GEORGIA DEPARTMENT OF EDUCATION

We will lead the nation in improving student achievement.

ANNUAL REPORT 2008

CTAE
Career, Technical and Agricultural Education

CTAE

Stimulus for the Georgia Workforce

GEORGIA DEPARTMENT OF EDUCATION

Kathy Cox, State Superintendent of Schools

Friends and colleagues,

Thank you for taking the time to learn more about Georgia's Career, Technical and Agricultural Education (CTAE) programs.

I am proud that Improving Workforce Readiness is one of Georgia's top education goals and that we are working together to make it happen. Georgia's CTAE programs are a vital part of us reaching our goal and securing our state's economic future.

Career, Technical and Agricultural Education not only provides our students with the skills and knowledge they need to prepare for a career, but it provides them with a real-life connection to what is being taught in our core classes of Mathematics, Social Studies, Science and English. We are developing a generation of critical thinkers and independent problem solvers who are ready for the 21st century.

Over the past six years, we have worked together to improve our CTAE programs by developing strong performance standards and logical career pathways in crucial job growth areas. For instance, in 2008, we had more than 20,000 students enrolled in healthcare science career pathways and more than 30,000 enrolled in business and computer science pathways. These students will be ready for whatever comes next, whether that is the work force, higher education or both.

As you will see in the pages of this report, our CTAE programs are preparing today's students to be the workforce of tomorrow like never before. Please join me in thanking the students, teachers and support groups that make Georgia's CTAE programs among the best in the nation.

Sincerely,

Kathy Cox

Kathy Cox

Office of the State Superintendent of Schools

CTAE

Career, Technical and Agricultural Education

Annual Report 2008

FROM THE DIRECTOR OF CTAE....

Welcome to our second CTAE Annual Report. Our programs have made much progress over the last several years under former director James R. Woodard. He began what was called the re-engineering of CTAE to meet the increasing need for a workforce who was more technically savvy and more highly-skilled than the workforce of the past. Today's workers must be able to think independently, solve problems, as well as work in teams. They also need strong math, science, and communication skills and have the ability to apply all those skills to solving real-life work related problems. We must continue this re-engineering and even step-up our efforts. What will stimulate our economy is having a workforce second to none in the world and that can meet the challenges of other aggressive nations.

Those closest to the students are the ones who will prepare this future workforce to meet this challenge. We will contantly re-assess our curriculum to be sure our students have the most current trends in their pathway. We must remain flexible in our teaching strategies to be sure their classes are both rigorous and relevant. This may mean more project-based lessons that mirror real work scenarios. I appreciate your hard work, passion for teaching and professionalism. Together I know we will continue to integrate new technologies into our students learning as our future workplace needs continue to evolve.

Sincerely,

Gary C. Steppe

Career, Technical & Agricultural Education:
Stimulus for the Georgia Workforce

CTAE At-A-Glance

Georgia Department of Education

2007- 2008 GEORGIA CAREER, TECHNICAL and AGRICULTURAL EDUCATION

Secondary Education—Grades 6-12

CTAE PROGRAMS
- 180 Local School Systems

TOTAL GEORGIA STUDENT ENROLLMENT
- 494,321 Students in Grades 9-12
- 386,523 Students in Grades 6-8

STUDENT ENROLLMENT IN CTAE CLASSES
(Students enrolled in one or more CTAE courses)
- 64% of all Students in Grades 9–12 Statewide (314,754 students)
- 56% of all Students in Grades 6–8 Statewide (216,329 students)

CTAE ENROLLMENT BY GENDER IN MIDDLE AND HIGH SCHOOLS
- Male 52%
- Female 48%

CTAE ENROLLMENT BY RACE
- Black 41%
- Hispanic 8%
- White 46%
- Other 5%

CTAE HIGH SCHOOL CONCENTRATORS
(3 or more classes in a Career Pathway)
- 88,002 Students

GRADUATION RATE FOR CTAE CONCENTRATORS
- 91%

HIGH SCHOOL COMPLETION - DIPLOMA TYPE EARNED BY CTAE CONCENTRATORS (31,991)
- College Prep 16 %
- Technical/Career 42%
- Dual Seal 42%

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

NOTE: Data Source: Georgia Department of Education Website (2007-08 CTAE Enrollment), data tables provided by the CTAE division, and Perkin's IV Consolidated Annual Report FY 2007-2008.

The dynamic Georgia economy depends on a high-tech, highly skilled workforce. Georgia's 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) connect the CTAE program closely to the academic indicators of the No Child Left Behind Act. The CTAE programs balance a strong academic preparation focus with current and emerging career opportunities, workforce needs, and economic competitiveness of the Georgia economy.

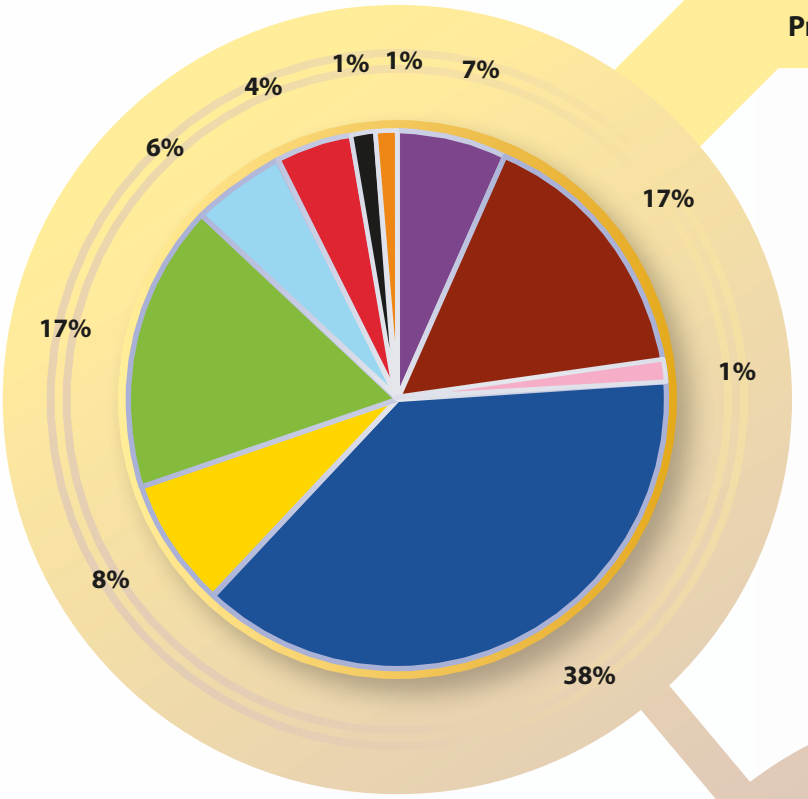
FY 2008 has been a year of transition to new directions (Perkins IV)[1] in Georgia's five-year plan for career and technical education as follows:

- Developing challenging academic and technical standards and assisting students in meeting such standards, including preparation for high-skill, high-wage, or high-demand occupations in current or emerging professions
- Promoting the development of services and activities that integrate rigorous and challenging academic and career and technical instruction, and that link secondary education and postsecondary education for participating career and technical students
- Increasing state and local flexibility in providing services and activities designed to develop, implement, and improve career and technical education
- Providing technical assistance that promotes leadership, initial preparation, and professional development at the state and local levels, and that improves the quality of career and technical education teachers, faculty, administrators, and counselors
- Supporting partnerships among secondary schools, postsecondary institutions, baccalaureate degree granting institutions, local workforce investment boards, and business and industry

The CTAE Career Pathways continue to be designed and updated, 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 to help develop a well-educated, technically trained and highly competitive workforce in Georgia that stimulates the economy and is widely recognized as the best in the nation.

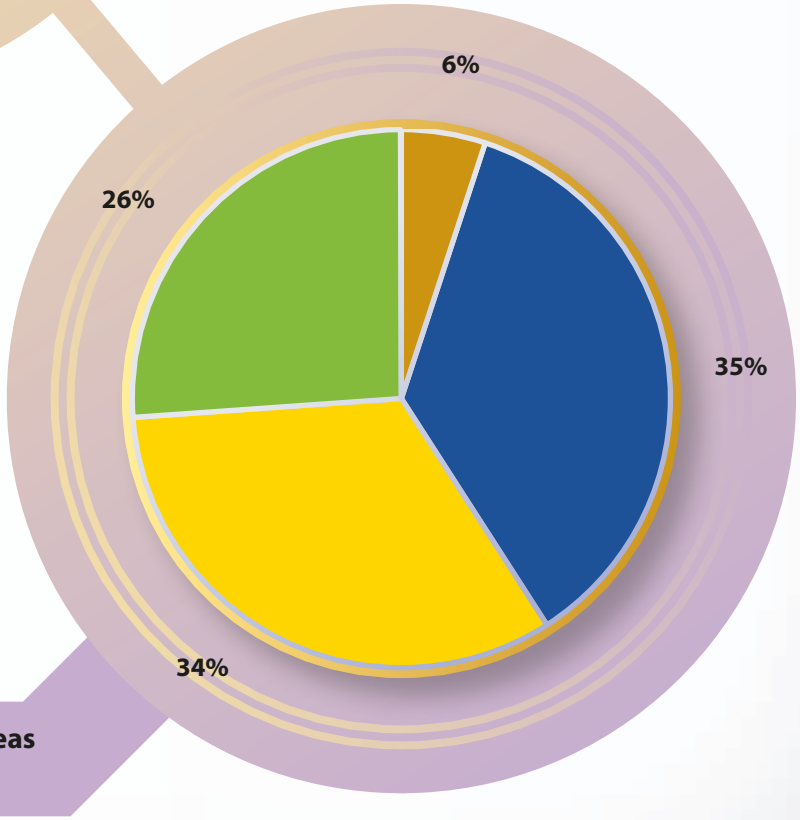
[1] Note that CTAE data reports from previous years may not be comparable with FY 2008 data because of new definitions and reporting required under the Perkins IV guidelines.

Students Enrolled in Each CTAE Program Area Grades 9–12 in 2008



Agricultural Education	28,645
Architecture, Construction, Communications & Transportation	66,405
Culinary Arts	4,166
Business & Computer Science	151,965
Engineering & Technology Education	30,069
Family & Consumer Sciences	66,407
Healthcare Science Education	23,694
Marketing, Sales & Service Education	16,149
Coordinated Career Academic Education	6,182
Career & Technical Instruction	6,704

Students Enrolled in CTAE Program Areas Grades 6–8 in 2008



Agricultural Education	19,111
Business & Computer Science	115,098
Engineering & Technology Education	112,154
Family & Consumer Sciences	85,569

CTAE Achievements in 2007-08

Academic Achievements of CTAE Students

- **92%** of CTAE Concentrators who took the Georgia High School Graduation Test (GHSGT) met or exceeded state standards in **English/Language Arts**
- **72%** 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 FY2008

	State FY08 Target	Actual Performance
English/Language Arts (% passing GHSGT)	85%	92.3%
Mathematics (% passing GHSGT)	69%	72.4%
Graduation rate	62%	90.7%

Graduation Rate for CTAE Concentrators

- 91% graduated with regular diplomas
- CTAE **graduation rate** of 91% compares favorably with Georgia's overall graduation rate of 75% in 2008
- Graduation rates for all **subgroups** of CTAE concentrators improved from 1 to 5%; highest rates of improvement were for Hispanic CTAE students and those with Limited English Proficiency

CTAE Postsecondary Transitions

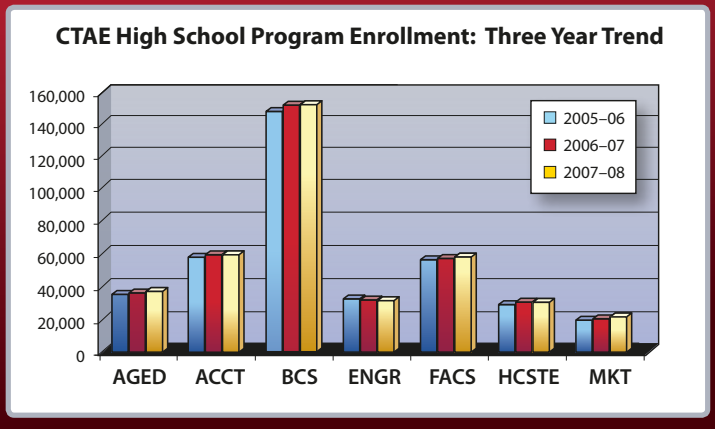
- A total of 7,548 high school students **dual enrolled** in college-level CTAE courses at Georgia's technical colleges or other colleges with technical division
- A total of 974 high school students **joint enrolled** in college-level CTAE courses at Georgia's technical colleges or other colleges with technical divisions

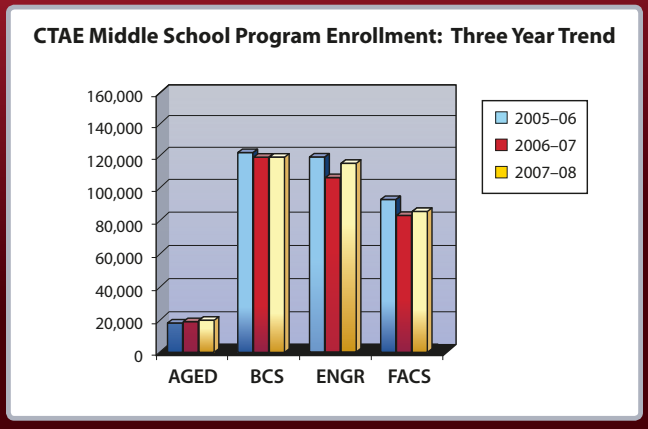
CTAE Teacher Acheivements

- 533 **professional development workshops** were held with a total attendance of 14,268 CTAE educators throughout the state in FY2008
- 2 Business and Computer Science teachers in Georgia were **finalists** for the National Business Education Teacher of the Year

CTAE Program Achievements

- 447 CTAE programs have **Industry Certification**, an increase of 41 programs since last year
- 56% of all **middle school** and 64% of all **high school students** were enrolled in CTAE courses in FY2008
- High school student enrollment in **CTAE classes increased** by 1% overall and middle school student CTAE enrollment increased by 2% compared to FY2007
- Student enrollment in the following **high school CTAE programs increased** compared to FY2007
  - Marketing Education (9%)
  - Family and Consumer Sciences (2%)
  - Agriculture Education (1%)
  - Architecture, Construction, Communication, Transportation (.5%)
- Student enrollment in the following **middle school CTAE programs increased** compared to FY2007
  - Agriculture Education (14%)
  - Engineering and Technical Education (4%)
  - Family and Consumer Sciences (2%)
- Student membership increased in 7 of the 9 **Career Technical Student Organizations** compared to last year's participation level; total increase in CTSO student membership was 14,910.
- 6 middle school CTAE program **curricula were developed or updated** and approved by the GA State Board of Education for implementation in the 2009-2010 academic year: Agriculture, Business and Computer Science, Career Development, Engineering and Technology, Family and Consumer Sciences, and Healthcare Science.
- 95% of employers participating in the **Georgia Youth Apprenticeship** program found the program beneficial to their company and 90% rated the program above average
- CTAE **End-of-Pathway Assessments** were identified by subject matter experts for 8 career pathways; national exams from the following organizations will be used to assess and validate student learning:
  - National Occupational Competency Testing Institute (NOCTI)
  - National Automotive Technicians Education Foundation (NATEF)
  - Institute for the Assessment of Skills and Knowledge of Business (A*S*K Business Institute)





Georgia Career, Technical and Agricultural Education Career Pathways

During 2007-2008 Georgia students participated in a variety of Career Pathways through a sequence of rigorous academic and career related courses. The career opportunities under each Career Pathway were identified as high-demand, high-wage, high-skilled jobs to support the needs of the Georgia economy. Each Career Pathway offered students the opportunity to take a single class in that area (Participant) or to graduate as a CTAE Concentrator who successfully completed at least three career technical education courses in a particular program area during high school. Students engaged in a variety of **learning opportunities in each Career Pathway:**

- 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

Foundation skills for CTAE are critical competencies that students pursuing any career pathway should exhibit to be successful. These skills link career, technical and agricultural education to the Georgia academic performance standards and are aligned with national guidelines. The following knowledge and skills provide learners with a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy:

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, and Entrepreneurship.

Working with parents, guardians, counselors and teachers, Georgia students create individualized **Peach State Pathway Career Plans** to guide their secondary and postsecondary education. Georgia CTAE provides specialized tools for career planning through print and online resources, the ***Peach State Pathways: Education and Career Planning Tool***, and CTAE-trained counselors. In addition to planning for high school classes, students plan for continuing education in many career areas that require extensive on-the-job-training, post-secondary technical training, bachelor's degree or higher education to successfully achieve their career goals.

Students in all Career Pathways can actively participate in **Career Technical Student Organizations** (CTSO) to further develop skills valued in any career area including leadership skills, application of academic and technical skills, participation in state and national activities requiring higher order thinking and problem solving skills, public speaking, teamwork, and personal growth.

Education-Career Partnership Initiative

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

Number of High School Students Enrolled in College Level Courses

	Dual enrollment courses	Joint enrollment courses	Total student enrollment
Georgia Technical Colleges	7,317	959	8,276
Georgia Colleges with Technical Divisions	231	15	246
Total student enrollment	**7,548**	**974**	**8,522**

No matter which concentration fits best, they will all give each Georgia student a rigorous and relevant education that provides the experience and skills necessary to build fulfilling careers in the 21st century economy.

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

AGRICULTURE EDUCATION (AGED) 2007-2008

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	**Total 28,645** **Male 19,188 (67%)** **Female 9,457 (33%)**
High School Student Enrollment in Agriculture Education in FY 2008 (Duplicated Count)	**Pathway-Related Course Enrollment – 51,764** • Agriculture Mechanics **10,866 (21%)** • Animal Science **8,011 (15%)** • Forestry & Natural Resources **7,715 (15%)** • Agriscience **7,580 (15%)** • Veterinary Science **6,073 (12%)** • Agribusiness Management **5,995 (12%)** • Plant Science/Horticulture **5,524 (11%)** Other AGED Courses • **5,892**
Grade 6-8 Student Enrollment in AGED Courses in FY 2008	**19, 111**
Number of Industry-Certified Programs	**22**
Number of Certified AGED Teachers FY 2008	**459 High School Teachers** **82 Middle School Teachers**

Career Technical Student Organization (CTSO)

Future Farmers of America (FFA): 28,410 members (55% of students enrolled in AGED)

Georgia FFA ranks in the top five for membership in the nation. Members develop their potential for premier leadership, personal growth, and career success through agriculture education. FFA encompasses more than 300 careers.

AGRICULTURE EDUCATION (AGED) 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. Students are prepared for careers in Agricultural Engineering, Agribusiness Management, Agriscience, Biotechnology, Turf Management, Landscaping, Environmental Science, Food Science, Forestry, and Wildlife Management. In addition to foundation and advanced math and science skills, students apply classroom lessons in real-world jobs and experiences through the Supervised Agricultural Experience Program (SAEP). Agriculture generates over $25 billion annually to the Georgia economy and CTAE supports this Governor's Strategic Industry.

The young adults in Ag Ed are fully prepared to enter the workforce. They have the social skills to present themselves professionally to customers, plus they have a tremendous work ethic. What they learn through this program gives them a leg up when they are starting their careers.

—Meat and Seafood Retail Coordinator, Publix Supermarkets, Atlanta

ARCHITECTURE, CONSTRUCTION, COMMUNICATIONS & TRANSPORTATION (ACCT) programs prepare students for a wide variety of careers to support Georgia's growing economy including architect/design, construction trades (plumbing, carpentry, masonry, sheet metal, electrical wiring), automotive services, aircraft support, flight operations, engineer drafting, graphic design, telecommunication specialist, web design, broadcast/video production, and surveyor. Students build solid foundation skills as well as math and science skills based on advanced algebra, chemistry, calculus, geometry, trigonometry, physics, and architectural and design concepts.

ARCHITECTURE, CONSTRUCTION, COMMUNICATIONS & TRANSPORTATION (ACCT) 2007-2008

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	**Total** **66,404** **Male** **46,133** **(69%)** **Female** **20,272** **(31%)**
High School Student Enrollment in Architecture, Construction & Transportation Education in FY 2008 (Duplicated Count)	**Pathway-Related Course Enrollment -- 63,010** • Construction **12,840 (20%)** • Transportation/Logistical Operations-Ground Marine **10,434 (17%)** • Broadcast/Video Production **9,102 (14%)** • Transportation/Logistical Support-Ground Marine **8,964 (14%)** • Graphic Communications **5,531 (9%)** • Graphic Design **5,531 (9%)** • Architectural Drawing & Design **5,401 (9%)** • Welding **2,156 (3%)** • Metals **1,700 (3%)** • Flight Operations **922 (1%)** • Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR) **218 (**less than 1**%)** • Aircraft Support **211 (**less than 1**%)** Other ACCT Courses • **1,711**
Number of Industry-Certified Programs	**113**
Number of CTAE Certified Teachers FY 2008	**977 High School Teachers**

Career Technical Student Organization (CTSO)

Georgia SkillsUSA: 5,754 members (9% of students enrolled in ACCT)
Members participate in local, state, and national activities sponsored by Architecture, Construction, Communication, Transportation, and Healthcare Science programs. Members develop leadership and workplace skills and earn recognition through activities, conferences, and competitions.

BUSINESS & COMPUTER SCIENCE (BCS) 2007-2008

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	**Total 151,967** **Male 78,054 (51%)** **Female 73,913 (49%)**
High School Student Enrollment in Business and Computer Science Education in FY 2008 (Duplicated Count)	**Pathway-Related Course Enrollment -- 160,330** • Administration/Information Support **75,655 (47%)** • Small Business Development **25,013 (16%)** • Financial Mgmt. – Accounting **17,592 (11%)** • Financial Mgmt. – Services **16,094 (10%)** • Interactive Media **14,855 (9%)** • Computing **5,467 (3%)** • Computer Systems & Support **4,913 (3%)** • Computer Networking **741** (less than 1**%)** Other BCS Courses • **12,471**
Grade 6-8 Student Enrollment in BCS Courses in FY 2008	**115,099**
Number of Industry-Certified Programs	**141**
Number of CTAE Certified Teachers FY 2008	**1,982 High School Teachers** **417 Middle School Teachers**

Career Technical Student Organization (CTSO)

Future Business Leaders of America (FBLA): 22,435 members (15% of students enrolled in BCS)
An organization for business students in middle and high school, FBLA provides opportunities to develop leadership and career skills while preparing for careers in business and business-related fields. Students engage in various projects and competitive events.

The BCS program has the largest percent of students enrolled in Work Based Learning. BCS is the only CTAE program with an AP Course —AP Computer Science.

BUSINESS and COMPUTER SCIENCE (BCS) programs offer students the opportunity to learn about finance, accounting, legal operations of business, administrative support, information management, small business development, business plans, personnel management, international business, and computing (programming and technical support for the latest technology). Career areas include Business Owner, Chief Executive Officer (CEO), Financial Planner, Accountant, and Computer Programmer or Technician. 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.

ENGINEERING AND TECHNOLOGY EDUCATION (ENGR) programs focus on a career area where the demand for skilled engineers in the United States far outpaces the current supply. Engineering and Technology programs combine hands-on projects with a rigorous curriculum to prepare students for the most challenging post-high school careers, including Environmental, Civil, Mechanical or Electronics Technician, Statistician, Biomedical, Industrial or Chemical Engineer, Scientist or Researcher. Students become highly skilled in manufacturing, electronics, engineering, graphics and design, and energy systems. The curriculum and related activities focus on the past, present, and future of technological advances and how they affect the world.

ENGINEERING AND TECHNOLOGY EDUCATION (ENGR) 2007-2008

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	**Total 30,069** **Male 22,610 (75%)** **Female 7,459 (24%)**
High School Student Enrollment in Business and Engineering and Technology Education in FY 2008 (Duplicated Count)	**Pathway-Related Courses Enrollment -- 42,061** • Engineering **19,824 (47%)** • Energy Systems **14,758 (35%)** • Engineering Graphics & Design **5,850 (14%)** • Manufacturing **1,053 (3%)** • Electronics **576 (1%)** Other ENGR Courses • **603**
Number of Industry-Certified Programs	**41**
Grade 6-8 Student Enrollment in ENGR Courses in FY 2008	**112,154**
Number of CTAE Certified Teachers FY 2008	**686 High School Teachers**

Career Technical Student Organization (CTSO)

Georgia Technology Student Association (GA TSA): 27,986 members (93% of students enrolled in ENGR)
GA TSA provides technology students with opportunities to excel and advance as critical thinkers, problem solvers, and technologically literate leaders. Member activities develop communication, leadership, and competitive skills.

The kinds of projects that Engineering and Technology students do take them through the problem-solving process multiple times. They get to work with their hands and collaborate on fun, interactive projects, all the while gaining insight into what it takes to become an engineer, scientist, or whatever other profession they choose.

—Quality Control/Engineering/Information Technology, Phoenix Stamping, Atlanta

FAMILY AND CONSUMER SCIENCES (FACS) F2007-2008

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	**Total 66,409** **Male 14,714 (22%)** **Female 51,695 (78%)**
High School Student Enrollment in Family and Consumer Sciences Education in FY 2008 (Duplicated Count)	**Pathway-Related Courses Enrollment – 25,448** • Nutrition & Food Science **18,478 (73%)** • Interior & Fashion Design **5,241 (21%)** • Family, Community & Global Leadership **959 (4%)** • Consumer Sciences **770 (3%)** Other FACS Courses • **24,353**
Grade 6-8 Student Enrollment in FACS Courses in FY 2008	**85,573**
Number of Industry-Certified Programs	**1**
Number of CTAE Certified Teachers FY 2008	**866 High School Teachers** **257 Middle School Teachers**

Career Technical Student Organization (CTSO)

Family, Career and Community Leaders of America (FCCLA): 28,888 members (44% of students enrolled in FACS)
FCCLA offers members in various career areas the opportunity to expand leadership potential and develop skills for life (planning, goal setting, problem solving, decision making, and interpersonal communication) necessary in the home and workplace. FCCLA addresses important personal, family, work, and societal issues through family and consumer science education.

Not only did my education in Family and Consumer Sciences prepare me for my success in owning my own business; it has also prepared me to balance my career and family. I am so grateful to be able to care for children from such a young age, and watch them grow into such wonderful people.

—Director, Country Loving Day Care, Screven County

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. Career areas include Interior or Fashion Design, Food Scientist or Technologist, Dietician, Nutritionist, Social Worker, and Community Planner. 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.

HEALTHCARE SCIENCE EDUCATION (HCSTE) programs support high-demand healthcare and medical careers in Georgia with an estimated 3.6 million new health care wage and salary jobs to be created by 2014 in the United States. Careers require various education and licensing requirements and include Registered Nurse or Physician Assistant, Family Doctor, Emergency Medical Service Technician, Lab Technician, Physical Therapist, and Biotechnology Research. 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.

HEALTHCARE SCIENCE EDUCATION (HCSTE) 2007-2008

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	**Total 23,694** **Male 3,942 (17%)** **Female 19,752 (83%)**
High School Student Enrollment in Business and Healthcare Science Education in FY 2008 (Duplicated Count)	**Pathway-Related Course Enrollment -- 96,960** • Therapeutic Services- Nursing **20,405 (21%)** • Therapeutic Services- Medical **19,130 (20%)** • Therapeutic Services- Emergency **14,992 (15%)** • Health Informatics **14,389 (15%)** • Diagnostic Services **14,059 (14%)** • Biotechnology Research & Development **13,985 (14%)**
Number of Industry-Certified Programs	**50**
Number of CTAE Certified Teachers FY 2008	**222 High School Teachers**

Career Technical Student Organization (CTSO)

Georgia Health Occupations Students of America (HOSA): 5,860 members(25% of students enrolled in HCSTE)
HOSA's mission is to enhance the delivery of compassionate, quality health care by providing opportunities for knowledge, skill and leadership development of all health occupations students and helping students meet the needs of the health care community.

Healthcare is one of the most exciting, rewarding, and complex career fields because it involves all aspects of human life. Many people don't realize that there are hundreds of different job opportunities within healthcare, not just being a doctor or nurse. It's a great choice for anyone who loves to serve.

—President and CEO, DeKalb Medical Center, Decatur

MARKETING, SALES AND SERVICE EDUCATION (MKT) 2007-2008

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	**Total 16,149** **Male 6,851 (42%)** **Female 9,298 (58%)**
High School Student Enrollment in Marketing, Sales and Service Education in FY 2008	**Pathway-Related Course Enrollment -- 52,130** • Fashion Marketing **11,295 (22%)** • Sports & Entertainment Marketing **10,895 (21%)** • Marketing & Management **10,456 (20%)** • Travel Marketing & Lodging Management **10,219 (20%)** • Marketing Communication & Promotion **9,265 (18%)**
Number of Industry-Certified Programs	**79**
Number of CTAE Certified Teachers FY 2008	**168 High School Teachers**

Career Technical Student Organization (CTSO)

DECA: 8,086 members (50% of students enrolled in MKT)
DECA, an international association of high school and college students, focuses on marketing, management and entrepreneurship in business, finance, hospitality, and marketing sales and services. Students participate in competitive events to hone their marketing and business skills.

Marketing, Sales and Service is packed with the practical skills required in today's business world. DECA challenges students to put into practice what they have learned in the classroom. The self-confidence and self-esteem students develop in these programs put them head-and shoulders above others with whom they will compete in the business community.

—Regional Sales Manager, Branson Ultrasonics Corporation, Atlanta

MARKETING, SALES AND SERVICE EDUCATION (MKT) prepares students for postsecondary education and careers in marketing, management, and entrepreneurship. Students develop knowledge and skills in the foundational 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. Careers include Advertising Sales, Public Relations Specialist, Community Association Manager, Technical Sales Representative, Real Estate Broker, Marketing Manager, Customer Service Specialist or Supervisor.

It is clear that our students must be entrepreneurial not just smart. In other words, our students must become workers who are innovative, creative thinkers who are able to plan strategically and confidentially solve problems, not just "smart" workers who wait to be told step-by-step what to do.

—CTAE Program Office

COORDINATED CAREER ACADEMIC EDUCATION/PROJECT SUCCESS (CCAE/PS) 2007-2008

Enrollment by Gender in Grades 9-12 (Unduplicated Count)	**Total 6,182** **Male 3,218 (52%)** **Female 2,964 (48%)**
Number of CTAE Certified Teachers FY 2008	**171 High School CCAE/PS Teachers**

Career Technical Student Organization (CTSO)

Georgia Career Student Association (GCSA): 6,425 members
The goal of GCSA is helping students reach their potential. Through participation in the CCAC/PS program students learn about the world of work and the employment skills they need to be successful.

COORDINATED CAREER ACADEMIC EDUCATION/PROJECT SUCCESS (CCAE/PS) provides educational and occupational services to assist students in becoming responsible, productive citizens. Through participation in the CCAE/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 a reservoir of information, attitudes and experiences that will serve as a substantial base for decision making when they reach points in their lives at which education or career decisions must be made.

CAREER AND TECHNICAL INSTRUCTION (CTI) 2007-2008

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 2008	**251 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 CTI program provides students with disabilities at the secondary level entry-level job skills in broad or specific occupation clusters.

JUNIOR RESERVE OFFICERS TRAINING CORPS (JROTC) offers the opportunity for high school students to be enrolled in a citizenship program that falls under the umbrella of the Career, Technical and Agricultural Education Division of the Georgia Department of Education. JROTC courses may apply to satisfaction of the credit and concentration provisions of Technology/ Career preparatory diploma requirements. Students may also pursue the College Preparatory Diploma or a Dual Seal Diploma while enrolled in JROTC programs.

JUNIOR RESERVE OFFICERS TRAINING CORPS (JROTC) 2007-2008

High School Student Enrollment in JROTC-Related Courses in FY 2008 by Type of Service	• U.S. Army **17,392** • U. S. Air Force **7,565** • U.S. Navy **6,708** • U.S. Marines **1,868**
Scholarship Awards Earned in FY 2008	• **$ 27,948,843**
Community Service Hours contributed by JROTC units	• **427,495 hours**

CTAE VISION:

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

Education is an essential part of the Georgia workforce development infrastructure and is a critical focus of the Governor's vision that has resulted in the implementation of **Georgia Work Ready** program to meet Georgia's economic challenges. 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 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.

Georgia's economic development infrastructure is influenced by local, regional, and state needs, as well as federal programs and funding agencies. The **Presidential initiative for High Growth Job Training** is a strategic effort to prepare workers to take advantage of new and increasing job opportunities in high growth, high demand and economically vital sectors of the American economy. Fields such as health care, information technology, and advanced manufacturing have jobs and solid career paths left untaken due to a lack of people qualified to fill them. The **Governor's Initiative in Georgia** has identified **five strategic industries** to focus resources based on (a) projections to add substantial numbers of new jobs or to affect the growth of other industries in Georgia and (b) trends for existing or emerging businesses being transformed by technology and innovation requiring new skill sets for Georgia workers:

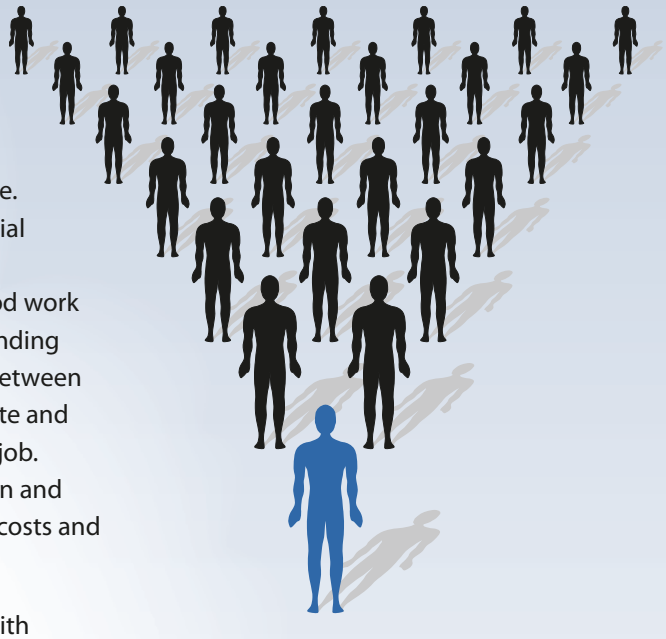
- **Aerospace**
- **Agribusiness**
- **Energy and Environmental**
- **Healthcare and Eldercare**
- **Logistics and Transportation**

To support these and related career areas, **Georgia's Centers of Innovation** provide unique, technology-oriented support to businesses and entrepreneurs in the areas of aerospace, agribusiness, energy, life sciences, logistics, and advanced manufacturing. Each of the six centers provides direct access to university and technical college applied research, commercialization resources, technology connections, matching grant funds, potential investor networks and government organization. Client companies are connected with industry-specific experts who are on the leading edge of technology and new ideas. A common goal across all of the centers is to cut red tape, streamline connections and seek technology solutions to industry-lead challenges. Within this framework, the centers create a pro-growth, innovative business environment for industries critical to Georgia's economic expansion.

Many of the Career Pathways of CTAE were developed to provide solid educational foundations for Georgia students to enter these fields.

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



Georgia Work Ready is a partnership between the State of Georgia and the Georgia Chamber of Commerce. The partnership works to improve job training for Georgia's workforce. 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.

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

To ensure that each of the CTAE programs prepares students for high-skill, high-wage, or high demand occupations, the Georgia Department of Education is implementing processes and procedures to determine that CTAE programs are directly aligned to current or emerging occupations leading to economic self-sufficiency to support the Georgia economy.

Programs/Initiatives of the CTAE

- 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

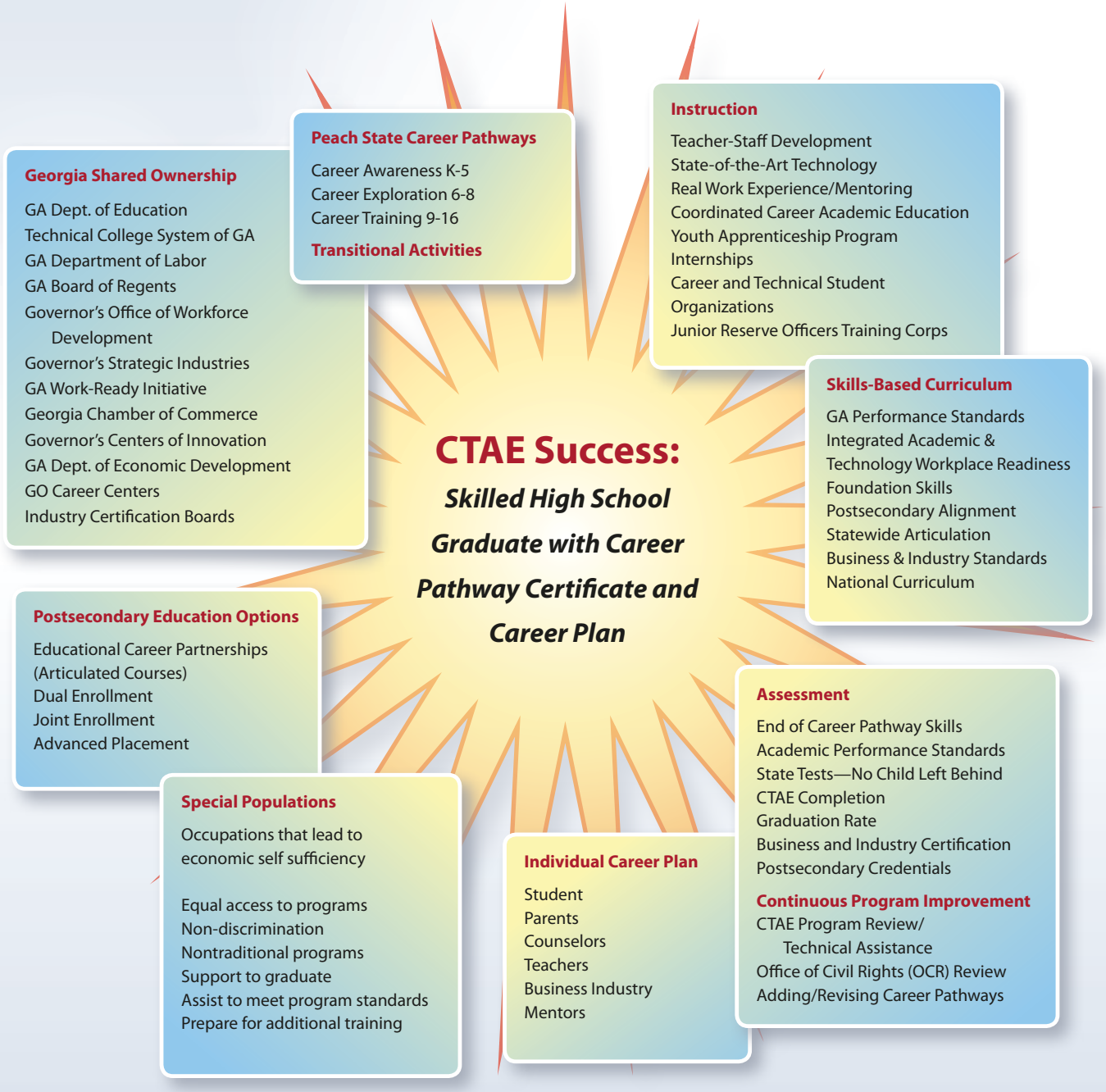
We will lead the nation in improving student achievement.

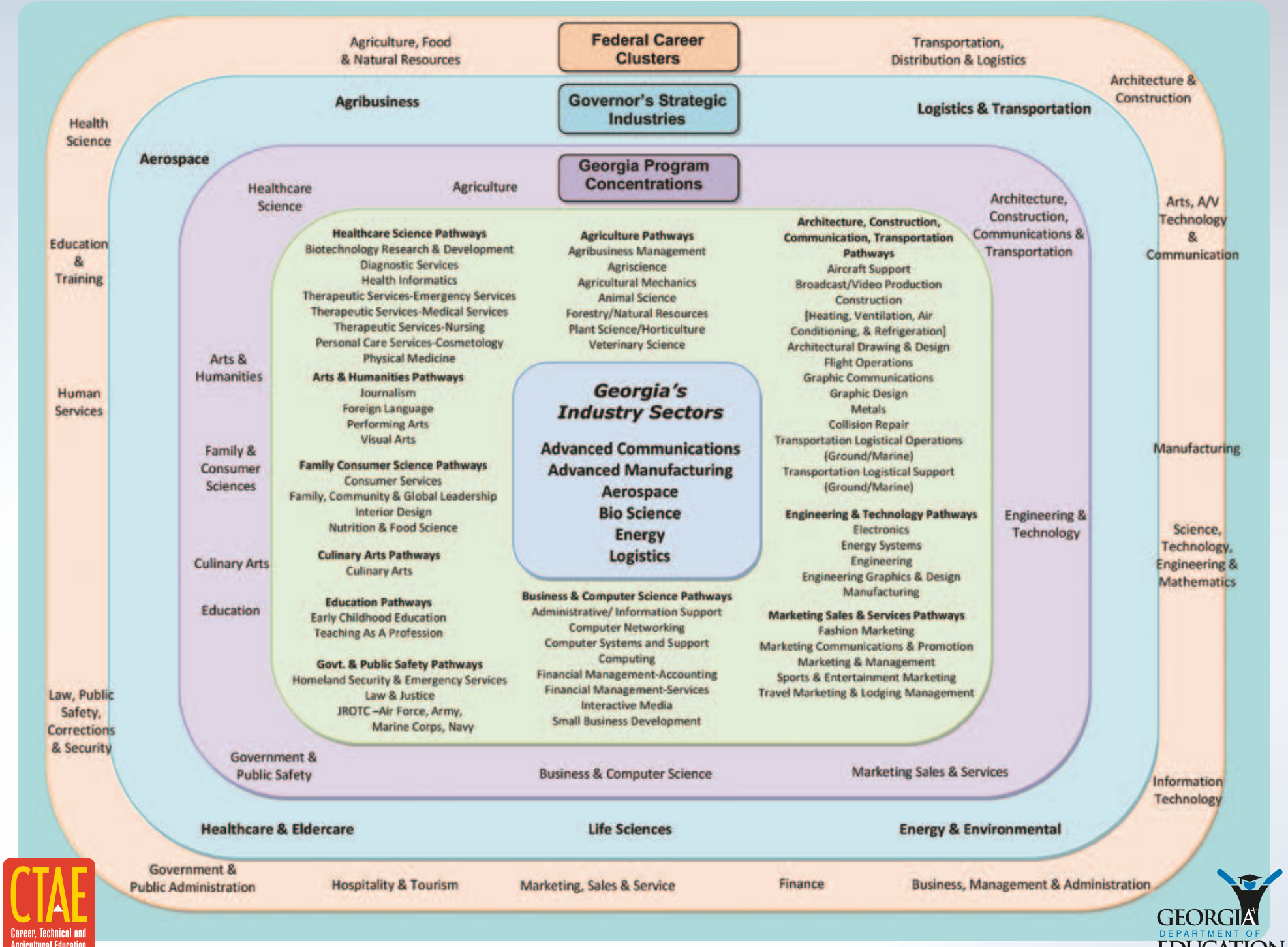
Georgia CTAE – Future Directions

As the dynamic Georgia economy changes and expands, the Georgia Department of Education CTAE program 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 2009 and beyond CTAE has identified several areas for special 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 and Healthcare Science.
- **Industry Certification** will be expanded to include additional Career Pathways.
- **Mini-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.





CTAE Career, Technical and Agricultural Education

GEORGIA DEPARTMENT OF EDUCATION

CTAE

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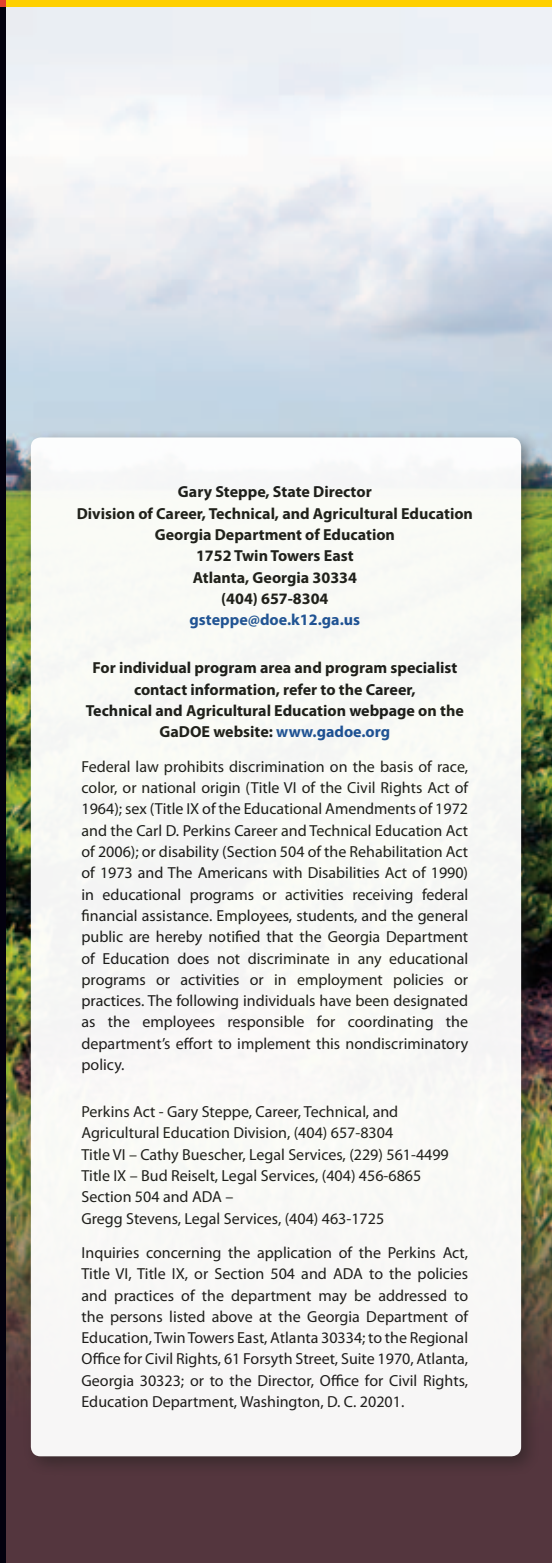

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