COLLEGE AND CAREER READY STANDARDS AND SECONDARY TRANSITION PLANNING FOR STUDENTS WITH DISABILITIES: 101

David W. Test

Jennifer Cease-Cook

Catherine H. Fowler

Audrey Bartholomew

National Secondary Transition Technical Assistance Center

nsttac

The University of North Carolina Charlotte

IDEAs
that Work
U.S. Office of Special
Education Programs

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There have been multiple philosophies of education in America since the nation began. However, there is general consensus that education is provided to improve outcomes for individuals and our society. With the onset of a new millennium there has been increased fervor around the preparedness of public school completers as competitors in a global economy, presenting the skills needed to succeed in postsecondary education, careers, and as citizens. There have been initiatives, priorities, and reforms that affect the policies and practices in schools. There seems to be common agreement in our nation that the public education system should prepare students for success after school. There is also an understanding from research and practice that all students can succeed and the education system is accountable for the success of all students (ESEA, 2010). There is evidence and support for accepting the notion that high expectations of students result in improved performance by students (Pathways to College Network, 2005). Further, there is support for the idea that providing multiple means to access content in innovative ways is a key to successful outcomes for students and the schools that educate them (Gates Foundation, 2010; National High School Center, 2011).

The purpose of the Individuals with Disabilities Education Act, (IDEA), reauthorized in 2004 is to "prepare (students) for further education, employment and independent living" (20 U.S.C. 1400 [d] [1] [A]). The Bill and Melinda Gates Foundation charged that through its education strategy, 80% of high school graduates in 2025 will be ready for college or careers (Gates Foundation, 2009). In March, 2010, the Obama administration released recommendations for the reauthorization of the Elementary and Secondary Education Act (ESEA) in a document titled "*Blueprint for Reform*" (http://www2.ed.gov/policy/elsec/leg/blueprint/index.html). The blueprint provides incentives lays the groundwork for states to adopt academic standards that prepare students to succeed in postsecondary education and the workplace, as it "challenges the nation to embrace education standards that would put America on a path to global leadership" (Blueprint, p.6). The document asserts that "every student should graduate from high school ready for college and a career. Every student should have meaningful opportunities to choose from upon graduation from high school" (Blueprint, p. 7). In June, 2010 the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA) released final versions of the Common Core State Standards for Language Arts and Mathematics. Together, these initiatives and recommendations are relevant for all students, including students with disabilities at the secondary level, because they have implications for curricula, instruction, and assessment. Further, these initiatives and recommendations reflect the overall focus of improving outcomes for students leaving the K-12 education system.

However, confusion remains over the definition of college and career ready. Are schools to prepare students for college readiness as a necessary precursor to success in a career, as reflected in a recent survey of teachers, students, parents, and executives

(Met Life Foundation, 2011)? Are there equally valid educational outcomes of college or career (Harvard Graduate School of Education, 2011)? For now, the terms Career Ready and College Ready are often used interchangeably and most discussions focus on core academic skills. However, some suggest that Career Ready involves more than academic skills. It also includes employability skills and technical, job-specific skills (www.achieve.org/files/CollegeandCareerready.pdf)/. The Association for Career and Technical Education (ACTE) focused its definition of career readiness on academic, employability, and technical skills in a paper on this issue (ACTE, 2010). Business and industry leaders have worked to identify employability skills needed for success, including the 1990 United States Department of Labor Secretary's Commission on Achieving Necessary Skills (SCANS) and, more recently, Partnership for 21st Century Skills. Finally in 2002, through the States Career Cluster Initiative, business and industry leaders identified technical, job specific skills needed across 16 career clusters. Since almost all states are in the process of adopting and implementing more rigorous College and Career Ready Standards for all students, the purpose of this paper is to provide secondary level educators with an overview of major concepts and national initiatives associated with the concepts of College and Career Ready. In addition, this paper reports which initiatives have been adopted by states, and discusses implications for students with disabilities. We hope that this information will serve as a resource as secondary educators become involved in their state's efforts to ensure all students are college and career ready.

College and Career Ready Standards

To date, College and Career Ready Standards have become known as the Common Core State Standards (CCSS). The CCSS initiative is a state-led effort coordinated by the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO). The standards were developed by teachers, school administrations, and content experts to provide a framework to prepare students for college and work. These standards are intended to define the knowledge and skills students should have within their K-12 education careers so that they will graduate high school ready to succeed in entry-level, credit-bearing academic college courses, and in English Language Arts (ELA) and Literacy in History/Social Studies, Science, and Technical Subjects. To date, 42 states and DC have fully adopted the CCSS, one state has provisionally adopted the standards, and one state has adopted the ELA standards only (Boyer, Phillips, Jones, Witzel, 2011). The National Research Council of the National Academies of Science, Engineering, and Medicine has selected an external workgroup to develop a framework for K-12 science education. These are not articulated standards, but will provide "key grade level anchor points…with examples of performance expectations" (Board on Science Education, 2011). The National Council for Social Studies also updated the National Curriculum for Social Studies Standards in September, 2010. However, these and the science standards should not be confused with the ELA and Math common core standards adopted by states. The science and social studies resources do not represent the same body of work. For more information, see: www.corestandards.org,

http://www7.nationalacademies.org/bose/Standards_Framework_Homepage.html, and
http://www.socialstudies.org/standards.

Career Ready Standards

Unlike the Common Core State Standards, national career curriculum standards have not yet been clearly defined. The reauthorization the Elementary and Secondary Education Act (ESEA) in a "Blueprint for Reform" (http://www2.ed.gov/policy/elsec/leg/blueprint/index.html) states that "every student should graduate from high school ready for college and a career." Being career ready means that a high school graduate has English and mathematics knowledge and skills necessary to qualify for and succeed in the postsecondary job and/or education necessary for their chosen career. Again, States are struggling with the difference between "college ready" and "career ready." Many argue that you can be "college ready" and not "career ready." While core academic skills are vital, business and industry leaders have suggested the need to also focus on employability skills (SCANS) and technical, job specific skills (Career Clusters). The Secretary's Commission on Achieving Necessary Skills (SCANS) represents the foundation of 21st Century Skills, Career Clusters, Next Generation Learners, as well as other state-led initiatives. Having core standards in mathematics and ELA and the process for science and social studies underway, many states are hoping that educators and policy makers will focus on a development of national career standards.

SCANS Skills. In 1990, the Secretary of Labor appointed a commission called the Secretary's Commission on Achieving Necessary Skills (SCANS) to determine skills young people needed to succeed in the world of work. The commission's fundamental purpose was to encourage a high-performance economy characterized by high-skill, high-wage employment. Although the commission completed its work in 1992, its findings and recommendations continue to be a valuable source of information for individuals and organizations involved in education and workforce development. This information includes employability skills that are needed for employee success and the report is called "What Work Requires of Schools: A SCANS report for America 2000." For more information see: http://www.academicinnovations.com/report.html.

Are They Ready to Work? An affirmation that the workplace readiness skills identified in the SCANS report remain valid today is included in the latest report *Are They Really Ready to Work*?, issued in 2006. This study included over 400 employers across the United States in partnerships with four organizations: The Conference Board, Corporate Voices for Working Families, the Partnership for 21st Century Skills, and the Society for Human Resource Management. The findings indicated that employers value applied skills (i.e., work ethics, oral and written communication, teamwork, and critical thinking/problem solving) over educational attainment and basic knowledge of math and reading comprehension. For more information see: http://www.p21.org/documents/FINAL_REPORT_PDF09-29-06.pdf.

Career Clusters/Essential Standard. The States' Career Clusters Initiative (2002) was established by the National Career Technical Education Foundation to identify Career Clusters as a tool to provide technical skills needed across 16 career clusters. These clusters include key knowledge and skills statements that represent content students need to know and be able to do to be a successful employee in the specific career area. For more information see: www.careerclusters.org.

Related Initiatives

To help states and local school systems implement College and Career Ready Standards, a number of national initiatives have emerged. Some of the more well-known initiatives include 21st Century Skills, Next Generation Learners, and P-16 (or P-20) Cradle to College and Career Ready, and Race to the Top. Each of these initiatives is briefly described below.

21st Century Skills. Partnership for 21st Century Skills (P21) is a national organization that advocates for 21st century readiness of every student. P21 and its members provide tools and resources to help educational systems infuse the three Rs and four Cs (critical thinking and problem solving, communication, collaboration, and creativity and innovation) into the basic competencies of core subjects. P21 believes schools must move beyond a focus on basic competency in core subjects to promoting understanding of academic content at higher levels by weaving 21st Century skills into core subjects. These themes are: Global Awareness, Financial, Economic, Business, and Entrepreneurial Literacy, Civic Literacy, Health Literacy, and Environmental Literacy. For more information see: www.p21.org.

Next Generation Learners. In November 2009, the Council of Chief State School Officers (CCSSO) in alliance with the Stupski Foundation, began a partnership called Next Generation Learners (NxGL) designed to transform the nation's public education system and enhance the quality of learning and achievement for all children in public schools. The NxGL initiative includes four areas across the critical attributes of the learning experience; early childhood education, extended learning opportunities, virtual learning systems, and school improvement and supports. For more information see: http://www.ccsso.org/What_We_Do/Next_Generation_Learners.html.

P-16: Cradle to College and Career Ready. The P-16: Cradle to College and Career Ready is a state-led initiative that emerged in the mid-90's through the work of states such as Georgia, Maryland, and Oregon. To date, 25 states have passed some form of P-16 legislation and the Education Commission reports that 37 states have P-16 initiatives in place. P-16 has been implemented as either a "mega-bill" introducing broad, sweeping changes or as a continuum of incremental changes. In a P–16 system, all levels of education beginning with preschool *(*the "P" in *P-16)*, continuing through K-12, and culminating in a baccalaureate degree and/or entry into the workforce are aligned into a flexible continuum designed to improve student achievement. The P-16 system responds to student needs at every point along the continuum to ensure student

access and progress in each consecutive level. The goal of all P-16 systems is to create a seamless system of education which begins in early childhood and ends after college. The P-16 initiative focuses on planned transitions for students and families from Infant-Toddler to preschool to early elementary to middle-grade to high school to postsecondary environments. There is a focus on student academic and social-emotional development throughout the system and a life-long view of student outcomes (transition focused education). For more information see: http://ideapartnership.org/media/documents/P-16-Collection/pipeline_p-16-and-breaking-ranks.pdf.

Race to the Top. In February 2009, President Obama signed the American Recovery and Reinvestment Act of 2009 (ARRA) into law to stimulate the economy and invest in critical sectors including education. The ARRA included the Race to the Top Fund (2010). This was a competitive grant designed to fund states that are demonstrating success in raising student achievement and had plans to accelerate reform in their future. These states were required to adopt the Common Core State Standards as part of the application for the Race to the Top funding. States funded in Phase I included Tennessee and Delaware. States funded in Phase II included District of Columbia, Florida, Georgia, Hawaii, Maryland, Massachusetts, New York, North Carolina, Ohio, and Rhode Island. For more information, see http://www2.ed.gov/programs/racetothetop/index.html.

What are States Doing?

Many states have aligned, or are in the process of aligning, their instructional standards to many of the initiatives described above. The following table summarizes which states are engaging in these initiatives.

Table 1. Summary of College and Career Ready Initiatives Adopted by Each State

State	Adopted *Common Core*	Adopted *21st Century Skills*	Adopted *NxGL*	Received *ARRA* *"Race to the Top"*
Alabama	X			
Alaska				
Arizona	X	X		
Arkansas	X			
California	X			
Colorado	X			
Connecticut	X			
Delaware	X			X
District of Columbia	X			X
Florida	X			X

Georgia	X			X
Hawaii	X			X
Idaho	X			
Illinois	X	X		
Indiana	X			
Iowa	X	X		
Kansas	X	X		
Kentucky	X	X	X	
Louisiana	X	X		
Maine	X	X	X	
Maryland	X			X
Massachusetts	X	X		X
Michigan	X			
Minnesota	X (only ELA)			
Mississippi	X			
Missouri	X			
Montana				
Nebraska				
Nevada	X	X		
New Hampshire	X			
New Jersey	X	X		
New Mexico	X			
New York	X		X	X
North Carolina	X	X		X
North Dakota				
Ohio	X	X	X	X
Oklahoma	X			
Oregon	X			
Pennsylvania	X			
Rhode Island	X			X
South Carolina	X			
South Dakota	X	X		
Tennessee	X			X
Texas				
Utah	X			
Vermont	X			
Virginia				
Washington	X (Provisionally)			
West Virginia	X		X	
Wisconsin	X	X	X	
Wyoming	X			

California: The Linked Learning Alliance. A two-year study by the Pathways to Prosperity Project at Harvard University Graduate School of Education notes that while much emphasis is placed in high school on going on to a four-year college, only 30 percent of young adults in the United States successfully complete a bachelor's degree.

The study recommends a "comprehensive pathways network" that would include three elements: embracing multiple approaches to help youth make the transition to adulthood, involving the nation's employers in things like work-based learning, and creating a new social contract with young people. The Linked Learning approach in California was highlighted in this study as a model of 21st Century Career and Technical Education. For more information on the Pathways to Prosperity Project see: http://www.gse.harvard.edu/news-impact/2010/02/pathways-to-prosperity-seeks-to-redefine-american-education-system.

Linked Learning is the name for the educational approach formerly known in California as "multiple pathways." The Linked Learning Alliance is a statewide coalition of education, industry, and community organizations dedicated to improving California's high schools and preparing students for postsecondary education and career, both options and not just one or the other. Used in schools throughout California, this integrated approach helps students build a strong foundation for success in college and career—and life. Pathways prepare high school students for career and a full range of postsecondary options, including two and four year college or university, apprenticeships, the military, and formal employment training. For more information see: http://www.connectedcalifornia.org/pathways/index.php.

Kentucky: Educational Planning and Assessment System (EPAS). Kentucky was the first state to adopt the Common Core State Standards and has included an alignment of the EPAS College Readiness Standards with their Program of Studies curriculum standards. This will help teachers link the instruction and assessment standards.

The assessment system in Kentucky includes examinations of high school readiness in eighth grade (called EXPLORE), college readiness in tenth grade (called PLAN), and college admissions and placement in eleventh (ACT). These three examinations comprise the EPAS. For more information see: http://www.education.ky.gov/KDE/Instructional+Resources/Curriculum+Documents+and+Resources/Teaching+Tools/Educational+Planning+and+Assessment+System+(EPAS)+College+Readiness+Standards+and+Program+of+Studies.htm.

Implications for High School Students with Disabilities

As states adopt or align new sets of college and career ready standards, there are implications for practice. For example, student acquisition of standards must be assessed and the standard curriculum must be taught to all students, including students with disabilities. The following sections describe some of the issues states may need to consider as they adopt and implement these new standards.

Assessment. The U.S. Department of Education awarded "Race to the Top" assessment funds to two consortia to develop of assessments aligned to the Common Core State Standards. For more information, see http://www2.ed.gov/programs/racetothetop-assessment/index.html.

First, Partnership for the Assessment of Readiness for College and Careers (PARCC) was funded to develop a K-12 assessment system aligned to the Common Core State Standards in English language arts and mathematics. These funds are designed to help states that have joined the Partnership to increase the number of students who graduate high school ready for college and careers. The 11 governing states that lead the 25-state Partnership in assessment development include: Arizona, Florida, Illinois, Indiana, Louisiana, Maryland, Massachusetts, New York, Rhode Island, Tennessee, and the District of Columbia. For more information see: http://www.parcconline.org.

Second, Smarter Balanced Assessment Consortium (SBAC) was funded to strategically balance summative, interim, and formative assessment through an integrated system of standards, curriculum, instruction, and teacher development. The 18 governing states that will lead the 31-state consortium include: Connecticut. Hawaii, Idaho, Kansas, Maine, Michigan, Missouri, Montana, Nevada, New Hampshire, New Mexico, North Carolina, Oregon, Utah, Vermont, Washington, West Virginia, and Wisconsin. For more information see: http://www.k12.wa.us/SMARTER/default.aspx.

Finally, the U.S. Department of Education also awarded grants to develop a new generation of **alternative assessments** for students with the most significant disabilities. These assessments will be aligned to the Common Core State Standards and assess knowledge of mathematics and English language arts in grades 3-8 and one grade in high school. Two consortia of states were awarded these grants.

The first one, called the National Center and State Collaborative Partnership is led by the University of Minnesota and comprised of Alabama, Arkansas, Arizona, Connecticut, the District of Columbia, Florida, Georgia, Indiana, Louisiana, Massachusetts, North Dakota, Nevada, New York, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Wyoming and six United States entities in the Pacific Rim. For more information see: http://www.cehd.umn.edu/nceo/projects/NCSC/NCSC.html

The second one, called the Dynamic Learning Maps Alternate Assessment System Consortium is led by the University of Kansas Center for Research and is comprised of Iowa, Kansas, Michigan, Mississippi, Missouri, New Jersey, North Carolina, Oklahoma, Utah, Wisconsin, and West Virginia. For more information see: http://dynamiclearningmaps.org/

Instruction. For academic instruction, states who adopted the Common Core State Standards are currently aligning them with their current standards. To do this, some states are using The Common Core Mapping Project. This project is a Washington DC based, non-profit organization founded in 2007. They have worked with the National Governors Association and the authors of the standards to develop the maps. The Common Core Mapping Project provides examples of ways to provide instruction that will teach the competencies of the Common Core State Standards, focused on literature, the arts, and technology. For more information, see: www.commoncore.org.

For career ready instruction, Career Technical Education (CTE) initiatives and programs are addressing transition from secondary education to postsecondary education. Through such initiatives such as Programs of Study, Dual Enrollment, Tech Prep, and Early and Middle College High Schools, these programs are preparing more students to transition to postsecondary education.

First, CTE Programs of Study (CTE POS) are knowledge and skills identified by secondary, postsecondary, and workforce partners designed to prepare students for self-sufficiency and career success. The four core elements of CTE POS are: (a) content and standards, (b) alignment and articulation, (c) accountability and assessment, (d) student support services.

Second, CTE Dual Enrollment programs allow high school students to enroll in college courses and earn college credit. Once limited to high-achieving students, these programs are increasingly seen as a means to support the postsecondary preparation of students with disabilities. Third, CTE Tech Prep programs link high school and college program in a career field so students can begin their course of study in high school and continue into a postsecondary educational or apprenticeship program. As a result, students earn an associate's degree or certification of apprenticeship. Last, CTE Early and Middle College High Schools are located on postsecondary campuses and allow students to earn a high school diploma and two years of college credit in five years. Many of the Early and Middle College High Schools have specific career focused themes such as design, technology, and health care. For more information on all the CTE initiatives, see: www.acteonline.org.

NSTTAC Examples of Infusing Secondary Transition Skills into the College and Career Ready Standards

As states work to adopt and implement college and career ready standards for all students, the field must continue to consider the comprehensive secondary transition needs of students with disabilities. As suggested by Kochar-Bryant and Bassett (2002), the field may also consider this an opportunity to provide relevant, transition-focused education for all students within the standards. As a starting point, NSTTAC developed a table of examples of how important secondary transition skills such as independent living, social, self-determination, and employment skills can be taught and assessed

within the CCSS in ELA and Mathematics at the high school level (see Tables 2 and 3 below).

Over the last 20 years, there have been numerous competencies identified for workplace and transition-focused education. *Are They Really Ready to Work?* (2006) identified that employers are frustrated with the lack of applied skills demonstrated by new employees entering the workforce. SCANS Skills (1990) reported five competency areas that are sometimes called "soft skills" in the workplace. They are (a) how to use resources, (b) have positive interpersonal relationships, (c) use information, (d) understand systems, and (e) use technology.

 NSTTAC conducted a systematic literature review to identify in-school predictors of post-school success in the areas of employment, education, and independent living for secondary students with disabilities (Test, Mazzotti, Mustian, Fowler, Kortering, & Kohler, 2009). As a result of this literature review, NSTTAC has identified 16 evidence-based predictors of post-school employment, education, and independent living success from the correlational research including career awareness, community experiences, exit exam requirements/high school diploma status, inclusion in general education, interagency collaboration, occupational courses, paid employment/work experience, parental involvement, program of study, self-advocacy/self-determination, self-care/independent living skills, social skills, student support, transition program, vocational education, and work study. For more information see: http://www.nsttac.org/ebp/PredictorResources.aspx.

Within the table, the secondary Common Core State Standards are listed with an example of a possible transition skill a student could use to demonstrate mastery of the standard. The examples are also linked to the NSTTAC predictors of post-school success (Test et al., 2009). An "X" indicates if the transition activity relates to one of the following outcome areas: postsecondary education, independent living, and/or employment. *As result, the examples in Tables 2 and 3 may be used as a starting point for educators who wish to infuse secondary transition skills and "soft skills" into the college and career ready standards for their high school students with disabilities.*

Table 2. Examples of Infusing Secondary Transition Skills into College and Career Ready Standards in English Language Arts

Language				
Standard	Activity	PSE	Ind. Living	Employ.
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking	Prepare a plan for post school life including plans for living, working, and attending school or relevant training program. Additionally, include recreation/leisure activities and any supports needed to achieve post-school goals. Lead educational conference (e.g., IEP meeting) and present plan for post-school life to team members. Performance should be evaluated through the use of a rubric. Components of rubric should include but are not limited to: -identification of goals in living, working, school attendance, recreation/leisure activities -identification of supports for each goal -use of parallel structure -use of phrases (e.g., noun, verb, adjectival, participial) and clauses (e.g., independent, dependent, etc.) to convey specific meanings and add variety and interest	X	X	X

	(grades 9-10)			
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing	Prepare a plan for post school life including plans for living, working, and attending school or relevant training program. Additionally, include recreation/leisure activities and any supports needed to achieve post-school goals. Performance should be evaluated through the use of a rubric. Components of rubric should include but are not limited to: -identification of goals in living, working, school attendance, recreation/leisure activities -identification of supports for each goal -usage of semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses -usage of colon to introduce a list or quotation -Spell correctly (Grades 9-10)	X	X	X
Knowledge of Language				
3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening	Read scenarios from several different settings with varying levels of formality (e.g., text messages/emails, time with friends, at work, interview for college, etc.) and identify how certain phrases change their meanings from context to context	X	X	X
Vocabulary Acquisition and Use				
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and	Read a user's manual for an item that will be used during post-school life (e.g., kitchen appliance, vacuum, camera, etc.). Use various reading comprehension strategies to determine the definition of unknown words (i.e., context	X		

specialized reference materials, as appropriate	clues, analysis of work meanings, consultation of reference materials)		
5. Demonstrate understanding of word relationships and nuances in word meanings			
6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression			

Reading				
Standard	Activity	PSE	Ind. Living	Empl.
Key Ideas and Details				
1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions from the text	Choose two postsecondary education institutions or training programs and summarize information from their website for prospective students. Identify one that would be an appropriate choice for postsecondary education/training and one that is not. Provide evidence that supports the choice. Performance should be evaluated through the use of a rubric. Components of rubric should include but are not limited to: -Identification of two PSE/training programs -Summary of information is provided -Identification of preferred program and evidence to support the choice	X		
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas				
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text	Read short stories on individuals who overcame adversity.			
Craft and Structure				
4. Interpret words and phrases as they are used in a text, including determine technical,				

connotative, and figurative meanings, and analyze how specific word choices shape meaning and tone	
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter scene, or stanza) relate to each other and the whole	
6. Assess how point of view or purpose shapes the content and style of a text	
Integration of Knowledge and Ideas	
7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words	
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence	
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches authors take	
Range of Reading and Level of Text Complexity	
10. Read and comprehend complex literary and informational texts independently and proficiently	Read the state driver's manual and answer comprehension questions.

Standard	Activity	PSE	Ind. Living	Empl.
Text types and Purposes				
1. Write arguments to support claims in analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence	Compare and contrast two types of health insurance offered through a potential job and identify the pros and cons of both. Choose the one that offers the best package and create a "commercial" that summarizes the information for the chosen plan. Performance should be evaluated through the use of a rubric. Components of rubric should include but are not limited to: -Accurately identify three major pros for each health insurance in contrast to the other choice -Accurately identify three major cons for each health insurance in contrast to the other choice -Provides evidence that is written for the specific audience (i.e., self, middle age, or older age) -Uses transitional words to link the major ideas -Writes with a formal tone -Chooses best plan and offers support for choice -Creates a "commercial" that highlights the pros for the chosen plan	X	X	X
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through				

Standard	Activity			
the effective selection, organization, and analysis of content				
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences	Write a narrative about a character who is graduating high school. Identify one of your own three post-school goals for them to participate in from the three outcome areas (i.e., independent living, employment, postsecondary education/training). Fictionalize the other two goals for the character.	X		
Production and Distribution of Writing				
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience	Participate in the IEP process by developing new goals. Write the goals using appropriate organization and style.	X	X	
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach	Participate in the IEP process by developing new goals. Revise the goals based on instructor feedback.	X	X	
6. Use technology, including the internet, to produce and publish writing and to interact and collaborate with others	Follow and participate in an online forum that poses questions through the term on functional activities.	X	X	X
Research to Build and Present Knowledge				
7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation	Identify one possible location to move to based post-school, independent living goals. Research locations to answer the following questions: -		X	
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism				
9. Draw evidence from literary or informational texts to support analysis, reflection, and research				
Range of Writing				

Standard	Activity	PSE	Ind. Living	Empl.
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences				
Comprehension and Collaboration				
1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively	Participate in a student-run leadership group that explores both educational and social issues (e.g., IDEA, bullying, peer pressure). One student is designated to research the topic and present information that is relevant to the group while facilitating a discussion on that issue during the meeting. Performance should be evaluated through the use of a rubric. Components of rubric should include but are not limited to: -Student leader prepares research on the assigned topic -Student defines rules and roles for participating group members -Student leader poses questions to facilitate discussion and encourages participation from all members -Addresses questions by relating them to larger ideas -Clarify, verify, and/or challenge opinions -Summarize points of agreement and disagreement -Justify own views	X	X	

	-Make connections to new evidence			
2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally				
3. Evaluate speaker's point of view, reasoning, and use of evidence and rhetoric				
Presentation of Knowledge and Ideas				
4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience	Participate in an IEP meeting. Discuss present level of performance on current goals (including data) and propose new goals based on current goal performance, post-school goals, and preferences, interests, needs, and strengths.	X	X	
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations	Participate in an IEP meeting. Present a portfolio of work through the use of power point and other digital media (e.g., video, pictures).	X	X	
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate	Participate in a variety of mock interviews (e.g., work, college, training program, etc.). Adapt language as needed for the various contexts.	X	X	

Table 3. Examples of Infusing Secondary Transition Skills into College and Career Ready Standards

Mathematics				
Standard	Activity	PSE	Ind. Living	Employment
Grade 8: The Number System				
1. Know that there are numbers that are not rational and approximate them by rational numbers.	Using the "one-more than" strategy with cents pile modification. (rounding).		X	
Grade 8: Expressions and Equations				
1. Work with radical and integer exponents. 2. Understand the connections between proportional relationships, lines, and linear equations. 3. Analyze and solve linear equations and pairs simultaneous linear equations.	Sorting: (using square root because of repeated division) task would involve sorting the same number of objects within the same number of groups.		X	X
Grade 8: Functions				
1. Define, evaluate, and compare functions. 2. Use functions to model relationships between quantities.	Any independent purchase using decision making would be a function.		X	
Grade 8: Geometry				
1. Understand congruence and similarity using physical models, transparencies, or geometry software. 2. Understand and apply the Pythagorean Theorem. 3. Solve real world and mathematical problems involving volume of cylinders, cones and spheres.	Building a bird house or dog house: you need a right angle at the top and then you determine how much wood you need from corner to corner on the bottom (this applies the Pythagorean theorem). Using liquid (paint, drink, vinegar, etc) can be used for volume of cylinders, cones, and spheres.		X	
Grade 8: Statistics and Probability				
1. Investigate patterns of association in	Collect data on any two variables and investigate the	X		X

bivariate data.	relationship, for example: how many students have a curfew and how many students have chores? Is there evidence that those who have a curfew also tend to have chores?			
11. Extends the properties of exponents to rational exponents. 12. Use properties of rational and irrational numbers.	Bank interest or paycheck hourly wage For example, .991 is the interest rate when you have a savings account. It is an irrational number. Server hourly wage could be $2.125 per hour.	X	X	X
Quantities				
1. Reason quantitatively and use units to solve problems.	Cooking breakfast for a group of 8. Everyone wants 2 eggs and 3 pieces of bacon. When I go to the grocery store, how many packs of bacon and cartons of eggs do I need?		X	
1. Perform arithmetic operations with complex numbers. 2. Represent complex numbers and their operations on the complex plane. 3. Use complex numbers in polynomial identities and equations.				
Vector and Matrix Quantities				
1. Represent and model with vector quantities. 2. Perform operations on vectors. 3. Perform operations on matrices and use matrices in applications.	Matrix- amount of production of a given task in a specified time period. For example, a.m. shift and p.m. shift productivity	X		X
1. Interpret the structure of expressions. 2. Write expressions in equivalent forms to solve problems.	Knowing amounts that are consistent and the number of people. For example, coefficient example: knowing there are 6 bags of popcorn in a box and 12 cans of coke in a carton. The amount of people is your variable. If you have 7 people coming over, how many boxes of popcorn and cartons of coke do you need?		X	X
Arithmetic with Polynomials and Rational Expressions				
1. Perform arithmetic operations on polynomials. 2. Understand the relationship between zeros and factors or polynomials. 3. Use polynomials to solve problems 4. Rewrite rational expressions.	Using the same as above with multiple variables. Number of people is the variable (above), use people and money as the polynomials. For example, if you had 7 people coming over and only $15. This activity could use a sale paper from the local grocery store.	X	X	X

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Creating Equations			
1. Creating equations that describe numbers or relationships.	For example, represent inequalities describing nutritional and cost constraints on combinations of different foods. (Any greater than or less than combination). For example, if you are on a gluten free diet versus a normal diet.		X	X
Reasoning with Equations and Inequalities			
1. Understand solving equations as a process of reasoning and explain the reasoning. 2. Solve equations and inequalities in one variable. 3. Solve systems of equations. 4. Represent and solve equations and inequalities graphically.	Any inequality example: need 50 nails to build the birdhouse. I have two boxes of 15 and 8 nails I found from my last project. Do I have enough or do I need to buy more? Explain with a chart for graphical display.		X	X
High School: Functions			
Interpreting Functions			
1. Understand the concept of a function and use function notation. 2. Interpret functions that arise in applications in terms of the context. 3. Analyze functions using different representations.	Functions have numerical outputs and inputs and are defined by algebraic expressions. For example, the time in hours it takes for a car to drive 100 miles is a function of the car's speed in miles per hour.	X	X	
Building Functions			
1. Build a function that models a relationship between two quantities. 2. Build new functions from existing function.	Route to grandma's is (x) but if I decided to stop by aunt betty's (y) then I have changed my route by (y).		X	
Linear, Quadratic, and Exponential Models			
1. Construct and compare linear, quadratic, and exponential models. 2. Solve problems, and interpret expressions for functions in terms of the situation they model.	Garden: grow a percent rate based on number of day and water. This is the reason we have "growing seasons." Day light and rainfall influence the growth of a garden. This is seasonal.		X	
Trigonometric Functions			
1. Extend the domain of trigonometric functions using the unit circle, model periodic phenomena with trigonometric functions. 2. Prove and apply trigonometric identities.				
High School: Geometry			

Congruence				
1. Experiment with transformations in the plane. 2. Understand congruence in terms of rigid motion. 3. Prove geometric theorems. 4. Make geometric constructions.	Anything you would have to replicate-slides, rotations. For example-setting a table at a restaurant; you would use both slides and rotations. If the teacher set one place setting, the student would have to "slide" to replicate on the left and right. The student would use "rotation" to do the place setting across from the example.	X	X	X
Similarity, Right Triangles, and Trigonometry				
1. Understand similarity in terms of similarity transformations. 2. Prove theorems involving similarity. 3. Solve problems involving right triangles. 4. Apply trigonometry to general triangles.				
Circle				
1. Understand and apply theorems about circles. 2. Find arc lengths and areas of sectors of circles.	Landscaping: arc length to determine the circular flower bed or circular driveway	X	X	
Expressing Geometric Properties with Equations				
1. Translate between the geometric description and the equation for a conic section. 2. Use coordinates to prove simple geometric theorems algebraically.				
Geometric Measurement and Dimension				
1. Explain volume and formulas and use them to solve problems. 2. Visualize relationships between two-dimensional and three-dimensional objects.	Investigate relationship of 2-D vs 3-D objects. For example, a cookie and a circle/cookie drawn on a piece of paper. Use a 2-D and 3-D movie for visualization.	X		
Modeling and Geometry				
1. Apply geometric concepts in modeling situations.	Modeling a tree trunk, can of food, soda can as a cylinder, cereal, cracker box as a rectangular prism, ice cream cone is a cone.		X	X
High School-Statistics and Probability				
Interpreting Categorical and Quantitative Data				
1. Summarize, represent, and interpret data on a single count or measurement variable. 2. Summarize, represent, and interpret data	Median, median, mode, outliers	X		

on two categorical and quantitative variables. 3. Interpret linear models.				
Making inferences and Justifying Conclusions				
1. Understand and evaluate random processes underlying statistical experiments. 2. Make inferences and justify conclusions from sample surveys, experiments, and observational studies.	Heads or tails game			
Conditional Probability and the Rules of Probability				
1. Understand independence and conditional probability and use them to interpret data. 2. Use the rules of probability to compute probabilities of compound events in a uniform probability model.	Using the TV show Deal or No Deal and probability of winning the $1,000,000. Also use the lottery or election if students are not familiar with the TV show.	X	X	

Using Probability to Make Decisions				
1. Calculate expected values and use them to solve problems. 2. Use probability to evaluate outcomes of decisions.	Compare a high-deductable versus a low-deductable automobile insurance policy using various, but reasonable chances of minor or a major accident.	X	X	

References

Achieve (2011). "*What is College and Career Ready*?" Retrieved from
http://ww.achieve.org/files/CollegeandCareerready.pdf

Association for Career Technical Education (2010). *CTE initiatives*. Retrieved from
http://www.acteonline.org

Association for Career Technical Education (2010). *What is Career Ready?* Retrieved
from http://www.acteonline.org

Bill & Melinda Gates Foundation (2007). *Common Core Mapping Project*. Retrieved
from http://www.commoncore.org

Bill & Melinda Gates Foundation (2009). *College Ready.* Retrieved from
http://www.gatesfoundation.org/learning/Documents/College-ready-education-
plan-brochure.pdf

Bill & Melinda Gates Foundation (2010). *Fewer, Clearer, Higher: Moving Forward with
Consistent Rigorous Standards for All Students*. Retrieved from
http://www.gatesfoundation.org/highschools/Documents/fewer-clearer-higher-
standards.pdf

Board on Science Education (2011). *Conceptual Framework for New Science Education
Standards.* Retrieved from
http://www7.nationalacademies.org/bose/Standards_Framework_Homepage.htm
l

Boyer, L., Phillips, C., Jones, K., & Witzel, B. (2011). *Common Core State Standards:
On a Fast Track to the Classroom*. Presented at the Council for Exceptional
Children Conference, Washington, DC.

California Center for College and Career (2010). *California Linked Learning Initiative*.
Retrieved from http://www.connectedcalifornia.org/services/initiative.php

Common Core State Standards Initiative (2010). *Common Core State Standards*.
Retrieved from http://www.corestandards.org

Elementary and Secondary Education Act (2010). *Blueprint for Reform*. Retrieved from
http://www2ed.gov/policy/elsec/leg/blueprint/index.html

Harvard Graduate School of Education (2011). *Pathways to Prosperity Project: Meeting
the Challenge of Preparing Young Americans for the 21st Century.* Pearson
Foundation.

Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 *et seq*

Kentucky Department of Education (2010). *Educational Planning and Assessment System (EPAS) College Readiness Standards and Program of Studies Standards Alignment.* Retrieved from http://www.education.ky.gov/kde/instructional+resources/curriculum+documents+ and+resources/educational+planning+and+assessment+system+(epas)+college +readiness+standards+and+program+of+studies.html

Kochar-Bryant, C. A., & Bassett, D. S. (2002). *Aligning transition and standards-based education: Issues and strategies.* Arlington,VA: Council for Exceptional Children.

Met Life Foundation (2011). *The Met Life Survey of the American Teacher: Preparing Students for College and Careers*. Retrieved from http://www.metlife.com/assets/cao/contributions/foundation/american-teacher/MetLife_Teacher_Survey_2010.pdf

National Council for Social Studies (2010). *National Curriculum Standards for Social Studies*. Retrieves from http://www.socialstudies.org/standards

National Secondary Transition Technical Assistance Center (2009). *Predictor of Post-School Success*. Retrieved from http://www.nsttac.org/ebp/PredictorResources.aspx

Next Generation Learners Initiative (2009). *Next Generation Learners*. Retrieved from http://www.ccsso.org/What_We_Do/Next_Generation_Learners.html

P-16: Cradle to College and Career Ready (2009). *In the pipeline: P-16 and breaking ranks.* Retrieved from http://ideapartnership.org/media/documents/P-16-Collection/pipeline_p-16-and-breaking-ranks.pdf

Partnership for the Assessment of Readiness for College and Careers (2011). *The PARCC Assessment*. Retrieved from http://www.parconline.org

Partnership for 21st Century Skills (2002). *21st Century Skills.* Retrieved from http://www.p21.org

Partnership for 21st Century Skills (2006). Are they really ready to work? Retrieved from www.p21.org/documents/FINAL_REPORT_PDF09-29-06.pdf

Pathways to College Network (2005). *High Expectations: a key to success for all.* Retrieved from http://www.pathwaystocollege.net/pdf/highexp.pdf

SMARTER Balanced Assessment Consortium (2010). *A summary of core components*. Retrieved from http://k12.wa.us/SMARTER/pubdocs/SBACSummary2010.pdf

States' Career Cluster Initiative (2002). *Career clusters.* Retrieved from
http://www.careerclusters.org

Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Kortering, L. J., & Kohler, P. H. (2009). Evidence-based secondary transition predictors for improving post-school outcomes for students with disabilities. *Career Development for Exceptional Individuals*, *32*, 160-181. Doi: 10.1177/0885728809346960

United States Department of Education (2010). *Race to the top funds.* Retrieved from
http://www2.ed.gov/programs/racetothetop/index.html

United States Department of Education (2010). *Race to the top assessment programs.* Retrieved from http://www2.ed.gov/programs/racetothetop-assessment/index.html

United States Department of Education (2010). *Grants to improve assessments for students with disabilities.* Retrieved from http://www.ed.gov/news/press-releases/us-education-department-awards-grants-improve-assessments-students-disabilities

United States Department of Labor Secretary's Commission on Achieving Necessary Skills (1991). *What work requires of schools: A SCANS report for America 2000*. Retrieved from http://www.academicinnovations.com/report.html