369	383
Other High School		134	191	195	456	525
Middle Grades						
6828	Exploring Biotechnology	1481	1939	1545	1339	1388
Total Agricultural Education		15095	18747	19934	21935	23791

Source: NC CTE Performance Data, 2001-2006

Data on Student Attainment of Academic and Technical Competencies

As part of the agreement providing North Carolina more than \$34 million annually for Career and Technical Education, data on academic and technical attainment are reported each year. Complete information on academic and technical attainment by school system can be viewed at <http://wdeppms.dpi.state.nc.us/wdeppms.nsf>.

Academic Attainment

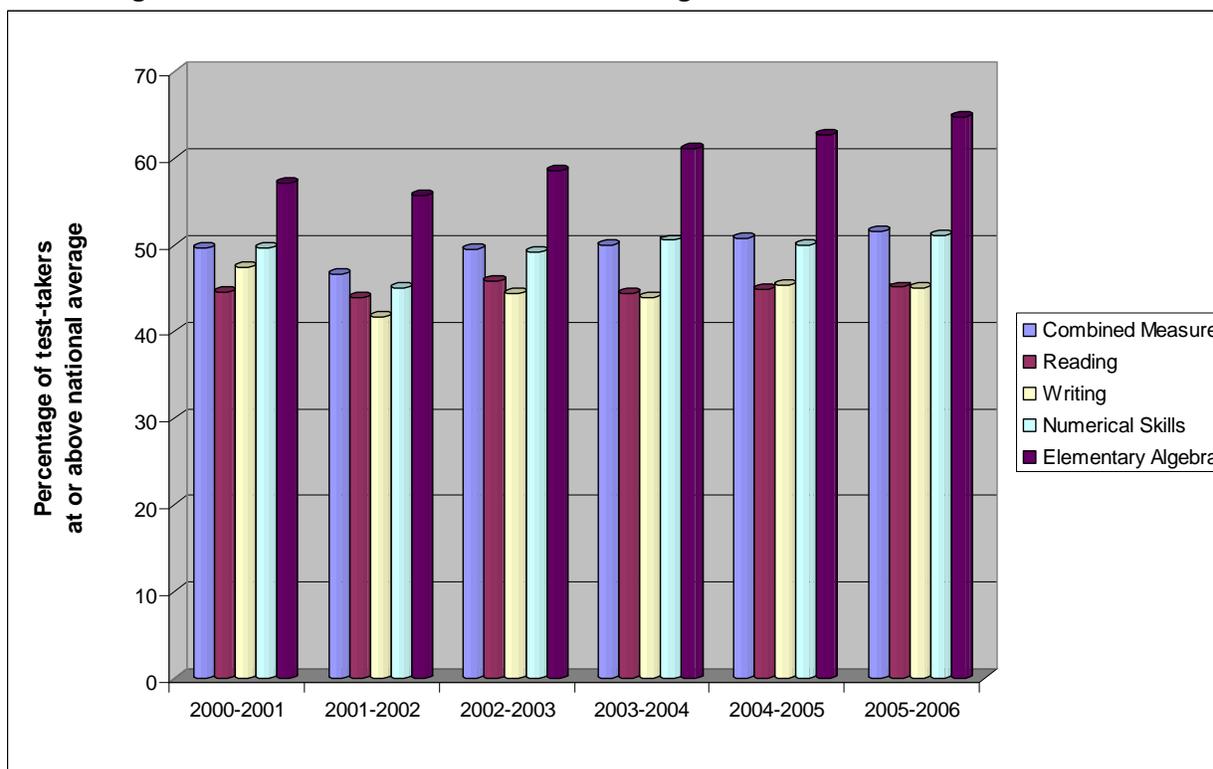
The measure of academic attainment used in North Carolina is performance on ASSET or ACCUPLACER, two national standardized examinations that are also used by community colleges to determine student placement. CTE concentrators take four ASSET or ACCUPLACER subtests: numerical skills, elementary algebra, writing, and reading. (A concentrator is a graduate who has earned at least four credits in a CTE pathway, at least one of which is in an upper level course.) Targets are set for each subtest and for a combined measure, for all students and disaggregated by special category and by program area. For the combined category, the numbers of students meeting or exceeding the national average on each subtest were added and then calculated as a percentage of total test takers. Figure 11 and Chart 8 illustrate the performance of concentrators in Agricultural Education on the academic attainment measure.

Chart 8. Percent of Concentrators in Agricultural Education Who Scored above the National Average on ASSET or ACCUPLACER

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Combined Measure	49.6	46.6	49.4	50.0	50.7	51.5
Reading	44.5	43.9	45.8	44.4	44.9	45.1
Writing	47.4	41.7	44.4	43.9	45.4	45.0
Numerical Skills	49.6	45.0	49.1	50.5	50.0	51.0
Elementary Algebra	57.1	55.6	58.5	61.1	62.6	64.7

Source: NC CTE Performance Data, 2001-2006

Figure 11. Academic Attainment Scores for Agricultural Education Concentrators



Source: NC CTE Performance Data, 2001-2006

In each of the four years for which data are available, a higher percentage of Agricultural Education concentrators exceeded the national average on the elementary algebra subtest than on any of the other three subtests. This same pattern is found with Career and Technical Education concentrators as a whole. For example, in 2005-2006, among Agricultural Education concentrators, 45.1 percent of concentrators exceeded the national average in reading; in writing, 45.0 percent, in numerical skills, 51.0 percent, and in elementary algebra, 64.7 percent. The greatest increase among Agricultural Education concentrators was for the numerical skills and elementary algebra subsets, which increased 1.0 and 2.1 percent, respectively.

Technical Attainment

The measure used for technical attainment is performance of all enrollees in Career and Technical Education courses on standardized postassessments given at the conclusion of each course. The examinations typically contain 100 multiple-choice questions. They are developed in North Carolina and are based upon course blueprints that list specific course objectives with respective weights of each objective. The examinations are assessed for validity and reliability prior to use in statewide accountability. The 2005-2006 target was for 60.5 percent of Agricultural Education enrollees to reach Proficiency (Level III) or better on the postassessments. To reach Proficiency, students must score 65 percent correct or better on the examination.

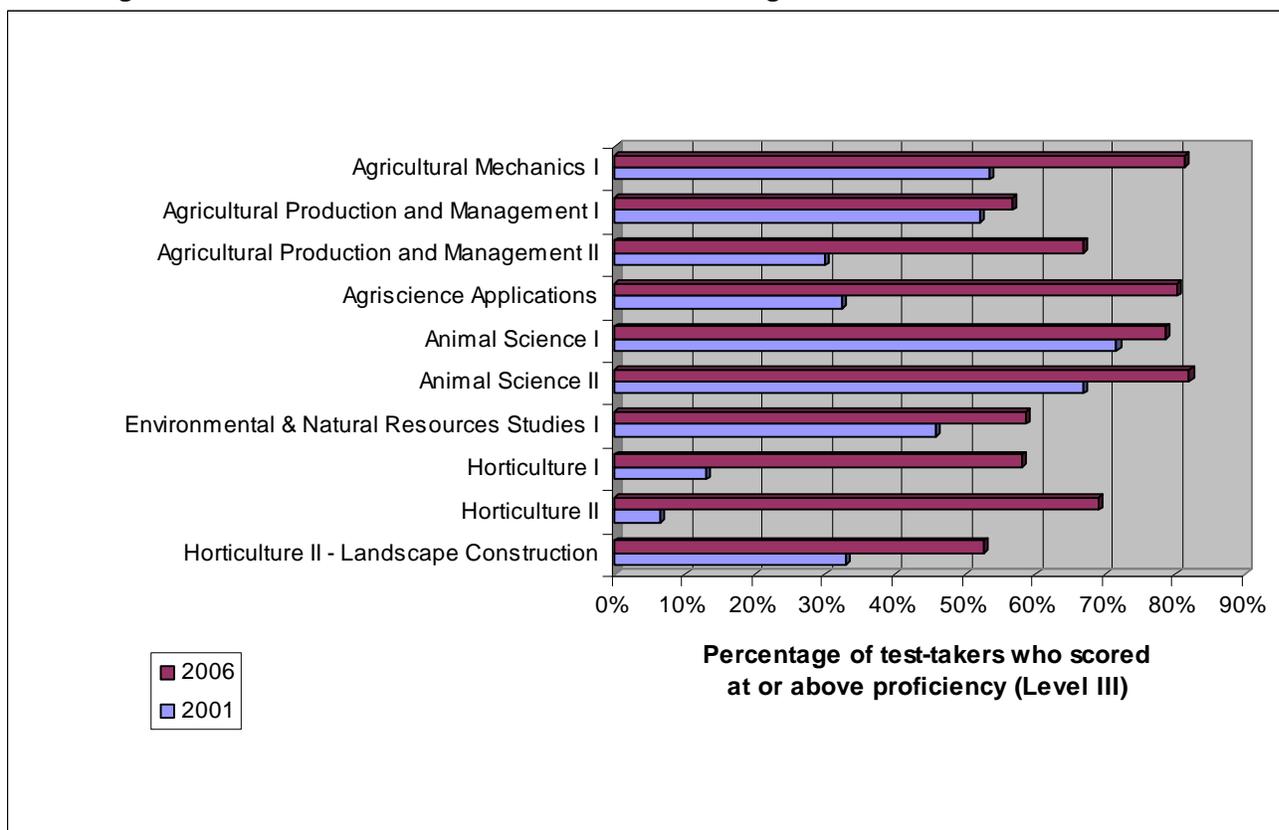
Figure 12 illustrates the performance of Agricultural Education students in selected courses on the technical attainment measure since 2000-2001, the first year for which comparable data are available. Details about overall and special populations technical attainment appear in Chart 9. Since 2000-2001, the percentage of Agricultural Education enrollees who reach Proficiency increased from 33.7 percent to 71.8 percent, a gain of 38.1 percentage points. Special populations students also showed a significant increase: from 21.9 percent at Proficiency or above in 2000-2001 to 62.0 percent in 2005-2006. The Agricultural Education course with the highest performance on the technical attainment measure statewide was Equine Science I, where during 2005-2006, 94.4 percent of the enrollees scored at Proficiency or above.

Chart 9. Percent of Enrollees who Scored above Proficiency in Agricultural Education Courses, 2000-2001 to 2005-2006

	2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
	Overall	Sp Pops										
6810 Agriscience Applications	32.3%	17.8%	51.7%	36.4%	73.3%	55.1%	77.0%	63.8%	81.1%	68.5%	80.2%	69.8%
6811 Agricultural Production and Management I	52.0%	42.7%	55.2%	46.3%	46.2%	33.9%	47.5%	39.9%	60.6%	52.1%	56.8%	48.1%
6812 Agricultural Production and Management II	30.1%	24.0%	33.6%	26.2%	56.8%	43.6%	49.6%	39.5%	66.1%	59.9%	66.9%	56.1%
6821 Animal Science I	71.6%	54.7%	60.4%	41.3%			69.2%	54.3%	75.6%	61.1%	78.5%	67.4%
6822 Animal Science II	66.8%	42.9%	55.2%	34.4%			67.0%	48.3%	70.4%	54.9%	82.0%	69.1%
6825 Equine Science I									92.7%	85.0%	94.4%	87.4%
6831 Agricultural Engineering Tech I	53.6%	40.2%	57.9%	43.5%	61.3%	44.6%	60.6%	49.5%			81.4%	74.9%
6832 Agricultural Engineering Tech II	50.3%	37.7%	47.5%	37.1%	53.1%	39.0%	48.7%	36.4%	57.7%	46.7%		
6833 Agr Mechanics II - Small Engines											81.6%	73.3%
6841 Horticulture I	13.1%	9.8%	29.0%	23.0%			41.5%	34.2%	66.3%	59.1%	58.2%	51.5%
6842 Horticulture II	6.5%	4.2%	32.1%	26.3%	45.5%	31.5%			49.2%	41.9%	69.0%	63.2%
6843 Horticulture II - Turf Grass									56.8%	38.8%	69.3%	53.2%
6851 Environmental & Natural Resources Studies I	45.8%	37.4%	51.6%	43.9%	42.9%	28.0%	55.9%	48.2%			58.6%	50.4%
6852 Environmental & Natural Resources Studies II	49.8%	32.9%	46.2%	34.1%	48.6%	38.8%	66.3%	57.5%	60.1%	50.2%		
6872 Biotechnology & Agriscience Research	78.9%	100.0%	72.3%	60.0%	79.4%	51.6%	84.9%	61.9%	57.5%	40.5%		
6882 Landscape Construction & Maintenance	32.9%	23.7%	42.5%	27.1%	49.4%	34.4%	55.4%	39.1%	42.2%	24.7%	52.6%	40.9%
Total Agricultural Education	33.7%	21.9%	45.1%	32.8%	60.0%	42.7%	59.3%	46.2%	68.3%	56.9%	71.8%	62.0%

Source: NC CTE Performance Data, 2001-2006

Figure 12. Technical Attainment Scores in Selected Agricultural Education Courses



Source: NC CTE Performance Data, 2001-2006

Chart 10 shows the average score by course in Agricultural Education. All Agricultural Education courses showed an increase in their state averages between 2001-2002 (the first year this information was available) and 2005-2006. The largest increase was for Horticulture II, where the average student score increased by 12.3 percentage points, to 69.6 percent correct. The highest average score is for Equine Science I, 85.1 percent correct, and the lowest for Horticulture II – Landscape Construction, 62.7.

Note that gaps in the chart are likely due to introduction of new curriculum. When a new curriculum is introduced, there is a year gap in reporting testing data during which updated test items are validated and reliability is determined.

CAREER AND TECHNICAL EDUCATION DATA PROFILE

Chart 10. Average Percent Correct by Course

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
6810 Agriscience Applications	63.9	72.2	73.5	76.4	75.7
6811 Agr Prod I	65.1	62.1	63.2	67.1	65.9
6812 Agr Prod II	58.2	64.8	63.9	68.7	69.9
6821 Animal Science I	66.7		70.0	73.2	74.3
6822 Animal Science II	65.1		68.9	70.1	76.5
6825 Equine Science I				83.0	85.1
6831 Agr Mechanics I	65.9	67.2	66.9		74.7
6832 Agr Mechanics II	63.2	64.8	63.8	66.6	
6833 Agr Mechanics II - Small Engines					72.9
6841 Horticulture I	55.0		60.0	69.6	66.2
6842 Horticulture II	57.3	61.6		62.3	69.6
6843 Horticulture II - Turf Grass				64.6	68.7
6851 Environmental & Natural Resources Studies I	64.1	60.9	64.9		65.7
6852 Environmental & Natural Resources Studies II	63.4	63.1	69.4	67.7	
6871 Biotech & Agrisci Rsch I				65.9	
6872 Biotechnology & Agriscience Research	69.7	73.9	78.6		
6882 Horticulture II - Landscape Const	60.1	63.1	65.0	60.6	62.7

Source: NC CTE Performance Data, 2001-2006

For more information

For more information, contact your Career and Technical Education Administrator or the North Carolina Agricultural Education staff, 919-515-4206.

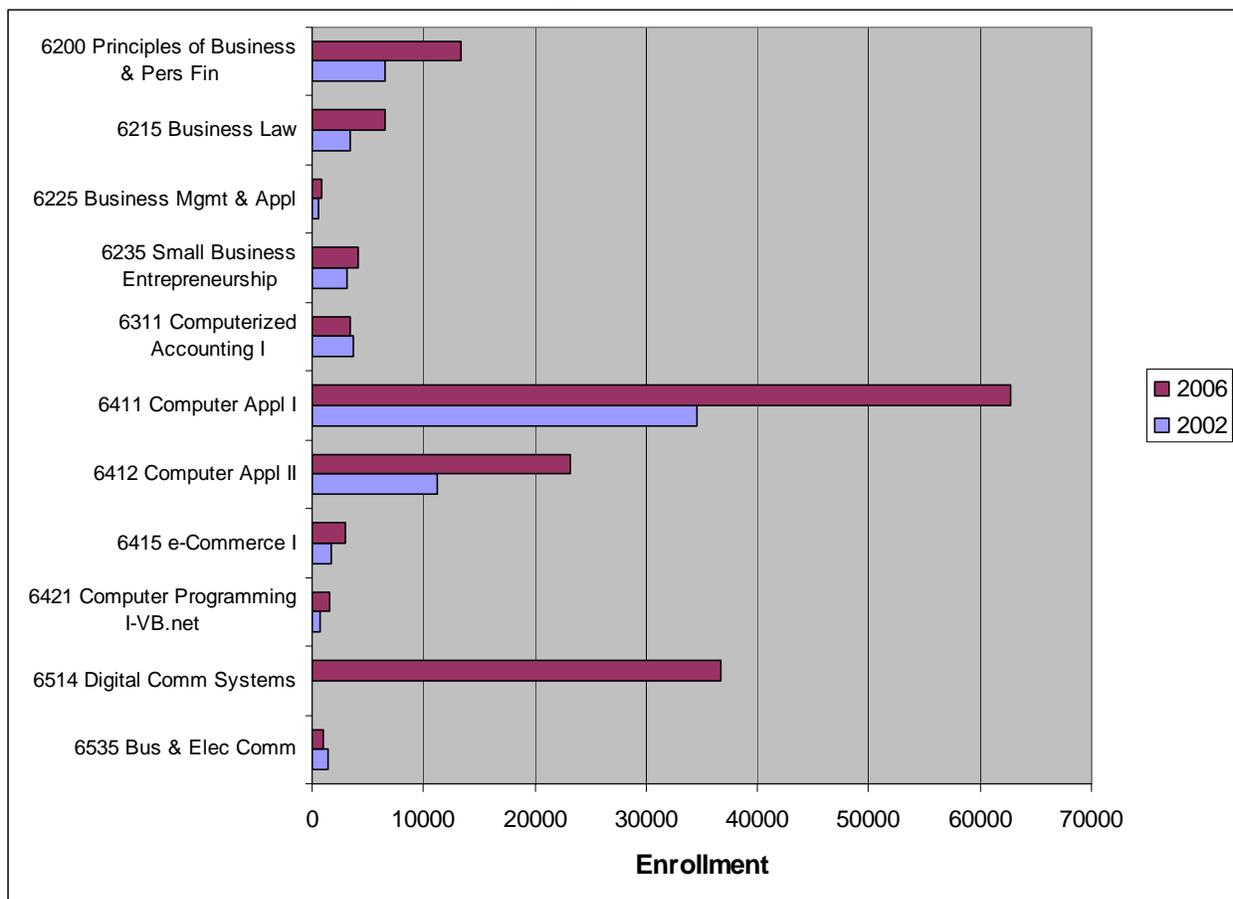
CAREER AND TECHNICAL EDUCATION DATA PROFILE

Business and Information Technology Education

Business and Information Technology Education is a broad, comprehensive curriculum at the middle and high school levels that provides students with meaningful instruction for and about business. Instruction in Business and Information Technology Education encompasses business skills and techniques, an understanding of basic economics, and business attitudes essential to participate in the international marketplace as productive workers and consumers.

The Business and Information Technology Education curriculum in North Carolina includes 29 high school courses and three middle grades courses. For 2005-2006, 181,842 students were enrolled in the three middle grades courses. While 161,184 students were enrolled in the high school programs, 76.1 percent of them were in the three largest enrollment courses: Computer Applications I, Computer Applications II, and Digital Communication Systems. Figure 13 illustrates the enrollment for selected courses for Business and Information Technology Education, grades 9-12, between 2000-2001 and 2005-2006.

Figure 13. Changes in Enrollment in Selected High School Business and Information Technology Education Courses between 2001 and 2006



Source: NC CTE Performance Data, 2001-2006

Overall enrollment by course for Business and Information Technology Education is presented in Chart 11. Enrollment by course for special populations students in Business and Information Technology Education is presented in Chart 12.

CAREER AND TECHNICAL EDUCATION DATA PROFILE

The overall enrollment in Business and Information Technology Education has increased over the past several years in spite of small setbacks in the current year. Since 2001-2002, Business and Information Technology Education enrollment increased by 82,442 students, from 260,584 to 343,026. (Enrollment in 2001-2002 showed a significant drop, due to a change in the way data were collected.) Of the high school enrollment 60.1 percent are identified as special populations, indicating special services or accommodations are needed to help these students succeed. Figure 14 illustrates the trend in Business and Information Technology Education enrollment since 2001-2002.

Chart 11. Overall Business and Information Technology Education Enrollment, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
6200 Principles of Business & Pers Fin	6517	8973	9742	12734	13383
6209 BITE Pilot/Local Option	417	636	2287	367	198
6215 Business Law	3416	4609	5282	6324	6481
6225 Business Mgmt & Appl	527	572	714	1020	908
6235 Small Business Entrepreneurship	3080	4142	3545	4974	4070
6311 Computerized Accounting I	3692	4023	3794	3732	3474
6312 Computerized Accounting II	613	705	835	792	867
6340 Foundations of IT	0	0	0	251	150
6341 Network Admin I	814	669	773	605	618
6411 Computer Appl I	34580	44342	49810	65070	62776
6412 Computer Appl II	11276	14953	18137	19721	23194
6415 e-Commerce I	1710	2429	2980	4268	3039
6416 e-Commerce II	0	0	0	244	293
6421 Computer Programming I-VB.net	761	1058	1231	1655	1621
6422 Computer Programming II-VB.net	0	0	0	329	301
6514 Digital Comm Systems	0	0	0	34594	36691
6535 Bus & Elec Comm	1353	1007	786	1814	956
6596 BITE Apprenticeship	159	255	76	81	93
6597 BITE Co-op Prog	305	423	236	381	325
6598 BITE Internship	94	149	132	324	473
6599 BITE Advanced Studies	268	355	512	656	488
Other High School Courses	57826	66518	62244	607	785
Middle Grades					
6208 Exploring Business Technologies	35513	45728	46187	43596	60397
6400 Business Computer Technol	35623	43820	50598	58421	48370
6511 Keyboarding	62040	76768	76854	86502	73075
Total Business and Information Technology Education	260584	322134	336755	349062	343026

Source: NC CTE Performance Data, 2001-2006

Data on Student Attainment of Academic and Technical Competencies

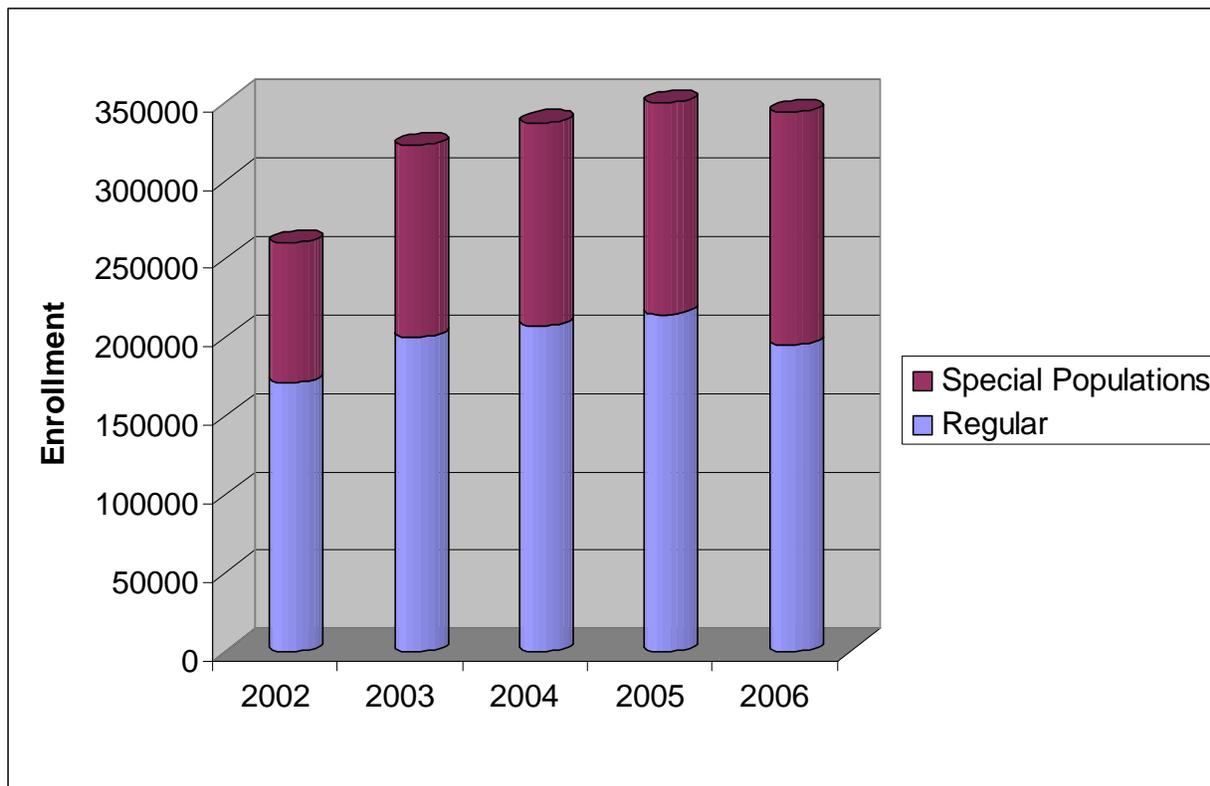
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Academic Attainment

The measure of academic attainment used in North Carolina is performance on ASSET or ACCUPLACER, two national standardized examinations that are also used by community colleges to determine student placement. CTE concentrators take four ASSET or ACCUPLACER subtests: numerical skills, elementary algebra, writing, and reading. (A concentrator is a graduate who has earned at least four credits in a CTE pathway, at least one of which is in an upper level course.) Targets are set for each subtest and for a combined measure, for all students and disaggregated by special category and by

program area. For the combined category, the numbers of students meeting or exceeding the national average on each subtest were added and then calculated as a percentage of total test takers. Figure 15 and Chart 13 illustrate the performance of concentrators in Business and Information Technology Education on the academic attainment measure.

Figure 14. Trend in Business and Information Technology Education Enrollment, 2001-2002 through 2005-2006



Source: NC CTE Performance Data, 2001-2006

In each of the four years for which data are available, a higher percentage of Business and Information Technology Education concentrators exceeded the national average on the elementary algebra subtest than on any of the other three subtests. This same pattern is found with Career and Technical Education concentrators as a whole. For example, in 2005-2006, among Business and Information Technology Education concentrators, 47.9 percent of concentrators exceeded the national average in reading; in writing, 52.8 percent, in numerical skills, 51.0 percent, and in elementary algebra, 71.9 percent. The percentage of Business and Information Technology Education concentrators who exceeded the national average in elementary algebra increased by 0.4 percent between 2004-2005 and 2005-2006, while all the other percentages decreased slightly.

Technical Attainment

The measure used for technical attainment is performance of all enrollees in Career and Technical Education courses on standardized postassessments given at the conclusion of each course. The examinations typically contain 100 multiple-choice questions. They are developed in North Carolina and are based upon course blueprints that list specific course objectives with respective weights of each objective. The examinations are assessed for validity and reliability prior to use in statewide accountability. The 2005-2006 target was for 69.6 percent of Business and Information Technology Education enrollees to reach Proficiency (Level III) or better on the postassessments. To reach Proficiency, students must score 65 percent correct or better on the examination.

Chart 12. Special populations Enrollment in Business and Information Technology Education, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
6200 Principles of Business & Pers Fin	2864	4226	5026	7018	8026
6209 BITE Pilot/Local Option	159	213	1088	162	83
6215 Business Law	1524	2279	2824	3490	4008
6225 Business Mgmt & Appl	235	270	396	593	600
6235 Small Business Entrepreneurship	1895	2829	2254	3040	2508
6311 Computerized Accounting I	1505	1785	1809	1812	1840
6312 Computerized Accounting II	255	324	394	383	470
6340 Foundations of IT	0	0	0	220	64
6341 Network Admin I	246	252	312	339	353
6411 Computer Appl I	13859	21299	25633	35608	38155
6412 Computer Appl II	4323	6659	9142	10598	13558
6415 e-Commerce I	489	882	1244	2027	1435
6416 e-Commerce II	0	0	0	89	124
6421 Computer Programming I-VB.net	278	397	456	683	799
6422 Computer Programming II-VB.net	0	0	0	150	124
6514 Digital Comm Systems	0	0	0	19225	23079
6535 Bus & Elec Comm	588	534	480	1145	664
6596 BITE Apprenticeship	56	112	33	34	33
6597 BITE Co-op Prog	178	251	116	201	179
6598 BITE Internship	18	41	45	148	185
6599 BITE Advanced Studies	72	100	203	301	264
Other High School Courses	57826	27412	35101	33623	227
Middle Grades					
6208 Exploring Business Technologies	7478	9681	8764	9566	15481
6400 Business Computer Technol	9438	12039	14184	15895	15103
6511 Keyboarding	16241	22378	21158	21484	20385
Total Business and Information Technology Education	89113	121652	129184	134438	147843

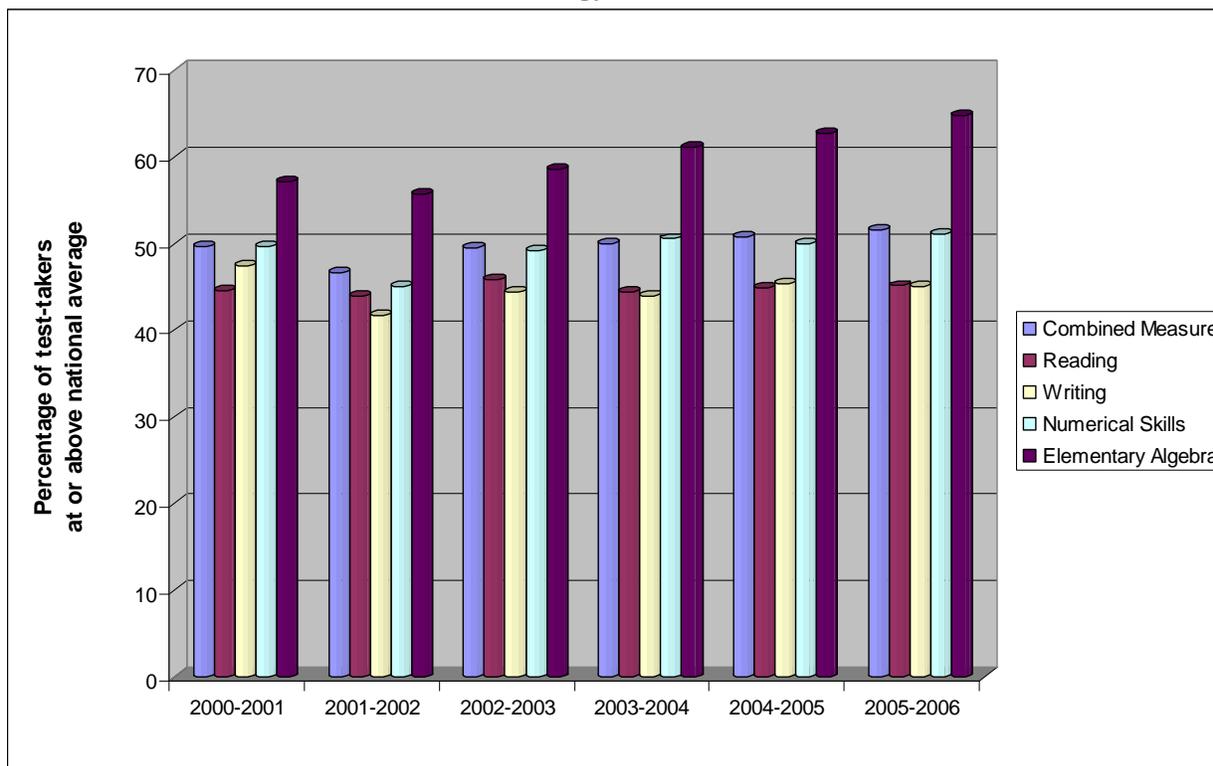
Source: NC CTE Performance Data, 2001-2006

Chart 13. Percent of Concentrators in Business and Information Technology Education Who Scored above the National Average on ASSET or ACCUPLACER

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Combined Measure	61.3	59.6	60.0	58.4	57.1	55.9
Reading	54.0	52.0	55.6	52.0	50.1	47.9
Writing	60.9	58.3	58.0	55.4	54.6	52.8
Numerical Skills	55.3	54.7	54.0	53.5	52.3	51.0
Elementary Algebra	75.0	73.4	72.4	72.7	71.5	71.9

Source: NC CTE Performance Data, 2001-2006

Figure 15. Academic Attainment Scores for Business and Information Technology Education Concentrators



Source: NC CTE Performance Data, 2001-2006

Figure 16 illustrates the performance of Business and Information Technology Education students in selected courses on the technical attainment measure since 2000-2001, the first year for which comparable data are available. Details about overall and special populations technical attainment appear in Chart 14. Since 2000-2001, the percentage of Business and Information Technology Education enrollees who reach Proficiency decreased from 65.4 percent to 61.0 percent, a drop of 4.4 percentage points. Special populations students also showed a comparable decrease: from 52.7 percent at Proficiency or above in 2000-2001 to 48.9 percent in 2005-2006. This drop may be due, at least in part, to the fact that Computer Applications I, which historically has high scores on the technical attainment measure, was a field test during 2005-2006 and is not included. However, several other courses that were included in both years show drops in the percentage of students who met the proficiency standard. The Business and Information Technology Education course with the highest performance on the technical attainment measure statewide was Computer Applications II, where during 2005-2006, 77.7 percent of the enrollees scored at Proficiency or above.

Chart 15 shows the average score by course in Business and Information Technology Education. Two Business and Information Technology Education courses showed an increase in their state averages between 2001-2002 (the first year this information was available) and 2005-2006, while the rest stayed the same or reflected a small decrease. The largest increase was for Business Law, where the average student score increased by 6.4 percentage points, to 70.1 percent correct. The highest average score is for Computer Applications II, 72.9 percent correct, and the lowest for e-Commerce I, 54.1 percent correct.

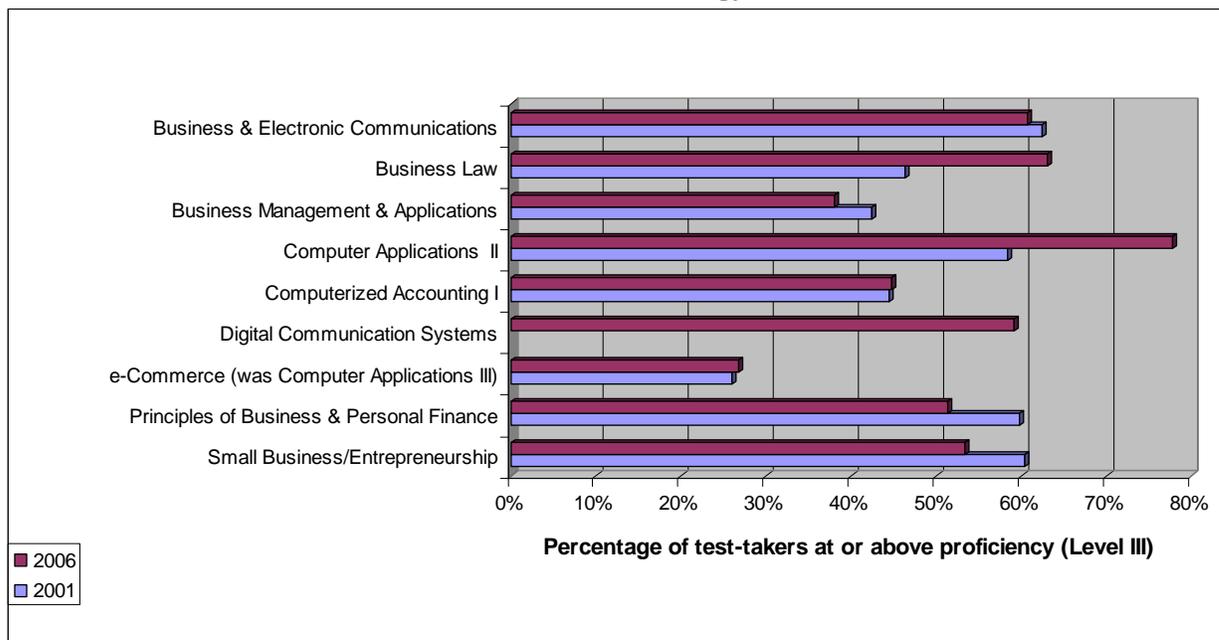
Note that gaps in the chart are likely due to introduction of new curriculum. When a new curriculum is introduced, there is a year gap in reporting testing data during which updated test items are validated and reliability is determined.

**Chart 14. Percent of Enrollees who Scored above Proficiency
in Business and Information Technology Education Courses, 2000-2001 to 2005-2006**

	2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
	Overall	Sp Pops										
6200 Principles of Business - BE	59.8%	38.2%	61.2%	42.7%	65.8%	44.6%			45.8%	30.7%	51.3%	35.9%
6215 Business Law	46.4%	27.0%	49.2%	31.6%	57.4%	41.7%	63.2%	51.2%	68.2%	57.8%	63.0%	52.6%
6225 Business Management & Applications	42.5%	37.9%	44.3%	42.9%	54.8%	48.4%					38.1%	36.1%
6235 Small Business/Entrepreneurship - BE	60.5%	45.4%	61.0%	47.6%	62.2%	44.5%			38.8%	24.5%	53.3%	40.0%
6311 Computerized Accounting I	44.4%	39.3%	45.9%	42.1%	49.7%	40.0%	49.3%	44.9%			44.8%	40.9%
6312 Computerized Accounting II	33.3%	21.1%	35.3%	20.0%	44.7%	26.8%	41.7%	28.3%				
6331 Business & Financial Management I - BE	32.0%	25.1%	36.0%	32.5%	34.7%	28.4%	53.2%	50.5%				
6332 Business & Financial Management II - BE	31.4%	19.4%	39.3%	38.8%	72.5%	58.0%	87.5%	86.5%				
6411 Computer Applications I	71.9%	65.8%	79.6%	74.7%	72.9%	60.5%	67.4%	61.6%	73.3%	68.0%		
6412 Computer Applications II	58.4%	39.2%	75.3%	57.9%	80.0%	64.1%	79.5%	67.8%	85.5%	76.3%	77.7%	67.4%
6415 e-Commerce (was Computer Applications III)	26.0%	13.3%	57.4%	40.1%	63.8%	41.7%			36.2%	20.2%	26.8%	14.4%
6512 Keyboarding (High School)	68.8%	49.5%	72.3%	55.5%	73.1%	53.3%	73.2%	59.7%				
6514 Digital Communication Systems											59.2%	45.7%
6535 Business & Electronic Communications	62.4%	56.7%	63.5%	56.1%	61.4%	45.9%	61.0%	54.8%	48.5%	43.5%	60.7%	55.7%
Total Business and Information Technology Education	65.4%	52.7%	71.4%	60.2%	71.2%	55.1%	70.6%	60.5%	69.1%	62.2%	61.0%	48.9%

Source: NC CTE Performance Data, 2001-2006

Figure 16. Technical Attainment Scores in Selected Business and Information Technology Education Courses



Source: NC CTE Performance Data, 2001-2006

Chart 15. Average Percent Correct by Course

Course	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
6200 Principles of Business & Personal Finance - BE	66.8	68.6		62.2	63.9
6215 Business Law	63.7	66.8	69.6	71.4	70.1
6225 Business Management & Applications	61.6	64.9			58.8
6235 Small Business/Entrepreneurship - BE	66.4	66.7		58.7	64.3
6311 Computerized Accounting I	62.4	63.7	64.3		61.0
6312 Computerized Accounting II	59.3	63.3	61.4		
6331 Business & Financial Management I - BE	59.7	58.4	64.8		
6332 Business & Financial Management II - BE	62.7	73.1	75.6		
6411 Computer Applications I	73.1	70.9	69.3	70.9	
6412 Computer Applications II	71.5	73.3	73.4	76.3	72.9
6415 e-Commerce I	66.7	68.5		59.2	54.1
6512 Keyboarding (High School)	71.1	71.9	72.3		
6514 Digital Communication Systems					66.4
6535 Business & Electronic Communications	66.3	66.4	66.2	61.5	66.3

Source: NC CTE Performance Data, 2001-2006

For more information

For more information, contact your Career and Technical Education Administrator or the North Carolina Business and Information Technology Education staff, 919-807-3870.

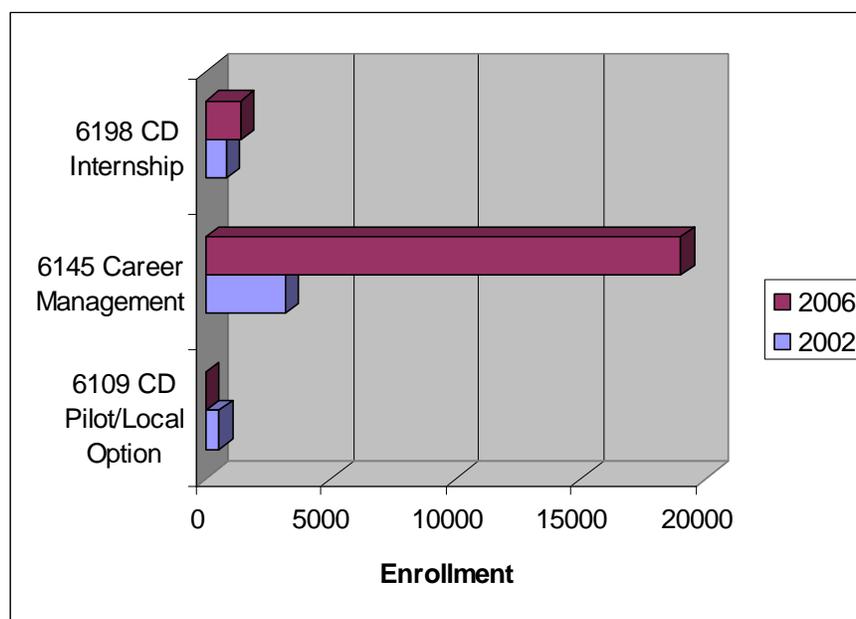
CAREER AND TECHNICAL EDUCATION DATA PROFILE

Career Development

Career Development is a process that involves students, parents, teachers, counselors, and the community. The goal is to help students make good decisions about themselves and their futures. The process includes helping students develop and implement an individual career development plan. Coordinating the process is the responsibility of the Career Development Coordinator.

The Career Development curriculum in North Carolina includes three high school courses and one middle grades course. For 2005-2006, 67,191 students were enrolled in the middle grades course, Exploring Career Decisions, while 20,406 students were enrolled in the high school programs. Figure 17 illustrates the enrollment for selected courses for Career Development, grades 9-12, between 2000-2001 and 2005-2006.

Figure 17. Changes in Enrollment in Selected High School Career Development Courses between 2001 and 2006



Source: NC CTE Performance Data, 2001-2006

Overall enrollment by course for Career Development is presented in Chart 16. Enrollment by course for Special populations students in Career Development is presented in Chart 17.

The overall enrollment in Career Development has increased steadily over the past several years. Since 2001-2002, Career Development enrollment increased by more than 14,943 students, from 72,654 to 87,587. (Enrollment in 2001-2002 showed a significant drop, due to a change in the way data were collected.) Of the high school enrollment, 67.9 percent are identified as special populations, indicating special services or accommodations are needed to help these students succeed. Figure 18 illustrates the trend in Career Development enrollment since 2001-2002.

Data on Student Attainment of Academic and Technical Competencies

As part of the agreement providing North Carolina more than \$34 million annually for Career and Technical Education, data on academic and technical attainment are reported each year. Complete information on academic and technical attainment by school system can be viewed at <http://wdeppms.dpi.state.nc.us/wdeppms.nsf>.

Chart 16. Overall Career Development Enrollment, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
6109 CD Pilot/Local Option	555	294	58	24	11
6145 Career Management	3201	6085	8446	15966	19007
6198 CD Internship	849	1280	963	1159	1388
Middle Grades					
6158 Exploring Career Dec	68049	70248	64190	69471	67191
Total Career Development	72654	77907	73657	86620	87597

Source: NC CTE Performance Data, 2001-2006

Chart 17. Special populations Enrollment in Career Development, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
6109 CD Pilot/Local Option	257	186	39	16	6
6145 Career Management	2333	4264	5797	10450	13468
6198 CD Internship	221	271	263	315	391
Middle Grades					
6158 Exploring Career Dec	14243	16027	13612	15295	17314
Total Career Development	17054	20748	19711	26076	31179

Source: NC CTE Performance Data, 2001-2006

Academic Attainment

The measure of academic attainment used in North Carolina is performance on ASSET or ACCUPLACER, two national standardized examinations that are also used by community colleges to determine student placement. CTE concentrators take four ASSET or ACCUPLACER subtests: numerical skills, elementary algebra, writing, and reading. (A concentrator is a graduate who has earned at least four credits in a CTE pathway, at least one of which is in an upper level course.) Targets are set for each subtest and for a combined measure, for all students and disaggregated by special category and by program area. For the combined category, the numbers of students meeting or exceeding the national average on each subtest were added and then calculated as a percentage of total test takers. Career Development does not have any concentrators, therefore academic attainment data are not available.

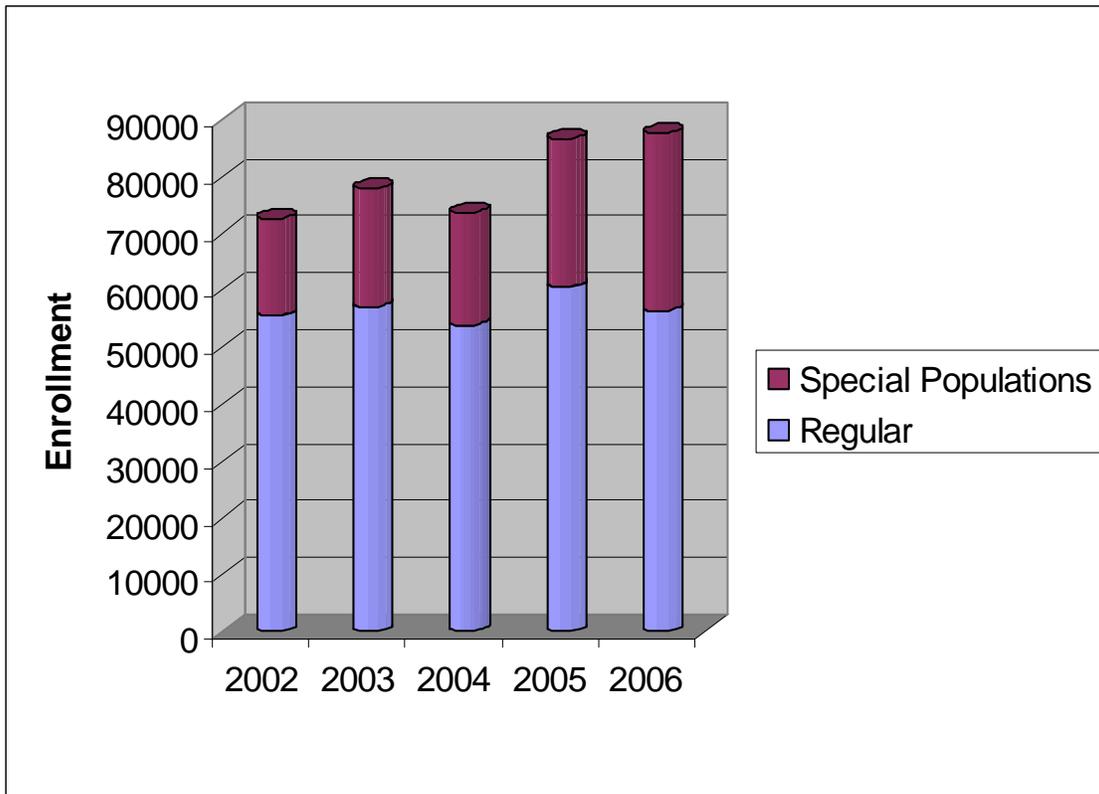
Technical Attainment

The measure used for technical attainment is performance of all enrollees in Career and Technical Education courses on standardized postassessments given at the conclusion of each course. The examinations typically contain 100 multiple-choice questions. They are developed in North Carolina and are based upon course blueprints that list specific course objectives with respective weights of each objective. The examinations are assessed for validity and reliability prior to use in statewide accountability. The 2005-2006 target was for 48.7 percent of Career Development enrollees to reach Proficiency (Level III) or better on the postassessments. To reach Proficiency, students must score 65 percent correct or better on the examination. At this time, Career Management is the only course in Career Development that is included in the technical attainment measure.

Figure 19 illustrates the performance of Career Management students on the technical attainment measure since 2000-2001, the first year for which comparable data are available. Details about overall and special populations technical attainment appear in Chart 18. Since 2000-2001, the percentage of Career Management enrollees who reached Proficiency increased from 41.4 percent to 64.2 percent, a gain of 22.8 percentage points. Special populations students also showed a significant increase: from 32.6 percent at Proficiency or above in 2000-2001 to 55.0 percent in 2005-2006.

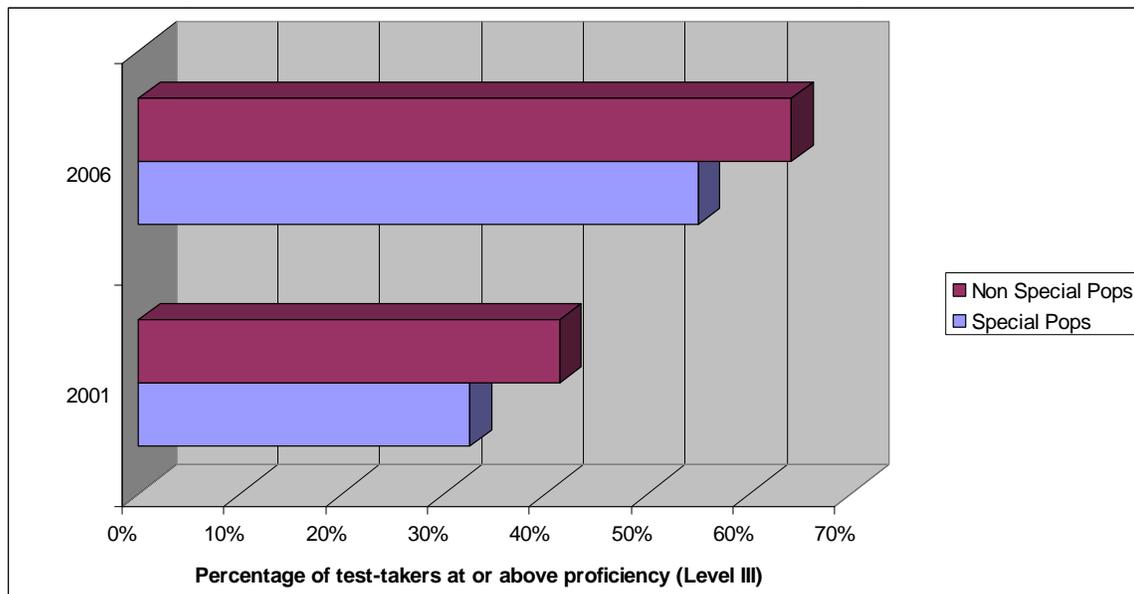
Chart 19 shows the average for Career Management since 2001-2002. Career Management students increased their scores an average of 6.8 percentage points in the years since these data first became available.

Figure 18. Trend in Career Development Enrollment, 2001-2002 through 2005-2006



Source: NC CTE Performance Data, 2001-2006

Figure 19. Technical Attainment Scores in Career Management



Source: NC CTE Performance Data, 2001-2006

CAREER AND TECHNICAL EDUCATION DATA PROFILE

Chart 18. Percent of Career Management Enrollees who Scored above Proficiency, 2000-2001 to 2005-2006

2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
Overall	Sp Pops										
41.4%	32.6%	44.9%	36.5%	52.5%	37.8%	56.2%	45.7%	60.0%	49.3%	64.2%	55.0%

Source: NC CTE Performance Data, 2001-2006

Chart 19. Average Percent Correct in Career Management

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
6145 Career Management	61.4	63.4	64.8	66.5	68.2

Source: NC CTE Performance Data, 2001-2006

For more information

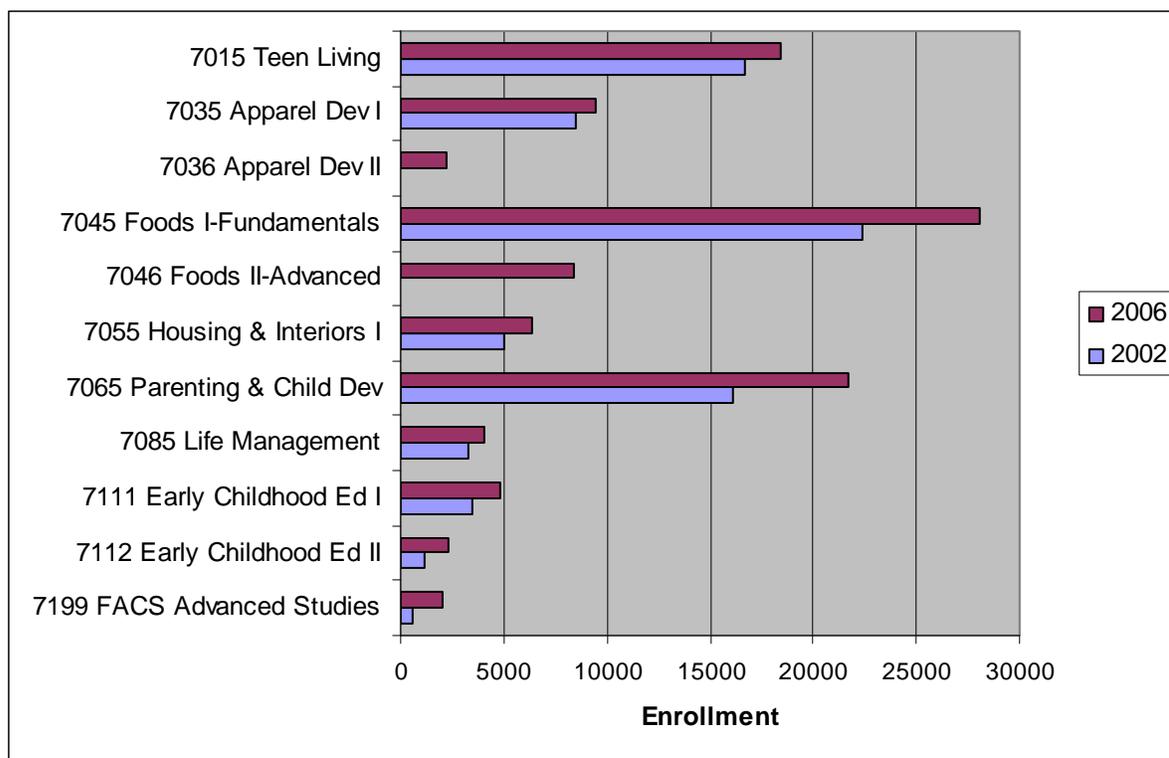
For more information, contact your Career and Technical Education Administrator or the North Carolina Career Development staff, 919-807-3892.

Family and Consumer Sciences Education

Family and Consumer Sciences Education prepares for careers working with individuals and families, as well as for competence in the work of their own families. The concept of work, whether in a family or career, is central to the program area. The program's unique focus is on families, work, and their interrelationships. Family and Consumer Sciences Education prepares individuals for family and career.

The Family and Consumer Sciences Education curriculum in North Carolina includes 14 high school courses and one middle grades course. For 2005-2006, 42,480 students were enrolled in Exploring Life Skills, the middle grades course, while 111,979 students were enrolled in the high school programs. Figure 20 illustrates the enrollment for selected courses for Family and Consumer Sciences Education, grades 9-12, between 2000-2001 and 2005-2006.

Figure 20. Changes in Enrollment in Selected High School Family and Consumer Sciences Education Courses between 2001 and 2006



Source: NC CTE Performance Data, 2001-2006

Overall enrollment by course for Family and Consumer Sciences Education is presented in Chart 20. Enrollment by course for special populations students in Family and Consumer Sciences Education is presented in Chart 21.

The overall enrollment in Family and Consumer Sciences Education has increased over the past several years in spite of small setbacks in the current year. Since 2001-2002, Family and Consumer Sciences Education enrollment increased by more than 25,165 students, from 129,294 to 154,459. (Enrollment in 2001-2002 showed a significant drop, due to a change in the way data were collected.) Of the high school enrollment, 67.7 percent are identified as special populations, indicating special services or accommodations are needed to help these students succeed. Figure 21 illustrates the trend in Family and Consumer Sciences Education enrollment since 2001-2002.

Chart 20. Overall Family and Consumer Sciences Education Enrollment, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
	2002	2003	2004	2005	2006
7009 FACS Pilot/Local Option	2739	3787	5298	890	535
7015 Teen Living	16729	19525	18233	18621	18387
7035 Apparel Dev I	8484	10247	10488	8829	9446
7036 Apparel Dev II	0	0	0	1954	2251
7045 Foods I-Fundamentals	22403	25279	25880	26589	28083
7046 Foods II-Advanced	0	0	0	6459	8349
7055 Housing & Interiors I	5050	6043	6423	6413	6410
7056 Housing & Interiors II	0	0	0	346	408
7065 Parenting & Child Dev	16072	19324	21136	21584	21681
7075 Foods II-Food Science	273	114	192	44	15
7085 Life Management	3284	4179	3513	3937	4052
7090 FACS Special Int	0	0	0	0	7
7111 Early Childhood Ed I	3501	4621	4457	5008	4782
7112 Culinary Arts & Hosp II	657	875	1019	853	790
7112 Early Childhood Ed II	1196	1439	2154	2533	2275
7113 Culinary Arts & Hosp III	10	6	13	8	1
7113 Early Childhood Ed III	22	22	17	23	7
7121 Culinary Arts & Hosp I	2299	2594	2212	2154	1934
7196 FACS Apprenticeship	260	374	56	70	38
7197 FACS Co-op Program	170	161	115	115	96
7198 FACS Internship	209	246	218	310	416
7199 FACS Advanced Studies	566	1176	1962	1980	2016
Other High School	664	728	608	0	0
Middle Grades					
7018 Exploring Life Skills	44706	54131	50194	48732	42480
Total Family and Consumer Sciences Education	129294	154871	154188	157452	154459

Source: NC CTE Performance Data, 2001-2006

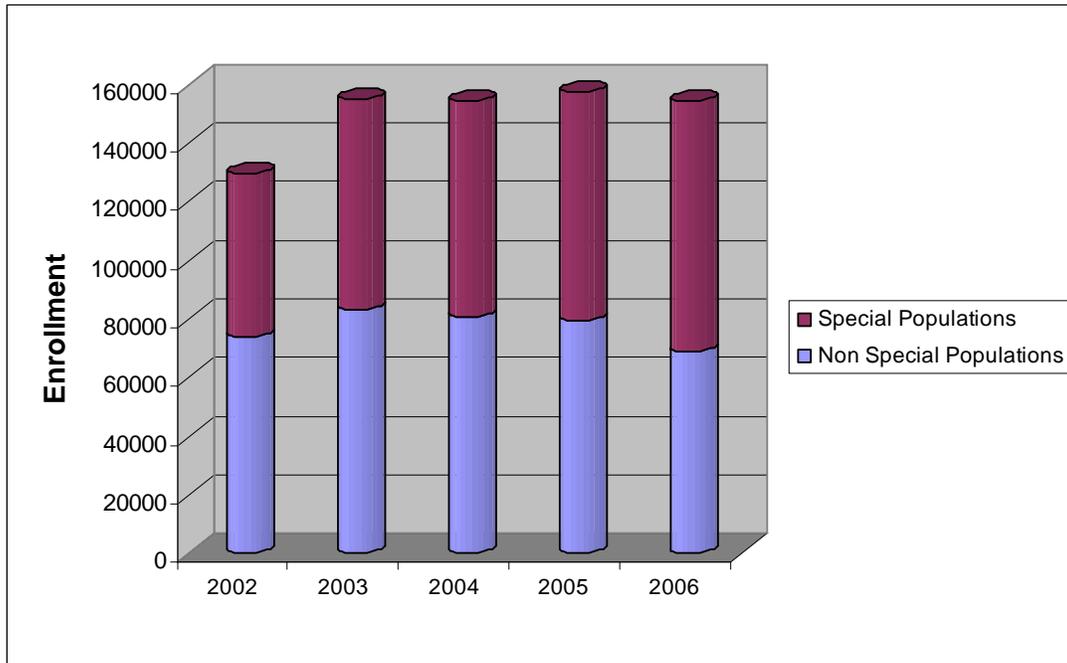
Data on Student Attainment of Academic and Technical Competencies

As part of the agreement providing North Carolina more than \$34 million annually for Career and Technical Education, data on academic and technical attainment are reported each year. Complete information on academic and technical attainment by school system can be viewed at <http://wdeppms.dpi.state.nc.us/wdeppms.nsf>.

Academic Attainment

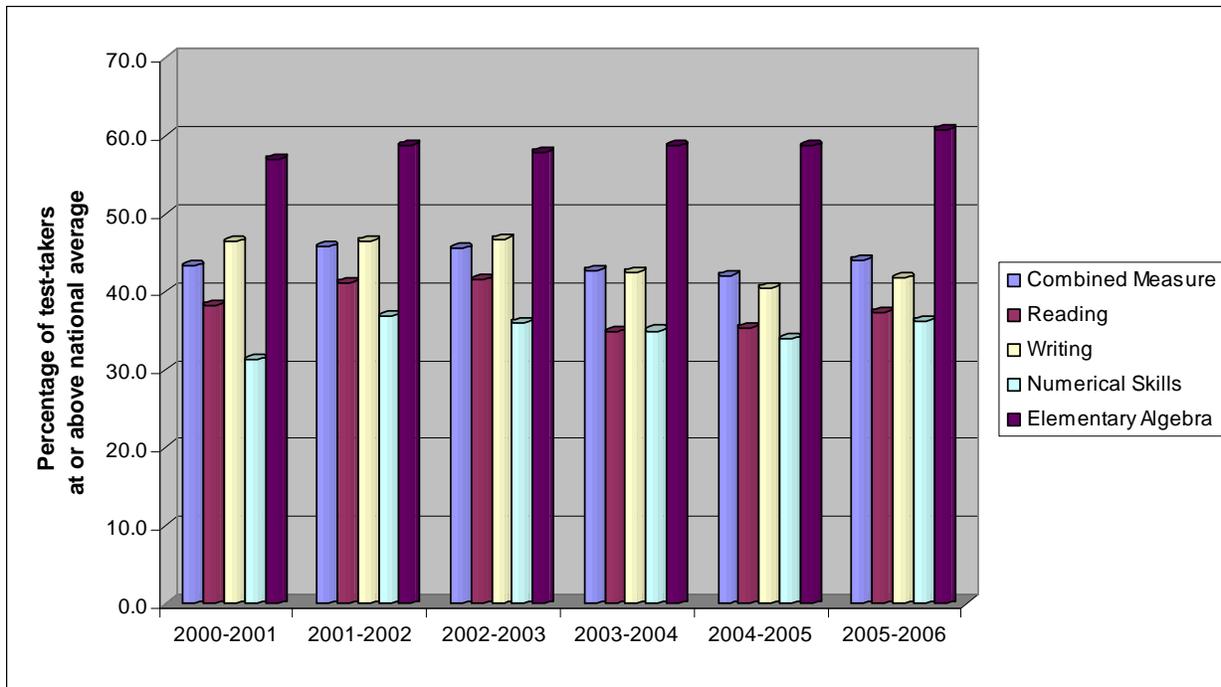
The measure of academic attainment used in North Carolina is performance on ASSET or ACCUPLACER, two national standardized examinations that are also used by community colleges to determine student placement. CTE concentrators take four ASSET or ACCUPLACER subtests: numerical skills, elementary algebra, writing, and reading. (A concentrator is a graduate who has earned at least four credits in a CTE pathway, at least one of which is in an upper level course.) Targets are set for each subtest and for a combined measure, for all students and disaggregated by special category and by program area. For the combined category, the numbers of students meeting or exceeding the national average on each subtest were added and then calculated as a percentage of total test takers. Figure 22 and Chart 22 illustrate the performance of concentrators in Family and Consumer Sciences Education on the academic attainment measure.

Figure 21. Trend in Family and Consumer Sciences Education Enrollment, 2001-2002 through 2005-2006



Source: NC CTE Performance Data, 2001-2006

Figure 22. Academic Attainment Scores for Family and Consumer Sciences Education Concentrators



Source: NC CTE Performance Data, 2001-2006

Chart 21. Special populations Enrollment in Family and Consumer Sciences Education, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
7009 FACS Pilot/Local Option	1146	1978	3242	488	304
7015 Teen Living	9145	11660	10830	11552	12778
7035 Apparel Dev I	4364	5893	5966	5017	5625
7036 Apparel Dev II	0	0	0	1200	1408
7045 Foods I-Fundamentals	11994	14644	15235	16682	18743
7046 Foods II-Advanced	0	0	0	4288	5882
7055 Housing & Interiors I	2436	3020	3052	3540	3835
7056 Housing & Interiors II	0	0	0	204	257
7065 Parenting & Child Dev	9238	12022	13406	14012	15300
7075 Foods II-Food Science	192	74	98	32	15
7085 Life Management	1943	2650	2096	2692	2883
7090 FACS Special Int	0	0	0	0	5
7111 Early Childhood Ed I	1921	2915	2899	3371	3467
7112 Culinary Arts & Hosp II	409	591	713	606	586
7112 Early Childhood Ed II	630	793	1412	1703	1627
7113 Culinary Arts & Hosp III	9	4	11	6	1
7113 Early Childhood Ed III	9	11	7	8	1
7121 Culinary Arts & Hosp I	1412	1654	1460	1443	1420
7196 FACS Apprenticeship	52	63	26	27	20
7197 FACS Co-op Program	95	112	67	80	57
7198 FACS Internship	49	71	77	108	137
7199 FACS Advanced Studies	301	660	1287	1293	1432
Other High School	352	370	383	0	0
Middle Grades					
7018 Exploring Life Skills	9910	12623	11196	9683	9833
Total Family and Consumer Sciences Education	55607	71808	73463	78035	85616

Source: NC CTE Performance Data, 2001-2006

Chart 22. Percent of Concentrators in Family and Consumer Sciences Education Who Scored above the National Average on ASSET or ACCUPLACER

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Combined Measure	43.3	45.8	45.6	42.8	42.1	44.1
Reading	38.3	41.2	41.5	34.8	35.4	37.4
Writing	46.5	46.6	46.8	42.5	40.5	41.8
Numerical Skills	31.3	36.8	36.1	35.0	33.9	36.3
Elementary Algebra	57.1	58.8	57.9	58.7	58.7	60.8

Source: NC CTE Performance Data, 2001-2006

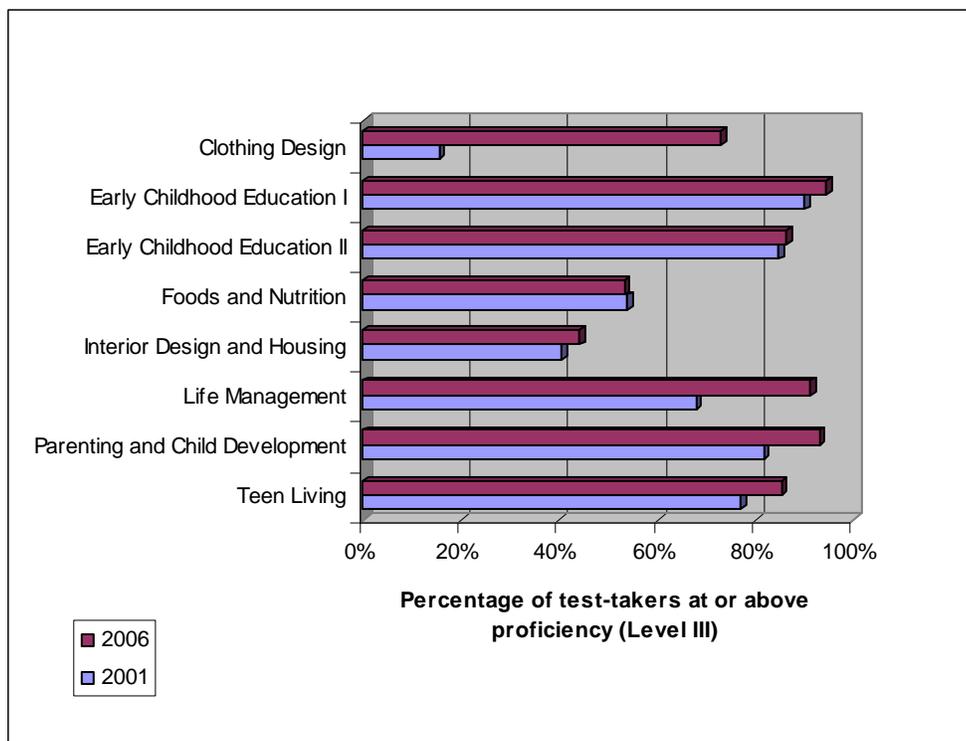
In each of the four years for which data are available, a higher percentage of Family and Consumer Sciences Education concentrators exceeded the national average on the elementary algebra subtest than on any of the other three subtests. This same pattern is found with Career and Technical Education concentrators as a whole. For example, in 2005-2006, among Family and Consumer Sciences Education concentrators, 37.4 percent of concentrators exceeded the national average in reading; in writing, 41.8 percent, in numerical skills, 36.3 percent, and in elementary algebra, 60.8 percent. The greatest increase among Family and Consumer Sciences Education concentrators was numerical skills, which increased by 2.4 percent.

Technical Attainment

The measure used for technical attainment is performance of all enrollees in Career and Technical Education courses on standardized postassessments given at the conclusion of each course. The examinations typically contain 100 multiple-choice questions. They are developed in North Carolina and are based upon course blueprints that list specific course objectives with respective weights of each objective. The examinations are assessed for validity and reliability prior to use in statewide accountability. The 2005-2006 target was for 66.6 percent of Family and Consumer Sciences Education enrollees to reach Proficiency (Level III) or better on the postassessments. To reach Proficiency, students must score 65 percent correct or better on the examination.

Figure 23 illustrates the performance of Family and Consumer Sciences Education students in selected courses on the technical attainment measure since 2000-2001, the first year for which comparable data are available. Details about overall and special populations technical attainment appear in Chart 23. Since 2000-2001, the percentage of Family and Consumer Sciences Education enrollees who reach Proficiency increased from 61.8 percent to 71.0 percent, a gain of 9.2 percentage points. Special populations students also showed a significant increase: from 49.8 percent at Proficiency or above in 2000-2001 to 63.2 percent in 2005-2006. The Family and Consumer Sciences Education course with the highest performance on the technical attainment measure statewide was Early Childhood Education I, where during 2005-2006, 94.3 percent of the enrollees scored at Proficiency or above.

Figure 23. Technical Attainment Scores in Selected Family and Consumer Sciences Education Courses



Source: NC CTE Performance Data, 2001-2006

Chart 23. Percent of Enrollees who Scored above Proficiency in Family and Consumer Sciences Education Courses, 2000-2001 to 2005-2006

	2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
	Overall	Sp Pops										
7015 Teen Living	77.0%	64.2%	70.1%	57.0%	74.4%	57.7%	79.4%	69.9%			85.2%	79.3%
7035 Clothing Design	15.7%	5.2%	23.1%	9.9%	25.0%	9.6%	24.5%	10.6%			73.0%	59.8%
7036 Apparel Devel II											31.7%	17.1%
7045 Foods and Nutrition	53.9%	37.1%			21.8%	9.7%			46.5%	33.4%	53.2%	40.4%
7046 Foods II – Advanced											45.9%	35.7%
7055 Interior Design and Housing	40.5%	24.1%	43.0%	24.3%	42.4%	20.9%	47.9%	27.8%	42.9%	25.7%	44.0%	27.4%
7065 Parenting and Child Development	81.5%	72.4%	79.5%	70.6%	86.2%	76.5%	91.6%	87.7%	90.3%	86.1%	92.9%	90.3%
7075 Food Science	11.7%	10.9%	11.4%	5.6%	27.0%	21.9%	41.2%	30.0%	*	*	*	*
7085 Life Management	67.8%	55.5%	79.3%	70.5%	78.6%	64.5%	78.8%	69.1%	86.3%	80.2%	91.2%	87.8%
7111 Early Childhood Education I	89.9%	83.3%	85.8%	77.6%	89.7%	81.8%	91.8%	87.8%	88.3%	83.1%	94.3%	92.3%
7112 Early Childhood Education II	84.7%	76.8%	76.3%	64.5%	84.0%	73.6%	82.1%	76.4%	74.1%	65.8%	86.3%	81.3%
7121 Culinary Arts and Hospitality I			55.4%	48.1%	67.1%	56.3%	66.4%	60.4%	58.9%	51.8%		
7122 Culinary Arts and Hospitality II	43.0%	38.6%	61.5%	53.8%	56.9%	48.0%	55.0%	49.3%	69.6%	64.9%		
7151 Interior Design Services I	20.8%	21.0%	38.1%	38.1%	31.9%	26.4%	30.1%	29.5%				
7152 Interior Design Services II	15.6%	15.9%	10.3%	10.3%	13.6%	9.9%	25.7%	25.7%				
7161 Community and Family Services I			75.0%	*								
7162 Community and Family Services II	60.0%	50.0%										
	61.8%	49.8%	63.7%	53.0%	55.6%	43.7%	71.5%	64.2%	67.0%	58.7%	71.0%	63.2%

Source: NC CTE Performance Data, 2001-2006

CAREER AND TECHNICAL EDUCATION DATA PROFILE

Chart 24 shows the average score by course in Family and Consumer Sciences Education. All Family and Consumer Sciences Education courses showed an increase in their state averages between 2001-2002 (the first year this information was available) and 2005-2006. The largest increase was for Apparel Development I, where the average student score increased by 16.9 percentage points, to 72.0 percent correct. The highest average score is for Early Childhood Education I, 82.4 percent correct, and the lowest for Apparel Development II, 56.8.

Note that gaps in the chart are likely due to introduction of new curriculum. When a new curriculum is introduced, there is a year gap in reporting testing data during which updated test items are validated and reliability is determined.

Chart 24. Average Percent Correct by Course

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
7015 Teen Living	69.6	71.0	72.6		76.8
7035 Apparel Devel I	55.2	55.3	55.3		72.0
7036 Apparel Devel II					56.8
7045 Foods I – Fundamentals		54.6		62.6	64.8
7046 Foods II – Advanced					62.4
7055 Housing & Interiors I	61.0	61.1	63.2	61.6	61.3
7065 Parenting and Child Development	71.3	76.1	79.3	79.5	81.7
7075 Foods II - Food Science	49.2	48.2	60.3		
7085 Life Management	73.4	73.4	73.2	76.9	80.7
7111 Early Childhood Education I	76.0	77.4	78.2	77.3	82.4
7112 Early Childhood Education II	71.2	74.7	74.7	71.1	76.4
7121 Culinary Arts and Hospitality I	64.8	69.5	68.9	66.4	
7122 Culinary Arts and Hospitality II	67.3	66.0	65.8	69.2	
7151 Interior Design Services I	59.6	58.5	57.1		
7152 Interior Design Services II	48.1	53.5	54.9		
7161 Community and Family Services I	68.0				

Source: NC CTE Performance Data, 2001-2006

For more information

For more information, contact your Career and Technical Education Administrator or the North Carolina Family and Consumer Sciences Education staff, 919-807-3816.

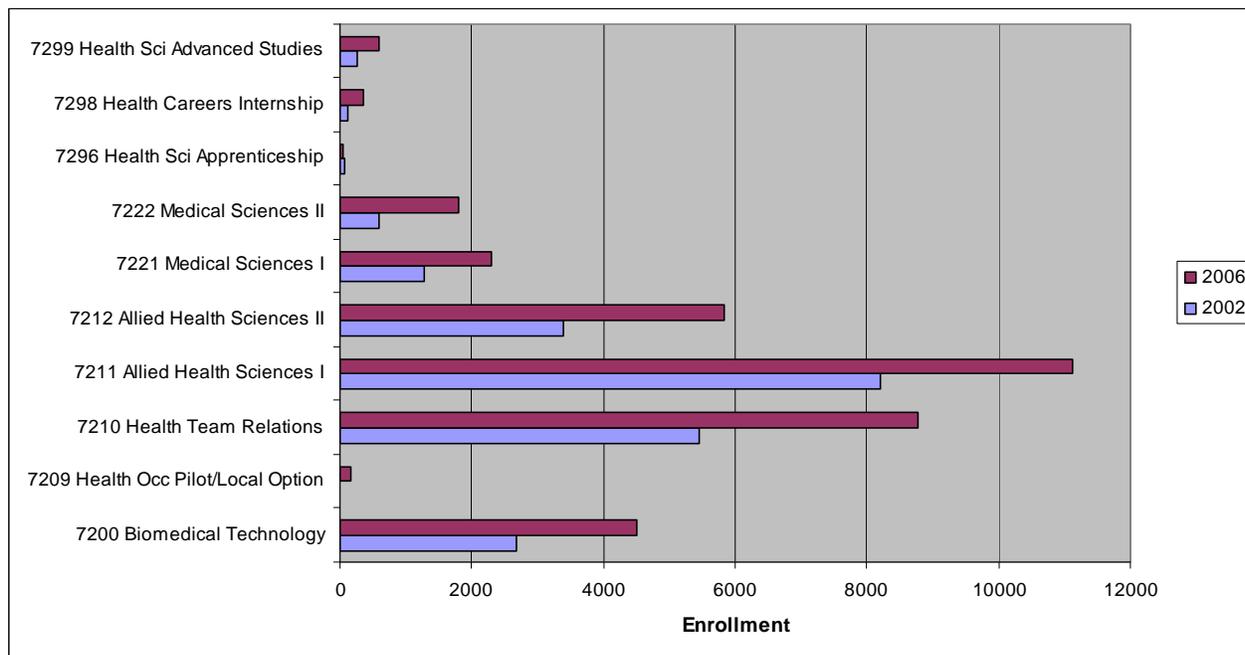
CAREER AND TECHNICAL EDUCATION DATA PROFILE

Health Occupations Education

Based on natural and social sciences, the humanities, and a researched body of knowledge, the Health Occupations Education curriculum is designed to offer a foundation of knowledge and skills necessary to health career preparation. Curriculum concepts incorporate technological advances related to the health care delivery system, including ethics, professionalism, prevention (wellness), patient/client diagnosis, treatment, care, and rehabilitation as a result of disease/disorders. Teaching/learning strategies integrate appropriate workplace basic skills that assist students to use resources and technologies, function as effective members within a complex system, and to access and use appropriate information/data.

The Health Occupations Education curriculum in North Carolina includes eight high school courses and one middle grades course. In 2005-2006, enrollment in the middle grades course, Exploring Biotechnology, was included in the enrollment in Agricultural Education. In future years, Health Occupations enrollment in Exploring Biotechnology will be reported separately. For 2005-2006, 35,530 students were enrolled in the eight high school Health Occupations Education courses. Figure 24 illustrates the enrollment for selected courses for Health Occupations Education, grades 9-12, between 2000-2001 and 2005-2006.

Figure 24. Changes in Enrollment in Selected High School Health Occupations Education Courses between 2001 and 2006



Source: NC CTE Performance Data, 2001-2006

Overall enrollment by course for Health Occupations Education is presented in Chart 25. Enrollment by course for special populations students in Health Occupations Education is presented in Chart 26.

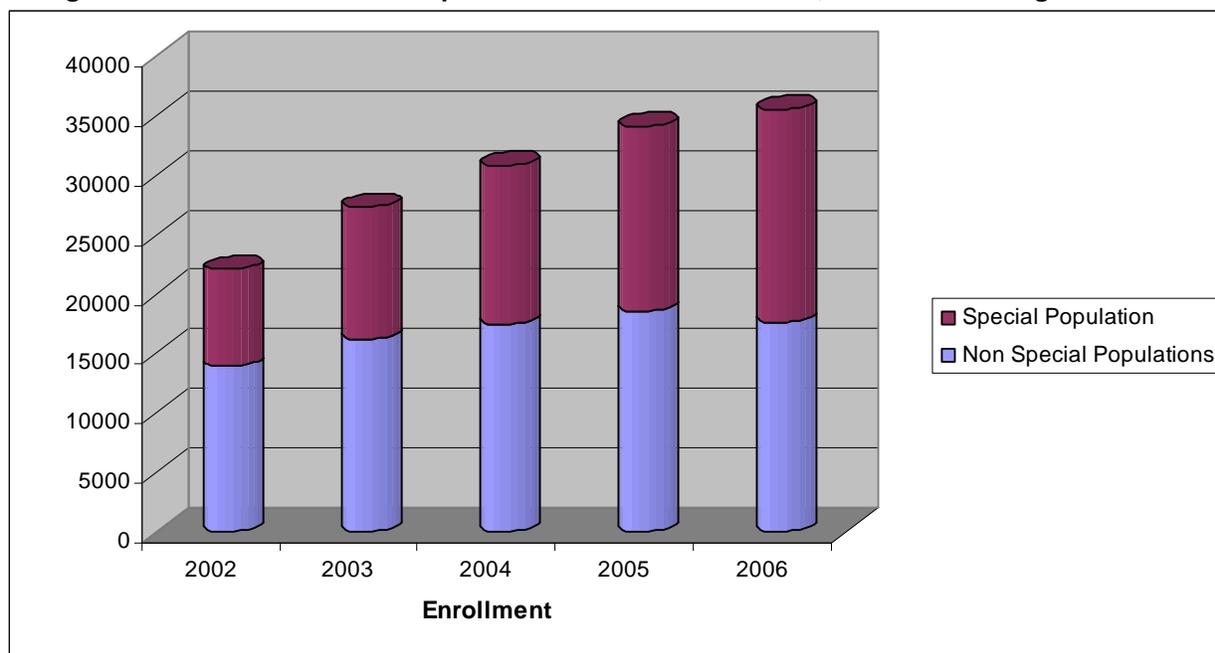
The overall enrollment in Health Occupations Education has increased steadily over the past several years. Since 2001-2002, Health Occupations Education enrollment increased by more than 13,000 students, from 22,110 to 35,530. (Enrollment in 2001-2002 showed a significant drop, due to a change in the way data were collected.) Of the high school enrollment, 50.4 percent are identified as special populations, indicating special services or accommodations are needed to help these students succeed. Figure 25 illustrates the trend in Health Occupations Education enrollment since 2001-2002.

Chart 25. Overall Health Occupations Education Enrollment, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
7200 Biomedical Technology	2671	3230	2928	4086	4503
7209 Health Occ Pilot/Local Option	16	0	567	109	169
7210 Health Team Relations	5460	6652	8104	8644	8780
7211 Allied Health Sciences I	8199	9871	10177	11459	11119
7212 Allied Health Sciences II	3390	4447	5178	5742	5831
7221 Medical Sciences I	1292	1745	1796	1826	2307
7222 Medical Sciences II	589	707	1105	1337	1801
7296 Health Sci Apprenticeship	73	114	109	95	58
7298 Health Careers Internship	126	194	201	246	358
7299 Health Sci Advanced Studies	270	318	610	568	603
Total Health Occupations Education	22110	27311	30784	34112	35530

Source: NC CTE Performance Data, 2001-2006

Figure 25. Trend in Health Occupations Education Enrollment, 2001-2002 through 2005-2006



Source: NC CTE Performance Data, 2001-2006

Data on Student Attainment of Academic and Technical Competencies

As part of the agreement providing North Carolina more than \$34 million annually for Career and Technical Education, data on academic and technical attainment are reported each year. Complete information on academic and technical attainment by school system can be viewed at <http://wdeppms.dpi.state.nc.us/wdeppms.nsf>.

Academic Attainment

The measure of academic attainment used in North Carolina is performance on ASSET or ACCUPLACER, two national standardized examinations that are also used by community colleges to determine student placement. CTE concentrators take four ASSET or ACCUPLACER subtests: numerical skills, elementary algebra, writing, and reading. (A concentrator is a graduate who has earned at least four credits in a CTE pathway, at least one of which is in an upper level course.) Targets are set for each subtest and for a combined measure, for all students and disaggregated by special category and by program area. For the combined category, the numbers of students meeting or exceeding the national average on each subtest were added and then calculated as a percentage of total test takers. Figure 26

CAREER AND TECHNICAL EDUCATION DATA PROFILE

and Chart 27 illustrate the performance of concentrators in Health Occupations Education on the academic attainment measure.

Chart 26. Special populations Enrollment in Health Occupations Education, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
7200 Biomedical Technology	946	1358	1249	1844	2145
7209 Health Occ Pilot/Local Option	6	0	285	61	106
7210 Health Team Relations	2249	2905	3942	4339	4986
7211 Allied Health Sciences I	3004	4192	4420	5325	5728
7212 Allied Health Sciences II	1163	1646	2037	2408	2798
7221 Medical Sciences I	478	605	670	799	1100
7222 Medical Sciences II	196	227	364	491	686
7296 Health Sci Apprenticeship	20	40	37	35	15
7298 Health Careers Internship	26	44	57	62	98
7299 Health Sci Advanced Studies	68	85	238	218	267
Total Health Occupations Education	8164	11112	13304	15582	17929

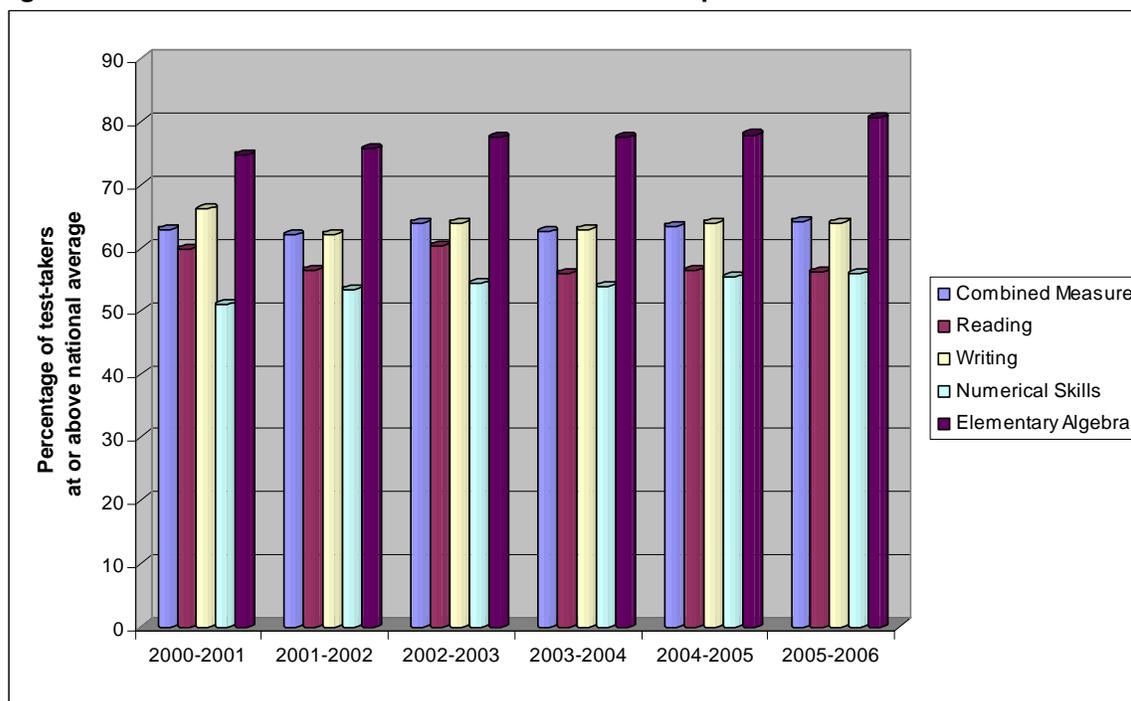
Source: NC CTE Performance Data, 2001-2006

Chart 27. Percent of Concentrators in Health Occupations Education Who Scored above the National Average on ASSET or ACCUPLACER

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Combined Measure	62.9	62.0	64.0	62.6	63.4	64.2
Reading	59.8	56.5	60.4	56.0	56.4	56.2
Writing	66.1	62.2	63.9	62.9	64.0	64.0
Numerical Skills	51.0	53.4	54.3	53.9	55.3	55.9
Elementary Algebra	74.7	75.7	77.5	77.5	77.9	80.6

Source: NC CTE Performance Data, 2001-2006

Figure 26. Academic Attainment Scores for Health Occupations Education Concentrators



Source: NC CTE Performance Data, 2001-2006

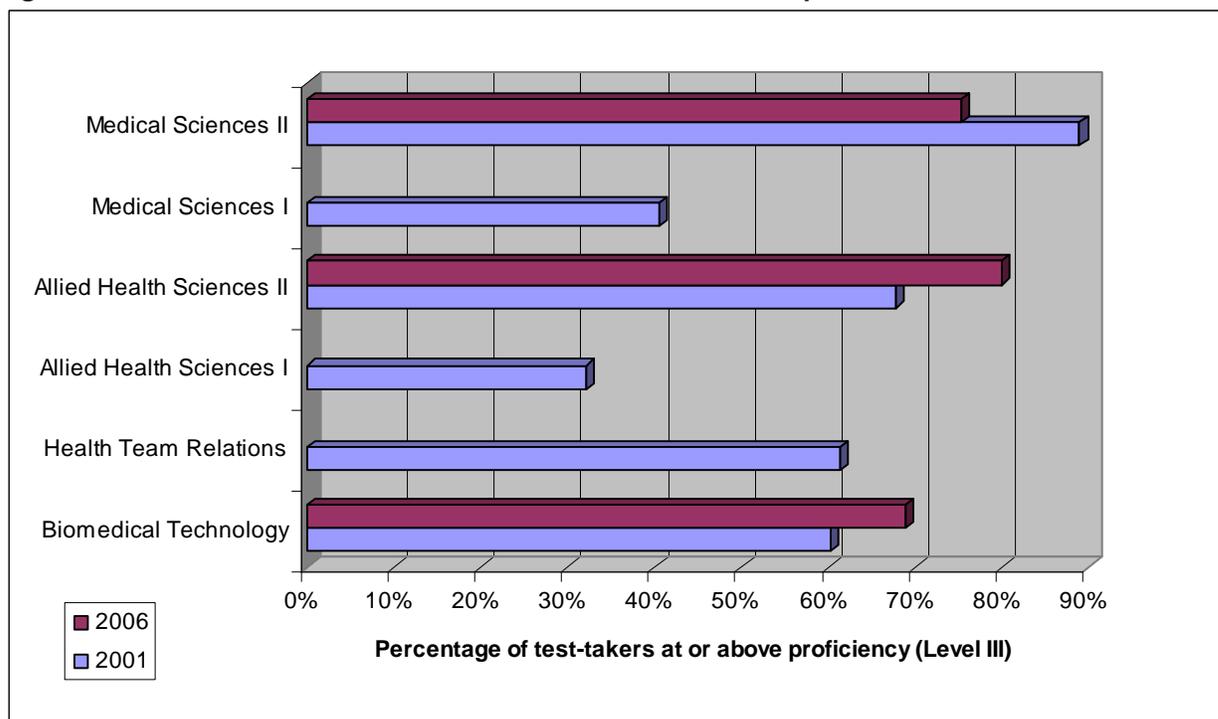
In each of the four years for which data are available, a higher percentage of Health Occupations Education concentrators exceeded the national average on the elementary algebra subtest than on any of the other three subtests. This same pattern is found with Career and Technical Education concentrators as a whole. For example, in 2005-2006, among Health Occupations Education concentrators, 56.2 percent of concentrators exceeded the national average in reading; in writing, 64.0 percent, in numerical skills, 55.9 percent, and in elementary algebra, 80.6 percent. The greatest increase among Health Occupations Education concentrators was in elementary algebra, where 2.7 percent more students met or exceeded the national average in 2005-2006 than in 2004-2005.

Technical Attainment

The measure used for technical attainment is performance of all enrollees in Career and Technical Education courses on standardized postassessments given at the conclusion of each course. The examinations typically contain 100 multiple-choice questions. They are developed in North Carolina and are based upon course blueprints that list specific course objectives with respective weights of each objective. The examinations are assessed for validity and reliability prior to use in statewide accountability. The 2005-2006 target was for 56.7 percent of Health Occupations Education enrollees to reach Proficiency (Level III) or better on the postassessments. To reach Proficiency, students must score 65 percent correct or better on the examination.

Figure 27 illustrates the performance of Health Occupations Education students in selected courses on the technical attainment measure since 2000-2001, the first year for which comparable data are available. Details about overall and special populations technical attainment appear in Chart 28. Since 2000-2001, the percentage of Health Occupations Education enrollees who reach Proficiency increased from 50.7 percent to 75.3 percent, a gain of 24.6 percentage points. Special populations students also showed a significant increase: from 35.8 percent at Proficiency or above in 2000-2001 to 64.7 percent in 2005-2006. The Health Occupations Education course with the highest performance on the technical attainment measure statewide was Allied Health Sciences II, where during 2005-2006, 80.0 percent of the enrollees scored at Proficiency or above.

Figure 27. Technical Attainment Scores in Selected Health Occupations Education Courses



Source: NC CTE Performance Data, 2001-2006

Chart 28. Percent of Enrollees who Scored above Proficiency in Health Occupations Education Courses, 2000-2001 to 2005-2006

		2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
		Overall	Sp Pops										
7200	Biomedical Technology	60.4%	37.6%	59.4%	35.3%	59.4%	35.8%	59.0%	42.8%			69.0%	54.5%
7210	Health Team Relations	61.5%	40.0%	61.9%	43.2%	69.7%	46.8%	66.8%	51.6%	81.6%	70.7%		
7211	Allied Health Sciences I	32.1%	22.7%	34.6%	24.3%	36.3%	25.0%			64.3%	53.6%		
7212	Allied Health Sciences II	67.8%	55.6%	72.9%	61.3%	77.3%	62.6%	80.5%	69.7%	81.6%	72.4%	80.0%	71.6%
7221	Medical Sciences I	40.5%	31.5%	33.7%	25.9%	43.2%	30.3%			80.0%	72.5%		
7222	Medical Sciences II	88.9%	82.2%	88.9%	82.9%					86.4%	78.9%	75.2%	64.3%
		50.7%	35.8%	52.0%	37.2%	55.3%	37.6%	69.9%	55.9%	74.9%	64.4%	75.3%	64.7%

Source: NC CTE Performance Data, 2001-2006

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Chart 29 shows the average score by course in Health Occupations Education. Although there were some minor fluctuations, in general Health Occupations Education courses showed an upward trend in their state averages between 2001-2002 (the first year this information was available) and 2005-2006. The highest average score is for Allied Health Sciences II, 72.6 percent correct, and the lowest for Biomedical Technology, 69.8.

Note that gaps in the chart are likely due to introduction of new curriculum. When a new curriculum is introduced, there is a year gap in reporting testing data during which updated test items are validated and reliability is determined.

Chart 29. Average Percent Correct by Course

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
7200 Biomedical Technology	66.4	66.8	66.7		69.8
7210 Health Team Relations	67.5	70.1	68.8	75.6	
7211 Allied Health Sciences I	59.2	60.0		69.1	
7212 Allied Health Sciences II	69.5	71.4	73.1	72.8	72.6
7221 Medical Sciences I	58.8	61.5		75.3	
7222 Medical Sciences II	77.6			74.8	70.5

Source: NC CTE Performance Data, 2001-2006

For more information

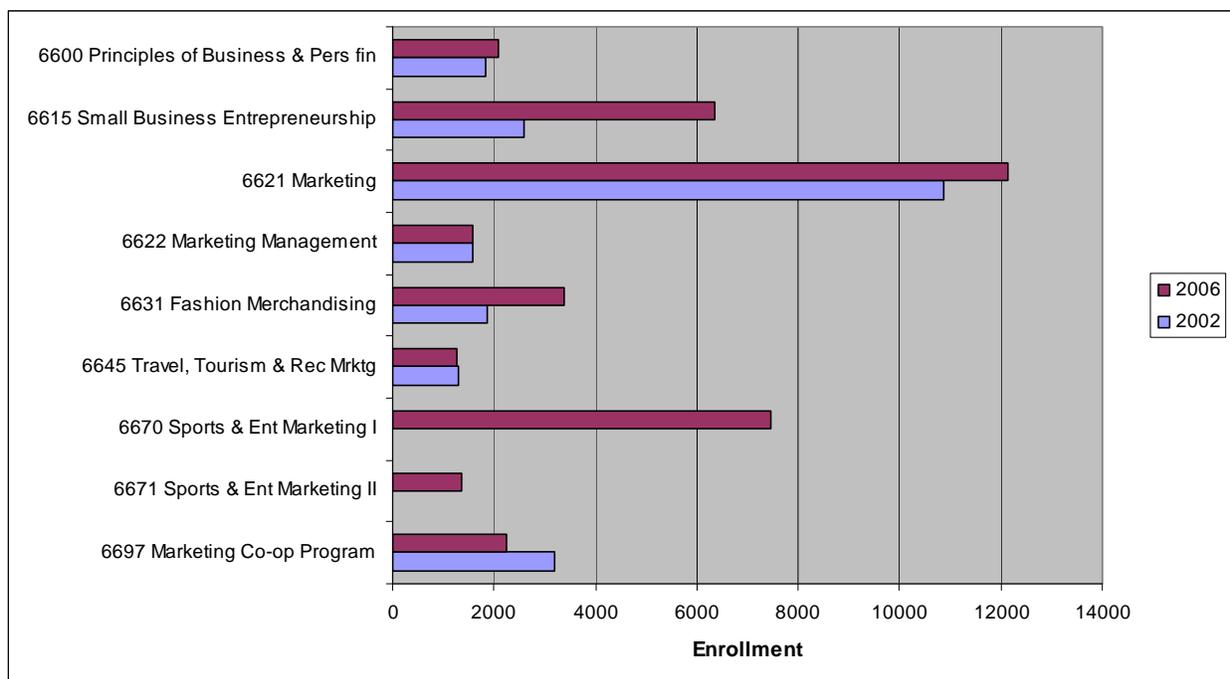
For more information, contact your Career and Technical Education Administrator or the North Carolina Health Occupations Education staff, 919-807-3894.

Marketing Education

The purpose of the Marketing Education instructional program is to prepare students for advancement in marketing and management careers and/or future studies in two-year technical/community colleges or four-year colleges or universities. Marketing is a vast and diverse discipline. It encompasses activities within production, as well as aspects of consumption. It is as specific as procedures for inventory control and, at the same time, as general as the creativity needed in effective promotion. The function of marketing occurs in all industries. Application of skills in reading, writing, mathematics, problem-solving, and critical thinking are found throughout the curriculum.

The Marketing Education curriculum in North Carolina includes 12 courses. For 2005-2006, 39,024 students were enrolled in Marketing Education courses. Figure 28 illustrates the enrollment for selected courses for Marketing Education, grades 9-12, between 2000-2001 and 2005-2006.

Figure 28. Changes in Enrollment in Selected High School Marketing Education Courses between 2001 and 2006



Source: NC CTE Performance Data, 2001-2006

Overall enrollment by course for Marketing Education is presented in Chart 30. Enrollment by course for special populations students in Marketing Education is presented in Chart 31.

The overall enrollment in Marketing Education has increased steadily over the past several years. Since 2001-2002, Marketing Education enrollment increased by nearly 15,000 students, from 24,399 to 39,024. (Enrollment in 2001-2002 showed a significant drop, due to a change in the way data were collected.) Of the Marketing Education enrollment, 60.2 percent are identified as special populations, indicating special services or accommodations are needed to help these students succeed. Figure 29 illustrates the trend in Marketing Education enrollment since 2001-2002.

Data on Student Attainment of Academic and Technical Competencies

As part of the agreement providing North Carolina more than \$34 million annually for Career and Technical Education, data on academic and technical attainment are reported each year. Complete information on academic and technical attainment by school system can be viewed at <http://wdeppms.dpi.state.nc.us/wdeppms.nsf>.

CAREER AND TECHNICAL EDUCATION DATA PROFILE

Academic Attainment

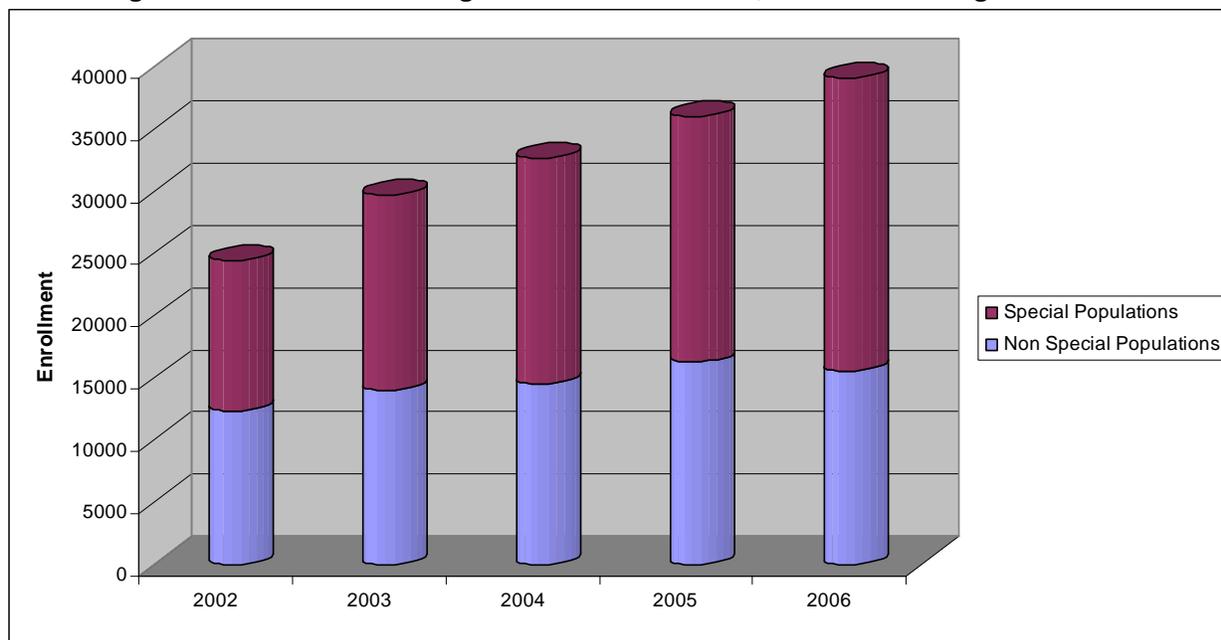
The measure of academic attainment used in North Carolina is performance on ASSET or ACCUPLACER, two national standardized examinations that are also used by community colleges to determine student placement. CTE concentrators take four ASSET or ACCUPLACER subtests: numerical skills, elementary algebra, writing, and reading. (A concentrator is a graduate who has earned at least four credits in a CTE pathway, at least one of which is in an upper level course.) Targets are set for each subtest and for a combined measure, for all students and disaggregated by special category and by program area. For the combined category, the numbers of students meeting or exceeding the national average on each subtest were added and then calculated as a percentage of total test takers. Figure 30 and Chart 32 illustrate the performance of concentrators in Marketing Education on the academic attainment measure.

Chart 30. Overall Marketing Education Enrollment, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
6600 Principles of Business & Pers fin	1845	2289	2711	2197	2085
6609 Marketing Pilot/Local Option	100	942	2598	431	118
6615 Small Business Entrepreneurship	2598	3709	4715	4754	6353
6621 Marketing	10881	13054	13160	12733	12149
6622 Marketing Management	1576	1800	2006	1713	1570
6626 Strategic Marketing	448	603	337	385	530
6631 Fashion Merchandising	1871	1923	2228	2625	3378
6645 Travel, Tourism & Rec Mrktg	1292	1443	1388	1216	1277
6665 Marketing Technol & Media	188	255	204	196	163
6670 Sports & Ent Marketing I	0	0	0	6112	7448
6671 Sports & Ent Marketing II	0	0	0	637	1346
6696 Marketing Apprenticeship	69	49	13	78	3
6697 Marketing Co-op Program	3179	3341	2749	2434	2252
6698 Marketing Internship	62	10	25	23	42
6699 Marketing Advanced Studies	156	186	395	359	295
Total Marketing Education	24399	29633	32534	35893	39024

Source: NC CTE Performance Data, 2001-2006

Figure 29. Trend in Marketing Education Enrollment, 2001-2002 through 2005-2006



CAREER AND TECHNICAL EDUCATION DATA PROFILE

Source: NC CTE Performance Data, 2001-2006

In each of the four years for which data are available, a higher percentage of Marketing Education concentrators exceeded the national average on the elementary algebra subtest than on any of the other three subtests. This same pattern is found with Career and Technical Education concentrators as a whole. For example, in 2005-2006, among Marketing Education concentrators, 43.3 percent of concentrators exceeded the national average in reading; in writing, 48.3 percent, in numerical skills, 45.4 percent, and in elementary algebra, 65.3 percent. Elementary algebra showed a small increase, 1.6 percent, between 2004-2005 and 2005-2006. The other subtests reflected a small decrease in the percentage of students who met or exceeded the national average.

Technical Attainment

The measure used for technical attainment is performance of all enrollees in Career and Technical Education courses on standardized postassessments given at the conclusion of each course. The examinations typically contain 100 multiple-choice questions. They are developed in North Carolina and are based upon course blueprints that list specific course objectives with respective weights of each objective. The examinations are assessed for validity and reliability prior to use in statewide accountability. The 2005-2006 target was for 51.4 percent of Marketing Education enrollees to reach Proficiency (Level III) or better on the postassessments. To reach Proficiency, students must score 65 percent correct or better on the examination.

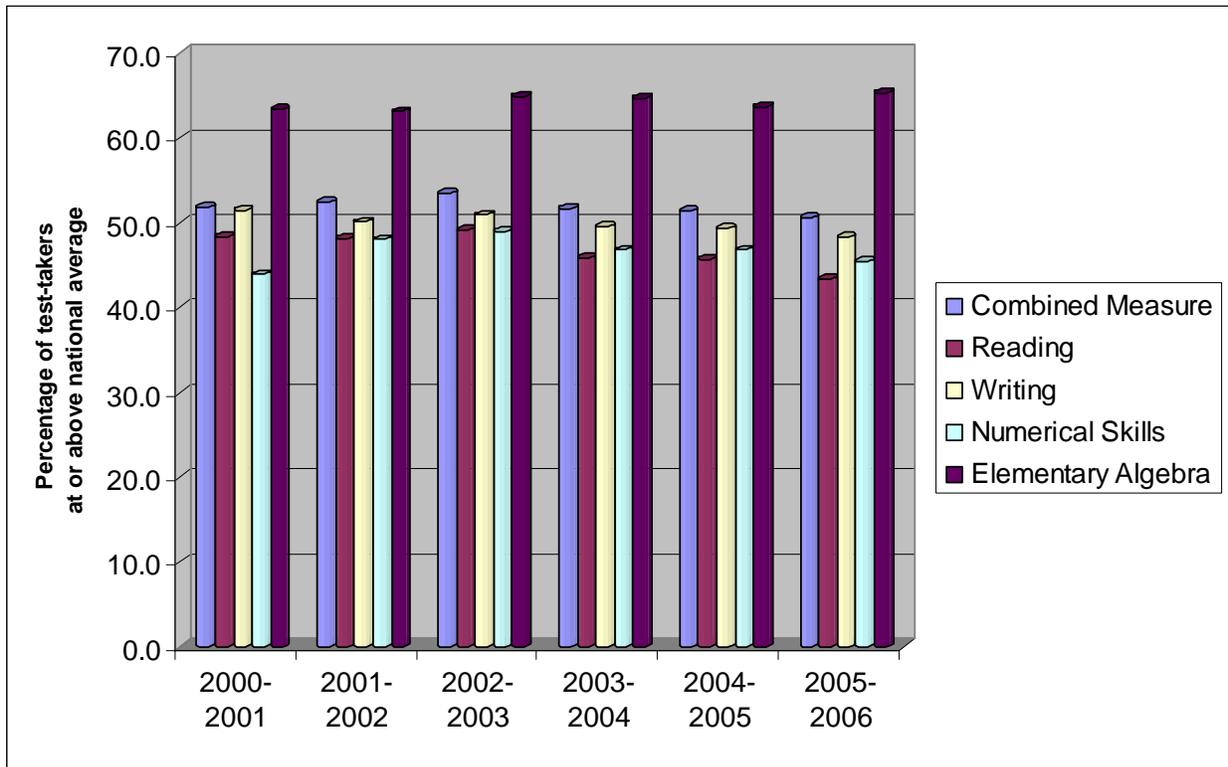
Figure 31 illustrates the performance of Marketing Education students in selected courses on the technical attainment measure since 2000-2001, the first year for which comparable data are available. Details about overall and special populations technical attainment appear in Chart 33. Since 2000-2001, the percentage of Marketing Education enrollees who reach Proficiency increased from 44.4 percent to 56.2 percent, a gain of almost 12 percentage points. Special populations students also showed a significant increase: from 28.9 percent at Proficiency or above in 2000-2001 to 41.2 percent in 2005-2006. The Marketing Education course with the highest performance on the technical attainment measure statewide was Sports and Entertainment Marketing I, where during 2005-2006, 65.6 percent of the enrollees scored at Proficiency or above.

Chart 31. Special populations Enrollment in Marketing Education, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
6600 Principles of Business & Pers fin	903	1205	1554	1018	1148
6609 Marketing Pilot/Local Option	30	526	1418	195	61
6615 Small Business Entrepreneurship	1121	1855	2588	2713	4289
6621 Marketing	5466	6905	7194	7266	7666
6622 Marketing Management	745	895	1150	1009	1009
6626 Strategic Marketing	190	278	159	233	267
6631 Fashion Merchandising	1054	1205	1421	1655	2182
6645 Travel, Tourism & Rec Mrktg	626	680	765	669	772
6665 Marketing Technol & Media	72	118	84	111	76
6670 Sports & Ent Marketing I	0	0	0	2975	3896
6671 Sports & Ent Marketing II	0	0	0	363	705
6696 Marketing Apprenticeship	31	17	6	25	1
6697 Marketing Co-op Program	1724	1929	1504	1284	1306
6698 Marketing Internship	14	4	3	9	16
6699 Marketing Advanced Studies	37	48	159	158	114
Total Marketing Education	12070	15681	18007	19683	23520

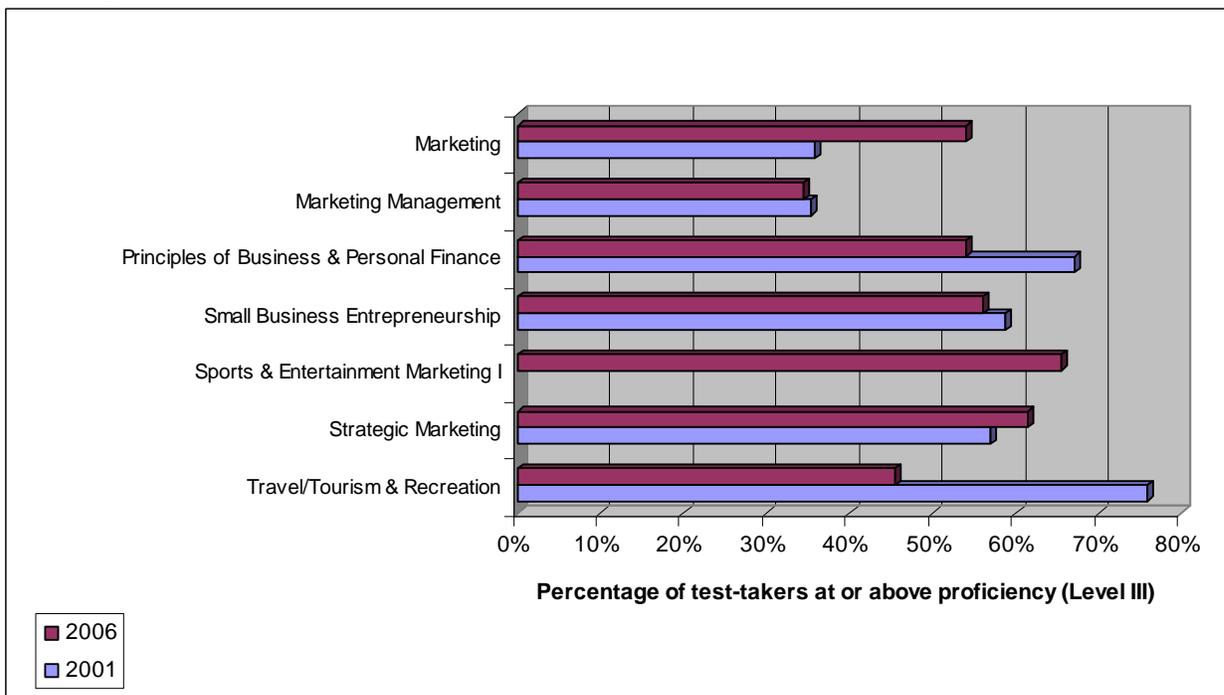
Source: NC CTE Performance Data, 2001-2006

Figure 30. Academic Attainment Scores for Marketing Education Concentrators



Source: NC CTE Performance Data, 2001-2006

Figure 31. Technical Attainment Scores in Selected Marketing Education Courses



Source: NC CTE Performance Data, 2001-2006

Chart 32. Percent of Concentrators in Marketing Education Who Scored above the National Average on ASSET or ACCUPLACER

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Combined Measure	51.8	52.4	53.5	51.7	51.4	50.6
Reading	48.4	48.2	49.1	45.8	45.7	43.3
Writing	51.5	50.1	50.9	49.5	49.3	48.3
Numerical Skills	43.9	48.0	49.0	46.8	46.8	45.4
Elementary Algebra	63.4	63.1	64.9	64.7	63.7	65.3

Source: NC CTE Performance Data, 2001-2006

Chart 34 shows the average score by course in Marketing Education. The largest increase since 2001-2002 was for Strategic Marketing, where the average student score increased by 3.2 percentage points, to 66.7 percent correct. 2001-2002 was the first year for which this information was available. The highest average score is for Sports and Entertainment Marketing I, 68.3 percent correct, and the lowest for Marketing Management, 58.8.

Note that gaps in the chart are likely due to introduction of new curriculum. When a new curriculum is introduced, there is a year gap in reporting testing data during which updated test items are validated and reliability is determined.

For more information

For more information, contact your Career and Technical Education Administrator or the North Carolina Marketing Education staff, 919-807-3875.

Chart 33. Percent of Enrollees who Scored above Proficiency in Marketing Education Courses, 2000-2001 to 2005-2006

	2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
	Overall	Sp Pops										
6600 Principles of Business - ME	67.2%	49.4%	59.8%	41.9%	67.1%	45.5%			54.9%	34.2%	54.0%	36.7%
6615 Small Business/Entrepreneurship - ME	58.8%	44.4%	67.9%	52.0%	68.4%	51.7%			42.9%	29.6%	56.0%	44.3%
6621 Marketing	35.8%	20.3%	47.6%	30.8%	53.0%	33.1%	55.2%	38.1%	54.5%	37.3%	54.1%	39.8%
6622 Marketing Management	35.4%	20.2%	39.3%	25.5%	39.3%	22.9%	44.3%	29.7%	46.3%	35.7%	34.6%	22.9%
6626 Strategic Marketing	57.0%	37.4%	52.9%	37.7%	41.6%	21.4%	46.5%	25.9%	45.1%	31.4%	61.5%	46.6%
6631 Fashion Merchandising	31.5%	15.8%	47.7%	29.8%	56.2%	37.4%	58.4%	43.5%	66.1%	51.8%		
6641 Business & Financial Management I - ME	24.2%	20.0%	38.4%	31.0%	31.3%	35.0%						
6642 Business & Financial Management II - ME	72.7%	70.0%										
6645 Travel/Tourism & Recreation	75.9%	61.0%	78.3%	65.7%	65.7%	48.4%	65.0%	54.3%			45.6%	32.4%
6670 Sports & Entertainment Mrktg I									71.0%	52.1%	65.6%	47.4%
6600 Principles of Business - ME	67.2%	49.4%	59.8%	41.9%	67.1%	45.5%			54.9%	34.2%	54.0%	36.7%
	44.4%	28.9%	52.6%	35.9%	56.2%	37.1%	55.2%	39.0%	56.7%	39.8%	56.2%	41.2%

Source: NC CTE Performance Data, 2001-2006

Chart 34. Average Percent Correct by Course

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
6600 Principles of Business & Personal Finance - ME	65.8	68.7		64.9	64.8
6615 Small Business Entreprp – ME	68.7	68.7		60.8	64.8
6621 Marketing	62.4	64.2	64.6	64.4	64.1
6622 Marketing Management	59.9	60.4	61.9	62.0	58.8
6626 Strategic Marketing	63.5	60.7	60.5	62.3	66.7
6631 Fashion Merchandising	62.2	65.0	66.3	68.8	
6641 Business & Financial Mgmt I – ME	58.3	56.8			
6645 Travel/Tourism & Recreation Mrktg	72.6	69.4	68.7		61.6
6670 Sports & Entertainment Marketing I				69.7	68.3

Source: NC CTE Performance Data, 2001-2006

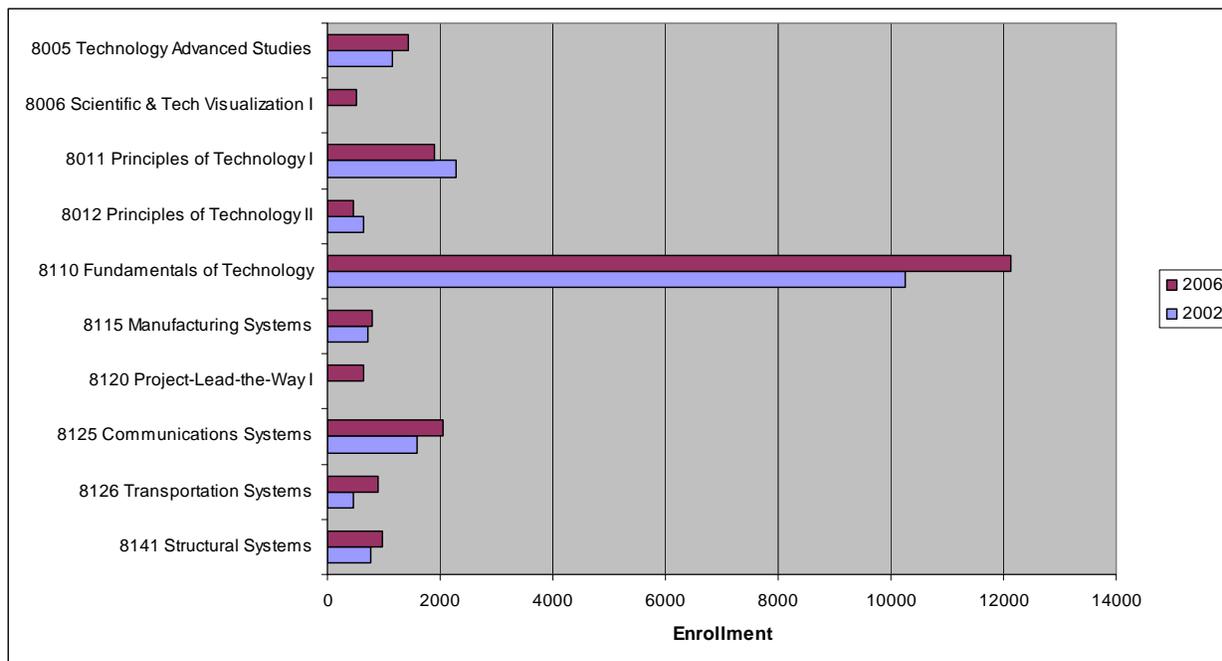
Technology Education

The purpose of Technology Education is to prepare technologically literate students for success in an ever-changing technological workplace. Technology Education helps students:

- Better understand complex technologies through the use of the systems approach to problem solving
- Apply design, problem solving, and leadership skills
- Assess the implications of technology upon society, the economy, and the environment
- Become more knowledgeable citizens and consumers regarding issues of technology
- Make wise career decisions

The Technology Education curriculum in North Carolina includes 11 high school courses and one middle grades course. For 2005-2006, 47,281 students were enrolled in Exploring Technology Systems, the middle school course, while 22,431 students were enrolled in the high school programs. Figure 32 illustrates the enrollment for selected courses for Technology Education, grades 9-12, between 2000-2001 and 2005-2006.

Figure 32. Changes in Enrollment in Selected High School Technology Education Courses between 2001 and 2006



Source: NC CTE Performance Data, 2001-2006

Overall enrollment by course for Technology Education is presented in Chart 35. Enrollment by course for special populations students in Technology Education is presented in Chart 36.

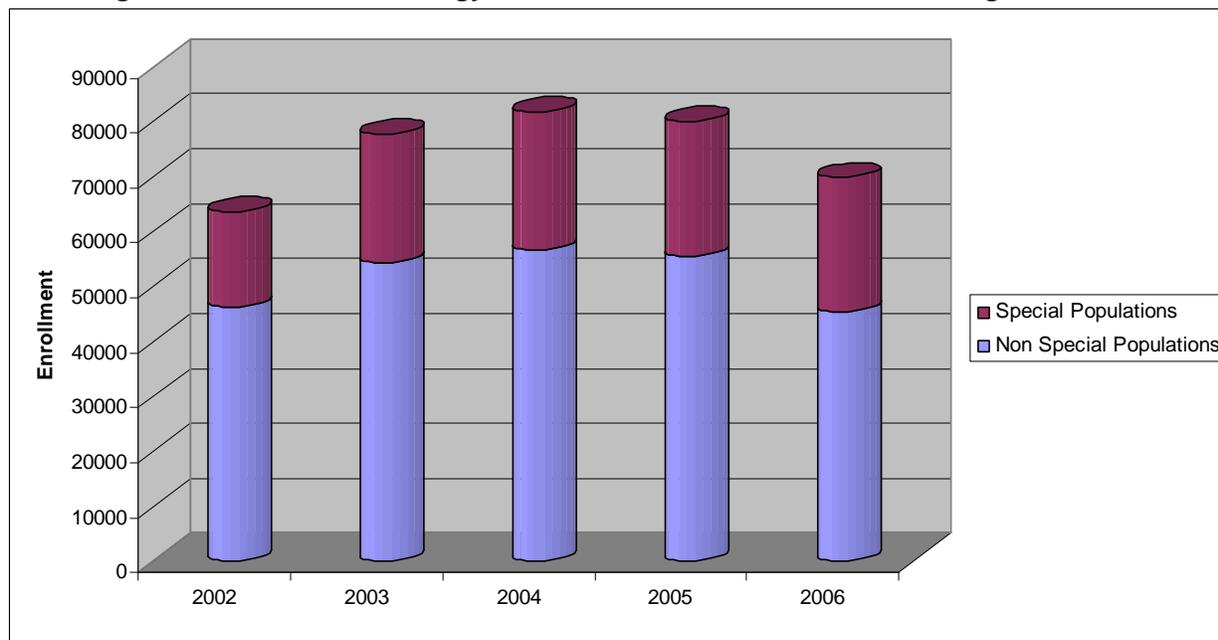
The overall enrollment in Technology Education has fallen by nearly 12,000 students since its high point of 81,574 in 2003-2004. Much of that drop can be attributed to a decrease in the enrollment in the middle grades course, which fell nearly 10,000 since 2004-2005 alone. Of the high school enrollment, 60.0 percent are identified as special populations, indicating special services or accommodations are needed to help these students succeed. Figure 33 illustrates the trend in Technology Education enrollment since 2001-2002.

Chart 35. Overall Technology Education Enrollment, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
8005 Technology Advanced Studies	1152	1372	1321	1268	1424
8006 Scientific & Tech Visualization I	0	0	97	309	513
8007 Scientific & Tech Visualization II	0	0	31	101	165
8009 Technology Pilot/Local Option	262	465	2699	436	265
8011 Principles of Technology I	2291	2779	3029	2377	1903
8012 Principles of Technology II	630	749	864	491	453
8110 Fundamentals of Technology	10265	12175	12297	12665	12124
8115 Manufacturing Systems	714	634	832	753	788
8120 Project-Lead-the-Way I	0	0	0	336	640
8121 Project-Lead-the-Way II	0	0	0	50	163
8125 Communications Systems	1578	1993	1878	2153	2053
8126 Transportation Systems	473	666	917	739	899
8141 Structural Systems	766	889	904	1070	984
8196 Technology Apprenticeship	41	22	27	12	16
8198 Technology Internship	26	26	37	58	35
Other High School Courses	0	0	0	0	6
Middle Grades					
8108 Exploring Technology Systems	45427	55881	56641	57092	47281
Total Technology Education	63625	77651	81574	79910	69712

Source: NC CTE Performance Data, 2001-2006

Figure 33. Trend in Technology Education Enrollment, 2001-2002 through 2005-2006



Source: NC CTE Performance Data, 2001-2006

Data on Student Attainment of Academic and Technical Competencies

As part of the agreement providing North Carolina more than \$34 million annually for Career and Technical Education, data on academic and technical attainment are reported each year. Complete information on academic and technical attainment by school system can be viewed at

<http://wdeppms.dpi.state.nc.us/wdeppms.nsf>.

**Chart 36. Special populations Enrollment in Technology Education
2001-2002 through 2005-2006**

	2002	2003	2004	2005	2006
High School					
8005 Technology Advanced Studies	336	390	285	375	383
8006 Scientific & Tech Visualization I	0	0	37	103	227
8007 Scientific & Tech Visualization II	0	0	10	29	72
8009 Technology Pilot/Local Option	93	197	1701	164	109
8011 Principles of Technology I	967	1420	1681	1325	1135
8012 Principles of Technology II	241	324	427	275	214
8110 Fundamentals of Technology	4797	6412	6519	7334	7915
8115 Manufacturing Systems	401	363	486	455	543
8120 Project-Lead-the-Way I	0	0	0	232	328
8121 Project-Lead-the-Way II	0	0	0	27	64
8125 Communications Systems	653	868	952	1178	1268
8126 Transportation Systems	209	371	506	423	551
8141 Structural Systems	343	469	471	625	625
8196 Technology Apprenticeship	15	9	9	3	7
8198 Technology Internship	4	4	11	9	15
Other High School Courses	0	0	0	0	5
Middle Grades					
8108 Exploring Technology Systems	9439	12454	12032	11992	10930
Total Technology Education	17498	23281	25127	24549	24391

Source: NC CTE Performance Data, 2001-2006

Academic Attainment

The measure of academic attainment used in North Carolina is performance on ASSET or ACCUPLACER, two national standardized examinations that are also used by community colleges to determine student placement. CTE concentrators take four ASSET or ACCUPLACER subtests: numerical skills, elementary algebra, writing, and reading. (A concentrator is a graduate who has earned at least four credits in a CTE pathway, at least one of which is in an upper level course.) Targets are set for each subtest and for a combined measure, for all students and disaggregated by special category and by program area. For the combined category, the numbers of students meeting or exceeding the national average on each subtest were added and then calculated as a percentage of total test takers. Figure 34 and Chart 37 illustrate the performance of concentrators in Technology Education on the academic attainment measure.

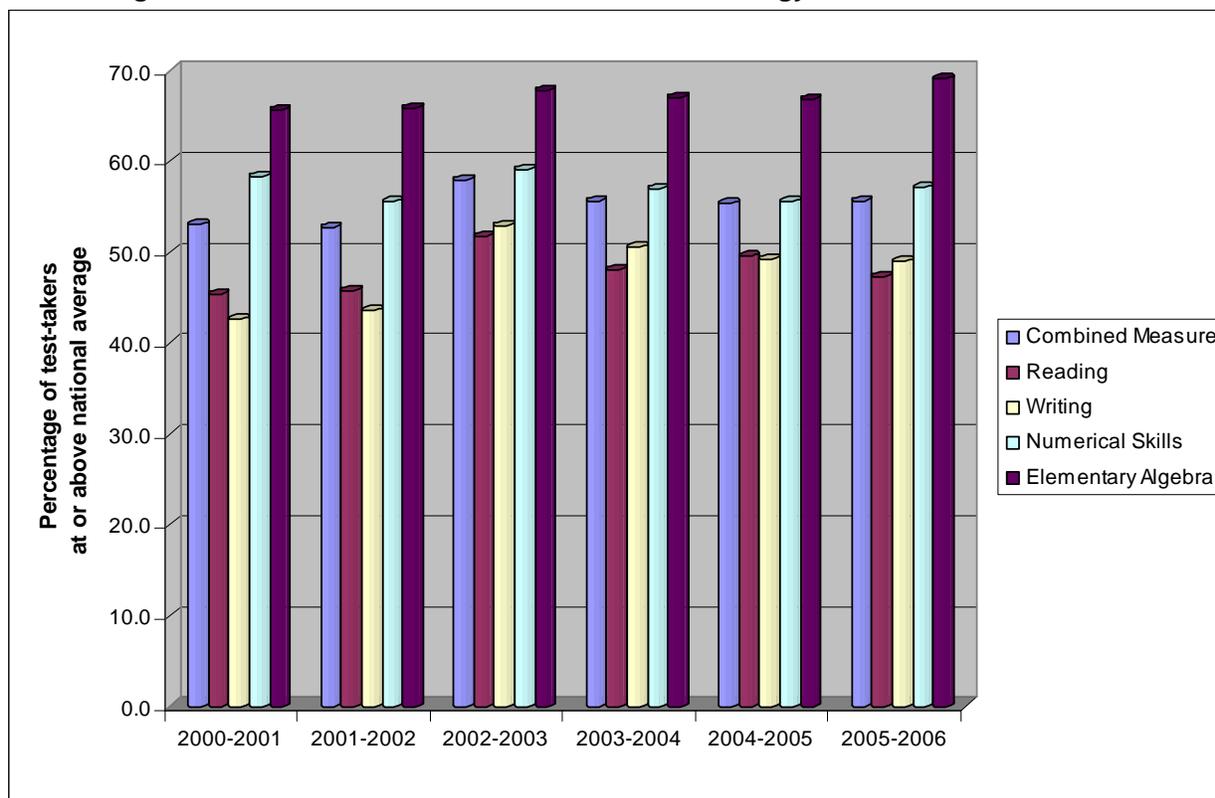
Chart 37. Percent of Concentrators in Technology Education Who Scored above the National Average on ASSET or ACCUPLACER

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Combined Measure	53.0	52.7	57.9	55.6	55.3	55.6
Reading	45.4	45.8	51.8	48.1	49.5	47.3
Writing	42.6	43.5	52.9	50.5	49.2	49.0
Numerical Skills	58.3	55.5	59.1	57.0	55.5	57.1
Elementary Algebra	65.7	65.9	67.8	67.0	66.8	69.0

Source: NC CTE Performance Data, 2001-2006

In each of the four years for which data are available, a higher percentage of Technology Education concentrators exceeded the national average on the elementary algebra subtest than on any of the other three subtests. This same pattern is found with Career and Technical Education concentrators as a whole. For example, in 2005-2006, among Technology Education concentrators, 47.3 percent of concentrators exceeded the national average in reading; in writing, 49.0 percent, in numerical skills, 57.1 percent, and in elementary algebra, 69.0 percent. The greatest increase among Technology Education concentrators was in elementary algebra, which increased 2.2 percent between 2004-2005 and 2005-2006.

Figure 34. Academic Attainment Scores for Technology Education Concentrators



Source: NC CTE Performance Data, 2001-2006

Technical Attainment

The measure used for technical attainment is performance of all enrollees in Career and Technical Education courses on standardized postassessments given at the conclusion of each course. The examinations typically contain 100 multiple-choice questions. They are developed in North Carolina and are based upon course blueprints that list specific course objectives with respective weights of each objective. The examinations are assessed for validity and reliability prior to use in statewide accountability. The 2005-2006 target was for 48.5 percent of Technology Education enrollees to reach Proficiency (Level III) or better on the postassessments. To reach Proficiency, students must score 65 percent correct or better on the examination.

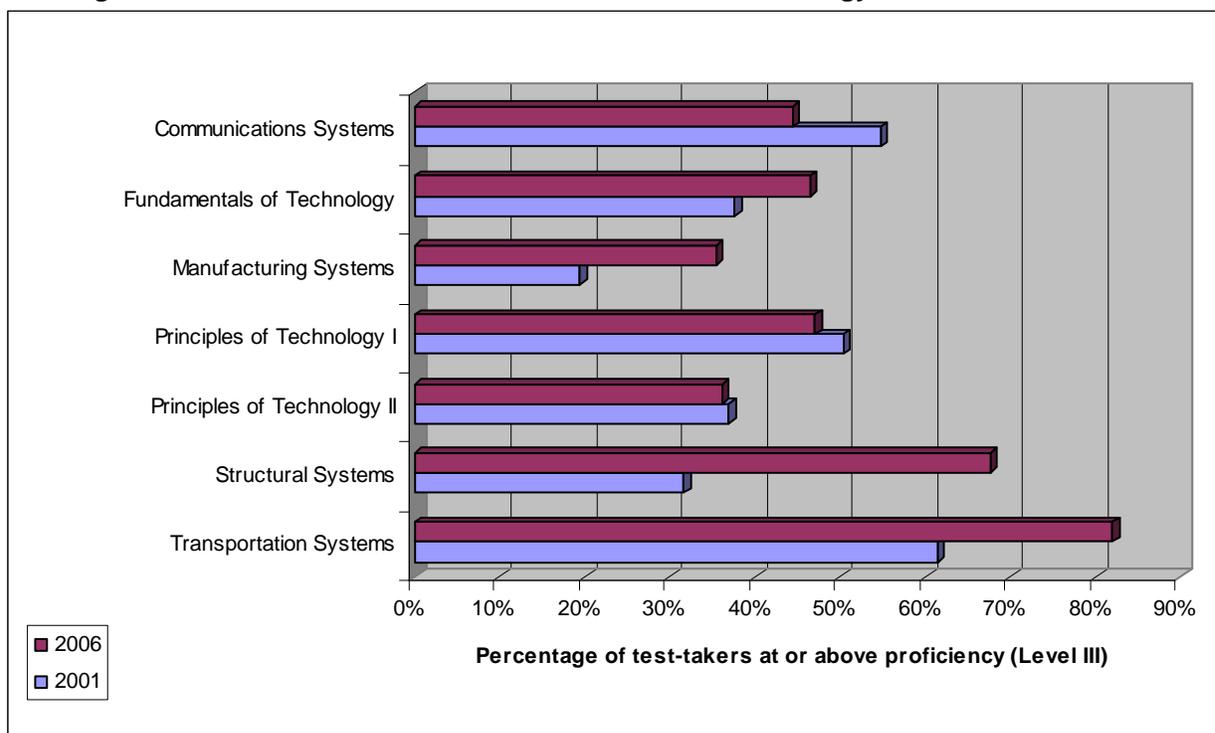
Figure 35 illustrates the performance of Technology Education students in selected courses on the technical attainment measure since 2000-2001, the first year for which comparable data are available. Details about overall and special populations technical attainment appear in Chart 38. Since 2000-2001, the percentage of Technology Education enrollees who reach Proficiency increased from 41.0 percent to 48.4 percent, a gain of 7.4 percentage points. Special populations students also showed a significant increase: from 27.2 percent at Proficiency or above in 2000-2001 to 36.5 percent in 2005-2006. The Technology Education course with the highest performance on the technical attainment measure statewide was Transportation Systems, where during 2005-2006, 82.0 percent of the enrollees scored at Proficiency or above.

Chart 38. Percent of Enrollees who Scored above Proficiency in Technology Education Courses, 2000-2001 to 2005-2006

	2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
	Overall	Sp Pops										
8011 Principles of Technology I	50.4%	36.1%	48.8%	34.2%	46.2%	27.7%	41.0%	26.2%	45.9%	32.3%	47.1%	34.9%
8012 Principles of Technology II	37.0%	25.6%	35.3%	22.2%	35.6%	18.3%	34.6%	20.0%	29.6%	15.2%	36.1%	24.8%
8110 Fundamentals of Technology	37.6%	22.4%	48.6%	32.3%			51.5%	37.0%	52.0%	38.7%	46.5%	34.4%
8115 Manufacturing Systems	19.4%	11.5%	25.2%	13.7%	28.3%	14.4%	26.6%	17.6%	34.8%	21.7%	35.5%	28.5%
8125 Communications Systems	54.7%	46.3%	54.6%	42.8%	58.7%	44.4%	56.3%	45.2%			44.5%	33.4%
8126 Transportation Systems	61.5%	41.6%	66.7%	51.3%	51.7%	45.6%	58.1%	50.0%	69.2%	55.7%	82.0%	72.6%
8141 Structural Systems	31.7%	21.5%	32.7%	21.4%	33.1%	19.5%	28.9%	20.2%			67.7%	54.9%
	41.0%	27.2%	47.5%	32.4%	45.9%	31.2%	48.0%	34.7%	50.6%	37.1%	48.4%	36.5%

Source: NC CTE Performance Data, 2001-2006

Figure 35. Technical Attainment Scores in Selected Technology Education Courses



Source: NC CTE Performance Data, 2001-2006

Chart 39 shows the average score by course in Technology Education. Most Technology Education courses showed an increase in their state averages between 2001-2002 (the first year this information was available) and 2005-2006. The largest increase was for Structural Systems, where the average student score increased by 12.9 percentage points, to 69.7 percent correct. The highest average score is for Transportation Systems, 74.8 percent correct, and the lowest for Manufacturing Systems, 58.7 percent correct.

Note that gaps in the chart are likely due to introduction of new curriculum. When a new curriculum is introduced, there is a year gap in reporting testing data during which updated test items are validated and reliability is determined.

Chart 39. Average Percent Correct by Course

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
8011 Principles of Technology I	63.1	62.6	60.1	61.9	61.5
8012 Principles of Technology II	57.1	57.2	57.2	55.9	59.1
8110 Fundamentals of Technology	62.2	0.0	62.6	62.8	60.4
8115 Manufacturing Systems	54.6	56.3	55.0	56.8	58.7
8125 Communications Systems	64.8	66.2	65.4		61.2
8126 Transportation Systems	69.1	64.8	66.4	70.3	74.8
8141 Structural Systems	56.8	56.7	56.8		69.7

Source: NC CTE Performance Data, 2001-2006

For more information

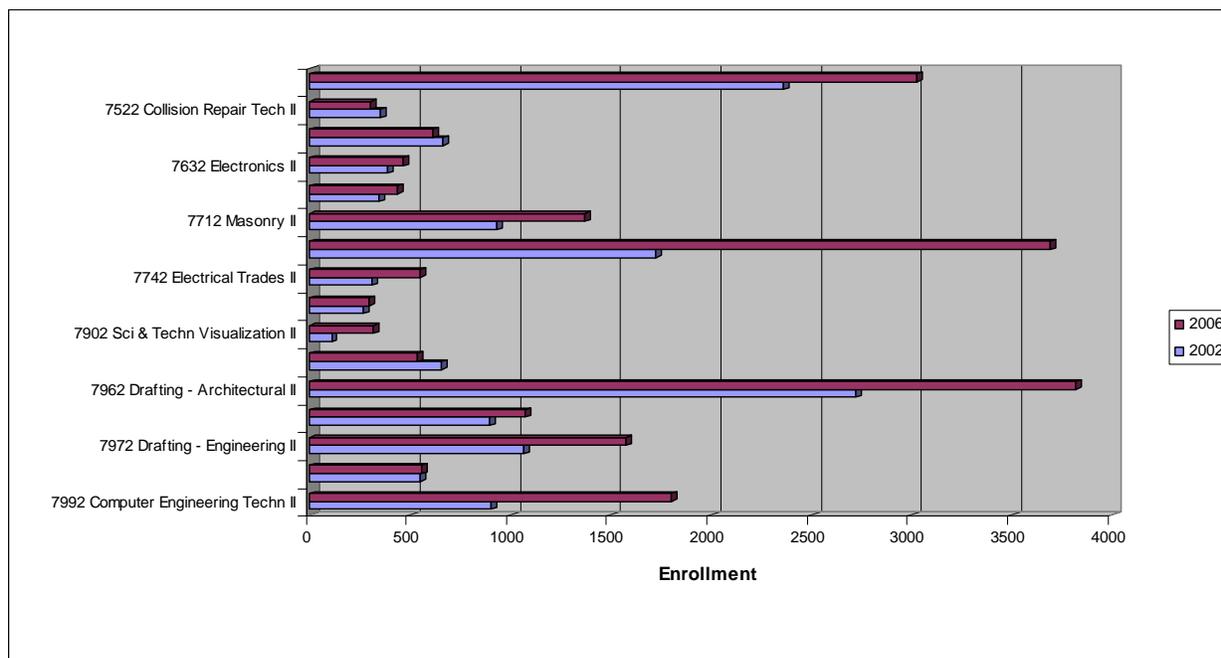
For more information, contact your Career and Technical Education Administrator or the North Carolina Technology Education staff, 919-807-3880.

Trade and Industrial Education

Trade and Industrial Education is a secondary program designed to prepare students for careers in public service, industry, and the trade occupations through a sequence of learning experiences. Instructional units are provided in the use of layout, design, production, processes, assembly, quality control, maintenance, and service of industrial, commercial, and residential goods and products.

The Trade and Industrial Education curriculum in North Carolina includes 47 courses. For 2005-2006, 86,517 students were enrolled in Trade and Industrial Education courses in North Carolina. Figure 36 illustrates the enrollment for selected courses for Trade and Industrial Education, grades 9-12, between 2000-2001 and 2005-2006.

Figure 36. Changes in Enrollment in Selected High School Trade and Industrial Education Courses between 2001 and 2006



Source: NC CTE Performance Data, 2001-2006

Overall enrollment by course for Trade and Industrial Education is presented in Chart 40. Enrollment by course for special populations students in Trade and Industrial Education is presented in Chart 41.

The overall enrollment in Trade and Industrial Education has shown an upward trend over the past several years. Since 2001-2002, Trade and Industrial Education enrollment increased by nearly 18,000 students, from 68,680 to 86,517. (Enrollment in 2001-2002 showed a significant drop, due to a change in the way data were collected.) Of the high school enrollment, 60.3 percent are identified as special populations, indicating special services or accommodations are needed to help these students succeed. Figure 37 illustrates the trend in Trade and Industrial Education enrollment since 2001-2002.

CAREER AND TECHNICAL EDUCATION DATA PROFILE

Chart 40. Overall Trade and Industrial Education Enrollment, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
7400 Introduction to T&I	4375	4394	4613	6572	6007
7409 T&I Pilot/Local Option	7437	9363	10173	9296	8701
7511 Automotive Serv Tech I	6088	7620	7391	7888	6806
7512 Automotive Serv Tech II	2358	2525	2965	3096	3025
7521 Collision Repair Tech I	0	0	0	736	471
7522 Collision Repair Tech II	350	364	504	353	301
7621 Cabinetmaking I	0	0	0	1518	2091
7622 Cabinetmaking II	660	745	735	602	613
7631 Electronics I	1670	1835	1891	1990	1727
7632 Electronics II	388	442	480	504	462
7641 Metals Manufacturing I	628	753	807	810	705
7642 Metals Manufacturing II	269	236	213	227	186
7651 Electro-mechanical Techn I	297	349	290	105	188
7652 Electro-Mechanical Tech II	139	100	86	66	75
7661 Welding Technology I	790	1002	869	1017	1171
7662 Welding Technology II	344	351	357	442	435
7711 Masonry I	2226	2923	3342	3496	3497
7712 Masonry II	932	1055	1255	1411	1373
7721 Construction Techn I	5992	7548	8298	8887	8990
7722 Construction Techn II	1721	2269	2780	3450	3692
7741 Electrical Trades I	1056	1109	1348	1371	1537
7742 Electrical Trades II	307	412	413	503	547
7810 Intro to Cosmetology	0	0	0	66	205
7811 Cosmetology I	581	619	676	750	566
7812 Cosmetology II	265	326	355	457	294
7821 T&I Work Development I	642	571	315	302	252
7822 T&I Work Development II	191	238	177	89	98
7901 Sci & Techn Visualization I	803	844	953	704	848
7902 Sci & Techn Visualization II	107	222	347	245	316
7911 Printing Graphics I	2524	2584	2535	2549	2440
7912 Printing Graphics II	654	692	682	672	535
7921 Drafting I	9073	10795	11095	11940	12006
7962 Drafting - Architectural II	2724	3186	3662	3493	3819
7963 Drafting - Architectural II	894	1095	1188	1101	1074
7972 Drafting - Engineering II	1068	1305	1418	1677	1576
7973 Drafting - Engineering III	313	337	313	349	322
7980 Networking I	1239	1159	1317	1356	1285
7981 Network Engineering Techn II Cisco	552	558	479	605	553
7982 Network Engineering Techn III Cisco	0	0	0	229	127
7983 Network Engineering Techn II Nortel	0	0	0	20	0
7991 Computer Engineering Techn I	2631	3624	3747	3772	3589
7992 Computer Engineering Techn II	901	1375	1901	2198	1801
7996 T&I Apprenticeship	446	451	483	276	250
7997 T&I Co-op Program	623	472	431	459	407
7998 T&I Internship	116	122	97	266	315
7999 T&I Advanced Studies	334	576	772	1134	1239
Other High School Courses	3972	3654	1652	81	0
Total Trade and Industrial Education	68680	80200	83405	89130	86517

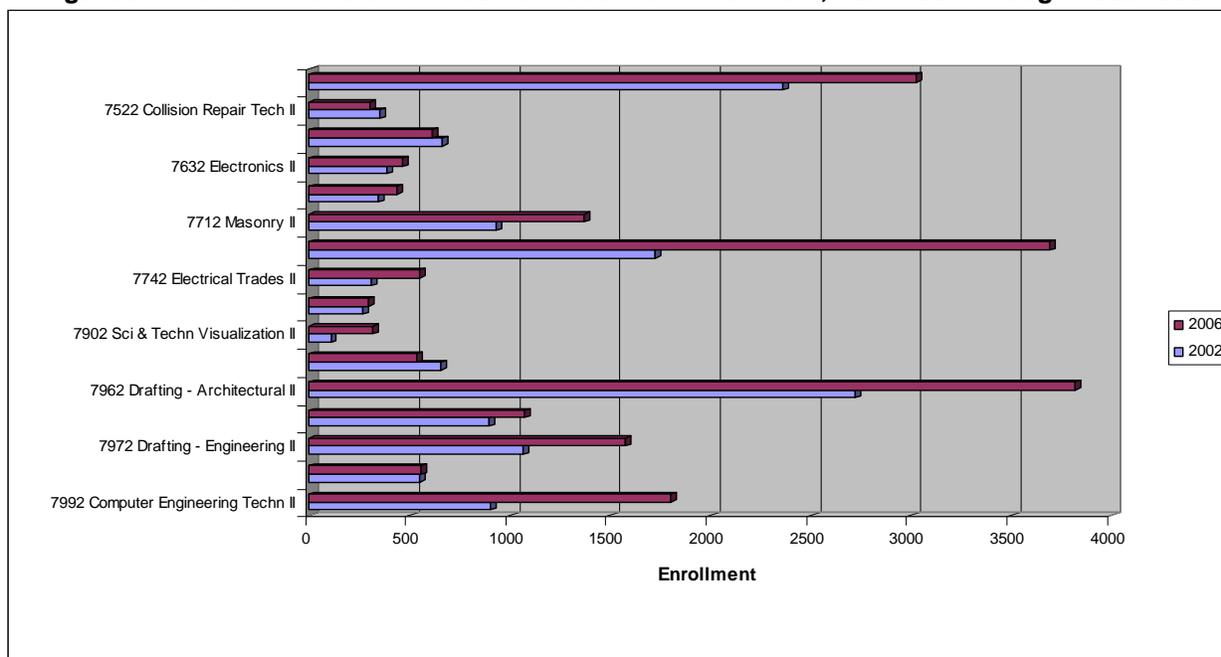
Source: NC CTE Performance Data, 2001-2006

Chart 40. Special populations Enrollment in Trade and Industrial Education, 2001-2002 through 2005-2006

	2002	2003	2004	2005	2006
High School					
7400 Introduction to T&I	2152	2454	2572	3526	3373
7409 T&I Pilot/Local Option	3520	4803	5502	5198	5321
7511 Automotive Serv Tech I	3536	4602	4519	4905	4785
7512 Automotive Serv Tech II	1319	1547	1937	2030	2071
7521 Collision Repair Tech I	0	0	0	435	329
7522 Collision Repair Tech II	165	243	316	209	213
7621 Cabinetmaking I	0	0	0	941	1210
7622 Cabinetmaking II	331	464	466	364	382
7631 Electronics I	742	950	974	1193	1060
7632 Electronics II	164	212	213	279	290
7641 Metals Manufacturing I	401	502	500	484	457
7642 Metals Manufacturing II	149	157	136	130	118
7651 Electro-mechanical Techn I	166	226	205	44	129
7652 Electro-Mechanical Tech II	75	64	66	46	54
7661 Welding Technology I	504	697	586	683	807
7662 Welding Technology II	211	231	232	305	323
7711 Masonry I	1497	2105	2444	2468	2587
7712 Masonry II	593	747	939	1059	1025
7721 Construction Techn I	3451	4750	5282	5873	6249
7722 Construction Techn II	1034	1404	1820	2307	2642
7741 Electrical Trades I	601	698	812	887	1059
7742 Electrical Trades II	180	214	261	338	384
7810 Intro to Cosmetology	0	0	0	38	157
7811 Cosmetology I	326	384	474	501	435
7812 Cosmetology II	163	190	229	293	215
7821 T&I Work Development I	333	299	164	167	168
7822 T&I Work Development II	100	126	106	57	62
7901 Sci & Techn Visualization I	242	310	325	282	421
7902 Sci & Techn Visualization II	26	73	92	93	145
7911 Printing Graphics I	1230	1298	1274	1367	1451
7912 Printing Graphics II	286	360	384	361	350
7921 Drafting I	3425	4703	5023	5464	6026
7962 Drafting - Architectural II	863	1175	1530	1472	1718
7963 Drafting - Architectural II	250	377	415	387	397
7972 Drafting - Engineering II	336	387	483	572	600
7973 Drafting - Engineering III	94	109	93	103	84
7980 Networking I	335	439	483	629	675
7981 Network Engineering Techn II Cisco	136	177	163	240	257
7982 Network Engineering Techn III Cisco	0	0	0	76	50
7983 Network Engineering Techn II Nortel	0	0	0	9	0
7991 Computer Engineering Techn I	1011	1594	1724	1971	1988
7992 Computer Engineering Techn II	336	584	817	1125	946
7996 T&I Apprenticeship	134	152	199	125	124
7997 T&I Co-op Program	261	246	230	231	254
7998 T&I Internship	31	49	45	116	158
7999 T&I Advanced Studies	136	256	363	534	649
Other High School Courses	2367	2295	943	45	0
Total Trade and Industrial Education	33212	42653	45341	49962	52198

Source: NC CTE Performance Data, 2001-2006

Figure 37. Trend in Trade and Industrial Education Enrollment, 2001-2002 through 2005-2006



Source: NC CTE Performance Data, 2001-2006

Data on Student Attainment of Academic and Technical Competencies

As part of the agreement providing North Carolina more than \$34 million annually for Career and Technical Education, data on academic and technical attainment are reported each year. Complete information on academic and technical attainment by school system can be viewed at <http://wdeppms.dpi.state.nc.us/wdeppms.nsf>.

Academic Attainment

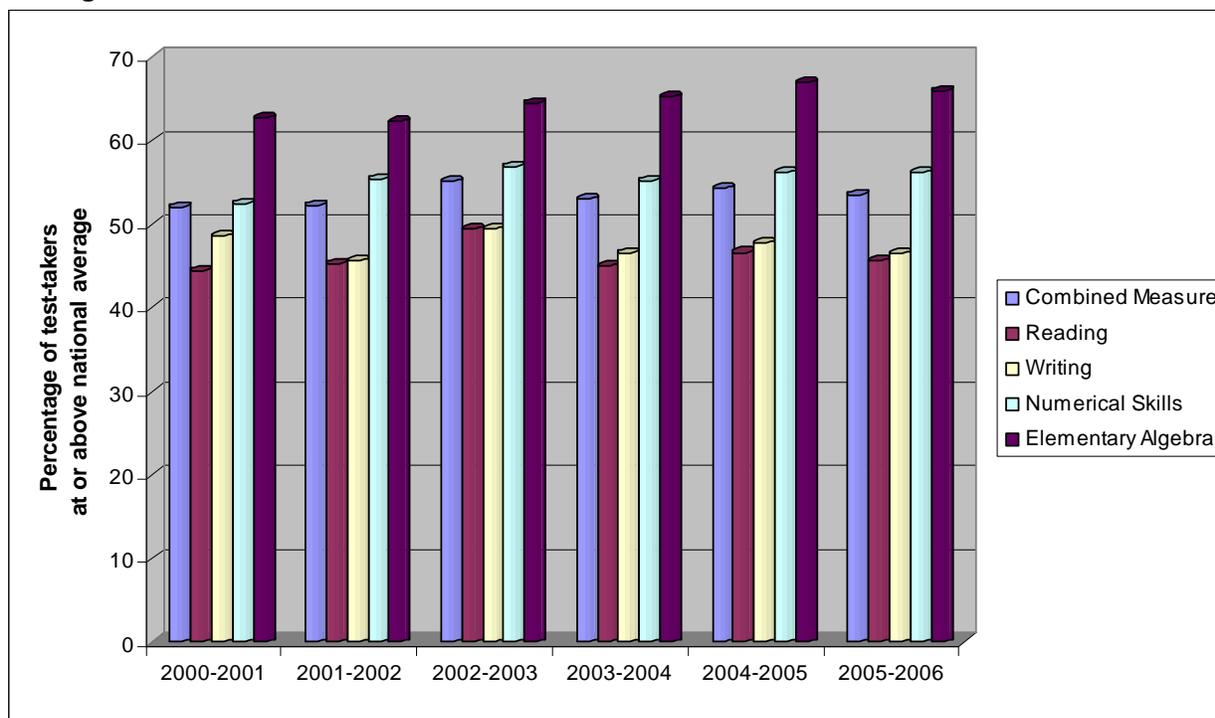
The measure of academic attainment used in North Carolina is performance on ASSET or ACCUPLACER, two national standardized examinations that are also used by community colleges to determine student placement. CTE concentrators take four ASSET or ACCUPLACER subtests: numerical skills, elementary algebra, writing, and reading. (A concentrator is a graduate who has earned at least four credits in a CTE pathway, at least one of which is in an upper level course.) Targets are set for each subtest and for a combined measure, for all students and disaggregated by special category and by program area. For the combined category, the numbers of students meeting or exceeding the national average on each subtest were added and then calculated as a percentage of total test takers. Figure 38 and Chart 42 illustrate the performance of concentrators in Trade and Industrial Education on the academic attainment measure.

Chart 42. Percent of Concentrators in Trade and Industrial Education Who Scored above the National Average on ASSET or ACCUPLACER

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Combined Measure	52.0	52.2	55.1	53.0	54.3	53.5
Reading	44.4	45.3	49.4	45.0	46.6	45.6
Writing	48.6	45.6	49.4	46.5	47.7	46.4
Numerical Skills	52.5	55.4	56.9	55.2	56.2	56.2
Elementary Algebra	62.7	62.3	64.5	65.2	66.9	66.0

Source: NC CTE Performance Data, 2001-2006

Figure 38. Academic Attainment Scores for Trade and Industrial Education Concentrators



Source: NC CTE Performance Data, 2001-2006

In each of the four years for which data are available, a higher percentage of Trade and Industrial Education concentrators exceeded the national average on the elementary algebra subtest than on any of the other three subtests. This same pattern is found with Career and Technical Education concentrators as a whole. For example, in 2005-2006, among Trade and Industrial Education concentrators, 45.6 percent of concentrators exceeded the national average in reading; in writing, 46.4 percent, in numerical skills, 56.2 percent, and in elementary algebra, 66.0 percent. There was little change in the performance of Trade and Industrial education students between 2004-2005 and 2005-2006.

Technical Attainment

The measure used for technical attainment is performance of all enrollees in Career and Technical Education courses on standardized postassessments given at the conclusion of each course. The examinations typically contain 100 multiple-choice questions. They are developed in North Carolina and are based upon course blueprints that list specific course objectives with respective weights of each objective. The examinations are assessed for validity and reliability prior to use in statewide accountability. The 2005-2006 target was for 49.6 percent of Trade and Industrial Education enrollees to reach Proficiency (Level III) or better on the postassessments. To reach Proficiency, students must score 65 percent correct or better on the examination.

Figure 39 illustrates the performance of Trade and Industrial Education students in selected courses on the technical attainment measure since 2000-2001, the first year for which comparable data are available. Details about overall and special populations technical attainment appear in Chart 43. Since 2000-2001, the percentage of Trade and Industrial Education enrollees who reach Proficiency increased from 42.5 percent to 56.2 percent, a gain of 13.7 percentage points. Special populations students also showed a significant increase: from 27.9 percent at Proficiency or above in 2000-2001 to 43.7 percent in 2005-2006. The Trade and Industrial Education course with the highest performance on the technical attainment measure statewide was Cosmetology II, where during 2005-2006, 81.4 percent of the enrollees scored at Proficiency or above.

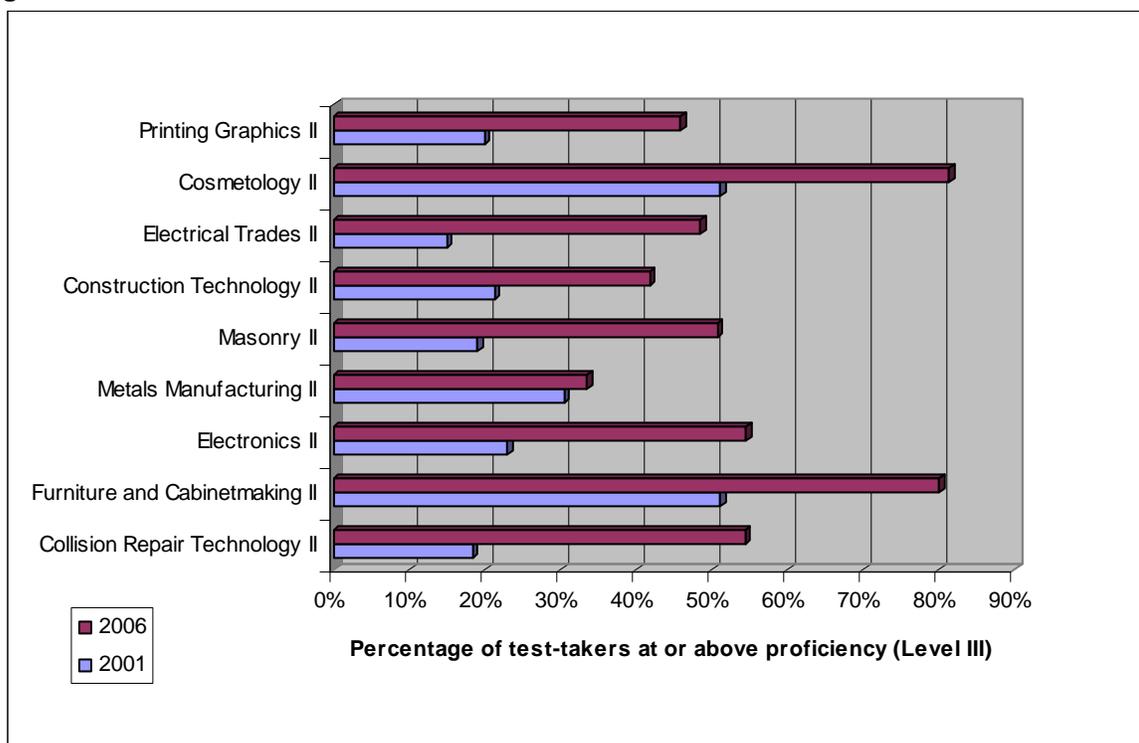
Chart 43. Percent of Enrollees who Scored above Proficiency in Trade and Industrial Education Courses, 2000-2001 to 2005-2006

	2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
	Overall	Sp Pops										
7511 Automotive Service Technology I	44.6%	32.7%	52.9%	41.8%	50.5%	35.4%	49.4%	40.6%	53.7%	44.4%		
7512 Automotive Service Technology II	43.1%	33.3%	63.2%	52.3%			66.3%	57.2%	70.9%	64.2%		
7513 Automotive Service Technology III	47.1%	39.0%	62.7%	51.2%			46.1%	32.5%	63.1%	52.5%		
7522 Collision Repair Technology II	18.4%	17.7%	28.5%	28.8%	42.4%	34.5%	53.5%	45.0%	42.6%	33.0%	54.4%	46.7%
7523 Collision Repair Technology III	16.5%	6.0%	14.9%	0.0%	43.1%	41.7%	47.3%	43.6%	49.3%	34.8%	52.7%	40.4%
7621 Furniture and Cabinetmaking I											87.2%	79.0%
7622 Furniture and Cabinetmaking II	51.2%	41.1%	48.7%	35.8%	34.5%	19.6%	39.8%	27.1%			80.1%	69.6%
7623 Cabinetmaking III	43.8%	37.0%	49.7%	40.0%	30.1%	17.4%	45.6%	23.7%				
7631 Electronics I	34.4%	19.7%	43.3%	25.6%	41.4%	25.0%	37.7%	21.9%			51.2%	41.4%
7632 Electronics II	23.0%	19.2%	28.7%	20.3%	26.7%	16.2%	32.3%	23.3%			54.6%	43.9%
7633 Electronics III	44.9%	27.8%	30.4%	15.8%	28.8%	20.0%	47.4%	22.2%				
7641 Metals Manufacturing I	20.4%	17.9%	10.9%	4.7%					35.4%	24.4%	49.1%	39.1%
7642 Metals Manufacturing II	30.5%	25.6%	7.6%	5.6%					18.2%	12.7%	33.6%	21.4%
7643 Metals Manufacturing III	18.2%	4.0%	18.5%	25.0%								
7651 Electro-Mechanical Technology I	42.7%	32.5%	6.1%	4.6%	2.3%	1.0%	2.3%	1.4%				
7652 Electro-Mechanical Technology II	25.0%	11.1%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%				
7653 Electro-Mechanical Technology III	24.0%	33.3%	5.0%	0.0%	9.1%	16.7%	20.0%	0.0%				
7661 Welding Technology I	43.7%	36.0%	55.0%	42.9%	46.4%	30.1%	53.5%	43.2%	49.3%	38.0%		
7662 Welding Technology II	20.1%	14.8%	34.9%	27.0%	38.1%	21.7%	47.8%	36.4%	49.1%	38.2%		
7663 Welding Technology II	38.9%	21.1%	44.0%	20.0%	71.7%	46.2%	68.4%	57.7%	66.7%	-2.0%		
7711 Masonry I	22.6%	14.6%	29.7%	24.0%	43.3%	31.0%			61.5%	54.2%	57.4%	49.9%
7712 Masonry II	19.0%	13.1%	19.8%	13.9%	17.8%	13.5%			52.7%	46.5%	50.8%	43.8%
7713 Masonry III	38.5%	32.6%	28.9%	21.5%	21.4%	12.5%					35.7%	31.0%
7720 Construction Core	43.4%	30.4%	47.7%	35.5%	52.8%	36.2%	59.6%	45.5%				
7721 Construction Technology I	30.8%	20.8%	30.8%	21.0%	33.2%	22.2%			62.6%	53.2%	49.2%	39.5%
7722 Construction Technology II	21.3%	13.3%	26.5%	17.6%	16.2%	9.7%			36.5%	28.3%	41.9%	33.5%
7723 Construction Technology III	21.4%	15.3%	26.8%	19.6%	17.5%	12.1%					42.8%	29.2%
7741 Electrical Trades I	17.8%	7.2%	22.7%	14.9%	18.0%	9.4%					63.8%	53.6%
7742 Electrical Trades II	15.0%	7.3%	29.1%	17.4%	7.6%	6.5%					48.5%	41.6%
7743 Electrical Trades III	15.0%	4.3%	16.3%	10.5%	15.9%	0.0%						
7811 Cosmetology I	62.7%	58.6%	60.9%	51.0%	81.5%	73.6%	69.7%	61.7%			61.5%	57.1%
7812 Cosmetology II	51.2%	39.2%	45.7%	40.9%	83.8%	72.3%	82.7%	80.4%			81.4%	75.0%

	2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006	
	Overall	Sp Pops										
7821 Trade & Industrial Work Development I	80.5%	69.3%	78.9%	70.2%	78.7%	67.3%	88.3%	81.7%				
7822 Trade & Industrial Work Development II	63.4%	52.0%	53.6%	47.0%	53.6%	38.7%	46.5%	39.1%				
7901 Scientific & Technical Vis I	25.7%	9.2%	49.0%	22.2%	56.6%	38.3%						
7902 Scientific & Technical Vis II	32.7%	20.0%	48.1%	43.5%	54.0%	32.8%						
7911 Printing Graphics I	31.8%	14.0%	30.6%	15.3%	32.4%	14.2%	32.2%	14.4%			58.8%	42.7%
7912 Printing Graphics II	20.0%	11.4%	21.7%	6.6%	20.6%	8.6%	18.9%	8.5%			46.0%	33.7%
7913 Printing Graphics III	9.1%	7.7%	12.5%	4.3%								
7921 Drafting I	64.3%	42.3%	65.1%	43.8%	65.3%	41.8%			64.2%	44.8%	60.4%	41.6%
7962 Drafting - Architectural II	61.6%	45.1%	74.6%	60.7%	75.6%	59.1%	77.2%	61.9%	73.9%	58.3%		
7963 Drafting Architectural III	51.9%	30.4%	56.2%	34.9%	53.2%	34.9%	54.4%	32.5%	57.8%	39.7%		
7972 Drafting - Engineering II	46.0%	24.6%	49.5%	28.8%	55.6%	33.9%	53.5%	32.8%	51.0%	30.6%		
7973 Drafting - Engineering III	32.8%	14.6%	34.9%	21.1%	30.9%	15.8%	34.8%	11.4%	36.3%	22.4%		
7980 Network Engineering Technology I	35.9%	23.3%	35.5%	16.8%								
7981 Network Engineering Technology II	53.2%	45.0%	49.2%	32.5%								
7991 Computer Engineering Technol I	36.1%	21.9%	24.7%	11.9%	34.8%	19.4%	28.7%	15.1%				
7992 Computer Engineering Technol II	40.7%	28.7%	18.3%	6.8%	25.0%	14.2%	22.7%	12.4%				
	42.5%	27.9%	45.5%	31.2%	48.8%	31.3%	48.3%	36.4%	59.0%	46.7%	56.2%	43.7%

Source: NC CTE Performance Data, 2001-2006

Figure 39. Technical Attainment Scores in Selected Trade and Industrial Education Courses



Source: NC CTE Performance Data, 2001-2006

Chart 44 shows the average score by course in Trade and Industrial Education. Most Trade and Industrial Education courses showed an increase in their state averages between 2001-2002 (the first year this information was available) and 2005-2006. The largest increase was for Metals Manufacturing II, where the average student score increased by 15.9 percentage points, to 58.2 percent correct. The highest average score is for Furniture and Cabinetmaking I, 77.8 percent correct, and the lowest for Metals Manufacturing II, 58.2 percent correct.

Note that gaps in the chart are likely due to introduction of new curriculum. When a new curriculum is introduced, there is a year gap in reporting testing data during which updated test items are validated and reliability is determined.

For more information

For more information, contact your Career and Technical Education Administrator or the North Carolina Trade and Industrial Education staff, 919-807-3881.

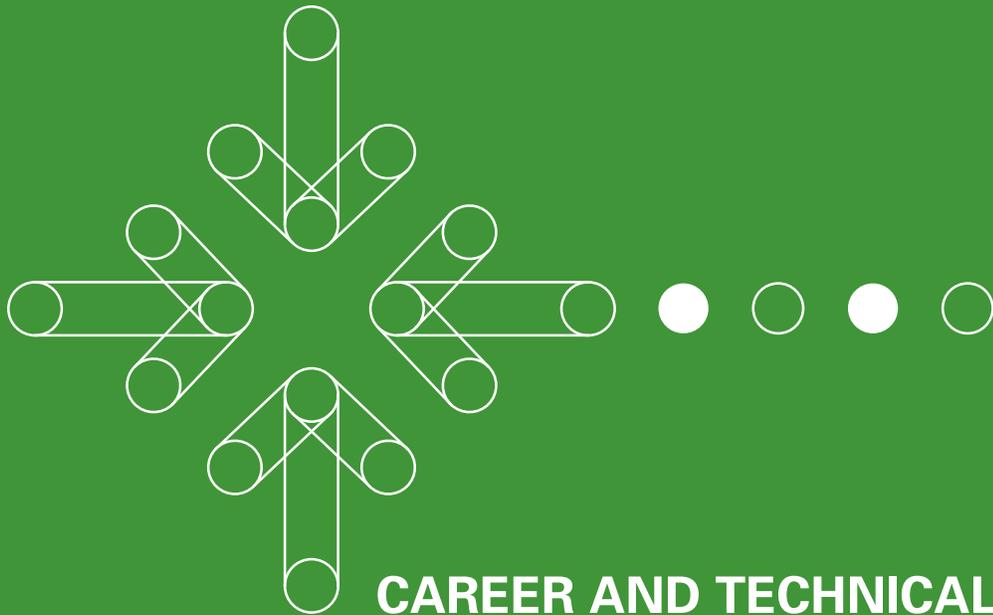
Chart 44. Average Percent Correct by Course

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
7511 Automotive Service Technology I	64.3	63.8	63.2	64.8	
7512 Automotive Service Technology II	67.2		68.3	70.0	
7513 Automotive Service Technology III	65.8		62.7	68.3	
7521 Collision Repair Tech I				60.7	64.8
7522 Collision Repair Technology II	52.5	60.4	64.4	62.1	65.1
7523 Collision Repair Technology III	47.4	58.8	61.2		
7621 Furniture and Cabinetmaking I					77.8
7622 Furniture and Cabinetmaking II	62.0	59.3	59.8		74.2
7623 Cabinetmaking III	64.3	59.0	62.5		
7631 Electronics I	61.0	58.7	57.1		64.7
7632 Electronics II	53.8	54.4	55.7		64.9
7633 Electronics III	54.0	53.9	62.7		
7641 Metals Manufacturing I	47.0			58.1	63.4
7642 Metals Manufacturing II	42.3			49.4	58.2
7643 Metals Manufacturing III	47.4				
7651 Electro-Mechanical Technology I	48.5	47.5	48.2		
7652 Electro-Mechanical Technology II	44.5	44.4	40.2		
7653 Electro-Mechanical Technology III	52.9	51.9	55.2		
7661 Welding Technology I	65.0	63.0	65.2	63.5	
7662 Welding Technology II	57.1	58.3	61.5	62.6	
7663 Welding Technology III	61.4	71.3	67.7	62.4	
7711 Masonry I	56.2	59.9		67.1	65.6
7712 Masonry II	53.1	50.9		63.1	63.4
7713 Masonry III	56.7	52.1			59.8
7720 Construction Core	61.8	63.6	66.2		
7721 Construction Technology I	56.7	57.7		66.6	63.0
7722 Construction Technology II	54.0	49.9		59.3	60.4
7723 Construction Technology III	54.5	51.5			60.7
7741 Electrical Trades I	53.0	52.6			67.1
7742 Electrical Trades II	55.9	46.1			62.0
7743 Electrical Trades III	44.0	54.1			
7811 Cosmetology I	67.8	73.2	70.3		67.2
7812 Cosmetology II	64.3	73.6	74.7		75.1
7821 Trade & Industrial Work Development I	71.4	72.2	75.4		
7822 Trade & Industrial Work Development II	65.1	65.7	63.7		
7901 Scientific & Technical Visualization I	62.4	65.7			
7902 Scientific & Technical Visualization II	62.5	66.8			
7911 Printing Graphics I	56.1	56.4	56.4		65.9
7912 Printing Graphics II	54.1	50.3	50.9		62.5
7913 Printing Graphics III	47.1				

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	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
7921 Drafting I	68.6	68.8		68.3	67.0
7962 Drafting - Architectural II	72.9	73.1	73.0	72.8	
7963 Drafting - Architectural III	64.9	64.4	64.5	65.5	
7972 Drafting - Engineering II	63.4	64.8	64.4	63.5	
7973 Drafting - Engineering III	58.7	56.2	57.5	59.1	
7980 Network Engineering Technology I	56.9				
7981 Network Engineering Technology II	62.2				
7991 Computer Engineering Technology I	56.1	58.6	56.5		
7992 Computer Engineering Technology II	52.0	55.3	54.9		

Source: NC CTE Performance Data, 2001-2006



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