

Visual Summary of the MyWays Student Success Series



October 2017

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for Next Generation Learning Challenges

The MyWays™ Student Success Series

All reports in the series are available for download at myways.nextgenlearning.org/report.

Visual Summary
Introduction and Overview

Part A: Adolescence in an Age of Accelerations

Summarizes specific real-world realities and conditions confronting today's young people.

- Report 1: Opportunity, Work, and the Wayfinding Decade**
- Report 2: 5 Roadblocks to Bootstrapping a Career**
- Report 3: 5 Decisions in Navigating the Work/Learn Landscape**
- Report 4: 5 Essentials in Building Social Capital**
- Report 5: Preparing Apprentice-Adults for Life after High School**

Part B: Broader, Deeper Competencies for Student Success

Provides a composite definition of student success in learning, work, and life.

- Report 6: Welcome to the MyWays Student Success Framework**
- Report 7: Habits of Success — for Learning, Work, and Well-being**
- Report 8: Creative Know How — for a Novel, Complex World**
- Report 9: Content Knowledge — for the Life Students Will Lead**
- Report 10: Wayfinding Abilities — for Destinations Unknown**

Part C: Redesigning the Learning Experience for the MyWays Competencies

Brings the broader and deeper competencies of the MyWays Student Success Framework into educational practice.

- Report 11: Learning Design for Broader, Deeper Competencies**
- Report 12: Assessment Design for Broader, Deeper Competencies**

About this report

The Visual Summary of the MyWays Student Success Series uses selected images from the MyWays Student Success Series to share key insights about the major trends and concepts impacting young people today; the broader, deeper competencies they need to succeed; and the learning design and assessment design approaches necessary to develop those competencies.

The *MyWays Student Success Series* examines the through-line of four essential questions for next generation learning and provides research and practice-based support to help school designers and educators to answer these questions. The series consists of 12 reports organized into three parts, plus a Visual Summary and Introduction and Overview.

The **primary researchers and authors** of the *MyWays Student Success Series* are Dave Lash, Principal at Dave Lash & Company, and Grace Belfiore, D.Phil., Principal Consultant at Belfiore Education Consulting.

MyWays is a project of Next Generation Learning Challenges, an initiative of the non-profit EDUCAUSE. MyWays is supported through a grant from the William and Flora Hewlett Foundation with additional support from the Bill & Melinda Gates Foundation, the Barr Foundation, and the Oak Foundation.



nextgenlearning.org



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Visual Summary of the MyWays Student Success Series

The *Visual Summary* uses 40 images from the series to share key insights about the four “through-line” questions around which the MyWays Project is organized. Consider it a fly-over of the major trends and concepts impacting young people today; the broader, deeper competencies they need to succeed; and the learning design and assessment design approaches necessary to develop those competencies.

While the *Visual Summary* focuses on the through-line questions, the companion *Introduction and Overview* summarizes the MyWays Student Success Framework; the research, reports, tools, and collaborative opportunities that comprise the MyWays Project; our design goal to reimagine student success and the related scope of our research; as well as some tips for navigating the 12 other reports in the series.

Here are the four through-line questions and the corresponding parts of the report series:

1 **WHY the urgency to change?** What are the **real-world conditions** that our students will need to address?

PART A
Adolescence in an Age of Accelerations
 Five reports summarize the growing opportunity gap and the increasingly rocky *wayfinding decade* of learning and working that follows high school. Reports focus on labor market trends and roadblocks, the increasingly fragmented and complex postsecondary sector, and the growing importance of building social capital. In addition, we outline key adolescent developmental tasks that are instrumental to thriving in a world of change.

2 **WHAT does success look like** for students in a world of accelerating change? What competencies promote a broader, deeper definition of success?

PART B
Broader, Deeper Competencies for Student Success
 Five additional reports describe the four domains and 20 competencies of MyWays Student Success Framework with one introductory report and individual reports on each domain and its competencies, including why the domain and its competencies are important, key principles, the state of play in the field, resources, and essential one-page primers for each competency.

3 **HOW can our learning experience design** help students develop the broader, deeper competencies?

PART C
Redesigning the Learning Experience for the MyWays Competencies

4 **HOW do we gauge student progress** in developing these competencies? How can we measure our school’s success beyond proficiency in math and ELA to whole child development?

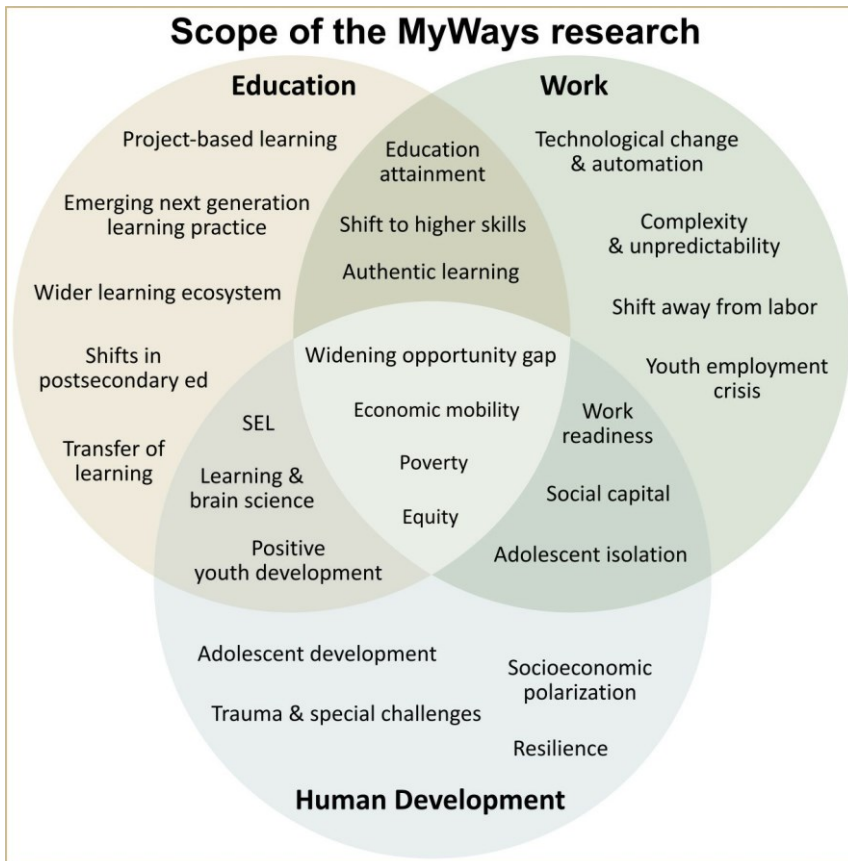
The final two reports bring broader and deeper competencies into educational practice, focusing on key constructs for learning design and assessment design to achieve authentic, agency-driven student learning experiences. These include: Whole Learning, the Wider Learning Ecosystem, Levers for Capability and Agency, the two essential assessment shifts and MyWays’ Five Assessment Strategies.

Note: All graphics are developed by, and should be credited to EDUCAUSE/NGLC unless otherwise noted.

Part A Adolescence in an Age of Accelerations

1 **WHY the urgency to change?** What are the **real-world conditions** that our students will need to address?

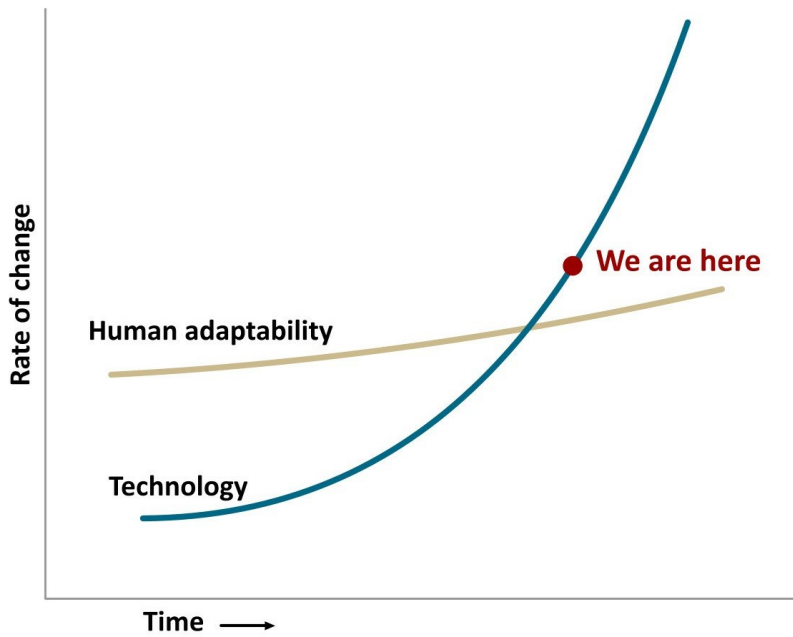
The five reports that comprise Part A of the *MyWays Student Success Series* answer the first question in the MyWays Through-line, distilling the real-world changes and conditions in the labor market, postsecondary sector, and social capital arena that are most acutely impacting young people today. In addition, key developmental tasks are described that are necessary to prepare “apprentice-adults” for life after high school.



In addition to analyzing dozens of competency frameworks, we conducted an extensive literature review to answer the first through-line question. The review covered three broad categories as illustrated in the Venn diagram: Education, Work, and Human Development.

Introduction and Overview, page 6

Eric Teller's graph of human adaptability versus exponential technological change

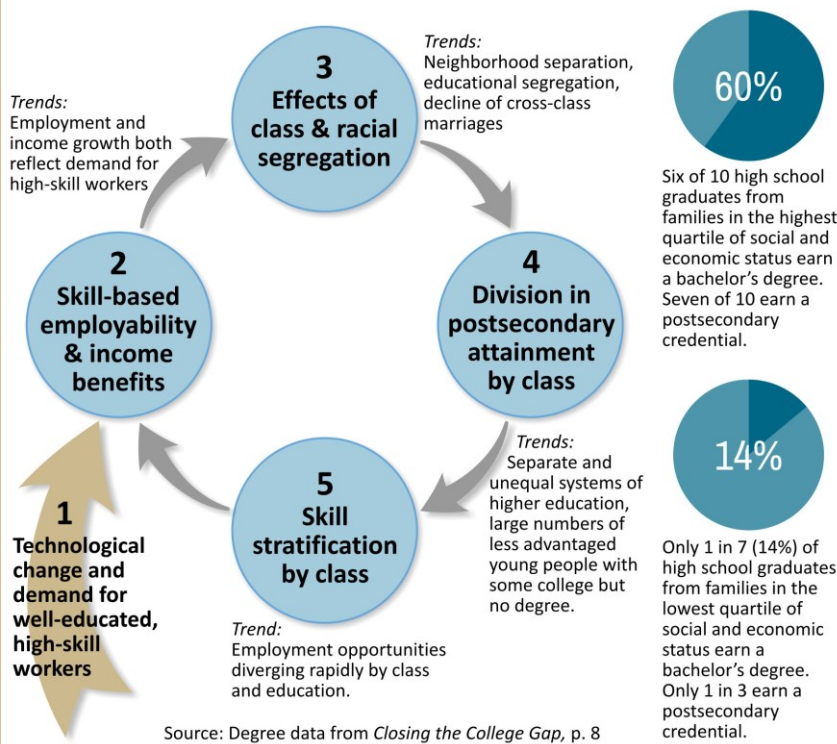


Source: *Thank You for Being Late*, Thomas Friedman, 2016, p. 32.

Young people are growing up in what Thomas Friedman calls an *age of accelerations* in which technological change is outpacing human adaptability. If we cannot slow down technology, globalization, and climate change, our only remaining option is to improve human adaptability by helping individuals, families, and institutions (including schools and youth-facing organizations) be more agile, resilient, and entrepreneurial.

Report 1, page 16

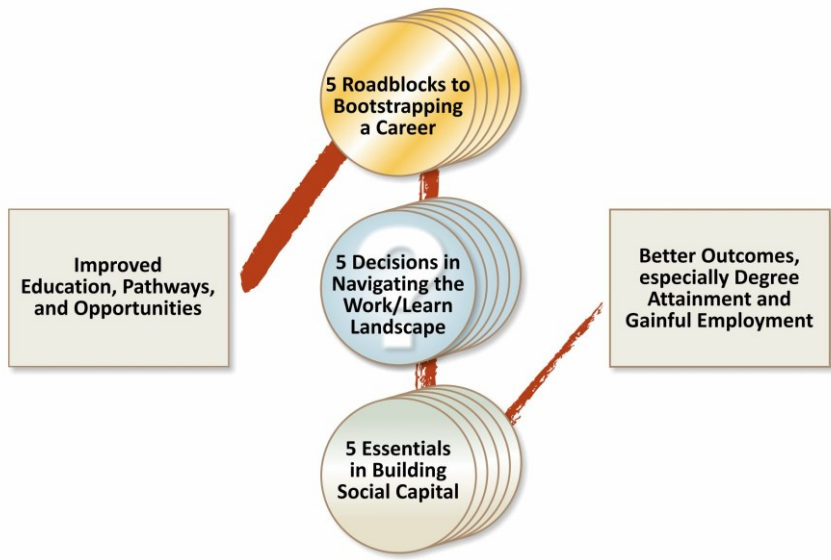
The opportunity gap is widening at an alarming rate due to the cyclical interaction of five components



Changes in employment and education patterns are most severely impacting the least advantaged in society, rapidly widening the opportunity gap in employment prospects, economic mobility, and access to the American Dream. Discussed in Report 1, this diagram describes the forces at play.

Report 1, page 11

To achieve better outcomes, we need to improve education, pathways, and opportunities to address the 5-5-5 Realities

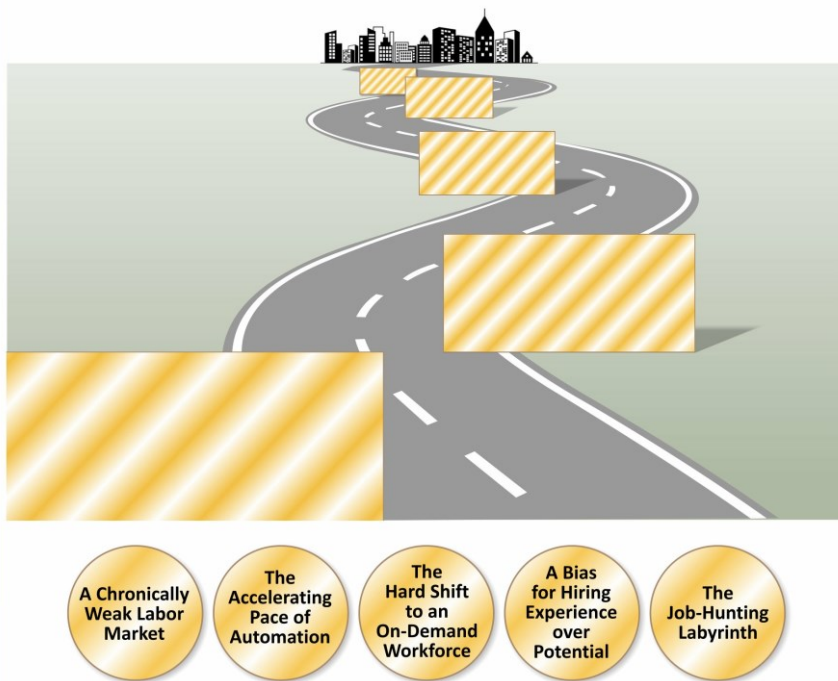


Real-world conditions facing young people are increasingly challenging. Our objective is to go beyond loosely defined technology and globalization trends to provide educators with specific challenges that we call the **5-5-5 Realities** — 15 key factors and trends that all young people are likely to confront during what we call their *wayfinding decade*. We define being “work/learn ready” as understanding these Realities and being equipped with the competencies and experiences needed to address them.

5 Roadblocks to Bootstrapping a Career	5 Decisions in Navigating the Work/Learn Landscape	5 Essentials in Building Social Capital
A chronically weak labor market	Plotting a path to entry & advantage	Caring friends & adults
The accelerating pace of automation	Calibrating the work/learn mix	Near-peers & role models
The hard shift to an on-demand workforce	Vetting postsecondary providers	Mentors & coaches
A bias for hiring experience over potential	Figuring finances & risk	Networks & weak ties
The job-hunting labyrinth	Cultivating social capital	Resources & connectors

Report 1, page 19, and Reports 2–4

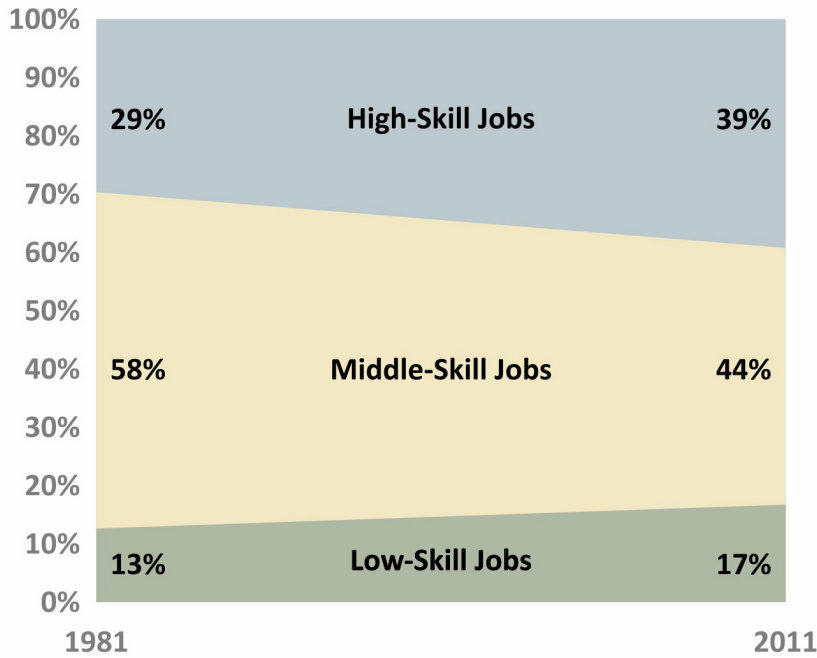
Labor-reducing measures by business have created 5 Roadblocks that new labor market entrants must overcome



Few people appreciate how rapidly the labor market is transforming and the roadblocks that are dampening job prospects for people under 30. We take a hard look at the **5 Roadblocks** shown at the bottom of the graphic — shifts in employment and hiring patterns that, in many ways, are especially problematic for young people today. We end the discussion with key takeaways for next generation educators.

Report 2, page 1

The middle-skill share of all jobs fell from 58% to 44% over 30 years, 1981-2011

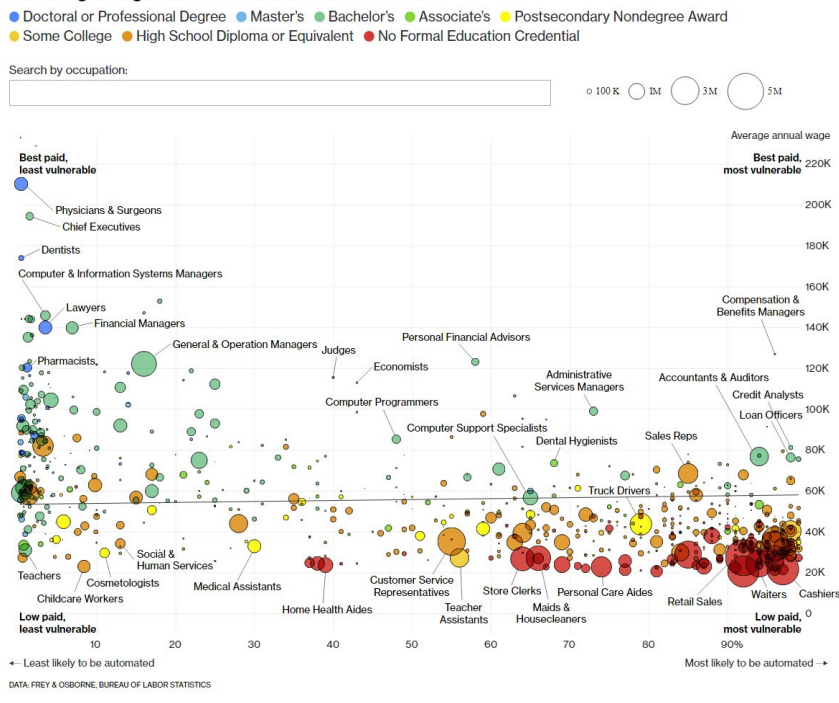


Source: Dallas Federal Reserve, "Middle-Skill Jobs Lost in US Labor Market Polarization," 2014. Data from Jaimovich and Siu, NBER.

One of the most profound changes in the labor market is the declining share of middle-skill jobs which are increasingly being offshored or replaced by technology. This contraction of middle-skill jobs is impacting the very positions that previously gave people a foothold in the economy and a path to middle-class living. The jobs that once gave many young people their start are those undergoing the greatest transformation.

Report 1, page 7

A College Degree Lowers Job Automation Risk

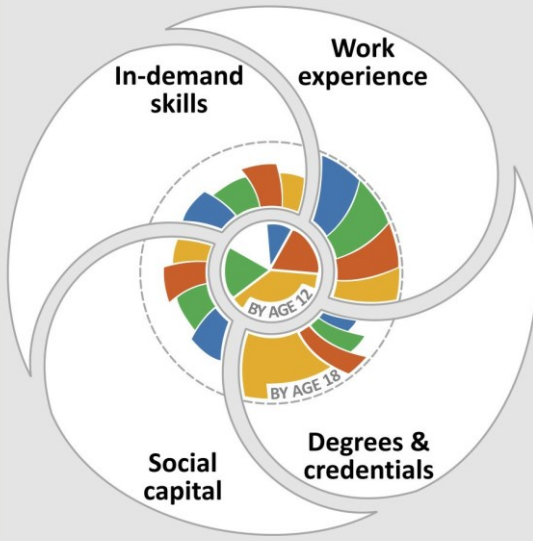


We carefully researched automation's impact on labor market trends, including the erosion of middle-skill jobs (above). Economists are busy attempting to project not only the overall impact of automation but also its impact on specific jobs and industries. This graphic is a screenshot of an interactive chart of potential job automation risk created by Bloomberg. One important message: all jobs are continually being redesigned and transformed. Young workers need to be prepared for an unprecedented rate of job redefinition and personal reinvention.

Report 2, page 10

The “opportunity engine” is a simple but meaningful model of career development in the 21st century

Students, like more experienced adults, must continuously improve and adapt each blade of their personal opportunity engine to the changing circumstances and opportunities they encounter. Employers today are evaluating for all four components.



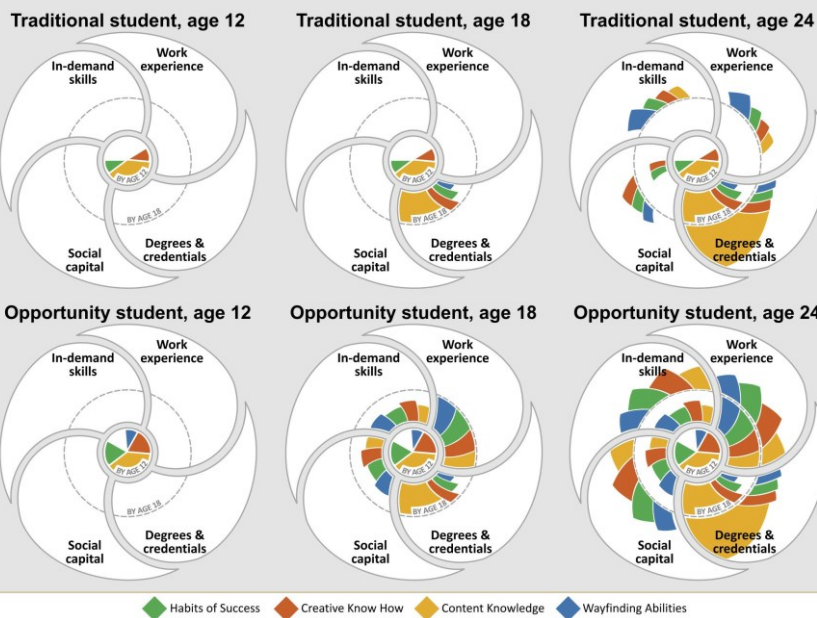
We build our individual engines over time from the center out as we age — as in this example of a hypothetical graduating high school senior. Colors symbolize how this student’s competencies (each a color of a MyWays domain) have developed with significant achievement in work experience, in-demand skills, and social capital along with a high school diploma. See Report 3 for more information.

◆ Habits of Success ◆ Creative Know How ◆ Content Knowledge ◆ Wayfinding Abilities

As a consequence of the shifts in employer labor demands, graduates from high school and college are increasingly competing for jobs directly with older workers with greater work experience, the job-specific skills desired by employers, and more developed social connections. Accordingly, in today’s *on-demand economy*, these three elements or “blades” — together with degrees and credentials — power an individual’s employment opportunities in what we call the “*opportunity engine*.”

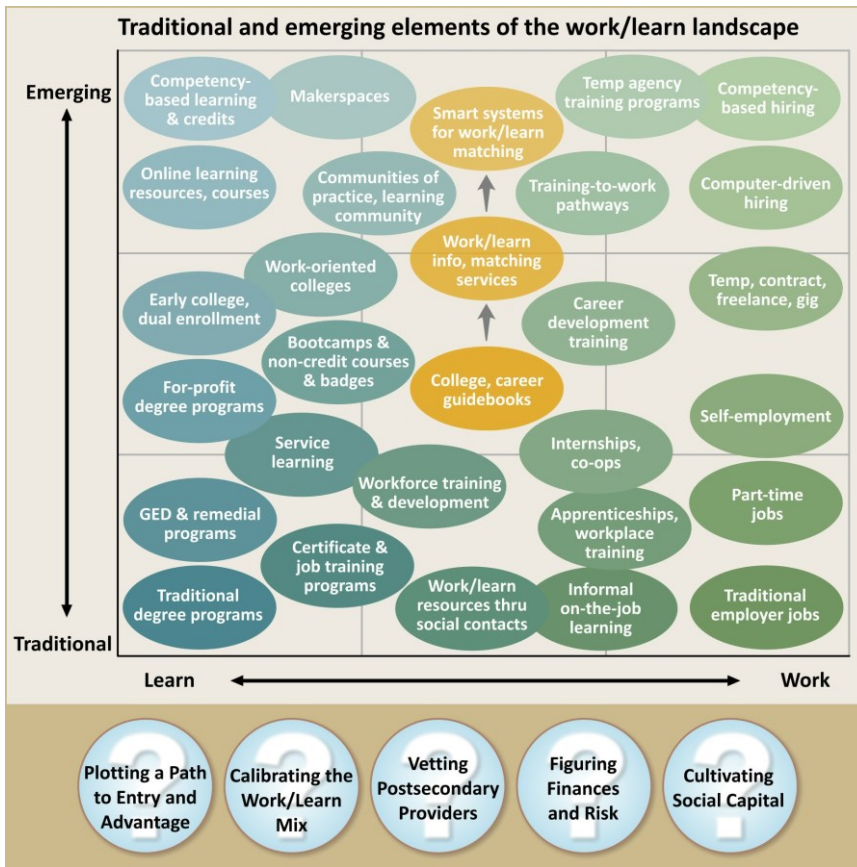
Report 2, page 23

Comparison of a “traditional” vs. “opportunity” student at ages 12, 18, and 24



A traditional student (top row) follows a standard, fairly rigid academic curriculum with negligible development of the other elements in their opportunity engine until they leave high school or college. In contrast, an opportunity student (bottom row) strives to increase workplace knowledge and employability by balancing academics with authentic learning and work-related experience, developing all four blades of the opportunity engine at a much earlier age.

Report 3, page 6



Meanwhile, in postsecondary education, there are far more fields of study, learning modes, and education providers for young people today to analyze and vet than ever before. In addition, amid the rise of freelance, or on-demand, forms of work and computer-driven hiring methods, most young people are now *working learners* who have entered the workforce for financial reasons, work experience, skill building, or networking. High schoolers must now select a path to entry (and later, a path to competitive advantage) from an ever-widening range of options and combinations — just one of the **5 Decisions** in navigating the *work/learn landscape* shown at the bottom of the graphic.

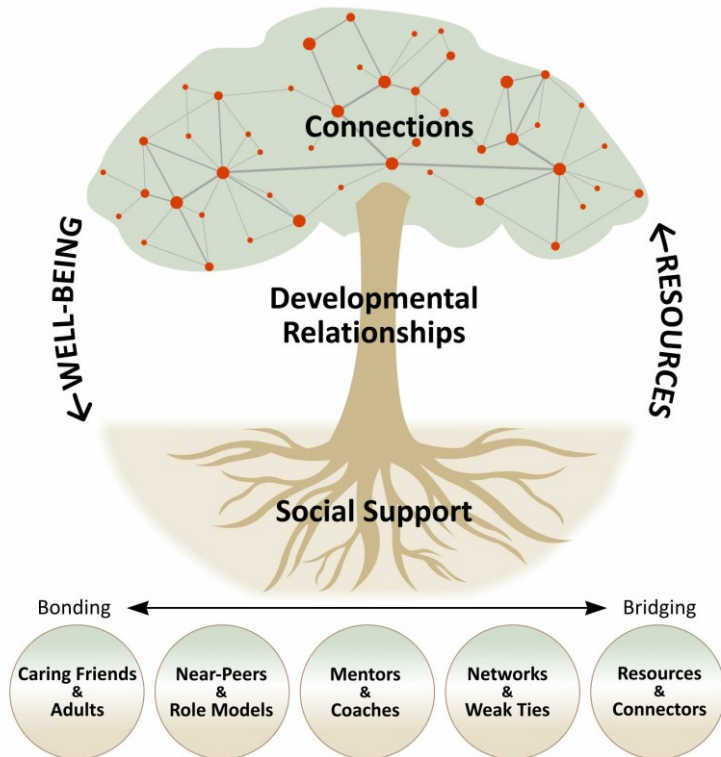
Report 3, page 16

The economic diversity of neighborhoods has fallen dramatically over the past 50 years; families are increasingly segregated by class.

The **5 Essentials** in building social capital constitute the third part of the 5-5-5 Realities construct that summarizes key challenges facing students in this age of accelerations. As labor market and postsecondary shifts accelerate, social capital resources become more and more critical to success. However, traditional education does little to foster social capital. Furthermore, as Americans increasingly live, learn, and work segregated by class (income levels), social capital is becoming less and less accessible to low-income students and students of color who need it the most.

Report 4, page 3

The MyWays Developmental Framework for Social Capital



Types of support: emotional, companionship, validation, informational, instrumental

We believe the research shows that social capital is *the* limiting factor impeding economic mobility today. Our research identified five crucial types of social capital (bottom row). In addition, the MyWays Developmental Framework for Social Capital integrates the most relevant research on the subject, including the finding that healthy social support and relationships throughout childhood and adolescence are prerequisites to developing robust social connections of mutual benefit throughout one’s life.

Report 4, page 10

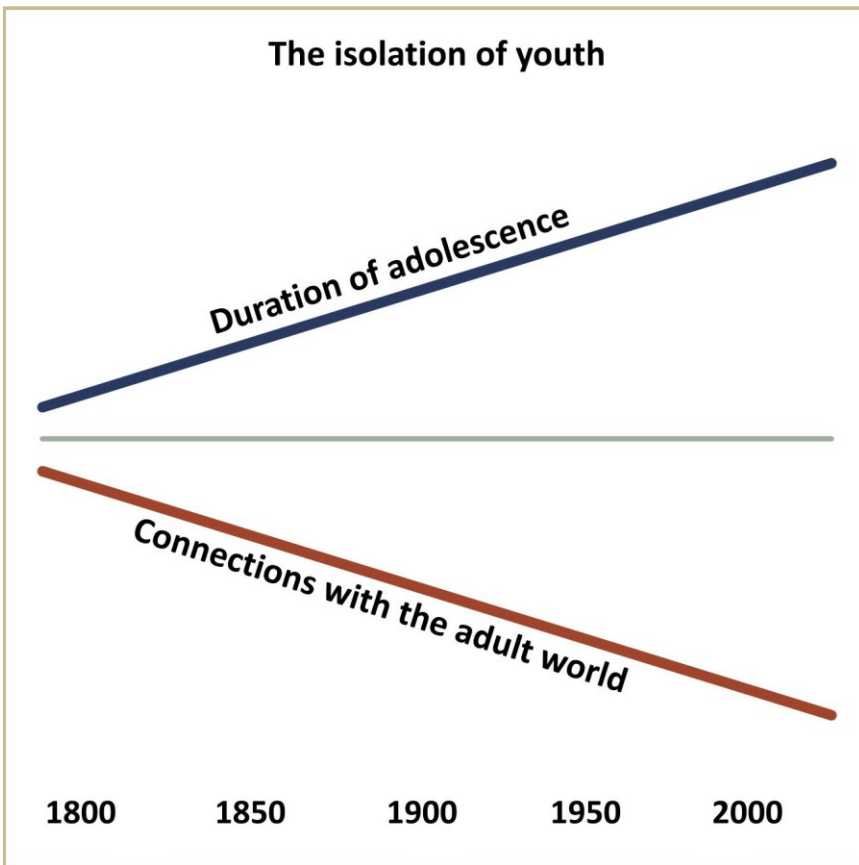
Harlem Children’s Zone (HCZ) Community-based example for Near-Peer & Role Models



HCZ has been heralded for changing the paradigm for education in troubled low-income communities, pioneering the cradle-to-career pipeline approach of integrated academic, youth, family advocacy, and wraparound programs now emulated by the StriveTogether Network, the federal Promise Neighborhoods Program, and other local initiatives across the country. Like many of our other social capital examples, HCZ works to build all 5 Essentials. However, in our view, they are unparalleled in their approach to Near-Peers & Role Models. Serving more than 25,000 children and families, HCZ fields 1,200 trained staff — 1,200 Near-Peers & Role Models. Most are from Harlem and a great many have come up through the ranks of the HCZ organization, perhaps starting as a student-participant, then a junior counselor, senior counselor, tutor, site coordinator, program manager, and program director. Every staffer is committed to each child’s success — “Whatever It Takes,” is the mantra — and every staffer is a walking, talking, inspiring example of what is possible.

Many school-based and community-based programs use social capital to change the lives of young people. Harlem Children’s Zone is one of 10 exemplars we describe.

Report 4, page 28



Given current education design and American attitudes toward adolescence, many teenagers will fail to successfully merge onto the highway of productive adulthood. The duration of adolescence keeps lengthening while meaningful connections with the adult world diminish. Accordingly, we need to urgently rethink adolescence, learn to treat adolescents as *apprentice-adults*, and build longer *acceleration lanes* for their transition into adult life.

Report 5, page 2

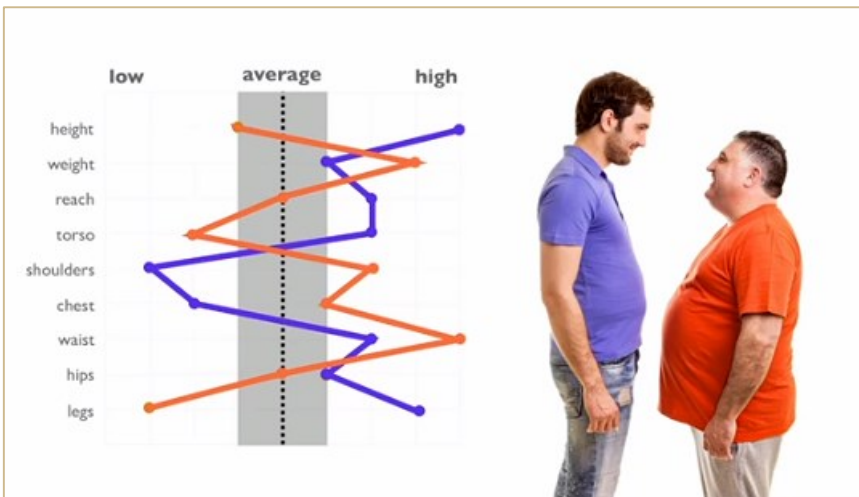
The 5 developmental tasks of adolescence

The illustration shows a large, white, 3D brain model. It is surrounded by a complex metal scaffolding structure. Several small, red, stylized human figures are positioned on different levels of the scaffolding, appearing to be working on or inspecting the brain. This visual metaphor represents the process of developing and refining the adolescent brain through various tasks.

- Reclaiming adolescence as an age of incredible growth & potential
- Finding self, strengths, and direction
- Acquiring capability and agency
- Overcoming trauma and personal challenges
- Building relationships, social capital, and guidance

Neuroscientists and psychologists studying the adolescent brain conclude that the teenager is “an exquisitely sensitive, highly adaptive creature wired almost perfectly for the job of moving from the safety of home into the complicated world outside.” Five developmental tasks of adolescence seem particularly crucial to align with next generation learning if we are to develop young people equipped to thrive in a world of change.

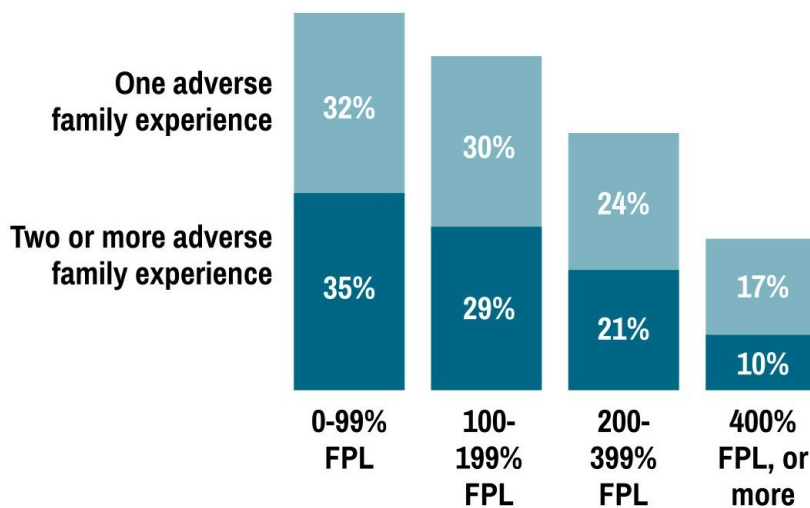
Report 5, page 3



The adult self — what Erik Erikson called an *enduring identity* — integrates the many selves of childhood, along with the feelings, self-discoveries, and aspirations we hold for the future. Key parts of that self are the specific strengths within ourselves that we elect to nurture and express on the journey to adulthood. Integral to self-awareness and personal satisfaction, the development of our personal strengths is also increasingly the key to making ourselves marketable, helpful, and adaptable in the world of work. To accomplish this goal, next generation learning must help students understand and cultivate their *jaggedness profile*, a term introduced by Todd Rose in his important book, *The End of Average*.

Report 5, page 13

Prevalence of Adverse Child and Family Experiences, by household income (% of federal poverty level)



Source: Data from the 2011/12 National Survey of Children’s Health (NSCH)

For a great number of apprentice-adults, the special challenges of childhood trauma, poverty, physical or health limitations, emotional or learning difficulties, addiction, language and cultural barriers, and discrimination impede personal development and success. Today, there is a heightened awareness, through data analysis, of the trauma associated with adverse childhood experiences (exacerbated by poverty as shown in the graphic) and these other challenges; in response, we have seen the rise of community schools, wraparound services, and professionally-trained counselors. The next priority is to ensure that trauma-informed care and other mitigations are accessible to all children who need them.

Report 5, page 19

Part B

Broader, Deeper Competencies for Student Success



WHAT does success look like for students in a world of accelerating change? What competencies promote a broader, deeper definition of success?

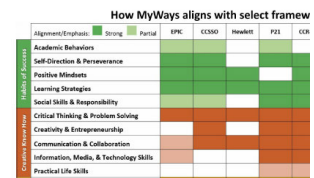
The five reports that comprise Part B of the *MyWays Student Success Series* answer the second question in the MyWays Through-line. We combined our analysis of the age of accelerations in Part A with research on a range of highly regarded outcomes frameworks to create the MyWays Student Success Framework, and to provide actionable strategies and resources related to its four domains and 20 competencies. The framework is not intended to replace success definitions you may already be using, but to help you deepen, reflect on, and update your current practice.



Select frameworks that helped inform the MyWays competencies		
Education		
EPIC and David Conley	Four Keys to College and Career Readiness **	link
Council of Chief State School Officers, ILN	Knowledge, Skills, and Dispositions **	link
Hewlett Foundation	Deeper Learning Competencies **	link
Partnership for 21st Century Learning	P21 Framework for 21st Century Learning **	link
ConnectEd	College and Career Readiness Framework **	link
Center for Curriculum Redesign	Four-Dimensional Education Framework **	link
National Research Council	Education for Life and Work	link
Advance CTE	The Common Career Technical Core	link
Nellie Mae Foundation	Ready for College and Career?	link
KnowledgeWorks	Redefining Readiness – a New Foundation	link
ACT	Holistic Framework for Enhancing Education and Workplace Success	link
Human Development		
UChicago Consortium on School Research	Foundations of Young Adult Success **	link
UChicago Consortium on School Research	Teaching Adolescents to Become Learners **	link
Forum for Youth Investment	Preparing Youth to Thrive	link
Forum for Youth Investment	Ready by Design: Science (and Art) of Youth Readiness	link
CASEL	Core SEL Competencies	link
Search Institute	40 Developmental Assets for Adolescents	link
Character Lab	Character Growth Card	link
Transforming Education	Measuring MESH (Mindsets, Essential Skills, Habits)	link
The Young Foundation	Framework of Outcomes for Young People	link
Turnaround for Children	Building Blocks for Learning: A Framework for Comprehensive Student Development	link
Work		
National Career Development Association	National Career Development Guidelines **	link
U.S Department of Labor	Skills and Tasks for Jobs (SCANS 2000 report)	link
National Work Readiness Council	National Work Readiness Credential Profile	link
Nat. Network of Business & Industry Associations	Common Employability Skills	link
National Association of Colleges and Employers	Definition of Career Readiness and Competencies	link
Microsoft/Cisco/Intel (ATC21S)	Defining 21st Century Skills	link
U.S. Department of Education	Employability Skills Framework	link
Employment & Training Administration, USDOL	Building Blocks for Competency Models	link
OECD (Education 2030 Framework Project)	Global Competency for an Inclusive World	link
	** See table on page 9	

We analyzed over thirty outcomes frameworks from diverse organizations across three fields: Education, Human/ Youth Development, and Work. The chart to the left illustrates the depth and range of the frameworks surveyed, from the six competencies of the Hewlett Deeper Learning model to the Search Institute’s 40 developmental assets.

Application of MyWays as a “rosetta stone” across a subset of eight of these frameworks highlights the way in which priorities in the three fields align with different aspects of the broader,



deeper competencies — and how much educators can learn from the other fields.

Introduction and Overview, pages 7–9

The MyWays competencies are grouped in four domains



Habits of Success are behaviors and practices that enable students to own their learning and cultivate personal effectiveness

Creative Know How involves skills and abilities to analyze complex problems and construct solutions in real-world situations

Content Knowledge focuses on subject area knowledge and organizing concepts essential for academic and real-world applications

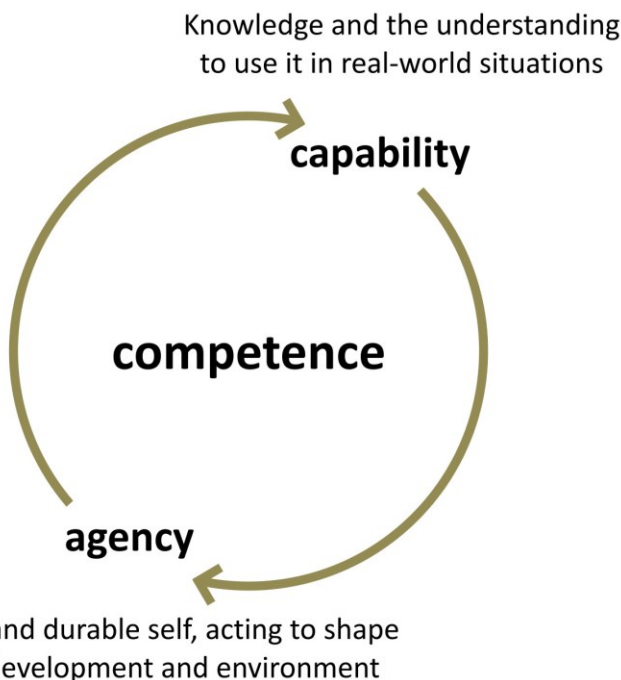
Wayfinding Abilities cover knowledge and capacity to successfully navigate college, career, and life opportunities and choices

The resulting *MyWays Student Success Framework* organizes the knowledge, skills, and habits that our students need for today’s world into four domains of broader, deeper competencies, as represented in the diamond to the left.

While the top three domains garner some agreement (if inconsistent coverage) across influential frameworks, MyWays offers three vital contributions: distilling these competencies through the latest research on the changing world, learning science, and adolescent development; re-positioning Habits of Success to lead the way, and lifting up Wayfinding Abilities as a skill set of equal importance to the others.

Report 6, page 3

Competence in any pursuit is the union of capability and agency



Besides this broader and more future-oriented set of competencies (more on this below), our research shows that today’s challenges also require a richer meaning for the concept of competence itself.

Achieving competence in the 21st century means that individuals need to be able to transfer their knowledge and skills to new situations. Thus, competence involves both **capability** — knowledge and the understanding to use it in real-world situations, **and agency** — a deep and durable self, acting to shape one’s development and environment.

Within the MyWays framework, capability and agency are mutually reinforcing aspects of each of the 20 competencies (see next page).

Report 5, page 16, and Report 6, page 4

The 20 broader, deeper competencies in the MyWays Student Success Framework



Habits of Success

Academic Behaviors
Self-Direction & Perseverance
Positive Mindsets
Learning Strategies
Social Skills & Responsibility



Creative Know How

Critical Thinking & Problem Solving
Creativity & Entrepreneurship
Communication & Collaboration
Information, Media, & Technology Skills
Practical Life Skills



Content Knowledge

English Core
Math Core
Science, Social Studies, Arts, Languages
Interdisciplinary & Global Knowledge
Career-Related Technical Skills



Wayfinding Abilities

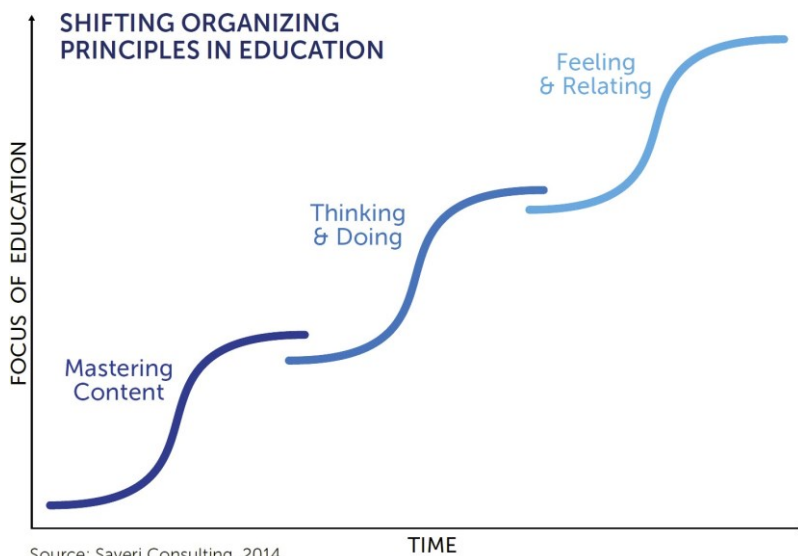
Survey Learn, Work & Life Landscapes
Identify Opportunities & Set Goals
Design & Iterate Prototype Experiences
Find Needed Help & Resources
Navigate Each Stage of the Journey

The *MyWays Student Success Framework* consists of 20 competencies that encompass the range of practiced habits, transferable skills, applied knowledge, and personalized navigation demanded by the 5-5-5 Realities (changes in the labor market, postsecondary sector, and social capital arena that are most acutely impacting young people today).

These competencies cover a lot of ground because they embrace a whole-person approach. No learner is expected to address the 20 competencies in an isolated, granular way. The value of the framework is to keep breadth, depth, and future-readiness front of mind for the creation of individual learning journeys that vary based on learner strengths and needs.

Report 6, pages 9–10

Connecting education to whole person development



KnowledgeWorks’ [imagining of the world of 2040](#) underscores one element of MyWay’s embrace of human development: “To prepare for a future in which smart machines will be able to perform increasingly complex, non-routine work and full-time employment will be decreasingly common, *today’s education systems must change their central operating principles. They must continue to shift from a limiting focus on mastering content and must also move beyond the more recent focus on thinking and doing to establish a new focus on feeling and relating.*” [Emphasis added.]

The MyWays framework is based in a major paradigm shift: the connecting of education to whole person development. We lead with Habits of Success because this domain has the biggest gap between what students currently learn in school and what they MUST begin to master to thrive in the rapidly changing and disorderly world.

This aligns with the shift to *feeling and relating* noted to the left. MyWays, however, emphasizes the additive nature of this shift (partly because learning science shows that feeling and relating are also vital for more durable and adaptable learning of content and thinking/doing skills). MyWays’ roots in whole-person development also empower a key additional focus on life efficacy — the development of personal Wayfinding Abilities for the future our students face.

Report 6, pages 7–8

Habits of Success for learning, work, and well-being

The MyWays research identified key principles for enabling learners to develop these competencies. Educators should help students to:

Experience day-to-day the active, authentic learning that enables students to work on their Habits of Success in integrated, sequenced, and explicit ways.

Benefit from strong adult relationships, which are necessary for all students to develop the Habits — and even more vital for students affected by poverty, trauma, or other challenges.

Avoid the unintended consequences possible in emerging measurement of Habits of Success, particularly as part of high-stakes accountability.



Academic Behaviors
Self-Direction & Perseverance
Positive Mindsets
Learning Strategies
Social Skills & Responsibility

MyWays is a future-ready goal set in which *Habits of Success* not only joins the more traditional curriculum, but leads the way.

Habits of Success (which draw on academic mindset, social-emotional learning or SEL, and character competency models) address the personal development, resourcefulness, and resolve needed to fuel the “opportunity engine” so vital to success in the complex and rapidly changing future. These competencies provide the internal mindsets, habits, and skills to help learners navigate their way through the postsecondary sector, build the social capital needed to succeed in the shift to the on-demand workforce, and manage their own life-long learning.

Report 7, page 10 and pages 1–4

Creative Know How for a novel, complex world

The MyWays research identified key principles for enabling learners to develop these competencies. Educators should help students to:

Develop and transfer competencies in novel, real-world contexts, incorporating a variety of complex and rapidly changing situations.

Work on skills and knowledge in integrated ways — learners need to apply skills to and through content knowledge, learning both more deeply, in a virtuous cycle.

Focus explicitly on these skills — naming, practicing, and reflecting on them, as well as being coached on them and receiving ongoing and effective feedback.

Explore the ways in which Creative Know How competencies are intimately interrelated with each other and with the Habits of Success.



Critical Thinking & Problem Solving
Creativity & Entrepreneurship
Communication & Collaboration
Information, Media, & Technology Skills
Practical Life Skills

A decade after P21 came out with its 21st Century Learning framework, we are beginning to realize just how creative (or adaptive and transferable) that know how must be to prepare learners, in essence, for the unknown — for jobs not yet invented, the impact of AI, and ways of engaging with others that evolve every few years.

Creative Know How focuses on competencies that better prepare students to pursue postsecondary learning, civic life, and workplace achievements. Coupled with the other domains, Creative Know How empowers us to escape old ways of doing things, solve current dilemmas, and invent new solutions to the world’s problems. In many respects, the five Creative Know How competencies are the everyday power tools of the information age.

Report 8, page 8 and pages 1–4

Content Knowledge for the life students will lead

The MyWays research identified key principles for enabling learners to develop these competencies. Educators should help students to:

Focus on a few “high-leverage” constructs in each subject that are central to the structure of the discipline, transfer, and continued learning in a world of change.

Engage with content through learner-driven, purposeful, real-world experiences, which improve learning while preparing students for life.

Attain balance by developing “T-shaped” knowledge, pursuing appropriate breadth while also developing depth of expertise in chosen areas.



English Core
Math Core
Science, Social Studies, Arts, Languages
Interdisciplinary & Global Knowledge
Career-Related Technical Skills

Although this domain might seem familiar, don’t be fooled. Even in core ELA or the sciences, the new Content Knowledge is different — focused on organizing concepts that learning science shows are likely to be durable and applicable to transfer, and with which students can build cultural and historical context and cross-disciplinary connections. Curating out other topics enables us to add important future-facing content such as entrepreneurship, technology, and wellness. MyWays research also asserts the value of *all* learners gaining career-related knowledge in their K-12 experience.

The “brawn to brains” shift in labor market skill levels described in Report 1 also mean that empowering every child with strong Content Knowledge competencies is now an essential tool in economic mobility.

Report 9, pages 8–9, and pages 1–6

Wayfinding Abilities for destinations unknown

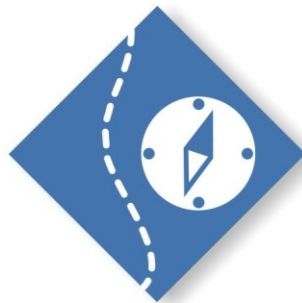
The MyWays research identified key principles for enabling learners to develop these competencies. Educators should help students to:

Start early, so that building awareness of one’s own profile and interests, and of the world outside school walls, informs learning choices and enhances relevance and motivation.

Harness the Wider Learning Ecosystem to engage with the adult world and give learners access to opportunities for developing Wayfinding Abilities.

Access the kind of support necessary to enable real progress in Wayfinding Abilities.

Address the barriers to equity inherent in competencies that are built on relationship-based supports and community-based lines of sight to college, career, and life outcomes.



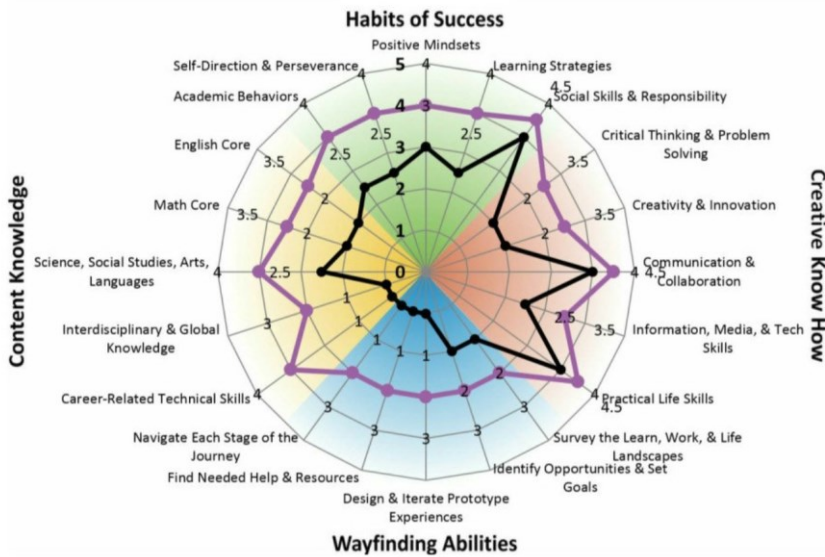
Survey Learn, Work & Life Landscapes
Identify Opportunities & Set Goals
Design & Iterate Prototype Experiences
Find Needed Help & Resources
Navigate Each Stage of the Journey

MyWays’ most dramatic departure from the majority of existing frameworks is its elevation of Wayfinding Abilities to equal standing with the other three domains. Wayfinding Abilities draws on the “plan then implement” tools of college and career counseling, the “prototype, fail fast, learn to be agile” approach of design-based career and life development, and successful entrepreneurship practices that illuminate how people successfully pursue opportunity despite uncertain conditions.

Wayfinding Abilities comprise a flexible toolkit for managing short- and long-term transitions, developing the skills to navigate the disorderly work/learn landscape, initiate a work path or a business in the era of the gig economy, and pursue relationships, personal goals, and other parts of life, into and throughout adulthood.

Report 10, pages 9–10, and pages 1–6

Using MyWays to map a more complete profile Tia's competency profile today (black) and goals at graduation (purple)



This plot illustrates a shortcoming that plays out every day in schools using the traditional, narrow academic metrics for student success. Tia (a composite of two real students in the Boston area) is a complex learner whose natural gifts and competencies in Habits of Success and Creative Know How are neither recognized nor developed. Using a visual tool with broader, deeper competencies enables Tia and her advocates to visualize her strengths and set goals for her future success.

We have received positive, early responses to the MyWays Whole-Student Competency Plot, one approach to visually representing broader, deeper competencies, pinpointing areas of strength as well as need.

Two simple MyWays tools, created in Excel, are easily customized and can be used to compare any two states, such as *student A vs. B*, *school A vs. B*, or, as in the Tia example here, *today vs. future*. Currently, the tool is conceptual, but some members of the NGLC community are interested in the rubrics and scoring protocols to make it empirically driven. (For more, visit [Tools.](#))

Introduction and Overview, page 11

Engaging your community in defining your student goal set

We believe deeply that school designers, educators, and individual learners need to invest in evolving their own goal sets within the broader MyWays framework — through rich discussions, collaborative development, and transformative culture-building.

We also realize that, in doing this hard work, it helps to see concrete exemplars and practice tools. We include examples of promising practice, as well as resource boxes focused on starter links, relevant competency frameworks, and models with strong emphasis on each domain. We even include a one-page primer for each of the 20 individual competencies, stuffed to the brim with definitions, suggestions of where to look for inspiration, links to tools like rubrics and learning progressions, and additional resources to explore.

Reports 6–10

Part C

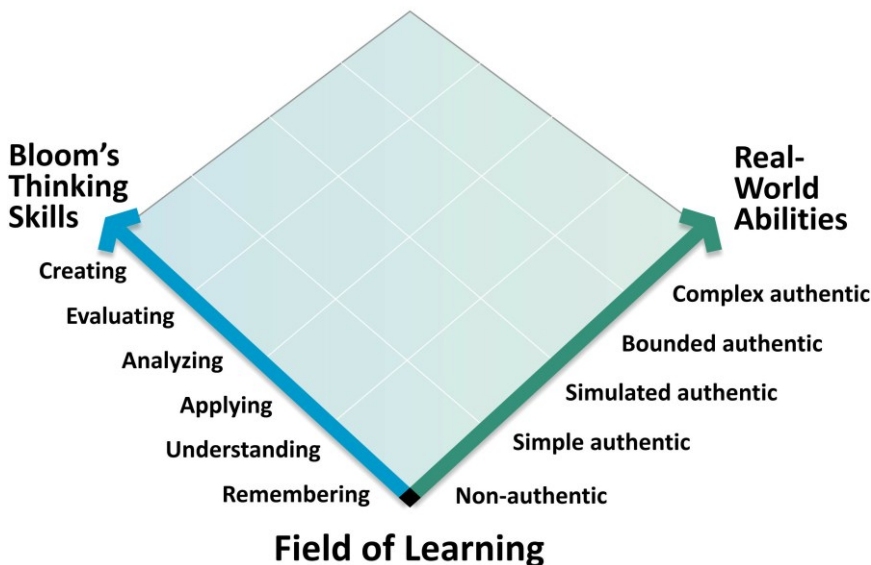
Redesigning the Learning Experience for the MyWays Competencies

3 **HOW can our learning experience design** help students develop the broader, deeper competencies?

4 **HOW do we gauge student progress** in developing these competencies? How can we measure our school’s success beyond proficiency in math and ELA to whole-child development?

The two reports that comprise Part C of the *MyWays Student Success Series* answer the third and fourth questions in the MyWays Through-line, exploring how to bring the broader and deeper competencies into educational practice. They focus on the growing importance of authenticity and offer resources for implementation. They introduce three important learning design constructs (Whole Learning, Wider Learning Ecosystem, and Levers for Capability and Agency), and the aligned MyWays’ Five Assessment Strategies.

The MyWays Field of Learning plots progression in authenticity as well as in thinking skills

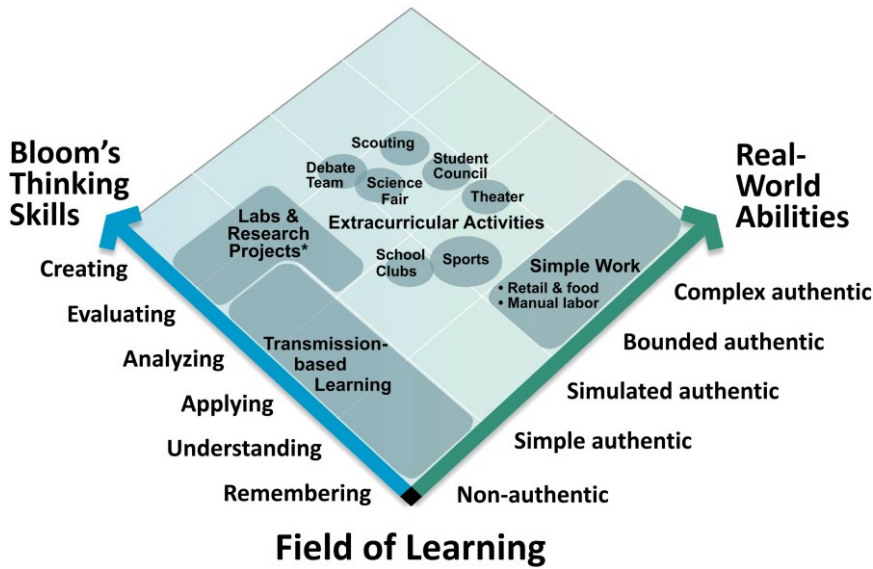


The learning HOW: How do we create learning experiences that foster new social skills, the tolerance of ambiguity, entrepreneurship, or the ability to identify opportunities? Above all, most MyWays competencies require an integration of thinking skills and real-world abilities.

The *MyWays Field of Learning* is a useful visual device for envisioning this integration. The left axis will be familiar to many; the right axis indicates growing competence as the authenticity of the setting increases. For example, a middle schooler might be competent in Communication & Collaboration within “simulated authentic” settings (such as those within school), but not in “complex authentic” settings in the adult world. This progression allows learning activities to be plotted by degree of authenticity.

Report 11, page 7

The traditional learning experience remains low on the authenticity axis



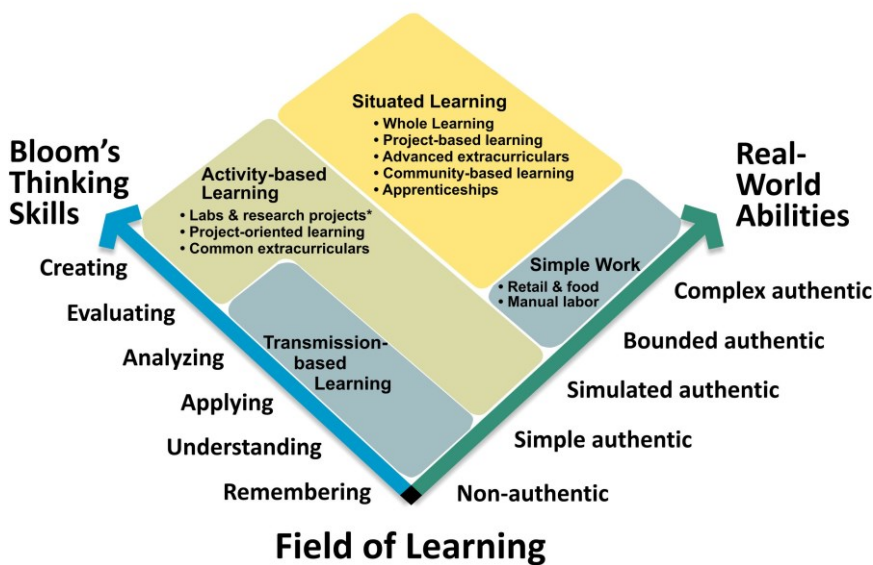
* Including activities associated with Advanced Placement and International Baccalaureate, or inspired by Common Core.

Let's look at the shift required by the new, broader definition of student success. The mapping to the left represents traditional student experience: lots of transmission-based instruction in the classroom, some labs and research projects focused on higher-order thinking skills, a smattering of more authentic extracurricular activities, and maybe some minimum-wage afterschool work.

Notice how closely most school learning hugs the left axis, despite learning science and human development evidence that student-driven learning in more complex situations is more durable and transferable. To develop competencies attuned to today's real-world challenges, we need to rebalance the learning field.

Report 11, page 8

The broader, deeper learning experience matches higher order thinking with more authentic practice

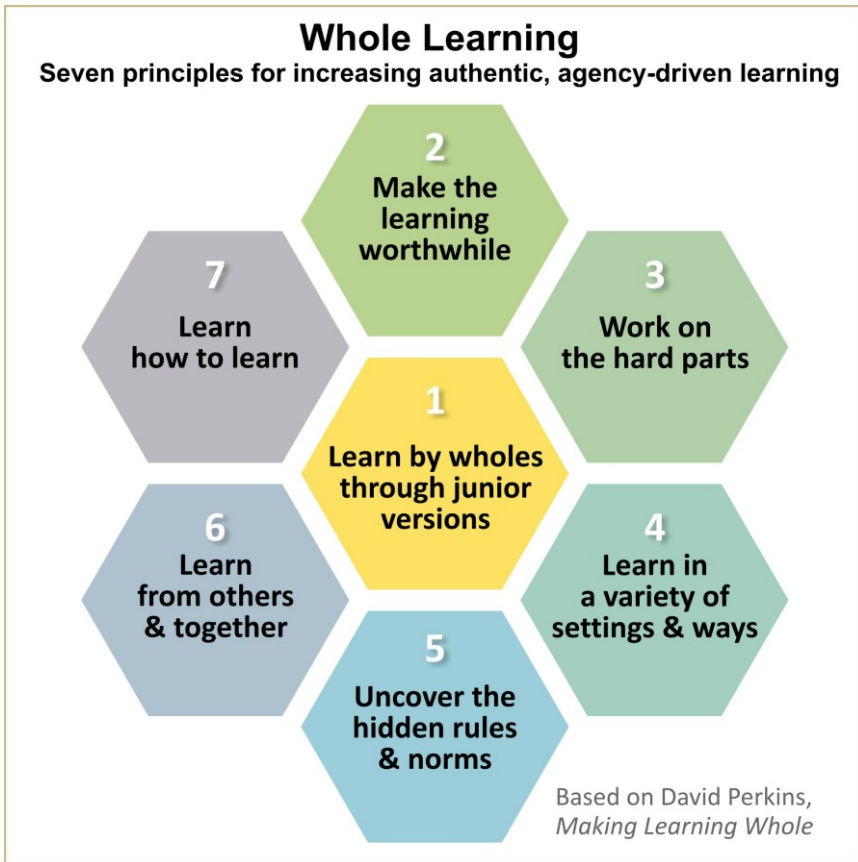


* Including activities associated with Advanced Placement and International Baccalaureate, or inspired by Common Core.

This third field shows an extended and rebalanced mix of core learning experiences, with significant additions further out the right axis in the situated learning zone. In this zone, higher-order thinking skills are engaged within real-world settings that are either bounded (within a controlled setting) or complex (unbounded).

Situated learning approaches are embedded in activity, context, and culture. Knowledge is presented in situations that typically use that knowledge, and social interaction is essential, with novices learning from those with more expertise. These ingredients are all invaluable for developing the MyWays Student Success Framework competencies.

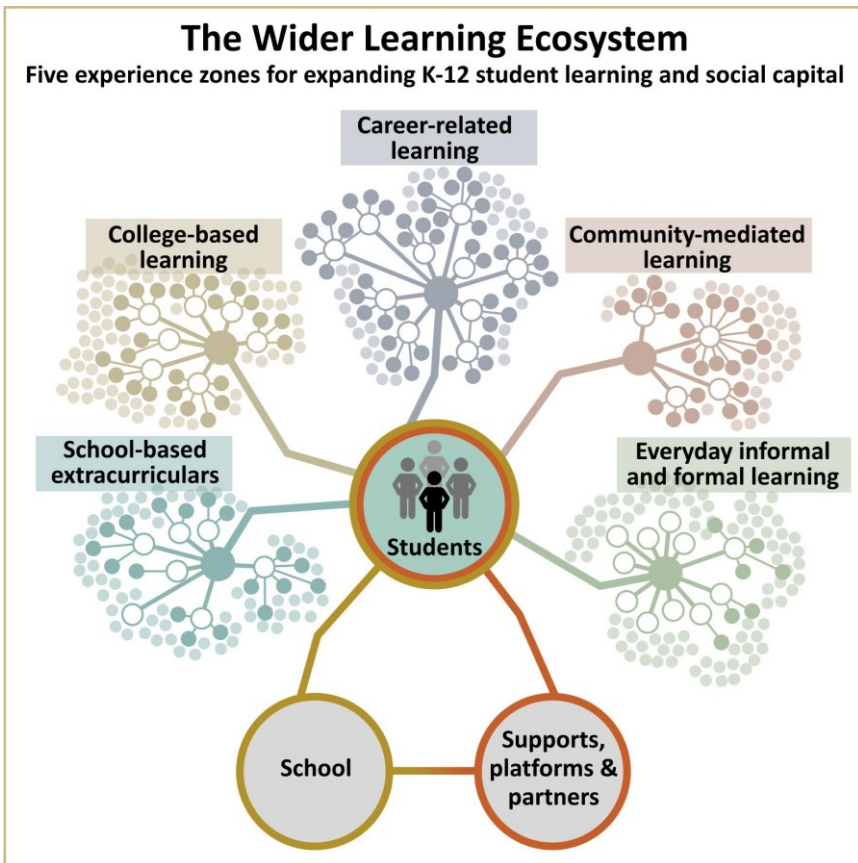
Report 11, page 9



To support authenticity and the broader, deeper competencies, learning design needs to result in experiences that are holistic and complex enough to require the kind of adaptable skills needed in a global and accelerating world.

For this key design construct, we draw on David Perkins’ principles for “learning by wholes.” These seven principles integrate the most important elements of learning and developmental science into a practical guide for holistic learning through “junior versions” — accessible learning experiences scaffolded in developmentally appropriate ways, while still keeping the essence and challenge of “the whole.” We provide tools for you to analyze existing and design new experiences using Whole Learning principles and junior version characteristics.

Report 11, page 14



There is much joyful life learning to be pursued anywhere, anytime, but the 5-5-5 Realities, adolescent development, and Whole Learning suggest that our students also need more intentionally organized and supported real-world learning experiences to help them prepare to navigate in an accelerating world. With the student at the center, the full spectrum of learning opportunities outside of the classroom become what MyWays calls the *Wider Learning Ecosystem* (WLE).

We provide guidance for WLE work, including three models for engagement, essential design and systems components, and examples of programs and organizations working across five WLE zones.

Report 11, page 25

Note: We will be creating a separate WLE resource, funded by the Barr Foundation. This forthcoming resource will be available on [the MyWays website](#).

Eight levers activate capability and agency which combine to create competence in any pursuit



As described above, the MyWays idea of *competence* encompasses both capability and agency, which work together to support transfer of learning. Research concludes that many forms of K-12 education produce very low levels of transfer, while societal conditions such as the 5-5-5 Realities create further transfer challenges for young people.

Drawing on cognitive psychology and neuroscience (including the book *Make it Stick*), we have created a set of eight “learning levers” that research indicates are effective in developing these two aspects across competencies. These levers offer next generation educators guidance on interactions and learning experiences that are likely to help apprentice-adults acquire capability and agency.

Report 11, page 40

A Whole Learning Movement: High-Quality PBL

“It’s easy to do project-based learning,” notes Tom Vander Ark, “it’s just hard to do it well.”¹⁵ What longtime PBL practitioners know is that authentic learning experiences contain a paradox. Learning science, deeper learning practice, and our analysis of the needs of an accelerating world all indicate that the most effective learning experiences are holistic and authentic, giving learners organic opportunities for ownership and agency. Yet behind the scenes the experience also often needs enough — but not too much — intentional design and developmental scaffolding to ensure that learners can discover, practice, develop, and interact in ways that will enable them to move toward their richer learning goals.



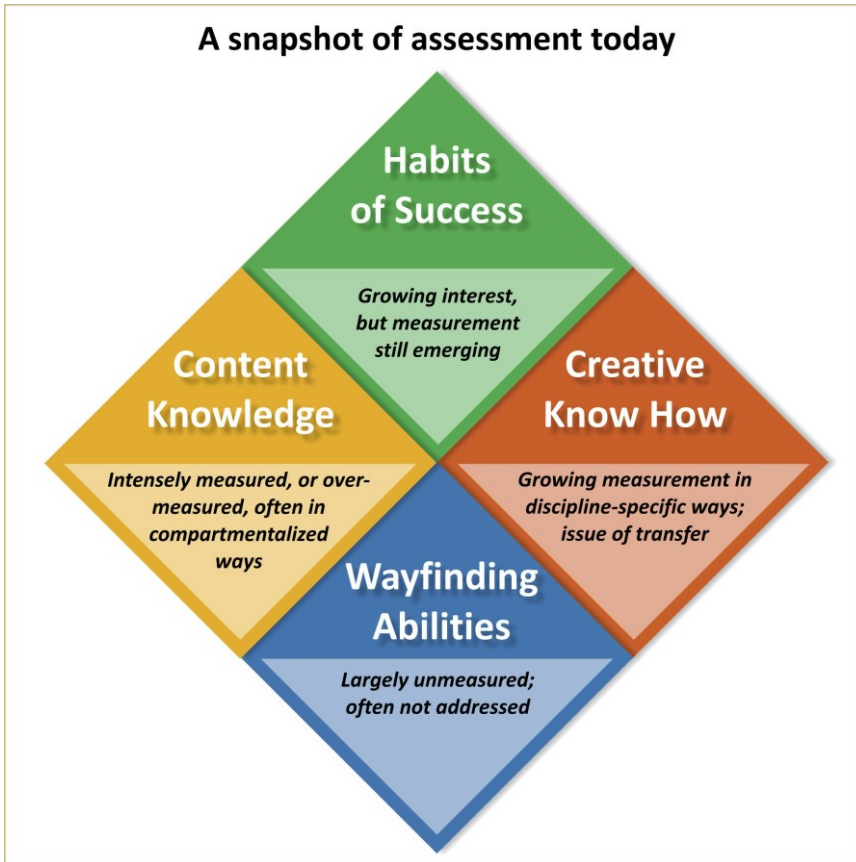
Perkins’ Whole Learning principles provide direct guidance on addressing this paradox. Principle 1 can be thought of as the prime directive: *learn by wholes*. Whole, authentic, purposeful learning creates a culture aimed at engaging learner identity, deepening understanding, and preparing learners to work in and contribute to the real world. At the same time, principles two through seven are also essential, driving the hard, behind-the-scenes work of enabling students to develop durable skills, self-reflect, collaborate, and learn to drive their own learning. Those ready to embrace these principles need to come to grips with the underlying learning architectures and the carefully developed processes and tools — the planning templates, learning progressions, rubrics, and protocols for critiques and performances — that make these learning experiences work effectively. The MyWays Levers for Capability and Agency (outlined later in this report) highlight the learner, educator, and interpersonal practice elements of this considered practice.

Concerns about PBL, like other types of Whole Learning, often focus on one side of this paradox or the other. Some educators are concerned that competencies, progressions, and rubrics, instead of being used appropriately within a Whole Learning framework, will instead be used to organize the learning or assessment in ways that “atomize” skills and learning. For how it could all go wrong, see the “remedial creativity” box in Report 6, and the whole food versus “nutritionist” processed food analogy in [this blog](#) by Michael Petrilli. “Right now,” PBL expert Thom Markham asserts, “not all PBL is equal, and we’re not to the point in which all PBL supports the whole child. Too often, the goal is to cover standards under the guise of ‘student-centered’ instruction.”¹⁶

Other educators are worried that PBL may be authentic, and even holistic, but not rigorous. PBL’s growing popularity has raised a concern that hands-on activities or interesting experiences are being tacked on to other types of instruction and labeled PBL, without resulting in deep and engaging learning. How to balance the two

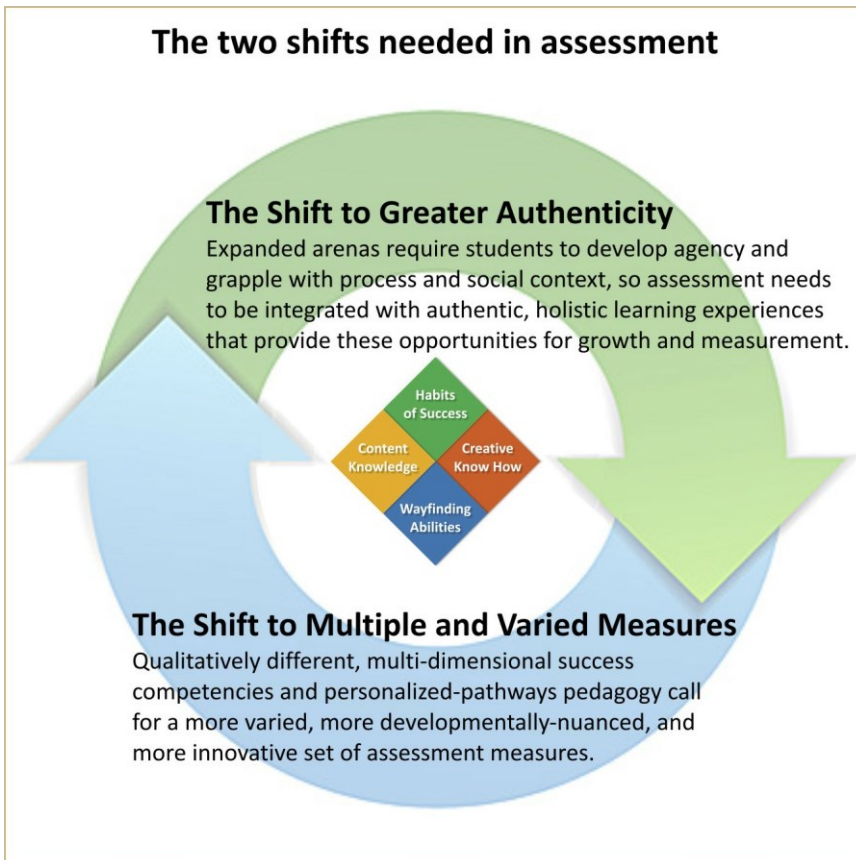
There are schools and organizations that have incorporated the three MyWays design constructs for some of the competency domains for decades, maturing processes and tools. Others are experimenting with learning design to incorporate the newer competencies in more authentic ways. The new drive for “High Quality PBL” (project-based learning) by the Buck Institute and others is one of the practice examples provided for Whole Learning; practice examples are also provided for Wider Learning Ecosystem and Levers for Capability and Agency.

Report 11, pages 20–21



The assessment *HOW*: How we measure what we value in a world that has shifted is a mission-critical challenge to next generation educators. There is no blueprint for how to replace narrow accountability testing with thoughtful investments in gauging the progress of the whole learner. On the other hand, there are pockets of growing research and maturing practice, though — as the graphic suggests — this varies across the competency domains.

Report 12, page 4

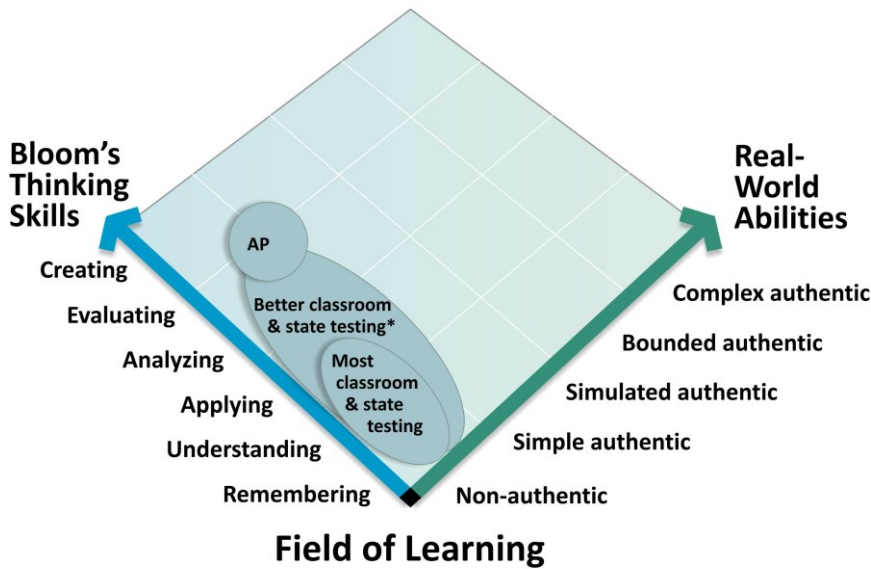


Not only do we need to assess hard-to-measure competencies such as creativity, social skills, and wayfinding abilities, but we must also gauge how well students “own” these competencies and can transfer them in real-world settings. Both of these undertakings require new assessment approaches. The initial step, we believe, is for educators to adopt the two paradigm shifts noted in the graphic.

The first shift involves moving from poor proxies — for example, measuring a few narrow competencies through tightly bounded tests — to assessments designed to include whole learner performance of real-world tasks. The second assessment shift involves moving from single assessments to multiple forms of measures that are also better integrated with each other and learning.

Report 12, page 5

The traditional assessment experience remains low on the authenticity axis



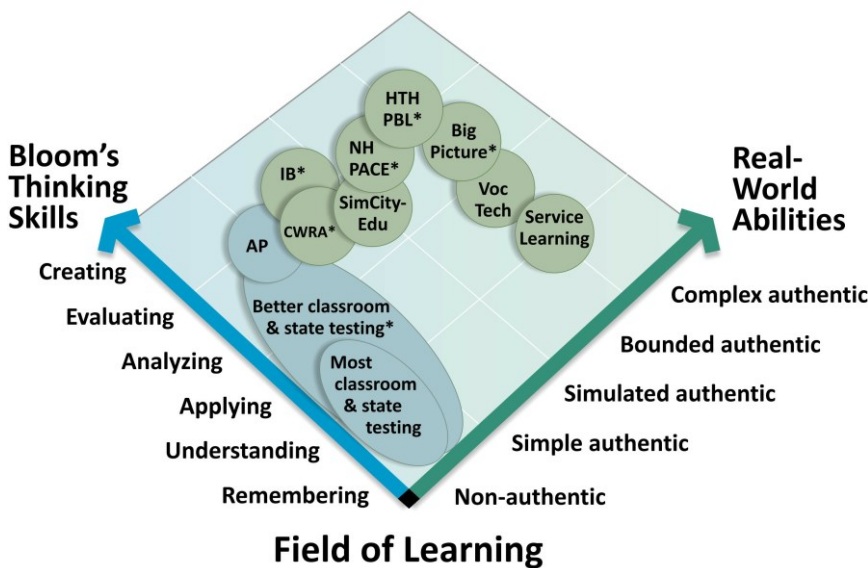
*Asterisked area: Better classroom & state testing – includes PISA for Schools and Common Core assessments from PARCC and Smarter Balanced.

The shift to greater authenticity: The MyWays Field of Learning graphic, introduced above, offers a useful visual device for envisioning assessment (as well as learning) experiences in terms of their degree of authenticity — the real-world abilities they engender — as well as progression in thinking skills.

Traditional assessments, especially most state tests, focus on performance on non-authentic measures like multiple choice questions. Better state tests and AP exams include essays that enable students to construct responses at higher orders of thinking, but do not incorporate more complex, authentic contexts or settings.

Report 12, page 8

The broader, deeper assessment experience involves more authentic feedback and performance



*Asterisked assessments are: Better classroom & state testing – includes PISA for Schools and Common Core assessments from PARCC and Smarter Balanced; IB – International Baccalaureate; CWRA – College Work & Readiness Assessment, a scenario-and document-based 90-minute assessment; NH PACE – New Hampshire Performance Assessment for Competency Education state testing (waiver); HTH PBL – High Tech High's Whole Learning-rich project-based learning approach; Big Picture – Big Picture Schools' experiential learning model, which integrates workplace-based learning. The latter two Deeper Learning models use extended, embedded performance-based assessment.

Assessment of broader, deeper competencies is only fully possible through measurement embedded in Whole Learning experiences higher in both thinking skills and real-world abilities.

This second field plots several examples of assessments that are aligned with Whole Learning principles and increasingly, as they move out the left axis, authentic contexts — including rich simulations, extended projects, and learning in the Wider Learning Ecosystem. These contexts increase the development of student agency, capability, and adaptability. Assessment in high quality service learning and internships, for example, incorporates the delivery of real products to companies or communities, who respond to and use the student work, providing authentic feedback.

Report 12, page 8

The shift from an assessment system to a system of assessments

Assessment elements for MA driver's license	
MA requirements	Assessment involved
Written test of road rules — to get permit	Multiple choice, fact-based; summative gateway to learner's permit
30 hours of classroom instruction, with test at end	Formative feedback; scenarios for understanding of skills, consequences; summative knowledge test
Computer simulations	Incorporating application of knowledge and skills
6 hours of official driving observation	Introduction to the authentic learning environment; group/peer learning
12 hours of official driving practice	Practice loops in authentic environment with instant instructor feedback



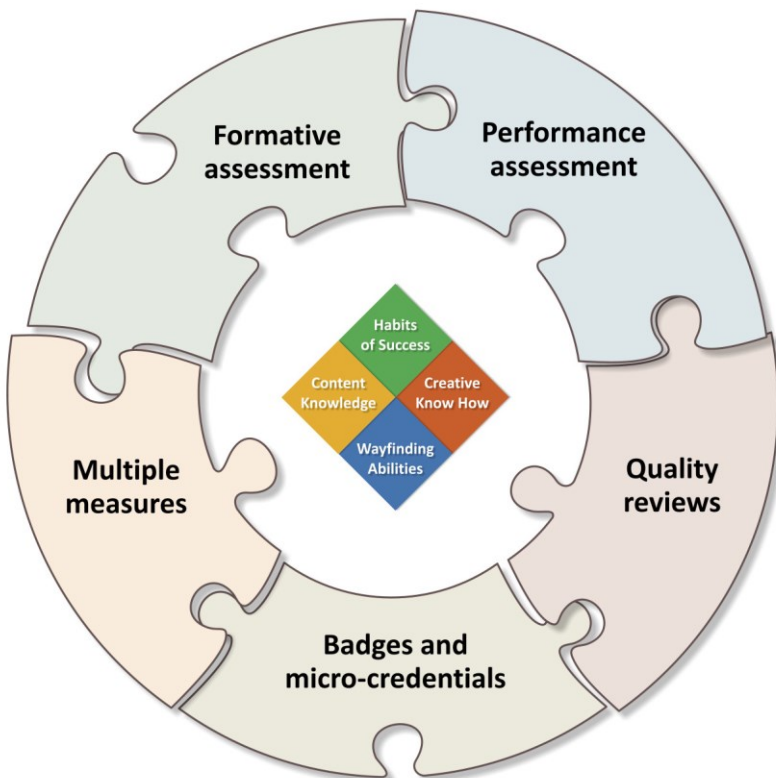
instances (different adult, sfer is "programmatic"/seat ent in complex, authentic

The shift to multiple and varied measures: Assessing competencies like creativity, social skills, and wayfinding abilities requires a more multifaceted approach than the testing of multiplication tables. Because multiple forms of measurement for any given competency are not the norm in traditional school models, we turn to state requirements for new drivers as a concrete and familiar example of such a system.

In Massachusetts and other states, the "driving test" has evolved over time into a mature and integrated system of learning, assessment, and certification that includes multiple forms of measurement and increasingly authentic and varied performance. A system of this kind is an excellent model for assessing broader, deeper competencies.

Report 12, page 10

Five strategies for next generation assessment



Next generation educators implementing the shifts to greater authenticity in a system of assessments can start by engaging the five key strategies featured to the left.

While all five strategies are important to next generation assessment, the two at the top of the puzzle are fundamental: expanded use of curriculum-embedded performance assessment that also includes strong formative elements is central to the kind of learning and assessment needed to prepare students for the world after high school graduation. The other three strategies supplement and support the first two in different ways in particular domains. The puzzle is still a work in progress, with little agreement around some innovative measures, and growing interest in approaches well-established in other sectors but new to education.

Report 12, page 12

PERFORMANCE ASSESSMENT
Measuring Creative Know How with Performance Assessment

Deeply committed to a broader definition of student success, the educators at [Two Rivers Public Charter School](#) in Washington, D.C., are finding ways to measure not only core content and basic skills, but also three additional dimensions of student success: critical thinking and problem solving, collaboration and communication, and character. Performance assessment is a natural fit with their project-based and problem-based curriculum. And it provides the opportunity for authentic assessment that engages a broad range of these success dimensions.

To assess Two Rivers' critical thinking and problem solving dimension — aligned with the MyWays domain of Creative Know How — the school designed a series of performance tasks, rubrics, and instructional supports. The performance assessments measure students' ability to transfer these skills to new situations through content-neutral tasks. For a great description of the work behind developing the performance tasks, in collaboration with the Stanford Center for Assessment, Learning, and Equity (SCALE), see this [EdSurge MyWays series article](#). Descriptions of the competencies within the critical thinking and problem solving dimension — schema development, decision making, effective reasoning, problem solving, and creativity and innovation — as well as the rubrics and tasks tailored for pre-kindergarten through eighth grade, are available in the organization's [Deeper Learning Assessment folder](#).



What's the impact?
 According to the director of curriculum and instruction at Two Rivers, Jeff Heyck-Williams, "Implementing

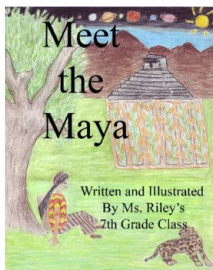
Building capacity within your faculty and staff to apply these strategies in integrated, mutually reinforcing ways will lead to systems of assessment that are more effective across the broader competencies.

Many schools and other organizations are developing and piloting new feedback, reflection, measurement, and assessment approaches. Two Rivers' work on measuring Creative Know How with performance assessment is one of the examples from CIE and NGLC's Assessment for Learning Project (ALP). For each of the five assessment strategies, we provide an ALP practice example, as well as a one-page primer full of information on why the strategy is important, how it relates to the MyWays approach, examples of measurement, and additional resources.

Report 12, page 18

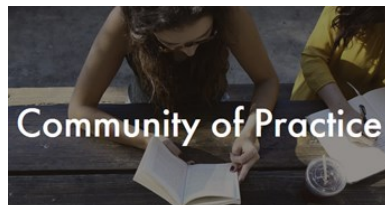
MyWays tools for integrating learning and assessment design

Engage your staff, school boards, students, and other community members in the work of school redesign with the [MyWays Toolkit](#).



The Toolkit also includes a [worked case study](#) that uses a selection of the MyWays evaluation tools to analyze a High Tech High middle school project. This case provides you with a resource for leading diagnostic/design sessions with your educator and designer teams, building the will to transform among your fellow stakeholders.

Share your ideas. Go deep. Take MyWays further by connecting with the [MyWays Community of Practice](#).



Although we have discussed competency definition, learning, and assessment design separately, it is vital to embed assessment in the learning experience, and to tie both back, via the through-line, to a student success framework intentionally shaped by the demands of an age of accelerations.

The MyWays tools can help your community define success and align your learning and assessment designs to the success framework. Connect with the MyWays Community of Practice, a group of organizations using MyWays in their schools and sharing their experiences.

Report 11, pages 50–51; Report 12, pages 36–37

Afterword

by Andy Calkins, Director of NGLC, adapted from his [announcement of the MyWays Project](#), November 7, 2017

Enabling young people to develop 21st-century competencies requires a thorough reimagining of the goals, processes, and structures that define our public schools. NGLC’s MyWays Project is here to help.

The students you’re serving will graduate into a fragmented and risky postsecondary landscape, an immensely challenging job market for young people, and a world of accelerating change. The challenges they encounter, and the life and career choices they will face, demand a learning orientation and problem-solving navigational skill set that makes their current experience in your school seem outdated and narrow.

You are ready to consider making some major changes. But there’s a problem. How do you sift through the confusing blizzard of frameworks that are out there and decide on a new, 21st-century goal-line of success for students? And then: what are the true implications of that new definition of success? How can your schools proactively and explicitly help your students develop the broader, deeper set of competencies represented in this new North Star?

And: who’s got time to even *ask* these questions, much less answer them?

You’ve come to the right place.

Nearly three years in development, the nonprofit [MyWays Project](#) from Next Generation Learning Challenges has been designed with you in mind. It assembles, distills, and presents exhaustive research on the four essential questions that every American K-12 educator should be asking right now.

The schools we studied for this project—including many that were catalyzed in part by competitively-awarded grants from NGLC’s \$45-million investment in next gen, “breakthrough” schools over the past four years—have worked extraordinarily hard to develop and continuously refine their models. The lessons they have learned, which we have consolidated and applied throughout the MyWays materials, will serve you well. But these pioneers would be quick to say to you: ***There are no shortcuts in implementing these forms of learning.*** The road to next gen learning environments—and outcomes—for students begins with deep, community-wide awareness of the reasons to transform, and thrives on the agency-fueled commitment of everyone involved.

Here’s what that process looks like, at a high level, and how MyWays can help.

- **Create a sense of urgency around the need to transform.** Study Part A of the *MyWays Student Success Series: “[Adolescence in an Age of Accelerations](#).”* Find your fellow travelers from the schools, your community, employers. Localize the data and storytelling! Use the customizable presentations and discussion-generating resources, including this brief, introductory [video](#), which you’ll find under Tools at the MyWays site.
- **Build and maintain the diverse Guiding Coalition you’ll need to lead the change.** Read John Kotter’s [Accelerate!](#), some of the best thinking out there on leading complex change successfully (and the basis for this short process guide of bullet points).

- **Formulate a strategic vision and set of change initiatives.** Use the MyWays series’ Part B, “[Broader, Deeper Competencies for Student Success](#),” to collectively reimagine what student success means for your community. That vision will be your initiative’s North Star.
- **Communicate the vision and the strategy to create buy-in and attract a growing volunteer army.** As Kotter says: “Sufficient urgency around a strategically rational and emotionally exciting opportunity is the bedrock upon which all else is built.” The army you need to enlist will show up, if the opportunity is extended compellingly.

At that point, the work is launched. There obviously remains an enormous lift in making your vision real for students. The *MyWays Student Success Series* Part C, “Redesigning the Learning Experience” (see [Learning Design](#) and [Assessment Design](#)), and the wide range of tools and lessons-learned narratives you can find at the MyWays and NGLC sites will help you. Your coalition will encounter challenges at every step. But if you’ve laid sufficient groundwork, established a strong vision and momentum, and your change processes [reflect the nature of the agency-driven learning](#) that lies at the heart of all of this, you’ve given yourself a chance to succeed.

We are firm believers that [next gen learning](#)—learner-centered, personalized, competency-based, experiential, tech-enabled, organized around richer/deeper definitions of student success—takes root in a genuine way only when everyone involved, from the adults to the students, has sufficient agency in the work to *own it*, or at least an appropriate share of it. Simply buying and implementing a personalized learning platform, or incorporating a few project-based learning units into your curriculum, or adopting a new success definition without deep engagement from staff and community won’t do the job. That’s why the MyWays Project’s tools are mainly designed to invite, catalyze, and inform discussion and input from stakeholders.

We welcome you to join the emerging [community of practice](#) that is already forming among educators, researchers, policymakers, reformers, and funders who are studying, adapting, and applying MyWays to their work. We encourage you to regard MyWays as more critical-friend than blueprint; more learning-community than report; more journey than destination. By helping you connect with others who are making that journey, and by providing an interoperable framework to act as a translator across the many exciting new expressions of student success, we hope to support and enable the K-12 education field’s capacity—and likelihood—of reimaging itself.

