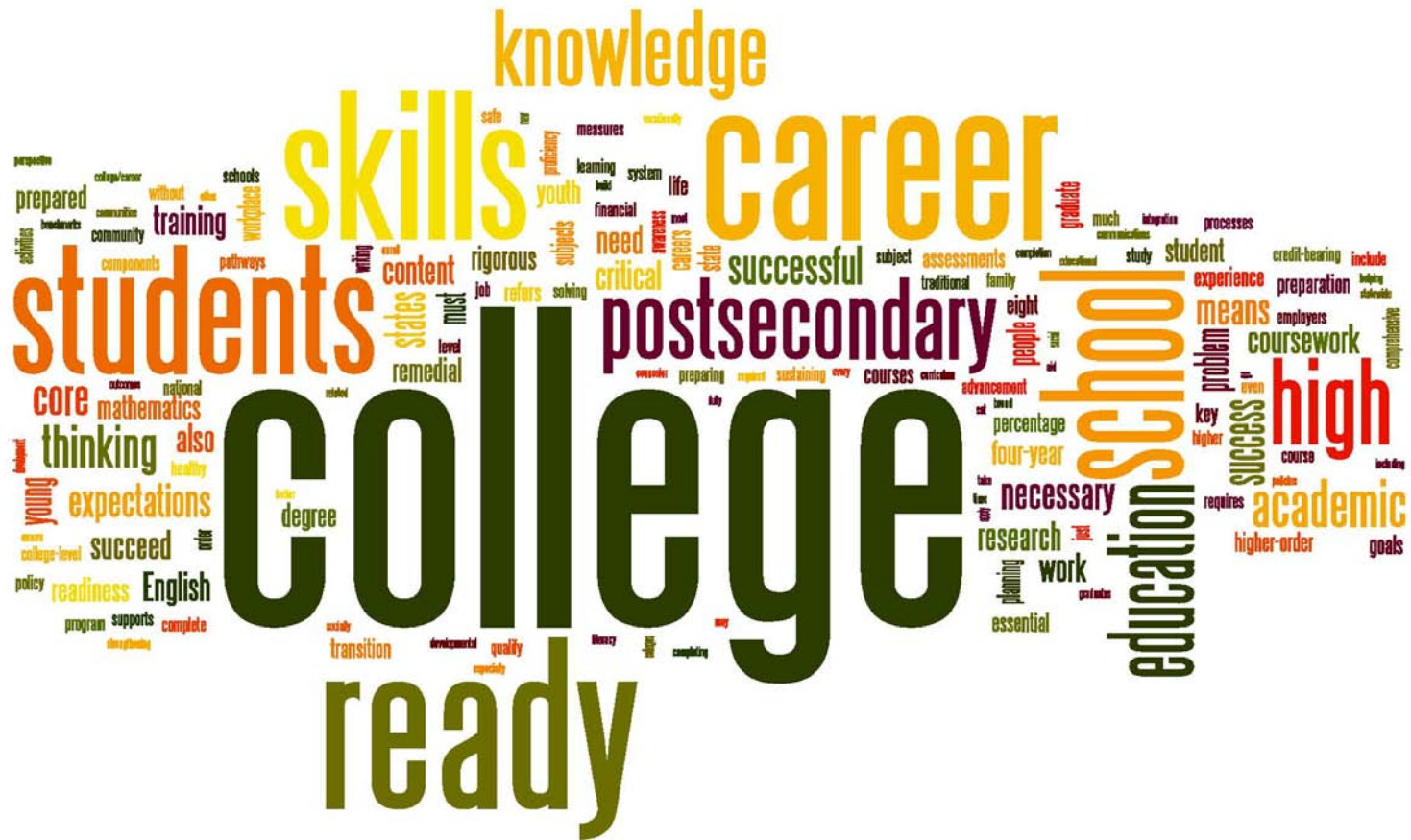


Defining College and Career Readiness: A Resource Guide



College and Career Readiness: Mapping the Landscape

The National High School Center’s (the Center) resource guide synthesizes information collected through a scan of more than 70 organizations focused on college and career readiness (CCR). A compilation of these and other CCR resources can be accessed at www.betterhighschools.org.

As the word cloud¹ on the cover represents, CCR is a diverse and increasingly complicated topic, and there is a wide range of definitions and frameworks that offer clues to what it means for students to be college and career ready. The resources here provide a snapshot of those frameworks and definitions, as well as an overview of the focuses of various organizations. This resource guide was initially used to facilitate state level conversations about CCR and was used in conjunction with the the Center’s Action Planning Template. It can be used at the SEA, LEA, or school level to help facilitate similar conversations, or can be paired with other Center products to help make sense of the growing CCR landscape.

The resource guide includes the following:

- **Organizational Focus on Outcomes**—A snapshot of how organizations are framing their college and career readiness discussion in terms of outcomes, where those outcomes overlap, and prevalence of these outcomes.
- **Definitions**—A compilation of definitions from organizations that have developed explicit language around what college and career readiness means for their work.
- **Frameworks**—A selection of college and career frameworks as examples of how CCR can be approached.

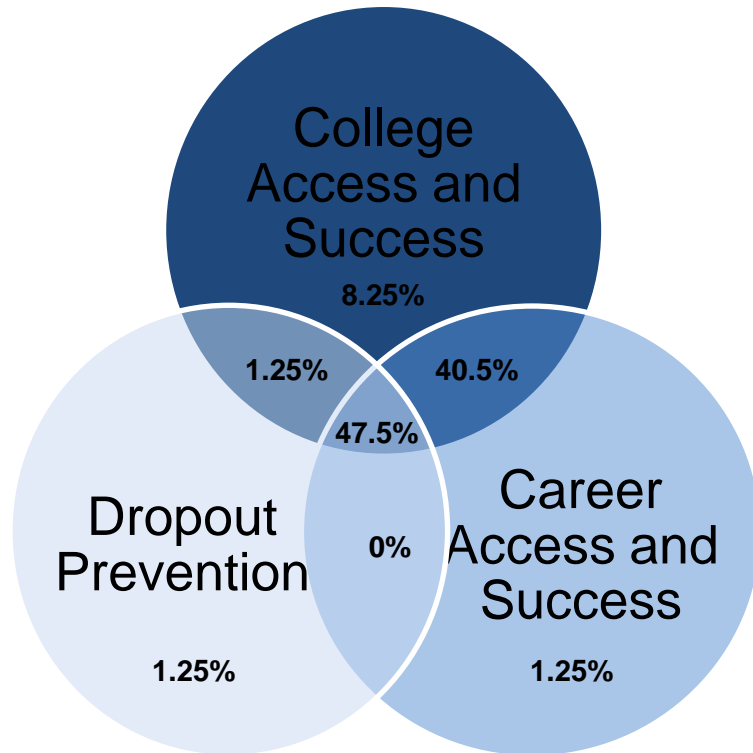
¹ The graphic representation on the cover illustrates the most commonly used terms by organizations defining college and career readiness.

College and Career Readiness: Organizational Focus on Outcomes

The National High School Center scanned organizations² that promote CCR to identify trends in organizational focus. Some organizations emphasized college access and success, while others emphasized career access and success. Often, the organizations focused on multiple outcomes, including both college and career access and success. Additionally, many organizations emphasized dropout prevention. The following information briefly summarizes the results of the scan, showing the areas of focus of the organizations and describing trends in strategies that are highlighted.

College Access and Success	Both College and Career Access and Success	College and Career Access Success and Dropout Prevention
Institute for Higher Education Policy Lumina Foundation National Center for Public Policy and Higher Education The College Board Woodrow Wilson National What Works Clearinghouse	Achieve ACT American School Counselor Association American Youth Policy Forum America's Promise Alliance Annenberg Institute for School Reform Carnegie Corporation of New York, Urban and Higher Education Program Center on Education Policy Common Core State Standards Initiative Council of Chief State School Officers Data Quality Campaign Educational Policy Improvement Center John J. Heldrich Center for Workforce Development Metlife Foundation National Academy Foundation National Alliance for Secondary Education and Transition National Center for Educational Achievement National Center on Education and the Economy National Collaborative on Workforce and Disability for Youth National Office for School Counselor Advocacy National Secondary Transition Technical Assistance Center National Youth Employment Coalition Partnership for Assessment of Readiness for College and Careers Ready by 21 Rennie Center for Education Research and Policy Smarter Balanced Assessment Consortium Southern Regional Education Board The Center on Education and Work, University of Wisconsin–Madison The Forum for Youth Investment The Future Ready Project The Partnership for 21st Century Skills The Thomas B. Fordham Institute	Alliance for Excellent Education American Youth Policy Forum America's Promise Alliance Association for Career and Technical Education Bill & Melinda Gates Foundation Campaign for High School Equity Center for American Progress Center For Public Education Coalition for a College and Career Ready America Doing What Works Education Trust Georgetown University Center on Education and the Workforce Harvard Graduate School of Education Institute for Educational Leadership IDEA Partnership Jobs for the Future Linked Learning, Irvine Foundation, Connect Ed National Assessment Governing Board National Association of Secondary School Principals National Association of State Boards of Education National Center for Education Statistics National Center for Learning Disabilities National Dropout Prevention Center/Network National High School Center National Post-Secondary Outcomes Center, U of Oregon National Research Center for Career and Technical Education National Women's Law Center NGA Center for Best Practices North American Council for Online Learning
Career Access and Success		
Center for Postsecondary and Economic Success		
Dropout Prevention		
National Dropout Prevention Center for Students With Disabilities		
College Access and Success and Dropout Prevention		
Annie E. Casey Foundation Coalition for Community Schools Institute for Higher Education Policy Pathways to College Network		

² This organization scan does not represent an exhaustive compilation of all organizations that promote college and career readiness but what was accessible during the time searches were performed.



Trends

- Nearly forty-one percent of the organizations focus on both college *and* career access and success.
- Fifty-six percent of the organizations cite the importance of creating alignment between secondary and postsecondary expectations. When strong secondary-postsecondary alignment is present, graduation requirements and curriculum standards will reflect the expectations required for success in postsecondary institutions and eliminate the need for remedial coursework in postsecondary institutions.
- Eighty-four percent of the organizations provide resources on using data to make decisions at the school, district, and state levels.
- Forty-eight percent of the organizations stress the importance of training school and district staff to prepare students for college and careers.
- Forty-seven percent of the organizations provide resources on career and technical education (CTE). Academic subject matter in CTE is taught with connection to real-world applications, and students develop workforce skills through vocational training, internships, and interaction with the business community.
- Sixty-six percent of organizations highlight the importance of facilitating community and family engagement, in which members of the business community, postsecondary institutions, families, and other stakeholders are engaged to prepare students for college and careers.
- One and a quarter percent of the organizations are focused on both college access and success and dropout prevention.
- Many organizations stress the importance of improving the college and career readiness of targeted populations, including low-income and minority students (fifty percent), students with disabilities (thirty-one percent), at-risk students (twenty-seven percent), and adult learners (fifteen percent).
- Fifteen percent of organizations cite technology-based learning as a powerful strategy in promoting college and career readiness. The use of technology-based learning is promoted as a means to enhance instruction, engage students in learning, enable real-world interactions, facilitate credit recovery and remediation, and increase accessibility for all.

College and Career Readiness: Definitions

Although the phrase “college and career readiness” has become increasingly popular among federal, state, and local education agencies as well as a number of foundations and professional organizations, it can be challenging to define precisely. In order to assist practitioners and policymakers in formulating a clear definition for “CCR”, the National High School Center has collected excerpts from websites and publications where national organizations provide definitions of CCR. Some definitions conflict with others on the list, so users should note differences and be careful to formulate definitions that meet their local context.

This list of definitional language should not be considered an exhaustive or static list of CCR definitions, nor should they be accepted without thorough discussion and consideration. The language is quoted directly from publications and websites; its inclusion in the document does not imply the Center’s endorsement of any definition or organization. If you use language from this document, please cite the source appropriately.

Achieve

Excerpt Citation: Achieve. (n.d.). *What is college- and career-ready?* Washington, DC: Author. Retrieved January 22, 2013, from <http://www.achieve.org/what-college-and-career-ready>

It is commonly said that the goal of high school reform is to ensure all students graduate “college- and career-ready.” But as often as the phrase is repeated, confusion remains over what it actually means. And in some cases, the confusion has led to skepticism or outright opposition to reforms that seek to raise standards for all students to the college and career readiness level. Much of Achieve’s work to define college and career readiness over the past several years has focused on the content knowledge and skills high school graduates must possess in English and mathematics - including, but not limited to, reading, writing communications, teamwork, critical thinking and problem solving. Achieve recognizes that readiness depends on more than knowledge and skills in English and math but these core disciplines undergird other academic and technical courses and are considered non-negotiables by employers and colleges alike. If high school graduates are not proficient and prepared in English and math, they will struggle to achieve postsecondary success.

What is “college” ready?

College today means much more than just pursuing a four-year degree at a university. Being “college-ready” means being prepared for any postsecondary education or training experience, including study at two- and four-year institutions leading to a postsecondary credential (i.e. a certificate, license, Associates or Bachelor’s degree). Being ready for college means that a high school graduate has the knowledge and skills necessary to qualify for and succeed in entry-level, credit-bearing college courses without the need for remedial coursework.

What is “career” ready?

In today’s economy, a “career” is not just a job. A career provides a family-sustaining wage and pathways to advancement and requires postsecondary training or education. A job may be obtained with only a high school diploma, but offers no guarantee of advancement or mobility. Being ready for a career means that a high school graduate has the knowledge and skills needed

to qualify for and succeed in the postsecondary job training and/or education necessary for their chosen career (i.e. community college, technical/vocational program, apprenticeship or significant on-the-job training).

Is ready for *college* and ready for *career* the same thing?

The bottom line is that today all high school graduates need to be prepared for some postsecondary education and/or training if they are to have options and opportunities in the job market. As such, our education system should be preparing students for entry into middle and high-skilled jobs, which offer a higher wage and represent a broader set of opportunities in the workforce, rather than low-skilled jobs that pay less, have fewer benefits, and now account for only one-fifth of all jobs.

American Youth Policy Forum (AYPF)

Excerpt Citation: Hooker, S., & Brand, B. (2009). *Success at every step: How 23 programs support youth on the path to college and beyond*. Washington, DC: American Youth Policy Forum. Retrieved January 22, 2013, from <http://www.aypf.org/wp-content/uploads/2012/03/SuccessAtEveryStep.pdf>.

AYPF takes a broad view of the concept of college and career readiness, expanding it to include the concept of success, not just readiness. By this definition, readiness means being prepared to successfully complete credit-bearing college coursework or industry certification without remediation, having the academic skills and self-motivation necessary to persist and progress in postsecondary education, and having identified career goals and the necessary steps to achieve them. Readiness also requires the developmental maturity to thrive in the increasingly independent worlds of postsecondary education and careers, the cultural knowledge to understand the expectations of the college environment and labor market, and the employer-desired skills to succeed in an innovation-based economy. In order for students to be successful in this broader framework of expectations, they need rigorous academic preparation, college and career planning, academic and social supports, employer-desired skills, and personal resources.

It is also important, in the discussion of college and career readiness, to recognize that youth will choose their own paths in life, with some young people charging forward on a traditional four-year college pathway and others moving equally quickly to pathways that are more technically or occupationally oriented.

Association for Career and Technical Education (ACTE)

Excerpt Citation: Association for Career and Technical Education. (2010). *What is "career ready"?* Alexandria, VA: Author. Retrieved January 22, 2013, from http://www.acteonline.org/uploadedFiles/Publications_and_Online_Media/files/Career_Readiness_Paper_COLOR.pdf.

All too often, the terms "career ready" and "college ready" are used interchangeably, and discussions around career readiness are limited to traditional academic skills that allow students to successfully enroll in postsecondary education. While there is no debate that a rigorous level of academic proficiency, especially in math and literacy, is essential for any post-high school endeavor, the reality is that it takes much more to be truly considered ready for a career.

Career readiness involves three major skill areas: *core academic skills* and the ability to apply those skills to concrete situations in order to function in the workplace and in routine daily activities; *employability skills* (such as critical thinking and responsibility) that are essential in any career area; and *technical, job-specific skills* related to a specific career pathway. These skills have been emphasized across numerous pieces of research and allow students to enter true career pathways that offer family sustaining wages and opportunities for advancement.

Career Readiness Partners Council

Retrieved January 22, 2013, from <http://www.careerreadynow.org/sample-page/>

There is an often-confusing mix of definitions, frameworks, policies and implementation strategies for career readiness. Some viewpoints center around learning skills for a specific entry-level job, while others define career readiness as a broader understanding of workplace skills. Still other definitions focus on knowledge and skills for a particular industry sector such as health sciences or marketing. Career readiness is a convergence of all of these definitions.

A career-ready person effectively navigates pathways that connect education and employment to achieve a fulfilling, financially-secure and successful career. A career is more than just a job. Career readiness has no defined endpoint. To be career ready in our ever-changing global economy requires adaptability and a commitment to lifelong learning, along with mastery of key academic, technical and workplace knowledge, skills and dispositions that vary from one career to another and change over time as a person progresses along a developmental continuum. Knowledge, skills and dispositions that are inter-dependent and mutually reinforcing.

Center for American Progress

Excerpt Citation: Soares, L., & Mazzeo, C. (2008). *College-ready students, student-ready colleges: An agenda for improving degree completion in postsecondary education*. Washington, DC: Center for American Progress. Retrieved January 22, 2013, from <http://www.americanprogress.org/issues/2008/08/pdf/highered3.pdf>.

College-ready students are prepared learners and empowered customers with reliable information and support in high school and college and flexible financial assistance, able to design a college experience leading to degree completion and successful education-career transitions.

The College Board™³

Excerpt Citation Source: *The College Board National Office for School Counselor Advocacy: Eight Components of College and Career Readiness Counseling*. Copyright © 2010. The College Board. www.collegeboard.org. Reproduced with permission. Retrieved January 22, 2013 from http://advocacy.collegeboard.org/sites/default/files/10b_2217_EightComponents_WEB_100625.pdf

The Eight Components of College and Career Readiness Counseling chart a comprehensive, systemic approach for school counselors' use to inspire all students to, and prepare them for, college success and opportunity — especially students from underrepresented populations. The eight components build aspirations and social capital, offer enriching activities, foster rigorous

³ College Board™ is a trademark registered the College Board, which was not involved in the production of, and does not endorse, this site. This definition is shared with the National Office for School Counselor Advocacy.

academic preparation, encourage early college planning, and guide students and families through the college admission and financial aid processes. By implementing these eight components, school counselors provide information, tools and perspective to parents, students, schools and their communities that build college and career readiness for all students.

Eight elements:

- College Aspirations
- Academic Planning for College and Career Readiness
- Enrichment and Extracurricular Engagement
- College and Career Exploration and Selection Processes
- College and Career Assessments
- College Affordability Planning
- College and Career Admission Processes
- Transition from High School Graduation to College Enrollment⁴

Educational Policy Improvement Center (EPIC)

Excerpt Citation: Conley, D. T. (2012). *A complete definition of college and career readiness*. Retrieved January 22, 2013 from

https://www.epiconline.org/publications/documents/College%20and%20Career%20Readiness%20Definition.pdf?force_download=true

College and career readiness consists of four “keys.” Students are ready to the degree to which they have mastered all four. They consist of the following:

1. *Key Cognitive Strategies* are the ways of thinking that are necessary for college-level work. They include formulating hypotheses and developing problem-solving strategies, identifying sources and collecting information, analyzing and evaluating findings or conflicting viewpoints, organizing and constructing work products in a variety of formats, and monitoring and confirming the precision and accuracy of all work produced.
1. *Key Content Knowledge* refers to key foundational content and “big ideas” from core subjects that all students must know well, and an understanding of the structure of knowledge in core subject areas, which enables students to gain insight into and retain what they are learning. Also included in this Key are the technical knowledge and skills associated with career aspirations, the ways in which students interact with content knowledge, its perceived value to them and the effort they are willing to expend to learn necessary content, and their explanations of why they succeed or fail in mastering this knowledge.
2. *Key Learning Skills and Techniques* consist of two broad categories: student ownership of learning, which includes goal setting, persistence, self-awareness, motivation, progress monitoring, help seeking, and self-efficacy; and specific learning techniques,

⁴ This definition is shared with the National Office for School Counselor Advocacy.

such as time management, study skills, strategic reading, memorization techniques, collaborative learning, technology skills, and self-monitoring.

3. *Key Transition Knowledge and Skills* are necessary to navigate successfully the transition to life beyond high school. This information is often privileged knowledge that is not equally accessible to all students. Least likely to have this information are students from families and communities historically under-represented in higher education or certain career pathways. This key includes, among other things, knowing which courses to take in high school in order to be admitted to an appropriate postsecondary program, understanding financial aid options and procedures, being focused on a career pathway or major, understanding college-level and workforce norms and expectations, and knowing how to be a self-advocate within the institutional framework of postsecondary programs.

A student who is ready for college and career can qualify for and succeed in entry-level, credit-bearing college courses leading to a baccalaureate or certificate, or career pathway-oriented training programs without the need for remedial or developmental coursework. However, not every student requires the same proficiency in all areas. A student's interests and post-high school aspirations influence the precise knowledge and skill profiles necessary to be ready for postsecondary studies. Therefore, a single cut score on a test given to high school students does not take into account this individualization of the match between knowledge and skills on the one hand, and aspirations on the other. A secondary program of instruction should be designed to equip all students with sufficient knowledge and skill as identified in the following section. The measure of success should be student success in their chosen field of postsecondary education or post-high school training. Measuring this requires a more specialized and adapted assessment strategy than can be achieved with a single cut score on a single test.

International Association for K-12 Online Learning

Excerpt Citation: Patrick, S., & Sturgis, C. (2011). *Cracking the code: Synchronizing policy and practice for performance-based learning*. Vienna, VA: International Association for K-12 Online Learning. Retrieved January 2, 2013, from http://www.inacol.org/research/docs/iNACOL_CrackingCode_full_report.pdf.

In redesigning policy, states can facilitate the adoption of a set of comprehensive competencies. The Common Core is absolutely critical to college and career readiness, but it is not sufficient on its own. States should also consider students' needs for lifelong learning competencies, such as navigating new environments, social-emotional literacy, and skills to make the transition to college and careers.

Internationals Network for Public Schools

Excerpt Citation: Internationals Network for Public Schools. (n.d.). *College readiness*. New York: Author. Retrieved January 22, 2013, from <http://www.internationalsnps.org/our-services/our-services-college-readiness.html>

Internationals Network's College Readiness Initiative links and supports International High School activities that promote a greater awareness of postsecondary educational access and success for immigrant English language youth. College readiness entails promoting an early awareness of the U.S. postsecondary system; strengthening content and language development in preparation for postsecondary success; and a program of transition into the postsecondary

system. Our Initiative builds on the assets of the immigrant experience and aligns that experience with a successful integration into college and/or the world of work.

NGA Center for Best Practices

Excerpt Citation: Reyna, R. (2010). *Setting statewide college- and career-ready goals*. Washington, DC: NGA Center for Best Practices. Retrieved January 22, 2013, from <http://www.nga.org/files/live/sites/NGA/files/pdf/1008COLLEGECAREERREADYGOALS.PDF>.

In setting state education goals, governors can define the vision and inspire the change necessary to prepare all students for success in college and careers. However, to date, very little guidance exists for states seeking to create education goals.

All states should instead report on these five key college- and career-ready performance measures:

- Percentage of students completing (or on track to complete) a college- and career-ready course of study
- Percentage of students demonstrating proficiency on “anchor” assessments
- Percentage of students obtaining college credit or a career certificate in high school
- Four-year cohort graduation rate
- Percentage of traditional, first-year students enrolling in remedial coursework at a postsecondary institution

The integration of ambitious goals into state education policy, based on a process with broad stakeholder involvement and transparency, is a crucial first step for states to realize system improvement. With clear expectations, schools, districts, state education agency officials, nonprofits, business representatives, and policymakers can work together to meet a common mission: preparing all students for college and careers.

Partnership for 21st Century Skills

Excerpt Citation: Partnership for 21st Century Skills. (2010). *21st century readiness for every student: A policymaker’s guide*. Washington, DC: Author. Retrieved January 22, 2013, from http://www.p21.org/storage/documents/policymakersguide_final.pdf.

For students to succeed in college and careers, they must be able to learn, apply and adapt in all subjects. The Partnership for 21st Century Skills (P21) believes that 21st century readiness is within reach of every student if our schools incorporate essential, higher-order thinking skills into all core subjects.

Core subject knowledge and higher-order thinking skills should be indivisible. Mastery of core subject knowledge and higher-order thinking skills should be measurable—and a basis for student outcomes and accountability under federal law.

Students, parents, employers, and K–12 and higher education professionals agree that integrating higher-order thinking skills and core subjects makes learning more rigorous, relevant and engaging. Both core subject knowledge and skills are necessary for readiness in college, work and life.

Ready by 21: An Initiative of the Forum for Youth Investment

Excerpt Citation: Ready by 21. (n.d.). *Getting youth ready*. Washington, DC: Author. Retrieved January 22, 2013, from <http://www.readyby21.org/what-ready-21/getting-youth-ready>.

Our perspective is that ALL children and youth should be supported in their efforts to be academically and vocationally productive, socially and civically connected, and healthy and safe.

We share the commitment to helping young people be academically and vocationally productive – seeing to it that they graduate from high school, and go on to some form of postsecondary training that equips them to succeed in the workplace. We also know that young people’s readiness is contingent upon them being healthy and safe, both physically and emotionally, as depicted in the outer ring of the target.

Ready by 21 places special emphasis on that middle ring in our Readiness Target – socially and civically connected – and champions the importance of those “soft” skills that research is increasingly showing are linked to both avoiding risky behaviors (keeping kids healthy and safe) and succeeding in school. While there are many names for this ring and few measures, this ‘connectedness’ is critical to being ready for college, work and life.

No matter what measures you use, we need to do better at helping all young people grow up ready for college, work and life. Raising “ready” children and youth requires a steady stream of supports from families, schools and communities to ensure that young people are not only problem-free, but also fully prepared and fully engaged.

Southern Regional Education Board (SREB)

Excerpt Citation: Southern Regional Education Board. (2010). *Frequently asked questions: What does college and career readiness mean?* Atlanta, GA: Author. Retrieved January 22, 2013, from http://www.sreb.org/page/1511/question_ans.html.

College/career readiness describes not only a national educational movement toward better preparing America’s youth for college and careers, but also the state of a student’s preparedness level for postsecondary education or a career. Today’s high school students who are properly prepared for college and the workplace are armed with the skills to be successful in higher education – from a career and technical school program to community college, to the pursuit of a four-year bachelor’s degree.

Woodrow Wilson National Fellowship Foundation

Excerpt Citation: Woodrow Wilson National Fellowship Foundation. (n.d.). *College readiness*. Princeton, NJ: Author. Retrieved January 22, 2013, from <http://www.woodrow.org/school-initiatives/readiness/index.php>.

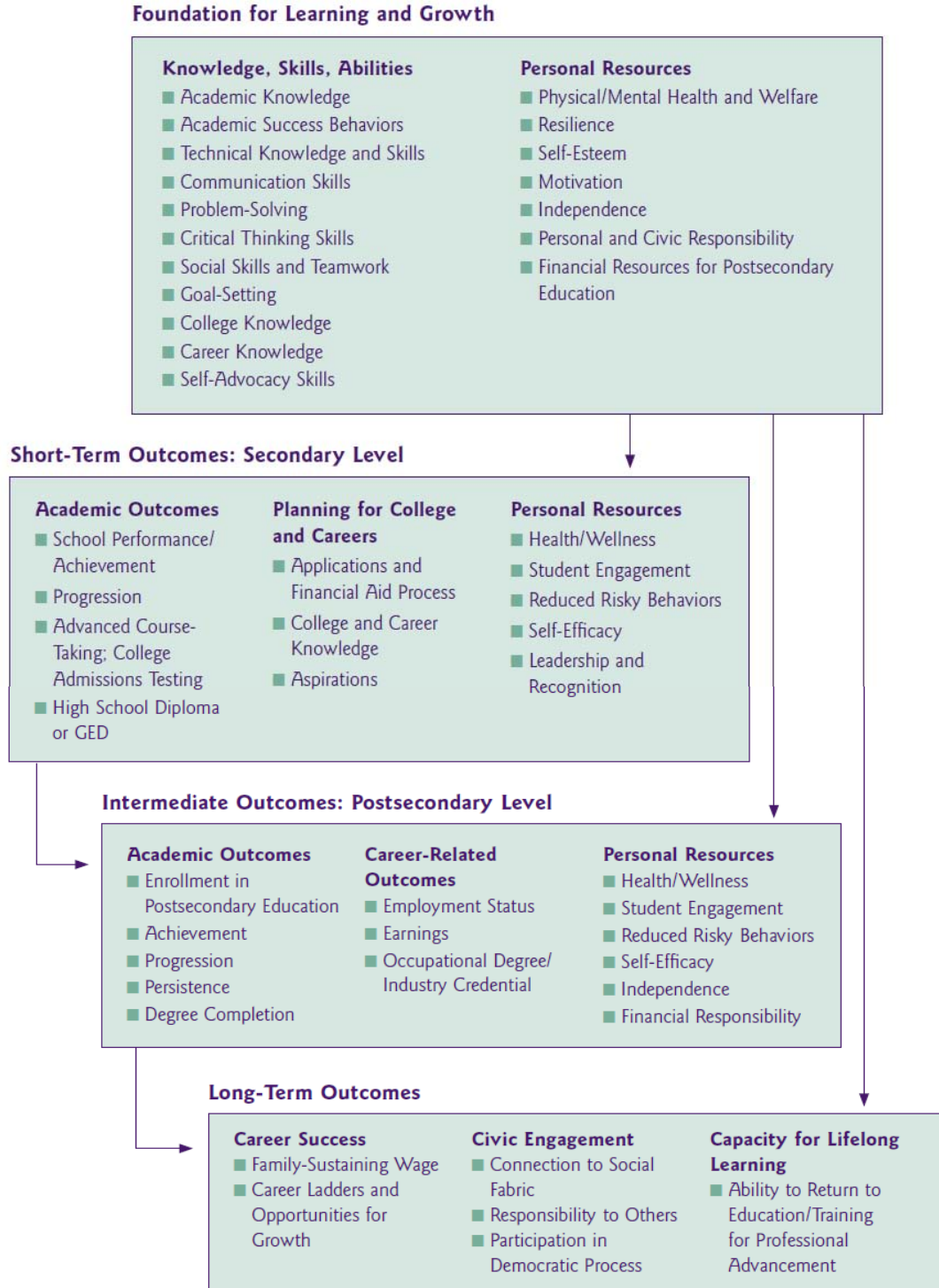
Sixty percent of entering college students must take remedial coursework before they can enroll in college courses. Even though these students are eligible to attend college, they are not ready for college-level academics. The lack of college readiness is a national problem, and is directly related to the preparation students receive—or do not receive—in high school. Even students who complete a college prep curriculum may not gain the advanced critical thinking skills that colleges expect of their first year students. Remedial coursework means a longer time to degree

and a higher cost—stumbling blocks that can prevent underserved students from ultimately completing their college education, if they even finish high school and go to college.

College and Career Readiness: Frameworks

The sample frameworks in this guide represent how four organizations (AYPF, Ready by 21, Educational Policy Improvement Center, and ConnectEd) have structured their work in CCR. They are included here to provide a starting point for conversations among state leaders who are considering common elements of CCR. None of these frameworks have been vetted nor are they endorsed by the Center. Rather, these frameworks present a range of options, language, and theories of action that states and districts might consider as they develop their own approaches to CCR.

American Youth Policy Forum ⁵

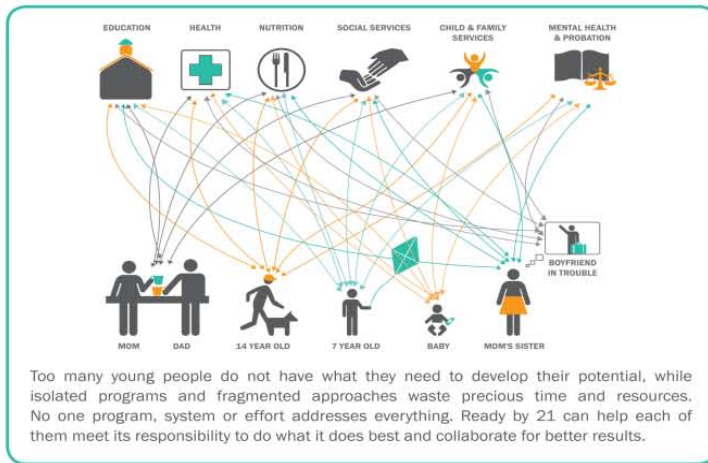


⁵ Source: Hooker, S. and Brand, B. (2009). *Success at every step: How 23 programs support youth on the path to college and beyond*. Washington, D.C.: American Youth Policy Forum. AYPF: Logic Model for College- and Career-Readiness and Success (p.14).

Ready by 21: An Initiative of the Forum for Youth Investment⁶

1 Ready by 21 meets the problem of fragmentation & duplication

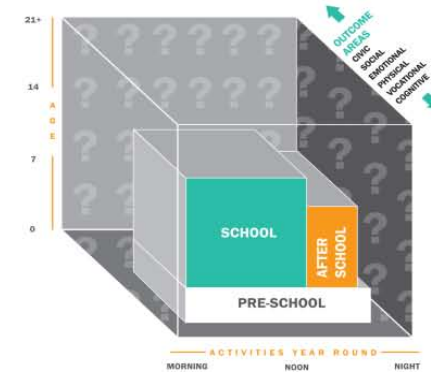
In any state or community, collaboration and shared accountability produce the best outcomes.



2 Ready by 21 challenges communities to serve the whole child

Communities that support the public structures that help children and youth — afterschool programs to health care and Head Start — see significant improvements in children's lives in school and out.

A CHILD'S DEVELOPMENTAL SPACE



While schools are the core of young people's learning and development, schools are not open 24/7/365. Ready by 21 harnesses the full developmental environment — families, schools, out-of-school time, neighborhoods, parks, libraries and community organizations — to get children started off right and staying on track for success.

3 Ready by 21 helps improve outcomes for all children & youth

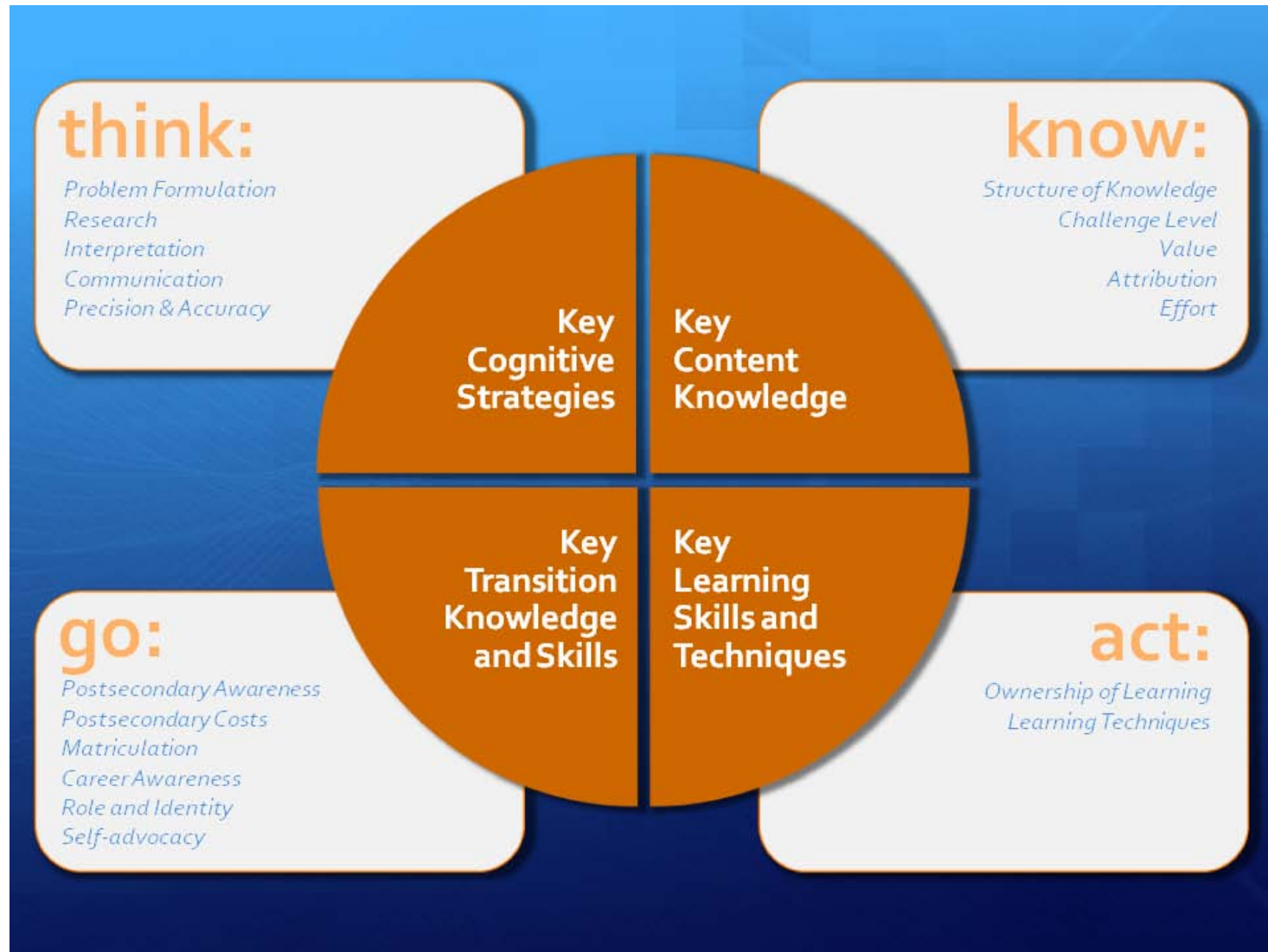
With successful strategies to meet the needs of young people, communities can build a competitive workforce, strong social networks, stable families and future leaders.



The United States' education pipeline is leaking and urgently needs insulation. Children struggle to learn and develop when they can't get to school, are hungry or unsupervised, when health problems go untreated or their families are financially insecure. But problem-free also doesn't mean fully prepared! Academic preparation is not the only challenge. All students need the tools to avoid risky behaviors as well as opportunities to develop a broad range of social and emotional skills. To help all children thrive, Ready by 21 strategies align education with other learning and engagement supports and basic services such as housing, health care and transportation.

⁶ Ready by 21[®] and the Ready by 21[®] logo are registered trademarks of the Forum for Youth Investment, www.forumfyi.org.

Education Policy Improvement Center⁷

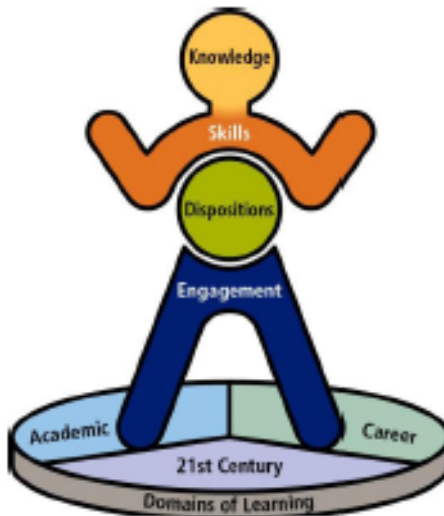


⁷ Source: Conley, D. (2012). Eugene, OR: Educational Policy Improvement Center.

ConnectEd: California Center for College and Career ⁸

College and Career Readiness Framework

(Excerpt from "College and Career Readiness: What Do We Mean?" by ConnectEd)



I. Knowledge

- A. Core subject-area content
- B. 21st century knowledge: global, civic, environmental, financial, health, and media literacy
- C. Career-related and technical knowledge: knowledge about a broad industry sector and associated technical content and college majors

II. Skills

- A. Academic skills in core disciplines
- B. 21st Century skills
 - 1. Metacognition and knowing how to learn
 - 2. Creativity and innovation
 - 3. Critical thinking and problem solving
 - 4. Systems thinking
 - 5. Communication: listening, speaking, writing, and nonverbal communication
 - 6. Collaboration and working with diversity
 - 7. Information management and digital media applications
- C. Technical skills: technical skill in at least one career area of interest

III. Productive Dispositions and Behaviors

- A. Productive self-concept: self-knowledge, self-esteem, self-efficacy
- B. Self-management: goal setting, time management, study skills, precision and accuracy, persistence, initiative/self-direction, resourcefulness, and task completion
- C. Effective organizational and social behavior: leadership, flexibility/adaptability, responsibility, and ethics

IV. Educational, Career, and Civic Engagement

- A. Engaging in and navigating the world of higher education
- B. Engaging in and navigating the world of work
- C. Engaging in and navigating civic li

⁸ ConnectEd: The California Center for College and Career. All rights reserved. Access the report: http://connectedcalifornia.org/schools_districts/resources