



*We will lead the nation in
improving student achievement.*

ANNUAL REPORT 2009

CTAE

Career, Technical and
Agricultural Education

CTAE

Pathways
to Georgia's
Economic
Growth



Kathy Cox, State Superintendent of Schools



Friends and Colleagues,

Thank you for your interest in reading about the Georgia Department of Education's Career, Technical and Agricultural Education (CTAE) programs. Over the last few years, we have been developing relevant Career Pathways aligned to the 21st century workplace, including crucial job growth areas. These Career Pathways are designed to provide our CTAE students with the knowledge and skills they need to be successful in today's world of work, and we are pleased to share the details with you in this report.

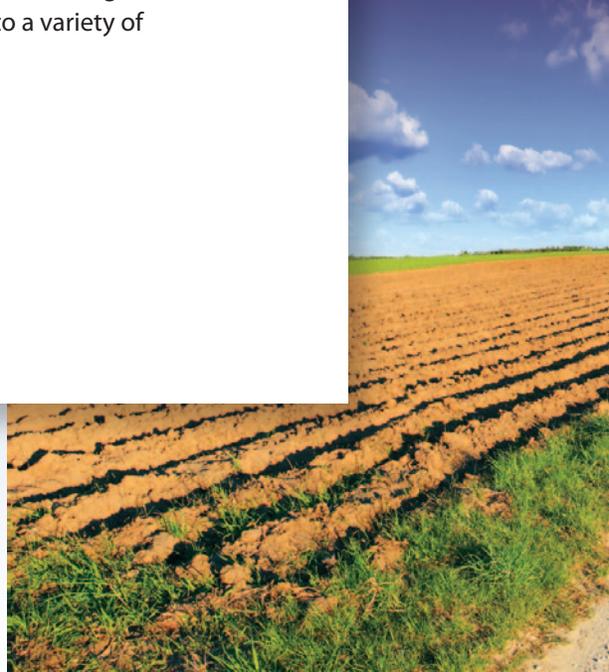
Students who follow our Career Pathways are not only prepared for their chosen careers, they are also provided with a real-life connection to what is being taught in our core classes of mathematics, social studies, science, and English. Additionally, our Career Pathways encourage CTAE students to be critical thinkers and problem-solvers, just what our nation needs in its future leaders. I believe we have one of the best CTAE programs in the nation.

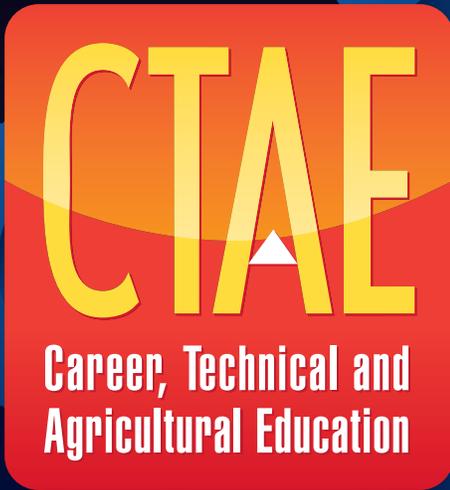
In Georgia, 138,192 students participate in nine CTAE organizations. The activities and goals of these organizations are linked to what is learned in the classroom and related work experience. Another important focus of these organizations is leadership training. Georgia's national ranking for student participation in these organizations is outstanding, ranging from first to fourteenth in the nation. We are very proud of their work and their accomplishments.

You will see as you read this report that our CTAE program in Georgia is stronger than ever, providing greater opportunities for students to build bridges to a variety of careers. Thank you again for your interest in our work.

Sincerely,

Kathy Cox
Kathy Cox





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Annual Report 2009

FROM THE DIRECTOR OF CTAE....

Friends and Colleagues,

Welcome to our annual report! If you are reading this report, you probably have an interest in Georgia's Career, Technical and Agricultural Education (CTAE) programs. Preparing students to be successful in careers has long been our goal. Additionally, CTAE provides students with a strong foundation in core academic skills and the ability to use those skills in solving real world problems encountered in business and industry. In any career, students must also have strong employability skills, which include work ethics, critical thinking and dependability. Our goal is to embed these fundamental skills in all CTAE courses. Also embedded in each course are the critical technical skills our students need to be successful in their career focus area. Students will be able to utilize these technical skills along with core academic skills and employability skills in solving real world problems.



Many positions, typically higher wage positions, require extensive training and higher level of technical skill. By acquiring more career related pathway specific skills, students increase their opportunities of obtaining career-sustaining industry certified credentials that are highly valued by employers.

These broad skill sets prepare students for careers, as well as additional training at our technical colleges and universities. We must take such approaches to ensure that our students become successful in the global economy of this 21st century.

Sincerely,

Gary C. Steppe

Career, Technical & Agricultural Education...

Pathways to Georgia's Economic Growth

CTAE At-A-Glance

Georgia Department of Education

2008-2009 Georgia Career, Technical and Agricultural Education

Secondary Education—Grades 6-12

CTAE Programs

180 Local School Systems and 2 Charter Schools

Total Georgia Student Enrollment

- 519,528 Students in Grades 9-12
- 410,935 Students in Grades 6-8

Student Enrollment in CTAE Classes

(Students enrolled in one or more CTAE courses)

- 62% of all Students in Grades 9-12 Statewide (320,625 students)
- 53% of all Students in Grades 6-8 Statewide (219,009 students)

CTAE Enrollment by Gender in Middle and High Schools

- Male 51%
- Female 49%

CTAE Enrollment by Race

- Black 36%
- Hispanic 10%
- White 44%
- Other 10%

CTAE High School Concentrators

(3 or more classes in a Career Pathway)

- 76,721 Students

Graduation Rate for CTAE Concentrators

- 91%

Diploma Type Earned by CTAE High School Completers (34,910)

- College Prep 17%
- Technical/Career 40%
- Dual Seal 43%

Student Enrollment is the **unduplicated count**: Each student is counted once, although he/she could be enrolled in more than one CTAE program area.

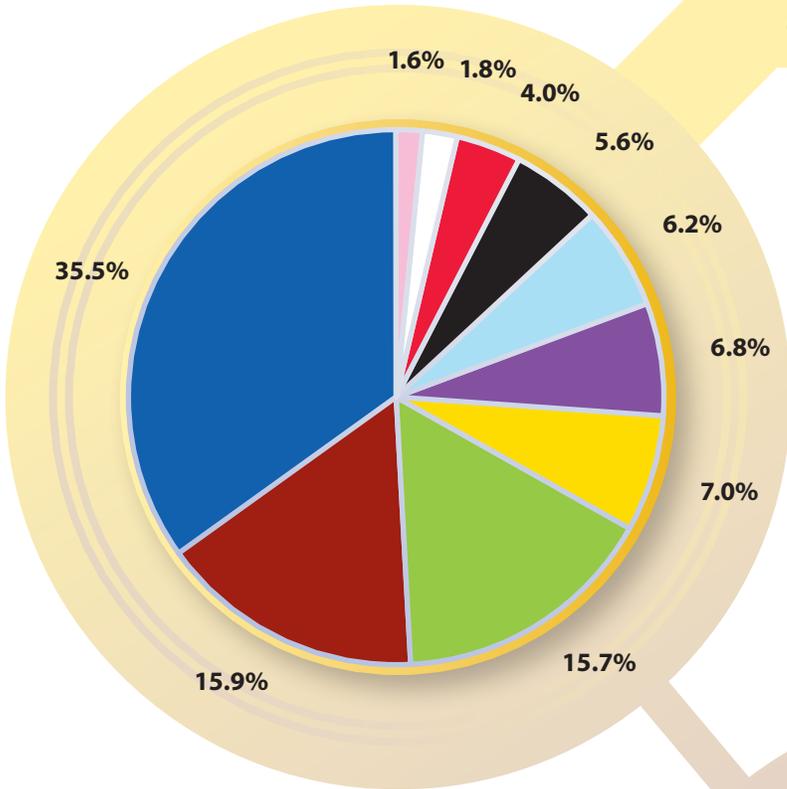
Expanding Georgia's economy depends on a high-tech, highly skilled workforce to support a broad variety of career pathways. The state career and technical education system consists of programs offered at the middle and secondary school level by the Career, Technical and Agricultural Education (CTAE) Division of the Georgia Department of Education (GaDOE) and at the postsecondary level by the Technical College System of Georgia (TCSG). Guidelines of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV) align the CTAE program with the academic indicators of the No Child Left Behind Act.

The CTAE programs offered to middle and high school students directly address the Georgia Department of Education Strategic Plan Goal 3 – **Improve Workforce Readiness Skills**. Each CTAE Career Pathway integrates a strong academic preparation with current and emerging career opportunities and workforce needs and skills, in support of the Georgia economy. The CTAE Career Pathways are designed and updated on an ongoing basis, in concert with the Governor's Office of Workforce Development, State Workforce Investment Board, the state's colleges and universities, and the Governor's Centers of Innovation. Georgia Career Pathways, widely recognized as the best in the nation, develop a well-educated, technically trained and highly competitive workforce that stimulates the economy.

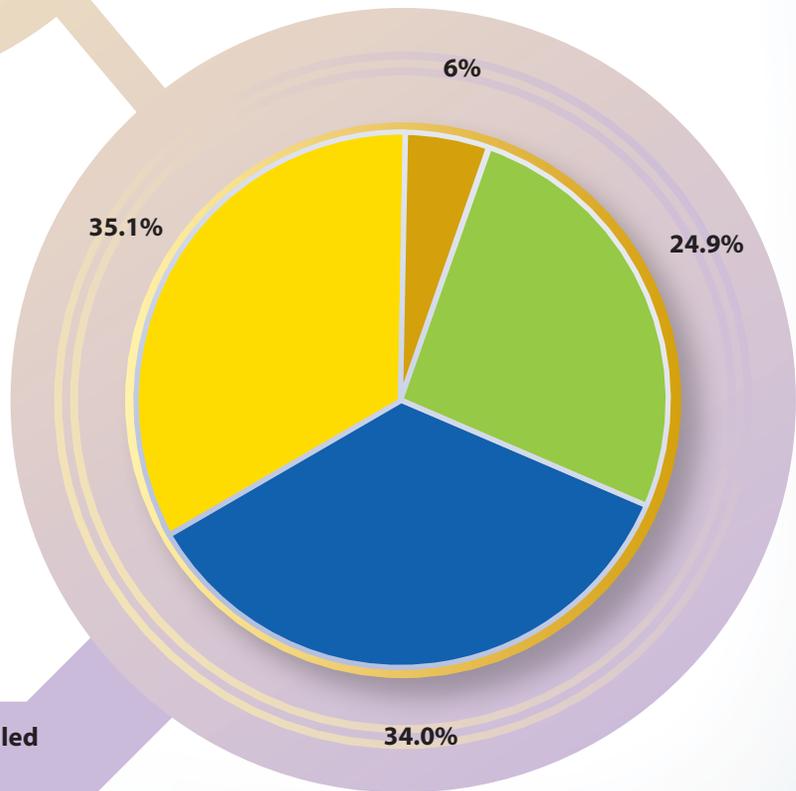
Programs of study under CTAE:

- Incorporate and align secondary and post-secondary education
- Include academic and CTAE content in a coordinated, non-duplicative progression of courses
- Include the opportunity for secondary students to acquire post-secondary credits
- Lead to an industry-recognized credential or certificate at the post-secondary level, or an associate or baccalaureate degree
- Identify and address current or emerging occupational opportunities

High School Students (Grades 9-12) Enrolled in each Program Area in 2008-2009



Culinary Arts	6,642
Government and Public Safety	7,677
Marketing, Sales and Services Education	17,114
Education	23,738
Healthcare Science Education	26,125
Agricultural Education	28,728
Engineering and Technology Education	29,449
Family and Consumer Science	66,544
Architecture, Construction, Communications & Transportation	67,205
Business and Computer Science	150,491



Middle School Students (Grades 6-8) Enrolled in each Program Area in 2008-2009

Agricultural Education	19,936
Family & Consumer Sciences	82,504
Business & Computer Science	113,037
Engineering & Technology Education	116,462

CTAE Achievements in 2008-09

Academic Achievements of CTAE Students

- 90% of CTAE Concentrators who took the Georgia High School Graduation Test (GHS GT) met or exceeded state standards in **English/Language Arts**
- 75% of CTAE Concentrators who took the Georgia High School Graduation Test met or exceeded state standards in **Mathematics**
- Georgia CTAE exceeded the **federal performance level targets** in all 3 categories of Academic Attainment in FY2009

	State FY09 Target	Actual Performance
English/Language Arts (% passing GHS GT)	85%	90%
Mathematics (% passing GHS GT)	69%	75%
Graduation rate	75%	91%

Graduation Rate for CTAE Concentrators

- 91% graduated with regular diplomas in FY2009
- CTAE **graduation rate** of 91% compares favorably with Georgia's overall graduation rate of 79% in 2009

CTAE Postsecondary Transitions

- A total of 5,918 high school students **dual enrolled** in college-level CTAE courses at Georgia's technical colleges or other colleges with technical divisions
- A total of 1,028 high school students **joint enrolled** in college-level CTAE courses at Georgia's technical colleges or other colleges with technical divisions

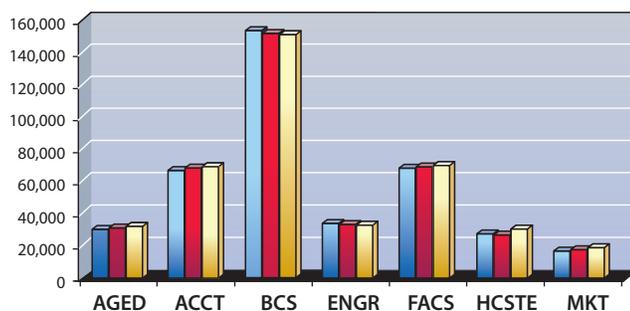
CTAE Teacher Achievements

- 389 **professional development workshops** were held with a total attendance of 10,950 CTAE educators throughout the state in FY2009

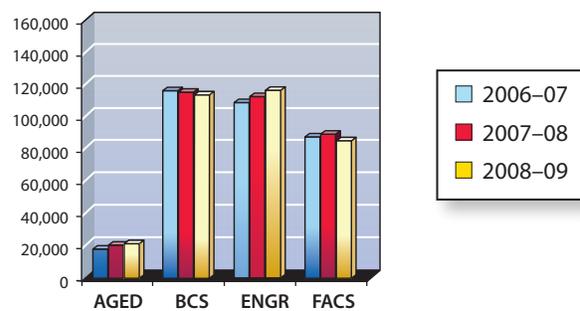
CTAE Program Achievements

- 443 CTAE programs were **industry certified** in FY 2009
- 53% of all **middle school** and 62% of all **high school students** were enrolled in CTAE courses in FY2009
- Student enrollment in the following **high school CTAE programs increased** compared to FY2008
 - ▶ New Programs
 - ✦ Culinary Arts (59%)
 - ✦ Education (40%)
 - ▶ Healthcare Science Education (10%)
 - ▶ Marketing, Sales & Services Education (6%)
 - ▶ Architecture, Construction, Communication, and Transportation (1%)
 - ▶ Agricultural Education (.3%)
 - ▶ Family and Consumer Sciences (.2%)
- Student enrollment in the following **middle school CTAE programs increased** compared to FY2008
 - ▶ Agriculture Education (4.3%)
 - ▶ Engineering and Technology Education (3.8%)
- Student membership in **Career Technical Student Organizations** numbered 138,192 in FY 2009
- Student membership increased in 5 of the 9 **Career Technical Student Organizations** compared to last year's participation level
- Three Georgia Career Technical Student Organizations were **ranked 1st in the nation in student participation**: Future Business Leaders of America (FBLA); Family , Career and Community Leaders of America (FCCLA); and Georgia Technology Association (TSA); Future Farmers of America (FFA) ranked 3rd in the nation
- 97% of employers participating in the **Georgia Youth Apprenticeship Program** agreed that students performed at the level expected
- 95% of employers participating in the **Georgia Youth Apprenticeship Program** found the program beneficial to their company and 93% rated the program above average

CTAE High School Program Enrollment: Three Year Trend



CTAE Middle School Program Enrollment: Three Year Trend



CTAE CAREER PATHWAYS -

All the Right Programs...High School and Middle School Curriculum, Assessment, and Work-Based Learning... Working Together for Georgia's Students

In FY 2009 Georgia Career, Technical and Agricultural Education offered high school students over 50 Career Pathways. Each Career Pathway is a state-approved career enhancement program and is designed as a coherent, articulated sequence of rigorous academic and career-related courses.

Middle school students participated in Career Exploration classes that are integrated in the curriculum, used tools from the GAcollge411 website to explore career options, engaged in student/parent advisement conferences, worked on an 8th Grade Pathway Project, and selected a Career Pathway.

Selecting career pathway courses in high school will enable students to have a head start toward a successful future.

At the high school level, students may explore various Career Pathway courses or take a sequence of three courses in a single Career Pathway (CTAE Concentrator). These courses usually begin in the 9th grade and lead to an industry-recognized certificate or licensure, an associate degree, or baccalaureate degree and beyond. Career pathways offer students options to explore and gain marketable skills in specific career areas that lead to high-demand, high-wage, and high-skilled jobs required to support the Georgia economy. Students create individualized Peach State Pathway Career Plans to guide their secondary and postsecondary education and participate in end-of-pathway assessments.

CTAE Career Pathways High School Foundation Skills

- ⚡ *Technical Skills*
- ⚡ *Academic Foundations*
- ⚡ *Communications*
- ⚡ *Problem Solving and Critical Thinking*
- ⚡ *Information Technology Applications*
- ⚡ *Organizational Systems*
- ⚡ *Safety, Health and Environment*
- ⚡ *Leadership and Teamwork*
- ⚡ *Ethics and Legal Responsibilities*
- ⚡ *Career Development*
- ⚡ *Entrepreneurship*

CTAE Career Pathways

High School Learning Opportunities

- ⚡ Classroom and Laboratory Work
- ⚡ Career related learning experiences such as Work-Based Education and Youth Apprenticeship Program
- ⚡ Membership and active participation in local, state, and national Career Technical Student Organizations (CTSO)
- ⚡ Postsecondary education opportunities during high school

Education-Career Partnership Initiative

Through the **Education-Career Partnership** the Georgia Department of Education, the Technical College System of Georgia, and the Georgia Board of Regents strengthen and expand seamless education opportunities to benefit Georgia high school students as they pursue their chosen careers. Georgia's technical colleges and other colleges and universities with technical divisions provide postsecondary education options for high school students that enhance their education in their identified Career Pathway. The Education-Career Partnership Initiative, an integral part of CTAE Program Career Pathways, makes it possible for high school students to participate in college classes through dual enrollment, joint enrollment, and articulated classes. Students may graduate high school with college credits and in some cases Certificates, Diplomas, or Associate Degrees in a career area.

Number of High School Students Enrolled in College Level Courses FY 2009

	Dual enrollment courses	Joint enrollment courses	Total student enrollment
Georgia Technical Colleges	5,685	1,013	6,998
Georgia Colleges with Technical Divisions	233	15	248
Total student enrollment	5,918	1,028	6,946



Our CTAE program in Georgia is stronger than ever, providing greater opportunities for students to build bridges to a variety of careers.

*— Kathy Cox, Superintendent of Schools
Georgia Department of Education*

AGRICULTURE EDUCATION (AGED) 2008-2009

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 28,728 Male 19,061 (66%) Female 9,667 (34%)
High School Student Enrollment in Agriculture Education in FY 2009 (Duplicated Count)	Pathway-Related Course Enrollment – 82,543 <ul style="list-style-type: none"> • Agriculture Mechanics 13,682 (17%) • Plant Science/Horticulture 14,745 (18%) • Agriscience 11,663 (14%) • Animal Science 11,540 (14%) • Forestry & Natural Resources 11,523 (14%) • Veterinary Science 9,697 (12%) • Agribusiness Management 9,693 (12%) Other AGED Courses <ul style="list-style-type: none"> • 3,301
Grade 6-8 Student Enrollment in Agriculture Education Courses in FY 2009	19,936
Number of Industry-Certified Programs	22
Number of CTAE Certified Teachers FY 2009	456 High School Teachers 76 Middle School Teachers

Career Technical Student Organization (CTSO)

Future Farmers of America (FFA): 29,304 members

Georgia FFA had 7 national winners and was recognized for the largest membership growth at the **82nd National FFA Convention**. Following the FFA motto “Learning to Do, Doing to Learn, Earning to Live, Living to Serve” FFA students are offered a variety of experimental learning opportunities and competitions that focus on leadership and public speaking. By complimenting classroom and lab instruction in agricultural education, FFA develops students’ potential for career success and provides optimal opportunities for them to become successful, productive citizens.



AGRICULTURE EDUCATION (AGED) is composed of three interrelated components including classroom and laboratory experiences, Supervised Agricultural Experience Program incorporating real-life on-the-job skills, and the Future Farmers of America student organization for developing leadership skills. The program combines agriculture technical skills with rigorous coursework, leadership training, and an exploration of the ethical and philosophical issues related to genetic engineering and other current agricultural topics. Agriculture generates over \$25 billion annually to the Georgia economy and CTAE supports this Strategic Industry identified by the Governor.



ARCHITECTURE, CONSTRUCTION, COMMUNICATIONS & TRANSPORTATION (ACCT) programs equip students with the knowledge, skills, and attitudes necessary for successful employment in the trade and industrial field and for further education. In addition to classroom and laboratory experiences, students participate in work-based learning and SkillsUSA, the youth organization with opportunities to develop academic, technical, and citizenship skills.



ARCHITECTURE, CONSTRUCTION, COMMUNICATIONS & TRANSPORTATION (ACCT) 2008-2009

<p>Enrollment by Gender in Grades 9-12 (Unduplicated Count)</p>	<p>Total 67,205 Male 45,658 (68%) Female 21,547 (32%)</p>
<p>High School Student Enrollment in Architecture, Construction & Transportation Education in FY 2009 (Duplicated Count)</p>	<p>Pathway-Related Course Enrollment -- 77,197</p> <ul style="list-style-type: none"> • Construction 12,913 (17%) • Transportation/Logistical Support – Ground Marine 10,915 (14%) • Broadcast/Video Production 10,089 (13%) • Transportation/Logistical Operations – Ground Marine 9,854 (13%) • Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR) 8,197 (11%) • Architectural Drawing & Design 6,790 (9%) • Graphic Communications 6,006 (8%) • Graphic Design 6,006 (8%) • Metals 4,310 (6%) • Flight Operations 969 (1%) • Collision Repair 934 (1%) • Aircraft Support 214 (less than 1%) <p>Other ACCT Courses</p> <ul style="list-style-type: none"> • 2,722
<p>Number of Industry-Certified Programs:</p>	<p>120</p>
<p>Number of CTAE Certified Teachers FY 2009</p>	<p>634 High School Teachers</p>

Career Technical Student Organization (CTSO)

Georgia SkillsUSA: 6,768 members

SkillsUSA Georgia helps each student excel by participating in local, state, and national activities provided through trade and industrial, technical, and health occupations courses and programs. Students develop leadership skills and workplace competencies needed to succeed in a constantly changing global workplace. In 2008, SkillsUSA Georgia received national recognition in the Best of Brand Print Award for publications.



The opportunities in construction in Georgia far outstrip the qualified manpower available. People who can handle a variety of different tasks and are knowledgeable about different types of construction issues can always find a place in the construction business.

—President, Goodman Decorating, Atlanta

BUSINESS & COMPUTER SCIENCE (BCS) 2008-2009

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 150,491 Male 78,671 (52%) Female 71,820 (48%)
High School Student Enrollment in Business and Computer Science in FY 2009 (Duplicated Count)	Pathway-Related Course Enrollment – 211,258 <ul style="list-style-type: none"> • Administration/Information Support 61,859 (29%) • Small Business Development 38,161 (18%) • Financial Mgmt. – Accounting 35,859 (17%) • Financial Mgmt. – Services 31,992 (15%) • Interactive Media 25,576 (12%) • Computing 15,212 (7%) • Computer Systems & Support 1,571 (less than 1%) • Computer Networking 1,028 (less than 1%) Other BCS Courses <ul style="list-style-type: none"> • 9,351
Grade 6-8 Student Enrollment in Business and Computer Science Courses in FY 2009	113,037
Number of Industry-Certified Programs:	127
Number of CTAE Certified Teachers FY 2009	1,766 High School Teachers 365 Middle School Teachers

Career Technical Student Organization (CTSO)

Future Business Leaders of America (FBLA): 23,721 members

Georgia FBLA, the largest FBLA chapter in the nation, prepares students to be competent, aggressive, successful business leaders. Through innovative leadership and career development programs, business and education are brought together in a positive working relationship. Georgia FBLA goals include strengthening the confidence of students in themselves and their work, creating interest in and understanding of American business enterprise, encouraging efficient money management, and facilitating students' transition from school to work. Following the motto "Service, Education, and Progress" FBLA students stay involved in community service projects.



BUSINESS and COMPUTER SCIENCE (BCS) programs prepare students to become productive members of the business community and to enter a post-high school institution after graduation. Entrepreneurs, innovators, and small businesses play a key role in Georgia's economic growth with over 810,000 small businesses contributing to the state economy.



Business and Computer Science programs in Georgia's high schools provide students the opportunity to learn about the business community. Georgia's economic prosperity depends upon an educated population to operate, initiate, and expand business in the 21st century. These programs in our high schools provide students the foundation to be the business leaders of tomorrow.

***—Monica Anderton, Human Resources Manager
BellSouth.Net, Inc., Atlanta, Georgia***



ENGINEERING AND TECHNOLOGY EDUCATION (ENGR)

utilizes computer and educational technology in the delivery of content related to systems of communication, energy/power, transportation, production, and bio-related technologies.

Technology education develops technological literacy as a part of the students' fundamental education through an activity-based study of past, present, and future technological systems and their resources, processes, and impact on society.

ENGINEERING AND TECHNOLOGY EDUCATION (ENGR) 2008-2009

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 29,449 Male 22,418 (76%) Female 7,031 (24%)
High School Student Enrollment in Engineering and Technology Education in FY 2009 (Duplicated Count)	Pathway-Related Courses Enrollment -- 42,171 <ul style="list-style-type: none"> • Engineering 19,359 (46%) • Energy Systems 13,619 (33%) • Engineering Graphics & Design 6,959 (17%) • Manufacturing 1,155 (3%) • Electronics 1,079 (3%) Other ENGR Courses <ul style="list-style-type: none"> • 630
Grade 6-8 Student Enrollment in Engineering and Technology Education Courses in FY 2009	116,462
Number of Industry-Certified Programs:	51
Number of CTAE Certified Teachers FY 2009	487 High School Teachers 279 Middle School Teachers

Career Technical Student Organization (CTSO)

Technology Student Association (TSA): 22,212 members

The **Technology Student Association (TSA)** motto "Learning to Live in a Technical World" is achieved by providing students opportunities to develop competitive skills in communication and leadership through the technology education program. A wide variety of event competitions such as Animatronics, Cyberspace Pursuit, Dragster Design, Flight Endurance, Transportation Modeling, Manufacturing Prototype, and Medical Technology allow students to demonstrate their skills. TSA students develop good attitudes concerning work, tools, materials, experimentation, and processes of industry.



Technical Education is critical to our business. We see the need for technical competency growing at all levels within our organization.

**—Jim Wallace, Director of Operations
Selectron Georgia, Suwanee, Georgia**

FAMILY AND CONSUMER SCIENCES (FACS) AND CULINARY ARTS 2008-2009

FAMILY AND CONSUMER SCIENCES (FACS) education offers a unique focus on families, work, and their interrelationships, providing a solid foundation for success in a broad range of careers that require strong leadership, professional, and interpersonal skills. Students learn to manage resources to meet the essential needs of individuals and families, to promote optimal nutrition and wellness across the life span, and to accept responsibility for actions and success in family, work, and the diverse global society.

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 77,192 Male 17,927 (23%) Female 59,265 (77%)
High School Student Enrollment in Family and Consumer Sciences Education in FY 2009 (Duplicated Count)	Pathway-Related Courses Enrollment – 29,387 <ul style="list-style-type: none"> • Nutrition & Food Science 23,137 (79%) • Interior & Fashion Design 5,553 (19%) • Consumer Sciences 697 (2%) Other FACS Courses <ul style="list-style-type: none"> • 12,337
Grade 6-8 Student Enrollment in Family and Consumer Science Courses in FY 2009	82,504
Number of CTAE Certified Teachers FY 2009	450 High School Teachers 209 Middle School Teachers

CULINARY ARTS is a growing program based on the American Culinary Federation Standards and with articulations with postsecondary institutions. Culinary Arts is designed for students wanting to learn the “art” of cooking in many diverse settings, such as Sous Chef, Pastry Chef, Kitchen Manager, Garde Manager, Banquet Chef, or Restaurant Entrepreneur.



Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 6,642 Male 1,594 (24%) Female 5,048 (76%)
High School Student Enrollment in Culinary Arts in FY 2009 (Duplicated Count)	Pathway-Related Courses Enrollment – 7,467
Number of Industry-Certified Programs	5
Number of CTAE Certified Teachers FY 2009	119 High School Teachers

Career Technical Student Organization (CTSO)

Family, Career and Community Leaders of America (FCCLA): 28,398 members

Family, Career, Community Leaders of America (FCCLA) promotes students’ personal growth and leadership development through family and consumer sciences education. Students are prepared for the multiple roles of family member, wage earner, and community leader. Members participate in a variety of community service projects and competitions. Student benefits include career preparation, personal growth and enhanced self-esteem, and leadership experiences.



HEALTHCARE SCIENCE EDUCATION (HCSTE) AND GOVERNMENT & PUBLIC SAFETY 2008-2009

HEALTHCARE SCIENCE EDUCATION (HCSTE) programs provide a pipeline for the healthcare workers of the future. According to the Georgia Department of Labor, by the year 2014, health services will account for one in every twelve jobs in Georgia. The healthcare field is projected to increase by almost 100,000 jobs, placing its employment levels at more than 420,000 jobs by 2014. Students learn basic concepts of health, wellness, and preventative care, medical terminology, microbiology, life-support skills, and the ethical and legal responsibilities of healthcare providers as well as problem solving and decision making skills.



Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 26,125 Male 4,404 (17%) Female 21,721 (83%)
High School Student Enrollment in Healthcare Science Education (HCSTE) Education in FY 2009 (Duplicated Count)	Pathway-Related Course Enrollment – 126,084 <ul style="list-style-type: none"> • Therapeutic Services- Nursing 22,488 (18%) • Therapeutic Services- Medical 21,096 (17%) • Therapeutic Services- Emergency 16,057 (13%) • Health Informatics 15,779 (13%) • Diagnostic Services 15,211 (12%) • Physical Medicine 15,200 (12%) • Biotechnology Research & Development 15,159 (12%) • Personal Care Services -- Cosmetology 5,094 (4%)
Number of Industry-Certified Programs:	50
Number of CTAE Certified Teachers FY 2009	353 High School Teachers

GOVERNMENT & PUBLIC SAFETY focuses on two career pathways: Homeland Security and Emergency Services, and Law and Justice. Students are prepared to be qualified professionals providing a dedicated public safety workforce for the future.

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 7,677 Male 4,421 (57%) Female 3,256 (43%)
High School Student Enrollment in Government and Public Safety in FY 2009 (Duplicated Count)	Pathway-Related Courses Enrollment – 5,656
Number of Industry-Certified Programs	5
Number of CTAE Certified Teachers FY 2009	83 High School Teachers

Career Technical Student Organization (CTSO)

Health Occupations Students of America (HOSA): 7,446 members

Health Occupations Students of America (HOSA) promotes career opportunities in the health care industry and enhances the delivery of quality health care to all people by providing a unique program of leadership development, motivation, and recognition for HSTE students. HOSA's mission is especially critical to help fill shortages of qualified workers for the health care industry.



MARKETING, SALES AND SERVICES EDUCATION (MKT) 2008-2009

MARKETING, SALES AND SERVICES EDUCATION (MKT) prepares students for postsecondary education and careers in marketing, management, and entrepreneurship. Students develop knowledge and skills in the foundation areas of marketing (economics, human relations and business basics) and the functional areas of marketing (product and service planning, marketing information management, purchasing and pricing, selling and promotion, risk management, financing and distribution/logistics), as well as international marketing, management, and entrepreneurship.



Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 17,114 Male 7,645 (45%) Female 9,469 (58%)
High School Student Enrollment in Marketing, Sales and Services Education (MKT) in FY 2009 (Duplicated Count)	Pathway-Related Course Enrollment – 51,732 <ul style="list-style-type: none"> • Marketing & Management 11,223 (22%) • Fashion Marketing 11,114 (21%) • Sports & Entertainment Marketing 10,748 (21%) • Marketing Communication & Promotion 9,434 (18%) • Travel Marketing & Lodging Management 9,213 (18%) Other MKT Courses <ul style="list-style-type: none"> • 742
Number of Industry-Certified Programs:	65
Number of CTAE Certified Teachers FY 2009	183 High School Teachers

Career Technical Student Organization (CTSO)

DECA: 8,735 members

DECA develops future leaders in marketing, management and entrepreneurship. Members become aware of the value of community service; participate in competitive events that showcase student skills and allow for interaction with the business community; serve in leadership roles; and develop a greater understanding of our competitive, free-enterprise system and an appreciation of the responsibilities of citizenship.



EDUCATION 2008-2009

EDUCATION programs are designed for students interested in pursuing a career in the education field from early childhood education through postsecondary education. These pathways introduce the foundations of education, combined with knowledge and skills essential for educators.

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 23,738 Male 2,937 (12%) Female 20,801 (88%)
High School Student Enrollment in Education in FY 2009 (Duplicated Count)	Pathway-Related Courses Enrollment – 24,068 <ul style="list-style-type: none"> • Teaching as a Profession 3,961 (16%) • Early Childhood Education 20,107 (84%)
Number of Industry-Certified Programs	3
Number of CTAE Certified Teachers FY 2009	422 High School Teachers

COORDINATED CAREER ACADEMIC EDUCATION/PROJECT SUCCESS (CCAЕ/PS) 2008-2009

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 5,779 Male 2,757 (48%) Female 3,022 (52%)
Number of CTAE Certified Teachers FY 2009	76 High School Teachers

Career Technical Student Organizations (CTSO)

Georgia Career Student Association (GCSA): 4,678 members

Georgia Career Student Association (GCSA) helps students learn about the world of work and the employment skills they need to be successful. Through GCSA students are assisted in reaching their potential and becoming well-rounded individuals. Members develop confidence and maturity through meeting challenges and completing projects.



COORDINATED CAREER ACADEMIC EDUCATION/PROJECT SUCCESS (CCAЕ/PS) provides educational and occupational services to assist students in becoming responsible, productive citizens. Through participation in the CCAЕ/PS support services, students in grades 9-12 learn about the world of work and employment skills they need to be successful. Throughout their school years, students have the opportunity to develop knowledge, attitudes and experiences that will serve as a substantial base for decision making when they reach points in their lives when they must make education or career decisions.

CAREER AND TECHNICAL INSTRUCTION (CTI) 2008-2009

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	Total 6,930 Male 4,457 (64%) Female 2,473 (36%)
Number of CTAE Certified Teachers FY 2009	262 High School Teachers

CAREER AND TECHNICAL INSTRUCTION (CTI) is designed to support students with disabilities enrolled in CTAE classes and in participation in Career Technical Student Organizations. The goal of the secondary level support services is to provide students with employment opportunities at the completion of their CTAE experience.



JUNIOR RESERVE OFFICERS TRAINING CORPS (JROTC) 2008-2009

High School Student Enrollment in JROTC-Related Courses in FY 2009 by Type of Service	<ul style="list-style-type: none"> • U.S. Army 15,956 • U. S. Air Force 7,498 • U.S. Navy 6,232 • U.S. Marines 1,895
Scholarship Awards Earned in FY 2009	• \$ 34,315,895
Community Service Hours Contributed by JROTC Units	• 690,430 hours

JUNIOR RESERVE OFFICERS TRAINING CORPS (JROTC) offers the opportunity for high school students to enroll in a citizenship program that combines classroom instruction and practical application with extracurricular activities. The curriculum teaches leadership, time management, and organizational procedures, the rights, and privileges of citizenship, and how our military serves our government. It helps to develop the student cadet's sense of personal responsibility, build life skills, and provide leadership opportunities. JROTC, under the umbrella of the Career, Technical and Agricultural Education Division of the Georgia Department of Education, offers courses that satisfy pathway concentration provisions as students earn credit toward graduation.

CTAE VISION:

Creating a world-class workforce for Georgia in the 21st Century

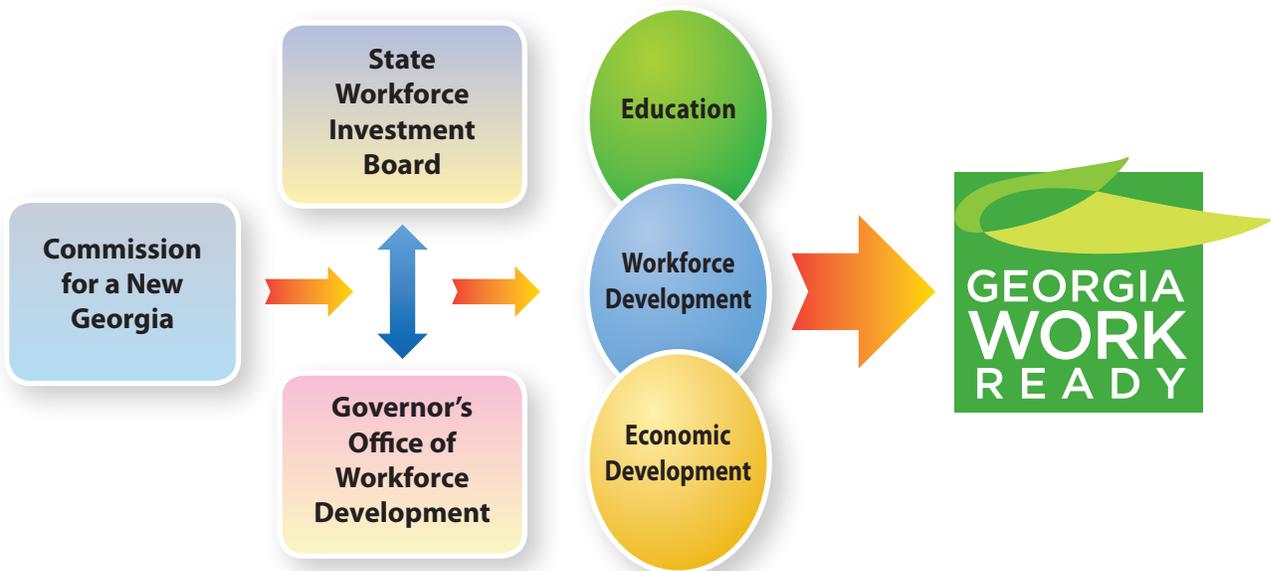
With the national economic downturn, the State of Georgia is aggressively addressing many challenges to retain a growing, dynamic economy. It is especially critical for the state to maintain and build the current and future workforce to meet the changing needs of business and industry as the state and regional economy rebounds. **Education** continues to be an essential part of the Georgia workforce development infrastructure and is a critical focus of the Governor's **Georgia Work Ready** program.

Georgia Work Ready was launched in August 2006 by Governor and the Georgia Chamber of Commerce to improve the job training and marketability of Georgia's workforce and to drive future economic growth for the state. It is the only initiative of its kind to be conducted through a partnership between a state government and state chamber of commerce ensuring that companies can more reliably match the right people with the right jobs. Work Ready is based on a skills assessment and certification for job seekers and a job profiling system for businesses. By identifying both the needs of business and the available skills of Georgia's workforce, the state can more effectively generate the right talents for the right jobs.

The **Georgia Work Ready Certificate** provides a comprehensive measure of foundation skills that contribute to workplace success and enables individuals to demonstrate to employers a fitness for employment as well as readiness for increased salaries and promotions. Georgia Work Ready results provide potential employers with information related to the potential employee's education, skills, and training, as well as good work habits. Students in high school benefit by an increased understanding of work readiness skills which helps them make the connection between education and work and leads to an increase in the graduation rate and recognition by prospective employers as a viable candidate for a job. Businesses benefit by sharing a common language with education and are ensured that the individual is "job ready". This reduces hiring costs and employee turnover.

Job seekers provide employers with their Work Ready Certificate to demonstrate that they are ready for employment. Educators may use information from the Work Ready program to tailor instructional development plans, certify workforce readiness, and guarantee diplomas. Employers use the system to determine hiring qualifications and training needs. Economic and workforce developers match employers with communities to ensure the best possible workforce.

Workforce Development Infrastructure



We need a system that links workforce development and education together and aligns to the economic needs of the state, its regions and local communities.

—Governor Sonny Purdue, State of Georgia

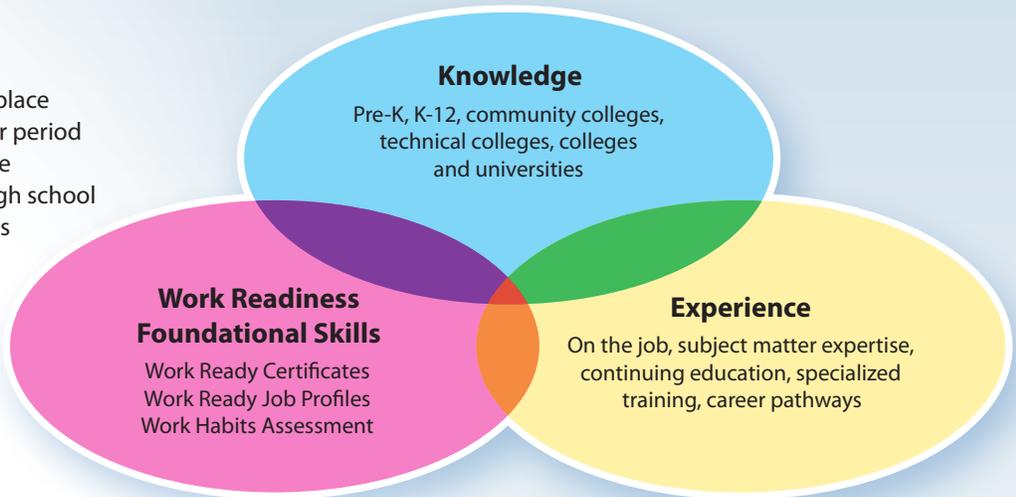


A number of Georgia high school students complete the Work Ready assessment as a part of their preparation for the workplace. According to the Governor's Office of Workplace Development, during the current three-year period more than 32,000 high school students have completed the Work Ready assessment. High school seniors account for a third of all assessments completed. Combined with their high school diploma, students strengthen their work credentials with the Georgia Work Ready Certificate.

Georgia's CTAE Career Paths are strengthened in the workplace with **Industry Certification** in many areas. Industry Certification is a mark of excellence for the student and is recognized by employers. Educators work with state industry associations and subject experts to create the requirements for industry certification, which ensures that students have the skills and knowledge using the latest equipment and technology to be ready to work in the high-demand, high-wage, high-skill jobs available in Georgia.

Work-Based Education opportunities and postsecondary education options offered during and following high school enable students to fulfill their career plans. The state of Georgia is unique in its support of postsecondary education options through the HOPE Program with HOPE grants and scholarships available to secondary

Career Pathways for Emerging, Transitioning and Existing Careers



and postsecondary students, to enhance their school-based preparation for the workplace.

Across Georgia, a broad range of state and nonprofit agencies are working together to stimulate the growth of the state economy and to ensure Georgia has a well-educated workforce that meets the needs of current as well as new businesses and industries that make up the backbone of the Georgia economy. A readily available, trained workforce is the key to maintaining and attracting companies to settle and expand in Georgia. The State of Georgia has created a strong structure to stimulate economic growth.

Programs/Initiatives of the CTAE

Moving Forward

- Industry Certification
- Assessment
- High School & Middle School Curriculum Development
- Work-Based Learning
- Special Populations
- Nontraditional Occupations
- Georgia Work Ready
- Education & Career Partnerships
- Career Development
- HSTW/JROTC
- Professional Learning

We will lead the nation in improving student achievement.

Georgia CTAE – Future Directions

As the Georgia economy changes and expands, the Georgia Department of Education CTAE programs will continue to evolve to ensure that every student in Georgia graduates from high school with the academic skills, hands-on experience in real work environments, and intensive career guidance required to succeed in college, employment, and life-long learning.

During FY 2010 and beyond CTAE has identified several areas for special ongoing focus:

- ▶ **CTAE End-of-Pathway Assessments** will continue to be identified and implemented for all career pathways.
- ▶ **Non-Traditional Career Pathways** will be promoted based on enrollment data, including attracting female students to enroll in the Career Areas of Architecture, Construction, Communication and Transportation; Agriculture; and Engineering and Technology Education; and attracting male students to enroll in Family and Consumer Sciences, Education, and Healthcare Science.
- ▶ **Industry Certification** will be expanded to include additional Career Pathways.
- ▶ **Curriculum Guides** will be developed to support all Career Pathways.
- ▶ **In-Service Education Opportunities** will continue to provide high-level professional development for CTAE educators and counselors.
- ▶ **Opportunities for postsecondary education during high school** will continue and expand as an integrated part of CTAE Career Pathways.



Agriculture, Food & Natural Resources

Federal Career Clusters

Transportation, Distribution & Logistics

Agribusiness

Governor's Strategic Industries

Logistics & Transportation

Architecture & Construction

Health Science

Aerospace

Healthcare Science

Agriculture

Georgia Program Concentrations

Architecture, Construction, Communications & Transportation

Arts, AV Technology & Communication

Education & Training

Healthcare Science Pathways
Biotechnology Research & Development
Diagnostic Services
Health Informatics
Therapeutic Services-Emergency Services
Therapeutic Services-Medical Services
Therapeutic Services-Nursing
Personal Care Services-Cosmetology

Agriculture Pathways
Agriculture Management
Agribusiness Management
Agriscience
Agricultural Mechanics
Animal Science
Forestry/Natural Resources
Plant Science/Horticulture
Veterinary Science

Architecture, Construction, Communication, Transportation Pathways
Aircraft Support
Broadcast/Video Production
Construction
[Heating, Ventilation, Air Conditioning, & Refrigeration]
Architectural Drawing & Design
Flight Operations
Graphic Communications
Graphic Design
Metals
Collision Repair
Transportation Logistical Operations (Ground/Marine)
Transportation Logistical Support (Ground/Marine)

Human Services

Arts & Humanities

Arts & Humanities Pathways
Journalism
Foreign Language
Performing Arts
Visual Arts

Engineering & Technology Pathways
Electronics
Energy Systems
Engineering
Engineering Graphics & Design
Manufacturing

Manufacturing

Family & Consumer Sciences

Family Consumer Science Pathways
Family, Community & Global Leadership
Interior Design
Nutrition & Food Science

Culinary Arts

Culinary Arts Pathways
Culinary Arts

Georgia's Industry Sectors
Advanced Communications
Advanced Manufacturing
Aerospace
Bio Science
Energy
Logistics

Engineering & Technology Pathways
Electronics
Energy Systems
Engineering
Engineering Graphics & Design
Manufacturing

Engineering & Technology

Education

Education Pathways
Early Childhood Education
Teaching As A Profession

Business & Computer Science Pathways
Administrative/Information Support
Computer Networking
Computer Systems and Support
Computing

Marketing Sales & Services Pathways
Fashion Marketing
Marketing Communications & Promotion
Marketing & Management
Sports & Entertainment Marketing
Travel Marketing & Lodging Management

Science, Technology, Engineering & Mathematics

Law, Public Safety, Corrections & Security

Government & Public Safety

Govt. & Public Safety Pathways
Homeland Security & Emergency Services
Law & Justice
JROTC-Air Force, Army, Marine Corps, Navy

Business & Computer Science

Marketing Sales & Services

Information Technology

Healthcare & Eldercare

Life Sciences

Energy & Environmental

Government & Public Administration

Hospitality & Tourism

Marketing, Sales & Service

Finance

Business, Management & Administration



CTAE

Career, Technical and Agricultural Education

Georgia Career, Technical and Agricultural Education

Georgia Department of Education

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