A Compendium of Competency-Based Education Resources in the PS and K12 Landscapes

> There is clear consensus about the **basic definition of competency-based education**, but confusion about the broader taxonomy and related terms

- The literature in the field centers around a widely accepted basic definition of competency-based education, which is that it aims to assess student learning (rather than time spent in the classroom) by allowing students to:
  - o Proceed at their own pace
  - o Demonstrate mastery by applying knowledge and skills, and
  - o Advance upon demonstrating mastery of defined competencies
- Beyond that basic definition, there is some confusion about related reforms, which are often used in parallel with competency-based learning. For instance, the term "competency-based learning" is often used synonymously with *personalized learning, student-centered learning,* and *blended learning*
  - o A number of recent publications have focused on trying to clarify this taxonomy, including this blog post by Chris Sturgis of CompetencyWorks, and this piece from the Clayton Christensen Institute

> For additional information on defining competency-based education, please refer to:
> - *It's Not a Matter of Time: Highlights from the 2011 Competency-Based Learning Summit* (Chris Sturgis, Susan Patrick and Linda Pittenger, 2011)
> - *Competency-Based Learning Models: A Necessary Future* (Richard Voorhees, 2001)

> In **PS education,** momentum is building to address issues of affordability, degree completion and connections to workforce needs. A small but growing number of institutions are turning to competency-based learning to help address these goals

- Postsecondary institutions provide some of the earliest **examples of competency-based learning**, and we estimate that there are more than 20 public and private institutions developing or delivering competency-based programs.
  - o This includes established programs like 40-year old Excelsior College and 15-year old Western Governors University, which is recognized as a leader in this field
  - o Public state systems like Kentucky's 16-college system and University of Wisconsin have recently began to offer competency-based degrees and certificates
  - o Newcomers SNHU's College for America and Capella University are the first of a new wave of "breakthrough" competency-based programs approved by the Department of Education to receive federal aid. These institutions use direct assessment of student learning rather than counting credit hours as a means to award credit

- **Collaborative experiments** in competency-based education demonstrate potential to break down traditional silos, for instance with higher education institutions partnering with both K-12 and employers:
    - [Community college consortia](#) are developing competency-based training programs in partnership with local employers
    - [Community colleges in Tennessee](#) are enrolling high school seniors requiring math remediation in a competency-based program to prepare them for college math
- Despite the momentum, the literature also recognizes a number of **challenges** to scaling in the field:
    - Policy environment: While the [President](#) and [Members of Congress](#) have publicly recognized the potential of competency-based models, there have been calls for further [reduction of regulatory barriers](#)
    - [Assessment](#): Getting the assessment right is critical in an output-focused system and there are few broadly-accepted measures of competency available
    - [Technology and Data Systems](#): The technology to enable personalized instruction and track data management exists but is home-grown with low penetration across institutions
    - [Public/private partnerships](#): Industry needs to continue investing in defining competencies, ensuring proposed standards and assessments are relevant and rigorous, and providing feedback to rapidly improve the quality of these programs
- Competency-based education is still in early stages in postsecondary education, but **leading indicators** are promising:
    - Employer satisfaction: 100% of [WGU grads](#) are prepared for their jobs, according to an employer survey
    - [Persistence](#): Adults who get credit for what they already know via Prior Learning Assessments (PLAs) are two and a half times more likely to persist to graduation
    - [Quality](#): Since implementing a competency-based curriculum, a community college's nursing school graduates have achieved a 98% pass rate on the nurse licensing exam, above national and state averages

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For additional PS-related information, please refer to:

- *[Competency-Based Degree Programs in the U.S: Postsecondary Credentials for Measureable Student Learning and Performance](#)* (Rebecca Klein-Collins, 2012)
- *[Reflections on the First Year of a New-Model University](#)* (Mark Milliron, 2012)
- *[Post-traditional Learners and the Transformation of Postsecondary Education: A Manifesto for College Leaders](#)* (Louis Soares, 2013)

> In **K12 education**, there has been a growing focus on increasing the degree of personalization to better meet the needs of individual students. Some schools and districts are turning to competency-based learning as a means to support personalization, for instance by increasing engagement and self-directed learning, differentiating students' learning experiences, and ensuring students have developed the necessary skills and knowledge to be successful in college and the workplace.

- **Competency-based education is the cornerstone of the strategy** of a small number of schools and districts
  - [Adams 50 SD](#) in CO implemented a full competency-based learning system in 2009, doing away with traditional grade-level placements to group students instead by what they know, and allowing students to advance to the next level upon demonstrating mastery
  - [Boston Day and Evening Academy](#) in MA serves over-age and under-credited students, and has employed a competency-based approach since it opened 17 years ago
- Many other schools **employ aspects of competency-based learning, or have implemented the approach in a few schools**, as they shift their focus towards mastery
  - The Foundation's [Project Mastery](#) program has supported 12 public high schools across 4 states as they have piloted programs that allow for anytime/anywhere learning experiences, increase student choice, and provide more feedback about their progress towards mastery targets
  - The NYC DOE's [Digital Literacy](#) course aims to serve students who have been labeled "at risk" by helping them focus on learning in ways that support success
- Competency-based learning is also **playing an important role in larger grant programs** like NGLC Waves [IIIa](#) and IV ([1](#),[2](#)) as well as more recently in the [Next Generation Learning Systems Initiative](#)
  - The Education Achievement Authority of Michigan's [Nolan Elementary-Middle School](#) is a NGLC Wave IIIa grantee which organizes students by instructional level rather than age or grade level, and lets them progress via mastery rather than seat time. At the end of its first year of turnaround, it ranked third out of 124 schools in individual student growth according to data released by Excellent Schools Detroit
- Competency-based education is difficult to implement, and **significant challenges remain**
  - [Policy](#): 36 states allow students to receive credit for demonstrated mastery, but the implications for admission to postsecondary education institutions aren't yet clear
  - Funding: since school funding formulae are typically based on the number of students in attendance on a specified date, the incentives in the current system do not align with providing students with more flexibility about when, where and how they earn credits
  - [Data systems and infrastructure](#): while technology is not a required component of a competency-based education system, it is a significant enabler (especially for scale)
  - [Educator role:](#) as the role of the educator shifts from delivering instruction and content to providing guidance and coaching for students in a competency-based system, so does the relationship between educator and student
- However, where implemented, the approach **has gathered momentum and support**

- o Students, like those of Lindsay Unified in CA, have expressed positive sentiments about the new approach
- o Educators, like those of Adams 50 SD, also report positive changes once they are trained and accustomed to the new system
- **Results** are still anecdotal, but as in PS, leading indicators are promising for competency-based education in K-12:
  - o More than 20% of students in Detroit's EAA schools (MI) had achieved one year's growth in reading and math just six months into their first year of a competency-based approach
  - o Sanborn and Spaulding high schools (NH) have experienced a decreased number of discipline issues, course failures and dropouts

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For additional information related to K12, please refer to:
- *Competency-Based Schools Embrace Digital Learning* (Katie Ash, 2012)
- *Building Buzz in Detroit* (Tom Vander Ark, 2013)
- *RISC Standards-Based Design* (RISC, video)

Looking ahead, the literature suggests that there will be continued challenges, including policy changes, the need for more data, and stronger proof points for competency-based learning. However, the existing momentum across both K12 and PS today provides a strong base from which to build future scale and success.

- To achieve scale and long-term success, the field is recognizing the importance of:
  - o Encouraging innovation and the diversification of educational models
  - o Increasing linkage between K12 and PS institutions through initiatives like the Los Angeles Trade-Technical College's proposed Secondary to Postsecondary Pathways to Academic Career and Transfer Success program
  - o Supporting schools and institutions to restructure themselves and their approach in order to accommodate full-scale transition to competency-based education
  - o Advocating for a scalable, less costly approval process for Direct Assessment programs, beyond an exception-based application process via the Department of Education