

10 NEW CAPABILITIES OF A COMPETENCY-ALIGNED SYSTEM

For more information, see the full report “The Shift from Cohorts to Competency,” available at:
<http://digitallearningnow.com/policy/publications/smart-series/>

DLN SMART SERIES
 A series of interactive papers that provides specific guidance regarding the adoption of higher standards and quality assessments focusing on the shift to personal digital learning.

THE SHIFT FROM COHORTS TO COMPETENCY



2015	Data Backpacks: Portable Records & Learner Profiles		Funding Students, Options, and Achievement	Improving Conditions and Careers: How Blended Learning Can Improve the Teaching Profession
Online Learning: Myths, Reality & Promise	Blended Learning Implementation Guide 3.0	Smart Series Guide to Edtech Procurement	Personalizing and Guiding College & Career Readiness	Using Prizes and Pull Mechanisms to Boost Learning






10 New Capabilities of a Competency-Aligned System

Competency education isn't just a modification or enhancement of the time-based system. It is a complete re-engineering around an equity-focused, high-achieving, continuously improving, customized education system. This re-engineering will create new capabilities, which will require re-tooling policies, building organizational capacity, and managing the re-alignment process. It will take time to understand what it really means to have all students progressing in their learning.



1. Set College- and Career-Ready Expectations:

Competency education is explicit in its expectations for students to demonstrate college- and career-ready knowledge, skills, and dispositions.¹⁹ In addition to traditional expectations and measures (credits, grades, test scores), competency systems focus on applying skills and incorporating broader demonstrations of dispositions that correlated with success in college, careers, and citizenship including agency, initiative, resilience, and adaptability. Competency schools separate the academic competencies from the dispositions needed for success in college and careers. Portfolios and learner profiles built as a result of a competency system will allow young people to communicate to potential employers and institutions of further and higher learning what they know and can do.

The alignment process between a K-12 competency-based system and post-secondary institutions such as college, training providers, union apprenticeships, and employers is a two-way conversation with post-secondary institutions that need to make some adjustments in order to make competency-based diplomas meaningful. Higher education will need to be clear about the skills needed for admission without remediation so that students can demonstrate those competencies during high school. Furthermore, admissions processes need to recognize that the traditional GPA, and its time-rooted value, has a very different meaning in a competency-based environment. The pressures on the cost of higher education may push it towards competency-based models that could enhance alignment with the K-12 system.



Employers will need to move beyond their use of educational achievement (such as a B.A.) as a proxy for skills. It would be helpful if they also began to use competencies that are valued in the workplace as a mechanism for recruitment and hiring.

Competency education isn't a silver bullet. Just like in today's traditional system, if the standards (and proficiency of those standards) are not upheld, the system will not produce results. Competency education's transparency makes it much easier to discuss "what good looks like" within and across schools. Yet states, districts, and schools will need to put into place teams that are responsible for ongoing spot checking to make sure proficiency in one school is the same as proficiency in another.

2. Measure Learning Gains: Do we really know how long it takes students to learn something?

Or how long it takes students from concentrated areas of poverty or parents with less than a high school degree with limited exposure to the world to meet college- and career-ready standards? As we move forward with competency education, research will be invaluable in helping us understand the median amount of time across all income levels to become proficient in the standards outlined in the CCSS. Data about student learning is now being generated by adaptive software systems that provide insights into the different trajectories students take over time to master a concept. Over the next decade, if not sooner, we should have a better idea of how to organize units of learning, at least within domains that can serve as benchmarks to guide pacing, monitor student achievement, and evaluate school performance.

One of the most important concepts that we will have to fully define and build into the system is pacing – the process of keeping students on the track to college and career readiness. Pacing will require a different meaning at different ages, especially for students who have gaps in their learning. A student entering first grade without any of the readiness skills – such as knowing the alphabet, colors, and numbers – will be behind what would be expected within the first level or grade of school. Schools will work with families to plan a trajectory to help them catch up within a reasonable amount of time, such as two years.

Keeping students on pace is a function of student motivation, effectiveness of the adaptive instruction, and support and opportunities. Competency education innovators embed the first set of supports into the daily operation of the school so that every student has the chance to get extra help the very day they are challenged by material. Federal programs, state policies, and district operations will need to be aligned to provide schools with as much flexibility as possible so that timely, tailored support can be provided to students. We must also open our minds and policies to the idea that sometimes support may consist of enriching opportunities that help students build up "non-cognitive" skills, see real-world application of skills, or broaden their horizons and spark their curiosity. It is only through ongoing continuous improvement and attention to cost effectiveness that we are going to truly understand the right mix of supports and opportunities to help all students achieve.

[Making Community Connections Charter School](#) serves grades 7-12 in Manchester, New Hampshire. MC2's design assumes that there is a greater investment upfront in helping students build their habits of learning and gain maturity that will at some point lead to a much steeper trajectory of learning, i.e., an acceleration of learning. The school is organized with four phases that include a gateway experience with a portfolio and presentation. Each phase is designed for students to reflect on where they started, where they have come and what they have learned along the way.



In a competency education system, students should only take summative assessments when they have been able to demonstrate that they are proficient in the standards and/or curriculum. In addition, summative assessments should be administered several times throughout the year to give students multiple opportunities to demonstrate mastery.

3. Know Students: Competency-based systems will know far more about their students than traditional forms of education. A competency-tracking system gathers much more achievement data than traditional grading systems, and much of it is in the form of authentic student performances. In [Data Backpacks](#), the authors described comprehensive learner profiles. It will soon be easier to gather achievement data and related keystrokes that will build a motivational profile to help identify the kinds of experiences that produce persistence and performance for individual students.

In addition to the Carnegie unit, attendance is one of the essential metrics upon which the entire education system is based. Attendance is important in competency education as an indicator of a lifelong competency, but is not directly related to academics. As information systems develop that show student learning progressions, districts and states can then monitor student participation and progress rather than attendance.

4. Create Responsive Learning Opportunities: The current approach and its accountability system are designed around a linear path to high school graduation. The competency-based model will need to have the capacity to respond to students with gaps in their education, students with high mobility, students taking a leave of absence from school and returning a year or two later, and students who want to advance more quickly – either continuing onto college-level courses while in high school or graduating from high school in less than four years. This responsiveness may include creating more capacity for open entry/exit in courses, more modularized units of learning than semester-long courses, creating transition time before and after courses, allowing students to advance in some domains and not others (even beyond their school's offerings), and an unlimited ability to take college courses in high school.

Competency-based systems will provide 24/7/365 access to a variety of engaging, standards-aligned, open, and proprietary learning experiences (i.e., instructional materials) and full- and part-time online learning opportunities.

5. Benchmark Effectiveness: Competency education will benefit from ongoing improvement structures that provide continuous feedback on: how schools are doing, how traditionally underserved students are achieving, how schools compare to each other, and which districts and schools are not implementing competency education effectively.

[Merit Prep](#) in Newark, New Jersey has integrated blended learning into a competency-based structure. The school day is organized in a learn, conference, apply and assess learning cycle.



In the input-focused time-based system, we know how much we spend on education but we don't look at cost effectiveness, because it isn't designed to be effective. In a competency-based system, we will want to establish mechanisms that allow us to understand cost effectiveness, given that we are trying to produce the highest achievement gains possible. There will never be a single best way to educate students, especially as digital innovations continue and our country adjusts in response to the global economy, demographic changes, and other forces. But we can have healthy discussion based on cost effectiveness that takes the starting points of students in schools and courses into consideration.

Competency-based systems create the potential for vendor payments based on success. An early example of this approach is [New Classrooms](#) (inventors of [School of One](#)), which pays some content providers based on use. Competency-based systems have the potential to pay for return on investment to the learning experience level.

6. Allow for Flexibility in Time and Resources: [Next Generation Schools](#), and many of the competency education innovators, have opened the door to understanding that the solution may not be more time but a different use of time. Does the teaching staff all need to be in school and working at the same time? Do all the students? Can schools run year-round, with students participating to the degree required to stay on pace? Can more modularized courses be designed so that students can enter schools and courses smoothly with less disruption to their education and the classroom? Can there be flex times at the beginning of

a course for students with gaps to build up their skills and at the end of a course for students who need some extra time to build up the evidence of their learning? It will take time to deconstruct our reliance on the agricultural calendar and establish school operations that are based on the flexibility of a competency-based, blended world.

We'll need tools that allow districts and schools to manage their budgets with greater flexibility to meet students' needs. For example, [New Classrooms](#) uses a smart recommendation engine and dynamic scheduling to manage resources effectively. New funding policies, no longer dependent on specific hours of instruction, may make this easier. [Digital Learning Now](#) recommends weighted funding to match student risk factors. As we gain evidence about the costs of helping low-income students succeed in college- and career-ready standards, we can shape weighted funding that will support extended learning times for students who need it.

7. View Teaching as a Team Sport: Schools must start by understanding where students are on their learning progression rather than placing them in an age-based classroom, in order to break away from traditional ideas about how schools operate. Teachers describe it as no longer thinking about "my kids," but "our kids." Teachers work together, across classrooms, grouping and regrouping students according to where they need help. If there is a large group of students stuck on the same concepts, the best math teacher might be pulled out for intensive tutoring.

Competency-Driven Professional Development: Walking the Talk²⁰

At Summit Prep, a model high school south of San Francisco, teachers are walking the talk. Extensive professional development, evaluation, and compensation are all built upon a competency-based model. It's a skill-based system that is focused on what teachers need to know (and be able to do) to accelerate student achievement. At Summit Prep, teachers know where their skills fit on the continuum of seven measurable dimensions (Assessment, Content, Curriculum, Instruction, Knowing Learners and Learning (i.e., special education and ELL)), Leadership, and Mentoring. Each dimension has four levels of proficiency.

As Summit founder Diane Tavenner explains, "Teachers are charged with gathering and presenting evidence of their performance as demonstrated in student work and achievement. For example, a teacher wanting to be evaluated as highly proficient on Curriculum/Differentiation would have to present evidence he/she consistently differentiated throughout the course, and that students of all levels of prior knowledge and skill were able to access and demonstrate mastery as a result." Placement and movement on the continuum are based on a combination of principal evaluation, peer evaluation and self-evaluation. It usually takes at least two years to move up a level. Getting the top salary means that a teacher has to be an expert in at least four of the seven dimensions.

Student achievement is the basis for all goals that determine annual performance bonuses of up to 10% of base salary: 50% individual, 25% team, 25% school.

Teaching in a competency system emphasizes the facilitation of learning. Competencies are held to the same expectations, but how students reach those competencies can vary. Teachers increasingly take on the roles of co-designing curricular tasks that are engaging to students, developing adaptive instruction that provides rapid feedback and supplemental instruction as needed, and effectively using student data to ensure all students are advancing in their learning. Digital tools and information technology are critically important to help teachers focus on student learning. Competency systems, especially those with a strong blended curriculum, will enable differentiated (different levels) and distributed staffing (different locations) models that extend the reach of great teachers, support new teachers, and provide compelling career opportunities for experienced educators.

The dynamics of professional development will be dramatically altered. There is currently a lot of "teacher talk" about student progress, what proficiency looks like, and revising competencies and rubrics to be as powerful as possible to help engage students in learning. Professional development is often realized through peers working together and sharing their expertise; when they find themselves stuck, they organize the type of coaching they need to expand and enhance their teaching toolbox.

Inevitably, policies related to teacher certification, evaluation, and compensation policies will need to be revisited. One of the interesting challenges that competency education innovators complain about is that teachers are certified to teach in specific age-based schools and are limited in

their response when students advance to higher levels of the domains or need help at lower levels. This limitation will pose challenges for students who are way behind or ahead. Online learning may resolve portions of this problem, but certification policies will eventually need to be revised.

8 Offer Students Coaching and Support in a Personalized Environment: Most competency systems will have more options regarding how to learn and how to demonstrate competence against a set of academic standards. Competency systems foster student ownership and can take advantage of asynchronous (teacher independent) learning experiences. With greater personalization and increased degrees of freedom comes formal strategies to provide coaching and guidance.

Competency-based schools such as [Kunskapsskolan](#), the personalized Swedish school network, use a learning coach model to work with students and families. Other schools use advisory structures or invest in daily activities to keep students focused and accelerate their maturation as an independent learner.

Personalization can also mean investing in partnerships. New Hampshire has established statewide policy for students to build and demonstrate skills in [extended learning opportunities](#). Schools that value real-world experiences such as internships and service-based learning, like those in the [Big Picture](#), [Expeditionary Learning](#), and [Diploma Plus](#) networks, invest in community relationships and student preparation.

9. Sustain a High-Access Environment: Although it is not essential, technology is the engine behind the rapid responsiveness to students, personalization, and accelerated learning that is needed to bring competency education to scale. Districts and schools should offer educators the tools they need to stay on top of student learning and progress, provide meaningful feedback, and manage multiple forms of assessments. Students will need access to adaptive software to supplement their learning and internet access devices with multimedia producers.

To take full advantage of competency education, high-access environments will need to be available at home, within the community, and at school. Schools should work with local governments and providers to expand home and community access, so that learning does not need to stop at the end of the school day.

10. Provide Funding That Supports Options and Innovation: Equal doses of creativity and commitment to equity will be needed to align funding around competency education. Weighted funding will certainly be required based on the true costs of educating underserved populations within a personalized, 24/7, competency-based model. Districts and schools need adequate funding for their unique functions while providing flexible financing so students can take the courses they want from the providers of their choice. Funding needs to encourage schools to accelerate learning while eliminating disincentives for achievement and graduation. First and foremost, states and districts need to immediately eliminate barriers to personalization and adequate learning time and experiment with incentives that encourage (or at least no longer discourage) acceleration.

For more information on funding, see the [Digital Learning Now](#) recommendations:

- Weighted funding that provides more funds for students who bring more risk factors to school and provisions more time and more options,
- Portable funding that follows the student to the best learning option, and
- Performance-based funding that creates incentives for completion and achievement.

