

Association for Career and Technical Education Association for Career and Technical Education

CTE Works! 2013 Results from a National Survey



Association for Career and Technical Education

This research brief was created through a joint effort between My College Options[®] and the Association for Career and Technical Education (ACTE) to examine the state of Career and Technical Education (CTE) in our nation's high schools. Students and educators were asked to share their attitudes and opinions on CTE, their experiences in the CTE classroom, and their future plans regarding CTE courses and programs.

ACTE is the largest national education association dedicated to the advancement of education that prepares youth and adults for careers. ACTE's core purpose is to provide leadership in developing an educated, prepared, adaptable and competitive workforce. To that end, ACTE is committed to enhancing the job performance and satisfaction of its members; to increasing public awareness and appreciation for career and technical programs; and to assuring growth in local, state and federal funding for these programs by communicating and working with legislators and government leaders.

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Student Findings:

45% of students taking CTE courses say they are provided with the chance to work as a team and interact with employers and community leaders.

2/3 of CTE students believe they are learning skills to help them get jobs in the future.

1/2 of students in planning to pursue careers related to the CTE areas they are studying, particularly in Engineering.

45% of CTE students planning to attend college within a year of high school graduation will also be entering the workforce, which can help defray the costs of postsecondary education.

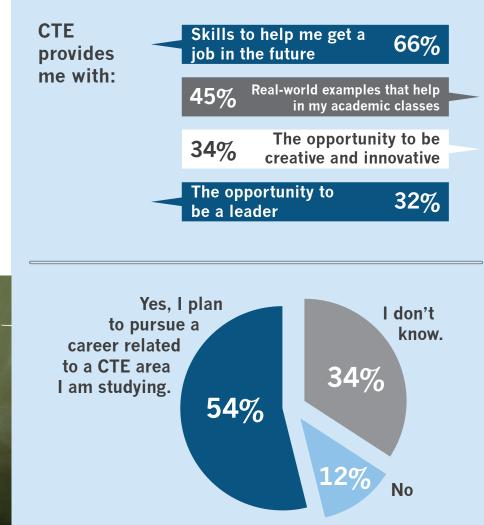


CAREER SKILLS & COLLEGE PLANS

CTE STUDENTS BENEFIT FROM DEVELOPING COLLEGE- AND CAREER-READY SKILLS AND PLAN TO PURSUE POSTSECONDARY EDUCATION.

Students were asked to identify the benefits and opportunities provided by their CTE classes, and they indicated a variety of benefits, including job skills and teamwork and leadership opportunities. Students were also asked whether they are planning to pursue a career related to the Career and Technical Education areas that they are currently studying in high school, and many students responded positively. While the majority of students plan to attend college within one year of graduation, nearly half of students also plan to enter the workforce.

STUDENTS ARE LEARNING VALUABLE CAREER SKILLS FOR THE FUTURE



ALIGNMENT WITH BUSINESS & INDUSTRY

CTE PROGRAMS FACILITATE EDUCATION AND BUSINESS WORKING TOGETHER TO EQUIP STUDENTS WITH SKILLS FOR CAREER SUCCESS.

When asked how they work with business/industry leaders in their CTE programs, nearly three-quarters of educators report that business leaders serve on program advisory committees, and many educators say they visit classrooms to speak to students. Nearly all educators report at least partially integrating CTE programming with core subject courses, with one-third of educators indicating formal, school-wide integration of CTE and core subjects.

CTE EDUCATORS WORK WITH BUSINESS/INDUSTRY LEADERS IN MANY DIFFERENT WAYS



Educator Findings:

3/4 of CTE educators say business and industry leaders serve on program advisory committees, 60% say they visit CTE classrooms, and 29% say they validate course/program standards.

46% of CTE educators say business and industry leaders provide their students with job shadowing experiences, and 33% say they provide internships.

95% of educators report integrating CTE with core courses, providing the technical, academic, and employability skills that employers need.

MOTIVATION & ACHIEVEMENT IN HIGH-SKILL FIELDS

Student Findings:

2/3^{of students say the} #1 motivation for taking CTE courses is to help them prepare for their lives after high school.

1/2 of students say they are taking CTE courses to learn new skills, and one-third say they are taking CTE to improve their existing skills.

85% of CTE students an "A" or "B" grade point average, and high achieving students are more likely to say that CTE has helped them a great deal in other courses.

Students interested in Science majors/careers are significantly more likely to say CTE courses provide them with higher levels of reading and writing skills.

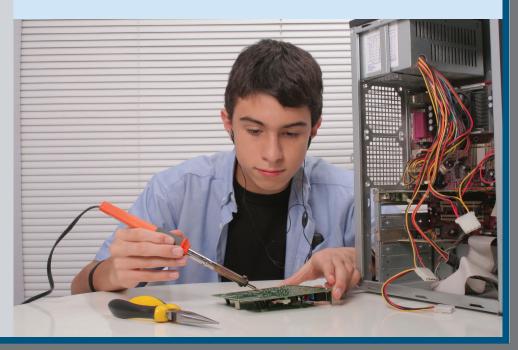
Students interested in Engineering majors/careers are more likely to say CTE provides them with higher levels of mathematics skills.

CTE STUDENTS ACHIEVE ACADEMICALLY AND ARE MOTIVATED TO PURSUE HIGH-SKILL, HIGH-DEMAND FIELDS.

While some students have many different reasons for studying CTE, most students indicate they are taking CTE courses to prepare for life after high school or to learn new skills. Around one-third of students say they are taking CTE to learn about specific careers, and another third say they want to improve their existing skills. Students particularly see the benefits of CTE in improving not just technical skills but also skills such as reading and writing for use in Science careers and mathematics for use in Engineering careers.

TOP REASONS FOR TAKING CTE COURSES

	prepare for life er high school
	learn w skills
34% say	To learn more about a specific career
34% say	To improve existing skills
30% say	To explore different careers

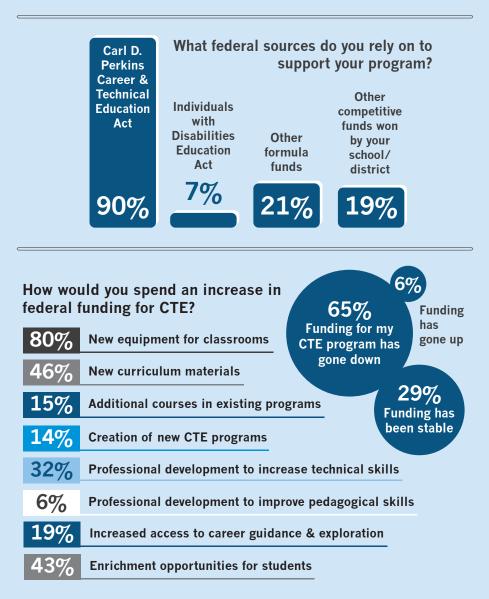


FUNDING & SUPPORT

CTE PROGRAMS ARE VITAL TO AMERICAN ECONOMIC COMPETITIVENESS, YET FUNDING REMAINS A CHALLENGE.

The majority of educators report that they rely on Perkins Act funding for their CTE programs, and nearly two-thirds of educators say that funding for their programs has decreased in recent years. When asked how they would use an increase in federal funding for their programs, most educators indicated they would purchase new equipment for their CTE classrooms which reflects a need to keep current and relevant to workplace needs. New curriculum materials and enrichment opportunities were also high on educators' lists.

FEDERAL FUNDING IS A CRITICAL ISSUE FOR CAREER & TECHNICAL EDUCATION PROGRAMS



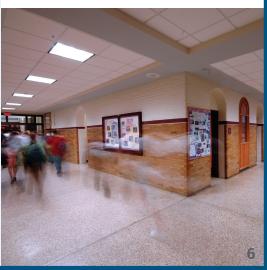
Educator Findings:

9 out of 10 educators in CTE classrooms rely on the Carl D. Perkins Career & Technical Education Act to support their programs.

65% of CTE educators funding has decreased in recent years, 29% say it has remained stable, and 6% report an increase.

80% of educators say they need an increase in federal funding for new equipment in their CTE classrooms.

Educators in low income high schools are twice as likely to say they need enrichment opportunities for students, career guidance activities, and new CTE programs in their schools.



Research Methodology

The Association for Career and Technical Education research, conducted by NRCCUA, was constructed using the results of paper surveys administered in high schools nationally. The ACTE student survey and educator questionnaire were designed by ACTE and NRCCUA, and administered by NRCCUA. The data analysis and presentation were conducted by NRCCUA. In the fall of 2012, the ACTE survey was mailed to educators across the nation. These educators were asked to distribute the survey to their students, as well as complete an ACTE educator questionnaire.

Sampling Error

The margin of error and the confidence interval below are a measurement of how well the ACTE survey results represent the entire student community. For example, in theory, one could say that if we performed the survey 100 times, the results for each respondent would fall within the margin of error above or below the percentage reported 99 out of 100 times.

Respondent Group	All students
Sample	
Estimated Population	
Margin of Error (MOE-99%)	

Nonsampling Error

It is possible that question wording and logistical difficulties in conducting surveys can introduce error or bias into the findings, in addition to that caused by non-response and sampling error.

Demographic Weights

When appropriate, demographic weights were created and applied to the data to reduce the effects of survey sampling and response bias. Weights were calculated for graduation year, ethnicity and state using the high school graduate projections from the Western Interstate Commission for Higher Education (WICHE).



Sample Demographics

Students

of Student Respondents......58,179

Gender

Male	.52.1%
Female	.47.9%

Ethnicity

American Indian	2.0%
Asian	2.9%
African-American	13.0%
Hispanic	13.5%
Middle Eastern	
White	46.1%
Other/Multiracial	14.4%
Prefer not to respond	7.6%

Graduation Year

2013	
2014	
2015	
2016	

Grade Point Average

A	
В	
С	
<c< td=""><td>1.3%</td></c<>	1.3%

Educators

# c	of	Educator	Respondents	.1,014
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Member

ACTE	Members	48.6%
Non-M	lembers	51.4%

Community

Rural	.50.1%
Suburban	.28.9%
Urban	.21.0%

School Type

Public	99.1%
Private	0.9%

ABOUT MY COLLEGE OPTIONS®

For 40 years, the National Research Center for College & University Admissions[™] has been gathering information on student and educator attitudes and interests. Every year, 2.5 million high school students in over 95% of the public and private high schools in the country participate.

NRCCUA[®] operates the nation's largest college planning program, My College Options, which directly benefits participating students, families and educators by providing them with comprehensive resources on colleges and universities, the college search and admissions processes, financial aid and scholarship programs, and more.

Through our research partnerships, we seek to assist the educational community in every way possible. Our research partners are able to reach millions of students and thousands of educators through our extensive reach and relationships with administrators, educators and students.

Thank you for your support and partnership in connecting our nation's youth with educational opportunities. We hope that the data gathered will be of significant value to your organization. For more information about this report and our research programs, please visit: www.nrccua.org/research.

RESEARCH ADVISORY BOARD

The My College Options Research Advisory Board assists the research efforts of NRCCUA and its partners by periodically reviewing our survey instrument, data collection and reporting methods to increase quality and value, and ensure our findings are aligned with current education research best practices.

Each member of the Board offers a unique perspective on educational issues, including college access for underrepresented students and minority programs, national education leadership and higher education administration, and the development of human service policy initiatives.

Dr. Nicole Francis President & CEO Visionary Policy Institute Dr. Steven M. LaNasa President Donnelly College

James M. Rubillo Former Executive Director National Council of Teachers of Mathematics



Career and Technical Planning Profile ALL ITEMS IN BOX ARE REQUIRED FOR PROCESSING.

Association for Career and Technical Education
ACTE)

	EASE PRINT CLEARLY WITH A NO. 2 PENCIL OR BLACK OR BLUE INK <u>ONLY! COMPLETELY</u> FILL IN CIRCLES.
Fin	st Last Name
Ho	me
	dress
Ci	y State Zip
	nail
Yo	bur High School Name
	Birth Date Gender High School Graduation Year What is your grade average? Scale:
	Male 2013 2015 2017 A B C C=2, D=1, C=2, D=1, month day year Female 2014 2016 2018 A B C C=2, D=1, Failing=0
L	
	me Cell Cell Phone
	rent Parent Last Name
1 11	YOUR ACTIVITIES AND POST-SECONDARY PLANS
1.	What are your college/career plans within one year after graduation? (Darken as many as apply)
	A. O Go on to a 4-year college or university C. O Go on to a technical/career college E. O Enter the workforce (I have secured a job.) G. O Enter the military B. O Go on to a community college D. O Pursue an apprenticeship F. O Enter the workforce (I will be looking for a job.) H. O I will not graduate.
2.	Are you planning to pursue a career related to one of the career and technical areas you are studying? (Darken ONE)
	A. O Yes B. O No C. O I don't know.
3.	Why are you taking career and technical education courses? (Darken as many as apply) A. O To prepare for life after high school C. O To improve existing skills E. O To learn more about a specific career G. O To fulfill an elective
	B. O To learn new skills D. O To explore different careers F. O To better understand my academic classes
4.	My career and technical education coursework provides me with: (Darken as many as apply) A. O Real-world examples that help me better understand D. O Higher levels of reading and writing skills H. O The chance to work as part of a team
	my academic classes E. O The opportunity to be creative and innovative I. O The opportunity to interact with employers
	B. O Higher levels of math skills F. O The ability to look at and solve complicated problems and community leaders C. O Higher levels of science skills G. O The opportunity to be a leader J. O Skills to help me get a job in the future
5.	If costs were not a factor, which categories of college would you like to attend? (Darken as many as apply)
6	A. O Private College/University B. O State College/University C. O Community/Junior College D. O Vocational/Technical School
6.	Specialized schools and colleges offer degree programs in selected professional areas. Which categories of college would you like to attend? (Darken up to THREE)
	A. O Architectural College G. O College of Education M. O College of Mathematics R. O School of Psychology/Sociology B. O Art/Design College H. O Engineering College N. O Medical School S. O College of Science
	C. O Bible College I. O School of Forestry/Environmental Studies O. O Military Academy/College T. O Institute of Technology D. O School of Business J. O General/Liberal Arts College P. O Music College/Conservatory U. O Theatra Arts College
	E. O School of Communications K. O School of Journalism Q. O Nursing College V. O Other/Undecided F. O Culinary School L. O Law School Lo Law School
7	Have either of your parents attended college? A. O Yes B. O No
8.	Please identify the types of high school courses you are currently taking. (Darken as many as apply)
0.	A. O Advanced Placement (AP) C. Honors Programs E. O ther Advanced Programs G. General College Prep B. International Baccalaureate (IB) D. Gifted/Accelerated Programs F. College-Credit Courses H. Vocational
9.	Which of the following VARSITY SPORTS are you most likely to participate in while attending college? (Darken as many as apply)
	A. O Baseball E. O Crew/Rowing I. O Football M. O Ice Hockey Q. O Softball U. O Volleyball B. O Basketball F. O Cross Country J. O Golf N. O Lacrosse R. O Swimming/Diving V. O Wrestling
	C. O Bowling G. O Cycling K. O Gymnastics O. O Rodeo S. O Tennis W. O Other Athletics D. O Cheerleading/Dance Team H. O Field Hockey L. O Horsemanship P. O Soccer T. O Track & Field
10.	Which of the following ACTIVITIES are you most likely to participate in while attending college? (Darken as many as apply)
	A. O Academic/Honors Club F. O Church/Religious K. O Fraternity/Sorority P. O Math/Science Club U. O Peer Mentoring/Tutoring B. O Art/Design G. O Community Serv/Volunteer L. O Hunting/Fishing Q. O Military/ROTC V. O Student Government
	C. O Band/Orchestra H. O Debate/Forensics M. O Intramural/Club Sports R. O Newspaper/TV/Radio W. O Study Abroad
	D. O Business/Entrepreneur I. O Drama/Theatre N. O Language Club S. O Outdoor Adventure/Rec X. O Writing/Publications E. O Choir J. O Environmental Club O. O Leadership T. O Outdoor Winter Sports

OVER PLEASE ACTE-13 9

11.	Please choose TWO occupational are	as that BEST fit your n	major int	erests or fu	uture ca	reer pa	ath. (Da	rken T	WO)				
	1. O Accounting/Finance 2	0. O Computer/Information S	Sciences		Financial							lealth Care	
		1. ○ Cosmetology 2. ○ Criminal Justice/Law En	forcement		 Foreign L Forestry/ 						harmacy hilosoph		
	- 0	3. O Culinary/Chef	norocinent		Game De			ber				ohy/Video/F	ilm
	5. O Agricultural Sciences 2	4. O Dance/Choreography		43. 〇	Golf Cou	rse Desi	gn/Manag		62	2. O P	hysical E	Education/R	
		5. O Dental Health			Graphic /		0					Therapy	
		6. ○ Drama/Theatre Arts 7. ○ Electronic Technician			 History/A Hospitalit 			ment				overnment	Science
		8. O Energy Technology		-	HVAC (h		-			-		gy/Psychiat	
		9. O Engineering (Chemical)			Interior D	•						/linistry/The	eology
		 O Engineering (Civil) C Engineering (Computer))		 Journalis Lawyer/L 		vices			$B \cap S$		ork/Human	Services
		2. O Engineering (Electrical/E			Marine B		1003			_		Developer	00111003
	14. O Business (International) 3	3. O Engineering (General)		52. 〇	Massage	Therapy						anagement	
		 4. ○ Engineering (Mechanica 5. ○ English/Writing 	al)		Mathema Medical F						ports Me	edicine Education	
		6. O Environmental Studies		55. O	Medical 1	Technolo	ypo				ravel/To		
	18. O Christian Services/Missionary 3	7. O Equine Studies		56. 🔿	Military S		0,			-		/ Medicine	
	19. O Communications/Public Relations 3	8. O Fashion Merchandising		57. ()	Music				76	6. O U	ndecide	d/Other	
12	Build Your Ideal College: Please dar	on all characteristics (that you	are looking	n for in v	vour id	امعا دما	logo (F	Jarko	1 26 N	nanv a	e annly)	
12.		Small (under 3,000 students)	-	G. O Ethnica				- · ·			iany a	s appiy)	
		Medium (3,001 to 10,000 students)		H. O Ethnica			O Do						
	C. O In a small town F. C	Large (over 10,000 students)		I. O Historic	ally black								
13.	Part I: Would you like to receive infor	mation on any of the fo		J. O Tribal	tions? (I. O Fai						
15.	-	Military Academy/College		 National G 		Darker		⊃ No mil					
		Military Reserves		O Other milit			0. (itory in	01000			
	Part II: Which military service would	you prefer? (Darken as	a many a	s apply)									
	A. O Air Force B. O Army	C. O Coast Guard		D. O Marine	es	Е. С) Navy						
14.	If you are interested in attending a de	nominational/church-re	elated c	ollege, whic	ch TWO	would	l you cl	100se?	(Darl	ken up	to TV	VO)	
		Bible		Church of God		P. O .					zarene		
		Catholic Chariamatia/Deptendental		Disciples of Chr		_	D.S./Mo _utheran	rmon		_	esbyteria	in inational	
		Charismatic/Pentecostal Church of Christ	M. O E N. O E	Evangelical			Mennonite	9		-		stian Denon	nination
		Church of Christ (United)		riends/Quaker		T. O I	Methodist		Υ.	O No	ne of the	e above	
15.	What kind of social behavior rules wo	ould you PREFER on a	college	campus? (I	Darken (ONE)							
	A. O Conservative: Separate male/female living	g arrangements. No drinking, s	smoking, or	r drugs on or of									
	 B. O Moderate: Observing reasonable limits ar C. O Liberal: Observing minimal campus regula 		ior on or of	f campus.									
46	- · · ·		hla ta ati	udanta haa			6	-	huia k	- ale		-	
16.	Scholarship, grant, loan, and incentiv Indicate your background by selectin							al or et	nnici	аскд	rouna	5.	
	A. O American Indian/Alaskan Native	C. O Black/African-Am			Middle E)	G. ()	Other				
	B. O Asian/Asian-American/Pacific Islander	D. O Latino/Hispanic/C			White/Ca			H. ()		not to r	espond		
17.	Which of the following types of inform	ation and materials wo	uld vou	like to recei	ive to he	uov ale	prepar	e for vo	our fu	ure?	(Darke	en as mai	nv as applv)
			-	entoring/Motiva				Study Sk			Test P		 Tutoring
18.	What are the top three states in whicl	n vou would consider a	attending	a colleae?					1		_		
	(Use two letter state abbreviations)	,		5 5	1.		2.		3.				Науа уси
19.	If you could attend college today, whi	ich would be vour top o	choices	? (List up to	FIVE)								Have you visited this
	Spell out full college name and the abbreviation of					VIV)						State	college?
													Yes
	1.								_				
	2.												Yes
													Yes
	3.												
	4.										_		Yes
	5.										—		Yes
20.		w how colleges and unit	iversities	match my	nrofile				_				
20.		w now coneges and an	IVEISILIES	sinaton my	prome.				_	_			
	Email Address												
	ear Student: We've entrusted My College Options® to												
volu	pluntary survey and research project is the informatio ducational products & services such as student loans	n you and your family will rece	eive from c	olleges and un	iversities.	In some	cases, y	ou and yo	our fam	ly may	also rec	eive inform	ation about
mili	ilitary opportunities, and camps, provided by non-pro-	fit organizations, companies of	ffering educ	cational produc									
I info	formation with commercial marketers offering to sell y	ou non-education-related proc	ducts and s	services.									

Comments:
1144G4D60
(*required to receive report) Estimated school start date in Fall, 2013:
Email:
School Phone Number: ()
City:State:Zip:
Street Address:
School:
Position/Title:
Name:
Please provide any updates to the information below:
 An emailed copy of my personalized report of student responses for my school *Please provide your email address in the update information section to receive your report.
 O Information about the Association for Career and Technical Education (ACTE)
O Additional planning profiles for my students: (number)
Please send me:
ACTE Education Educator & Technical Educator Questionnaire Complete and return with students' surveys.

will not be associated with your questionnaire in any way. Thank you. Your responses to these questions will be used for research purposes only. Your contact information

- . ` This semester I have been assigned to teach the following number of **students: (Darken ONE)** A. O 1-50 B. O 51-100 C. O 101-150 0 O 151+
- Ņ How long have you been teaching? (Darken ONE) A. O 0-5 years B. O 6-10 years C. O 11-15 years D. O 16-20 years E. O 21-25 years F. O 26-30 years Ģ O 31+ years

- ω. If your CTE program received an increase in federal funding, how would you
- choose to spend the money? (Darken top THREE)
- œ Þ O New equipment for CTE classrooms
- O New curriculum materials for CTE classrooms
- O Additional courses in existing CTE programs Creation of new CTE programs in your school

D. 0

- O Professional development to increase your technical skills
- O Professional development to improve your pedagogical skills
- O Increased access for students to career guidance and exploration activities
- O Enrichment opportunities for students (career and technical student organizations, work-based learning activities, development of secondary-postsecondary articulation agreements, etc.)
- What federal sources do you rely on to support your program? (Darken as many as apply)

4

Ω <u>∓</u>

- Þ œ O Carl D. Perkins Career and Technical Education Act
- O No Child Left Behind (Elementary and Secondary Education Act
- <u>0</u> O Individuals with Disabilities Education Act
- D. O Other formula funds
 E. O Other competitive funds won by your school/district

ġ How would you rate the support of career and technical education by your

- ₽ school's principal or administrator? (Darken ONE) O Generally positive
- B. O Somewhat positive C. O Somewhat negative D. O Generally negative
- Are you a member of ACTE? (Darken ONE)

൭

- A. O Yes B. O No, but I am aware of the organization. C. O No, I am not aware of the organization.
- Describe the level of integration between career and technical classes and core

2

- subject classes in your school/district. (Darken ONE)
- A. O Systemic/Formal School-wide integration
- ņ B. O Informal - I include core subject concepts in my class O None
- œ In what type(s) of career and technical education professional development have you participated in within the last 12 months? (Darken as many as apply)
- A. O Academic and CTE integration
- Ē O Analysis and uses of assessments and data
- 0 O Course content and knowledge
- 0 O CTE linkages to state content standards
- O Differentiated instruction/special population
- O Education and pedagogical skills
- Ģ 0 O Improving parental/community involvement Non-traditional fields
- Ŧ 0 Research based effective teaching practices
- <u>ب</u> O Staying current with industry methods and needs
- How do you work with business and industry leaders in your program?
- (Darken as many as apply)

<u>ە</u>

- A. O I don't work with them.
- μ O They serve on a program advisory committee
- о q m m
 - O They have validated my course/program standards and curriculum

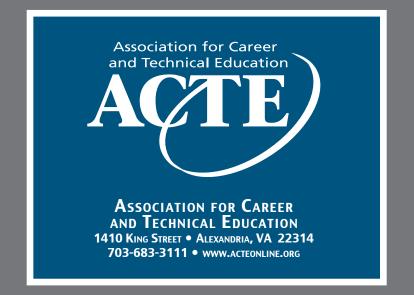
 - O They visit my classroom to speak to students.
- O They provide job shadowing experiences for my students
- O They provide internships to my students.
- G. U They donate equipment and/or supplies for my program.
- Has funding specifically for your program changed in recent years? (Darken ONE)

i

- A. O Yes, it has gone up. B. O Yes, it has gone down. C. O No, it has been stable
- \$
- How would you rate the image of career and technical education at
- your school? (Darken ONE)
- A. O Generally positiveB. O Somewhat positive C. O Somewhat negative D. O Generally negative
- <u>1</u>2 How would you rate the equipment and resources available to you in your
- A. O Very good career and technical education classes? (Darken ONE) B. O Good D. O Poor
- C. O Average E. O Very poor

EQACTE

11



Research for the Future

Prepared by the National Research Center for College and University Admissions[™] (NRCCUA®), a non-profit educational research organization. NRCCUA operates the nation's largest college and career planning program, My College Options[®].