



Association for Professional Development in Career and Technical Education
A Section of the Division of New and Related Services, Association for Career and Technical Education

A Summary Report on the Fourth Annual Survey: Priorities in CTE Professional Development

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Summary Report

Introduction and Background

The Association for Professional Development in Career and Technical Education (APDCTE) conducted this annual survey as a professional service. The intent behind the conduct of this annual survey activity is to establish longitudinal base line information and, over time, identify trend patterns. Further, it is hoped that the results of these annual surveys will contribute to professional dialogue and serve to influence policy, professional development, and research in the career and technical education priority areas identified.

The original instrument was developed in 2004 and at that time reviewed for content validity by three independent judges. It included 49 topical statements describing possible priorities in career and technical education and space for write-in items. This is the fourth year this survey was conducted. Upon review of the survey returns from the prior three years, it was determined that the same instrument be used in 2007 with only slight modification to reflect current Perkins legislation.

The instrument and transmittal letter were electronically distributed to a national population of state directors of career and technical education with a request for them to complete the survey or to pass it on to an individual in their organization responsible for the coordination of professional development activities for career and technical educators. Respondents were directed to identify up to ten items representing priorities in their individual state. All returned instruments included no more and no less than 10 priority items.

A follow-up electronic distribution of the instrument was sent out one month after the first distribution. It should be noted that the 2007 survey was conducted between the first of October 2007 and the middle of November, 2007. The preliminary report was completed at the end of November 2007. Copies of the transmittal letter and survey instrument are included in Appendix A. This summary report with additional data analysis was completed at the end of April 2008.

The response rate when considering the initial mailing and the follow-up mailing was 53%. This actual rate compares very favorably with the prior years of data collection.

Findings

Descriptive statistics in the form of frequencies, and in the event of ties, assigned ranks were computed. In the case of assigned rank ties, the items are listed in the order in which they were originally listed in the instrument. The top “10” assigned rank order priorities for professional development identified this year are listed in Table 1. A four year comparison (2004, 2005, 2006 and 2007) of the top 10 priorities for Career and Technical education is listed in Table 2. Longitudinal patterns beginning to appear as a result of this survey are displayed in Table 3. Finally, Table 4 displays the composite priorities based on a four year survey extension.

The survey items receiving the highest assigned rank-ordered listing for professional development this year were the same as the items identified in 2004, 2005 and 2006 but in a slightly different order. Survey item 49, “Dual Enrollment/Advanced Standing Programs for Secondary CTE Students” placed in the fifth position in 2007 as compared to number one in each of the other three years. Survey item 8, “Integration of Academic and CTE” placed first in 2007 as compared to second in each of the three years. These two items continue to appear as the top two priorities when considered over the span of four years of annual surveys. Although there was a vast similarity between the top ten items of 2007 compared to those of 2006 the order of placement had slight variability.

In considering the emergence of trends when examining the data collected from the 2004, 2005, 2006, and 2007 surveys two significant patterns became visible. First, four individual items appeared in the top 10 priority needs in each of the four years the survey was conducted. Secondly, three additional individual items appeared in the top 10 priorities in three of the four years the survey was conducted. In all, seven of the items contained in the top 10 survey results collected in 2004 remained as top 10 priorities in subsequent surveys. A consistency and validity of these seven Career and Technical Education Professional Development Needs is beginning to emerge as National Priorities.

Discussion

Since there is no change in the top two priorities in the composite survey results over four years, it is believed that the discussion presented in the Third Annual Survey Report is still of significant value. Therefore, that discussion is included as part of this report but amended with recent updated data to further illustrate the importance of local Career and Technical Education agencies beginning a dialogue of discovery.

An ad-hoc review of the literature on the topic of dual enrollment and the integration of academics into CTE was conducted since these topics dominated the number one and number two positions for four years in a row. The first to be addressed will be the area of dual enrollment. Two reports which were completed within the last two years. One was done by the Community College Research Center, Karp, M, Bailey, T., Hughes, K. & Fermin, B. *State Dual Enrollment Policies: Addressing Access and Quality*. No. 26, April 2005. The other was done by the U. S. Department of Education, Office of Vocational and Adult Education, *Dual Enrollment: Accelerating the Transition to College*. Issue Papers, 2005. A listing of national dual enrollment characteristics has been synthesized from these two sources and presented in Table 5. Table 6 presents an updated vision based on the report *The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Outcomes in Two States* also conducted by the Community College Research Center 2007.

From an examination of table 5, it is easy to conclude there is great variation in the form and structure that dual enrollment takes throughout the nation. This variation is to be expected due the relative newness as well as the emerging nature of dual enrollment in many states. It is expected that state-by-state variation will likely remain for some time until the form and function relationship is more clearly defined through trial and error. In table 6 a vision of student outcomes is presented based on results from two states. These results depict a highly positive trend when examining Dual Enrollment student success data.

Although the information in table 5 and the follow-up data reported in table 6 provides a view of the dual enrollment national landscape, it is not as comprehensive as one might hope. Absent in the reporting on dual enrollment is the presence of career and technical education. Due to this, it is reasonable to ask the following dual enrollment questions:

1. Are dual enrollment programs being used primarily to provide support for an academic study?
2. Are career and technical education programs included under the umbrella of dual enrollment?
3. Are there any state or local dual enrollment programs that serve career and technical students that can serve as a model?

Table 6 begins to focus the above three questions, however there are some additional related questions that also may be considered:

1. How will the use of industry skill standards and industry skill certificates impact on articulation agreements between secondary and post-secondary institutions?
2. How will the achievement of industry skill certificates by secondary students be treated by post-secondary institutions?
3. Are there any state or local dual enrollment programs that provide for post-secondary advanced standing based on industry skill certificates that can serve as a model?

Although these and other related questions may not have answers at this time, it is important that they are at least asked. Consideration of these questions may serve to stimulate discussion and yield answers.

The integration of academics and CTE was the second priority area among a field of 49 possibilities surveyed for the last four years. Although this priority came out close to the top once again, it should not be a surprise. This priority, among a pioneer like Gene Bottoms, is not new. It can, at least, be traced back to 1987 when his early efforts with the High School that Works, HSTW, initiative began as a component of the Southern Regional Education Board. The HSTW program has been credited as the first widespread national effort to combine challenging academic courses and a quality career and technical curriculum to enhance the achievement of CTE high school students and may have served as an influence on the integration language of Perkins. Currently, the HSTW program involves more than 1,100 sites in 27 states. The proportion of students in recent HSTW programs meeting their achievement goals as measured on the National Assessment of Educational Progress, NAEP, documents gains in reading and science from about 33% to about 50%. In mathematics, gains increased from about 33% to 61%. Other programs that have demonstrated success in regard to the connection between academics and CTE also deserve some comment.

A recent research and development effort completed in 2005 is the Math-in-CTE project by the National Center for Research in Career and Technical Education under the direction of James Stone, University of Minnesota. Based on a pilot in six states, findings from this project show significant gains in math scores on standardized measures between experimental and control groups. Contributing to this success was the use of a math instructional model that delivered mathematics instruction integrated in a sequence of contextualized CTE content followed by more abstract mathematics. The premise of this model is to de-mystify math through the use of a contextual CTE model and then re-introduce the math in a more theoretical format.

Another research and development project that also utilized CTE in a contextual setting was designed to support the enhancement of CTE student reading skills. Initiated as a pilot through the Center for Professional Development Career and Technical Education, Temple University, this project has expanded to more than 100 Pennsylvania secondary and CTC's, Wichowski & Garnes. Utilizing a combination of pre-reading, during-reading, after-reading as well as writing strategies, these contextual CTE instructional practices have been documented to help the marginal reader gain the skills of the accomplished reader. Score increases in the 12% to 15 % range have been recorded on state standardized tests as a result of these practices.

Individual states and schools are encouraged to use this data (or use the survey instrument – see Appendix A) to facilitate discussions, identify priorities, and develop action plans to guide the achievement of priorities.

The members of the APDCTE executive committee have made a commitment to continue to conduct this survey as an annual activity once again. The 2008 survey will be conducted early in the fall. The preliminary results of the survey will be reported on at the ACTE Annual Convention.

Table 1

2007 Fourth Annual Survey
Top 10 Assigned Rank Order
Professional Development in CTE

<u>Assigned Rank</u>	<u>Survey Item</u>
1.	8. Integration of Academics and CTE
2.	15. School Emergency Plans
3.	20. Student Conflict Resolution
4.	7. CTE Teacher Technical Skill Updating
5.	49. Dual Enrollment/Advanced Standing Programs for Secondary CTE Students
6.5.	12. Career Pathways Program Related Needs
6.5.	35. Recruiting & Retaining CTE Teachers
8.	4. Training on Substance Abuse Topics
9.5.	40. Career Awareness for CTE Students/Parents
9.5.	45. Business & Educational Partnerships

Table 2
Four Year Analysis
Top 10 Priorities for Career and Technical Education

Priority #	2004 Survey	2005 Survey	2006 Survey	2007 Survey
# 1	Dual Enrollment	Dual Enrollment	Dual Enrollment	Integration of Academics
# 2	Integration of Academics	Integration of Academics	Integration of Academics	School Emergency Plans
# 3	Reading Programs	Career Awareness	Career Pathways	Student Conflict Resolution
# 4	Career Clusters	Student Data for Decision Making	Career Clusters	Teacher Technical Skills Updating
# 5	Teacher Technical Skills Updating	Career Pathways	Career Awareness	Dual Enrollment
# 6	CTE Teacher Certification	Career Clusters	Reading Programs	Career Pathways
# 7	Distance Learning	National Skill Standards	Assessment Rubrics	Recruiting and Retaining CTE Teachers
# 8	National Skill Standards	Reading Programs	Small Learning Communities	Training on Substance Abuse
# 9	Curriculum Development	Assessment Rubrics	Student Data for Decision Making	Career Awareness for Parents
# 10	Entrepreneurship Programs	Student Follow-up Surveys	Teacher Technical Skills Updating	Business Education Partnerships
# 12	Career Awareness	Curriculum Development	Curriculum Development	Curriculum Development
# 12		Recruitment and Retention Of CTE Teachers		Use of Skill Standards

Table 3

**Career and Technical Education Priorities
Four Year Analysis
Individual Items Appearing in Top 10 Priorities Each Survey Year
(Four Items Appearing in Top 10 for Four Years)**

<u>Survey Item Description</u>	<u>04 Rank</u>	<u>05 Rank</u>	<u>06 Rank</u>	<u>07 Rank</u>	<u>4 Yr. Average</u>
Dual Enrollment	1	1	1	5	1
Integration of Academics	2	2	2	1	2
Career Clusters	4	6	4	6	5
Career Awareness	10	3	5	9	7

**Individual Items Appearing in Top 10 Priorities for Three of the Survey Years
(Three Items Appearing in Top 10 for Three Years)**

<u>Survey Item Description</u>	<u>04 Rank</u>	<u>05 Rank</u>	<u>06 Rank</u>	<u>07 Rank</u>	<u>4 Yr. Average</u>
Teacher Technical Skills Updating	5	-	10	5	8
Reading Programs for CTE Students	3	8	6	-	6
Curriculum Development	9	10	10	-	10

Table 4

**Four Year Longitudinal Priority Ranking
Top 10 Assigned Rankings
Professional Development in CTE
(Items Appearing in Top 10 Priorities at Least Three Years)**

<u>4 Yr. Composite Rank</u>	<u>Survey Item</u>
1.	Dual Enrollment/Advanced Standing Programs for Secondary CTE Students
2.	Integration of Academic and CTE
3.	Career Clusters
4.	Reading Programs for CTE Students
5.	Career Awareness
6.	Teacher Technical Skills Updating
7.	Curriculum Development

Table 5

Selected National Dual Enrollment Characteristics

40 States have dual enrollment policies or regulations

33 States address tuition payment for dual enrollment courses

33 States have policies that address student eligibility

23 States allow dual enrollment at a HS or college - 4 others specify that it be delivered at a college

17 States mandate that dual enrollment opportunities be provided to students

14 States regulate course content

13 States directly oversee dual enrollment with defined accountability requirements

13 States have varying eligibility guidelines for instructors of dual enrollment courses

10 States provide dual payment to the HS and the college for dual enrollment programs

10 States have legislation to give HS and colleges the option to provide dual enrollment to students but do not actually require dual enrollment delivery

Table 6

***Postsecondary Achievement of Participants in Dual Enrollment Programs**

Upon Examination of Program Outcomes, Data Supported Findings in New York and Florida

Both CTE and non-CTE Students benefit from participation in Dual Enrollment Programs

The most disadvantaged students (males and low SES students) benefit more than others in Dual Enrollment Programs

Students benefit from taking more than one Dual Enrollment course. Programs are best when they span multiple semesters

Dual Enrollment programs are most effective in the area of CTE when they are integrated with Pathways

States may want to reconsider restrictive eligibility requirements

Most successful Dual Enrollment Programs are tuition free for low income students

Implications for Consideration which have Resulted from Emerging Trends

Positive findings indicate that expansion of Dual Enrollment Programs may be warranted – States may want to encourage participation among a broad range of students.

Further study should be conducted to determine if Dual Enrollment can become the reform strategy for CTE and the academic high school.

Student recruitment by Post Secondary institutions needs to be planned early enough to allow students to complete multiple courses in multiple semesters.

Further study should be conducted in other states to confirm the very positive relationship between Dual Enrollment Programs and student outcomes at the Post Secondary level.

**Community College Resource Center 2007 as distributed by the National Research Center for CTE (The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Achievement in Two States)*

APPENDIX A
TRANSMITTAL LETTER
SURVEY INSTRUMENT



Association for Professional Development in Career and Technical Education
A Section of the Division of New and Related Services, Association for Career and Technical Education

September, 2007

Dear State Director:

Re: Fourth Annual National Priorities Survey

The attached two-part survey has been developed by the Association for Professional Development in Career and Technical Education as a vehicle to identify regional and national priorities. Please complete this survey or pass it on to an individual in your organization who is responsible for the coordination of professional development activities for career and technical educators.

This survey will identify current ongoing professional development efforts that have been categorized as priorities. This survey will continue to be conducted annually in order to establish longitudinal base line information and, over time, identify trend patterns. Results of the first survey in 2004 were summarized on pp. 15-17 of the September 2005 issue of the *Techniques* Journal and a follow-up article on the 2005 second-year survey is on p. 8 of the September 2006 edition. ACTE members may access these articles via this link: www.acteonline.org.

Preliminary findings from this survey will be reported at the Association for Career and Technical Education (ACTE) Convention on Friday, December 15, 10:30-11:45 am in Room B403 of the Convention Center. Further, a report on the findings from this survey will be distributed to you as an e-mail file attachment at a later time.

Your cooperation in the completion or the routing of this survey is greatly appreciated. Do not hesitate to contact me if you wish to discuss this or if you have any questions regarding this activity. I can be reached at (215) 204-6199, tgptu@verizon.net, or apdcte@yahoo.com.

Return the completed survey by **October 26, 2007** as a file attachment to Ms. Vivyaine Palmer, vpalmer@temple.edu or FAX to her attention at (215) 204-5154.

Sincerely,

Thomas G. Pivnichny, President
APDCTE

APDCTE

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FOURTH ANNUAL NATIONAL PRIORITIES SURVEY

Part 1- Priorities: Directions, place an “X” or a check in the space to the left of up to 10 items from the list below that you feel are **current priorities** for professional development in your state. You are welcome to add additional items and to offer comments in the space provided.

- | | |
|--|---|
| <input type="checkbox"/> 1. Graduation Follow-up Survey Data | <input type="checkbox"/> 26. Recruiting CTE Administrators |
| <input type="checkbox"/> 2. Determination of Employer Needs | <input type="checkbox"/> 27. Use of National Skill Standards |
| <input type="checkbox"/> 3. Updating of School Safety Programs | <input type="checkbox"/> 28. ISO 9000 School Certification |
| <input type="checkbox"/> 4. Training on Substance Abuse Topics | <input type="checkbox"/> 29. Use of Brain-Based Instruction |
| <input type="checkbox"/> 5. Preparation for NCLB State Testing | <input type="checkbox"/> 30. Curriculum Development/ Revision |
| <input type="checkbox"/> 6. CTE Teacher Certification | <input type="checkbox"/> 31. Cultural, Equity and Diversity Awareness |
| <input type="checkbox"/> 7. CTE Teacher Technical Skill Updating | <input type="checkbox"/> 32. Meeting Multiple-Intelligence Needs |
| <input type="checkbox"/> 8. Integration of Academic and CTE | <input type="checkbox"/> 33. Meeting Learning Styles Needs |
| <input type="checkbox"/> 9. Assessment Rubrics | <input type="checkbox"/> 34. Meeting Emotional-Intelligence Needs |
| <input type="checkbox"/> 10. Tech-Prep Program Related Topics | <input type="checkbox"/> 35. Recruiting & Retaining CTE Teachers |
| <input type="checkbox"/> 11. Limited English Proficiency CTE Student | <input type="checkbox"/> 36. Reading Programs in CTE |
| <input type="checkbox"/> 12. Career Pathways Program Related Needs | <input type="checkbox"/> 37. Computer and Cyber Technology in CTE |
| <input type="checkbox"/> 13. Effective use of Block Scheduling | <input type="checkbox"/> 38. Seamless Curriculum Development |
| <input type="checkbox"/> 14. Use of Distance Learning Technologies | <input type="checkbox"/> 39. Implementing Entrepreneurship Programs |
| <input type="checkbox"/> 15. School Emergency Plans | <input type="checkbox"/> 40. Career Awareness for CTE Students/ Parents |
| <input type="checkbox"/> 16. Senior Projects/ Student Portfolios | <input type="checkbox"/> 41. Student Recruitment |
| <input type="checkbox"/> 17. Cooperative Education Programs | <input type="checkbox"/> 42. Support for Student Career Decisions |
| <input type="checkbox"/> 18. Use of O*Net | <input type="checkbox"/> 43. SCANS Skills |
| <input type="checkbox"/> 19. Customized Job Training Programs | <input type="checkbox"/> 44. Student Data for Decision Making |
| <input type="checkbox"/> 20. Student Conflict Resolution | <input type="checkbox"/> 45. Business & Educational Partnerships |
| <input type="checkbox"/> 21. Development of Career Clusters | <input type="checkbox"/> 46. Teacher Leader Programs |
| <input type="checkbox"/> 22. Support for Transition Programs | <input type="checkbox"/> 47. Contextualization of Instruction |
| <input type="checkbox"/> 23. Effective use of IEPs | <input type="checkbox"/> 48. Student Employability Skills Programs |
| <input type="checkbox"/> 24. Using Teacher Reflective Practices | <input type="checkbox"/> 49. Dual Enrollment/Advanced Standing |
| <input type="checkbox"/> 25. Small Learning Communities | Programs for Secondary CTE Students |

50. Other: _____

51. Other: _____

Comments:

Part 2- Demographics: Directions, place an “X” or a check in the space to the left of the region in which you are located:

Region 1 (CT, DC, DE, MA, MD, ME, MI, NH, NY, OH, PA, RI, VT, WV)

Region 2 (AL, FL, GA, KY, NC, SC, TN, VA, Puerto Rico, Virgin Islands)

Region 3 (IA, IL, IN, MN, MO, WI)

Region 4 (AR, LA, MS, NM, OK, TX)

Region 5 (AZ, AK, CA, CO, HI, ID ,MT, ND, NE, NV, OR, SD, WA, WY, American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Republic of the Marshall Islands, Republic of Palau)

Return the completed survey by **October 26, 2007**, as a file attachment to the attention of Ms. Vivyaine Palmer at vpalmer@temple.edu or to her attention by fax at (215) 204-5154.