CTE Works! 2013 Results from a National Survey
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.
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 CTE courses are planning to pursue careers related to the CTE areas they are studying, particularly in Engineering.

45% of CTE students who are 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.

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

- Skills to help me get a job in the future: 66%
- Real-world examples that help in my academic classes: 45%
- The opportunity to be creative and innovative: 34%
- The opportunity to be a leader: 32%

Yes, I plan to pursue a career related to a CTE area I am studying. 54%
I don’t know. 34%
No 12%
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.
Top Reasons for Taking CTE Courses

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>To prepare for life after high school</td>
<td>63%</td>
</tr>
<tr>
<td>To learn new skills</td>
<td>57%</td>
</tr>
<tr>
<td>To learn more about a specific career</td>
<td>34%</td>
</tr>
<tr>
<td>To improve existing skills</td>
<td>34%</td>
</tr>
<tr>
<td>To explore different careers</td>
<td>30%</td>
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Motivation & Achievement in High-Skill Fields

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.

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 report having 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.
**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.

**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 report their 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.

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**Federal Funding is a Critical Issue for Career & Technical Education Programs**

What federal sources do you rely on to support your program?

- **Carl D. Perkins Career & Technical Education Act**: 90%
- **Individuals with Disabilities Education Act**: 7%
- **Other competitive funds won by your school/district**: 19%
- **Other formula funds**: 21%

How would you spend an increase in federal funding for CTE?

- **80%** New equipment for classrooms
- **46%** New curriculum materials
- **15%** Additional courses in existing programs
- **14%** Creation of new CTE programs
- **32%** Professional development to increase technical skills
- **6%** Professional development to improve pedagogical skills
- **19%** Increased access to career guidance & exploration
- **43%** Enrichment opportunities for students

65% Funding for my CTE program has gone down

6% Funding has gone up

29% Funding has been stable
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: 58,179
Estimated Population: 12,949,193
Margin of Error (MOE-99%): +/− 0.53%

**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).
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
11. Please choose TWO occupational areas that BEST fit your major interests or future career path. (Darken TWO)

1. Accounting/Finance  
2. Advertising/Marketing  
3. Aeronautics/Flight Training  
4. Aerospace Technology  
5. Agricultural Sciences  
6. Animation/Multimedia  
7. Architecture  
8. Art  
9. Athletics/Coaching  
10. Aviation/Airline Industry  
11. Biology  
12. Broadcasting/Radio/TV  
13. Business  
14. Business (International)  
15. Business Owner/Entrepreneur  
16. Chemistry  
17. Child Care/Development  
18. Christian Services/Missionary  
19. Communications/Public Relations  
20. Computer/Information Sciences  
21. Cosmetology  
22. Criminal Justice/Law Enforcement  
23. Culinary/Chef  
24. Dance/Choreography  
25. Dental Health  
26. Drama/Theatre Arts  
27. Electronic Technician  
28. Energy Technology  
29. Engineering (Chemical)  
30. Engineering (Civil)  
31. Engineering (Computer)  
32. Engineering (Electrical/Electronic)  
33. Engineering (General)  
34. Engineering (Mechanical)  
35. English/Writing  
36. Environmental Studies  
37. Equine Studies  
38. Fashion Merchandising  
39. Financial Services  
40. Foreign Language  
41. Forestry/Conservation  
42. Game Design and Developer  
43. Golf Course Design/Management  
44. Graphic Arts/Design  
45. History/Archaeology  
46. Hospitality/Resort Management  
47. HVAC (heating and cooling)  
48. Interior Design  
49. Journalism  
50. Lawyer/Legal Services  
51. Marine Biology  
52. Massage Therapy  
53. Mathematics/Statistics  
54. Medical Physician  
55. Medical Technology  
56. Military Science  
57. Music  
58. Nursing/Health Care  
59. Pharmacy  
60. Philosophy  
61. Photography/Video/Film  
62. Physical Education/Recreation  
63. Physical Therapy  
64. Physics  
65. Politics/Government Science  
66. Psychology/Psychiatry  
67. Religion/Ministry/Theology  
68. Science  
69. Social Work/Human Services  
70. Software Developer  
71. Sports Management  
72. Sports Medicine  
73. Teaching/Education  
74. Travel/Tourism  
75. Veterinary Medicine  
76. Undecided/Other

12. Build Your Ideal College: Please darken all characteristics that you are looking for in your ideal college. (Darken as many as apply)

Part I: Would you like to receive information on any of the following military options? (Darken as many as apply)

A.        Air Force  
B.        Army  
C.        Coast Guard  
D.        Marines  
E.        Navy

Part II: Which military service would you prefer? (Darken as many as apply)

A.        Enlist after high school  
B.        College-Based ROTC  
C.        Military Academy/College  
D.        Military Reserves  
E.        Other military plans

14. If you are interested in attending a denominational/church-related college, which TWO would you choose? (Darken up to TWO)

A.        Adventist  
B.        African Methodist Episcopal  
C.        Assemblies of God  
D.        Baptist  
E.        Baptist (Southern)  
F.        Bible  
G.        Church of God  
H.        Disciples of Christ  
I.        Episcopal  
J.        Friends/Quaker  
K.        Jehovah's Witness  
L.        Lutheran  
M.        Mennonite  
N.        Methodist  
O.        Medicare/United  
P.        Mormon  
Q.        Missouri  
R.        Nazarene  
S.        Nondenominational  
T.        Other Christian Denomination

15. Which of the following types of information and materials would you like to receive to help you prepare for your future? (Darken as many as apply)

A.        Accounting/Finance  
B.        Advertising/Marketing  
C.        Aeronautics/Flight Training  
D.        Aerospace Technology  
E.        Agricultural Sciences  
F.        Animation/Multimedia  
G.        Architecture  
H.        Art  
I.        Athletics/Coaching  
J.        Aviation/Airline Industry  
K.        Biology  
L.        Broadcasting/Radio/TV  
M.        Business  
N.        Business (International)  
O.        Business Owner/Entrepreneur  
P.        Chemistry  
Q.        Child Care/Development  
R.        Christian Services/Missionary  
S.        Communications/Public Relations  
T.        Computer/Information Sciences  
U.        Cosmetology  
V.        Criminal Justice/Law Enforcement  
W.        Culinary/Chef  
X.        Dance/Choreography  
Y.        Dental Health  
Z.        Drama/Theatre Arts  
AA.       Electronic Technician  
AB.       Energy Technology  
AC.       Engineering (Chemical)  
AD.       Engineering (Civil)  
AE.       Engineering (Computer)  
AF.       Engineering (Electrical/Electronic)  
AG.       Engineering (General)  
AH.       Engineering (Mechanical)  
AI.       English/Writing  
AJ.       Environmental Studies  
AK.       Equine Studies  
AL.       Fashion Merchandising  
AM.       Financial Services  
AN.       Foreign Language  
AO.       Forestry/Conservation  
AP.       Game Design and Developer  
AQ.       Golf Course Design/Management  
AR.       Graphic Arts/Design  
AS.       History/Archaeology  
AT.       Hospitality/Resort Management  
AU.       HVAC (heating and cooling)  
AV.       Interior Design  
AW.       Journalism  
AX.       Lawyer/Legal Services  
AY.       Marine Biology  
AZ.       Massage Therapy  
BA.       Mathematics/Statistics  
BB.       Medical Physician  
BC.       Medical Technology  
BD.       Military Science  
BE.       Music  
BF.       Nursing/Health Care  
BG.       Pharmacy  
BH.       Philosophy  
BI.       Photography/Video/Film  
BJ.       Physical Education/Recreation  
BK.       Physical Therapy  
BL.       Physics  
BM.       Politics/Government Science  
BN.       Psychology/Psychiatry  
BO.       Religion/Ministry/Theology  
BP.       Science  
BQ.       Social Work/Human Services  
BR.       Software Developer  
BS.       Sports Management  
BT.       Sports Medicine  
BU.       Teaching/Education  
BV.       Travel/Tourism  
BW.       Veterinary Medicine

17. Which of the following types of information and materials would you like to receive to help you prepare for your future? (Darken as many as apply)

A. College/Career Information  
B. Financial Aid/Student Loans  
C. Mentoring/Motivational Programs  
D. Study Skills  
E. Test Prep  
F. Tutoring

19. If you could attend college today, which would be your top choices? (List up to FIVE)

1.  
2.  
3.  
4.  
5.  

20. Please email me a report that will show how colleges and universities match my profile.

Email Address
Complete and return with students' surveys.