By assessing and developing students’ mastery of specific skills and knowledge, we can enable personalized learning pathways and better alignment with real-world demands.

MASTERY, NOT TIME

A Look at Competency-Based Education in Practice

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ver the past century, our world has changed dramatically. As the ways we communicate and access information evolve, the pace of change seems to be accelerating exponentially. We are more interconnected with each other as the nature of our work evolves rapidly in a dynamic global economy. Yet the way education operates remains essentially the same. One teacher, one textbook, one schoolhouse.

Even though learning is the stated goal, the traditional education system is designed around time rather than learning, with a one-size-fits-all curriculum and students moving on after a set amount of time regardless of what or how much they’ve learned. Students advance with learning gaps because we allow them to move ahead with a 70% or 80%, which means they are still missing 20% or more of the content. We don’t know what they missed or if it’s essential for learning the next thing. We wouldn’t let a contractor continue to build a house with a partial foundation. Why do we let students move on with partial learning?

Preparing today’s students for success in their future careers and helping them live up to their fullest potential means we need to equip them with the necessary durable skills and transferable knowledge to do so. This means fundamentally rethinking how, when, and where learning happens. We must recognize that learning can happen both within and beyond the classroom walls through real-world projects in the community and work-based experiences. The good news is that there are efforts to do just this. We must rethink how time plays a role in education and instead put attention on student mastery, ensuring each student gets the support they need to build knowledge and skills to thrive. A growing interest in competency-based education offers a future-focused path to transform the educational experience.

What Is Competency-Based Education?

Competency-based education, also known as mastery-based or proficiency-based learning, grounds student advancement on demonstrating mastery of skills and knowledge rather than on age, seat time, or hours on task. The organization where I work, the Aurora Institute, collaborated with over 100 practitioners to develop the following seven-part definition of competency-based education:

- Students are empowered daily to make important decisions about their learning experiences, how they will create and apply knowledge, and how they will demonstrate their learning.
- Assessment is a meaningful, positive, and empowering learning experience for students that yields timely, relevant, and actionable evidence.
- Students receive timely, differentiated support based on their individual learning needs.
- Students progress based on evidence of mastery, not seat time.
- Students learn actively using different pathways and varied pacing.
- Strategies to ensure equity for all students are embedded in the culture, structure, and pedagogy of schools and education systems.
- Rigorous, common expectations for learning (knowledge, skills, and dispositions) are explicit, transparent, measurable, and transferable.

Competency-based education is a major shift in school culture, structure, and pedagogy focused on ensuring that all students succeed. Districts and schools turn to competency-based education for different reasons: to help students learn most effectively, to achieve greater equity, to foster deeper learning, or to create a system of continuous improvement.
What Does Competency-Based Education Look Like in Practice?

In a competency-based system, students know exactly what they are learning and what competency looks like. Rubrics and examples of exemplary work are readily available. Students should be able to tell you what they are working on, how they will be assessed, how to get extra support if needed, and what they will learn next. Competency-based education aims to cultivate students’ ownership over their learning while ensuring teachers identify needs, pinpoint gaps, use data, and intervene immediately to address student needs.

As students develop agency, they set goals, find purpose in learning, persist through challenges, and increasingly learn how to manage their own learning. Personalized learning practices allow for multiple student pathways to reflect each learner’s unique needs, strengths, interests, goals, and pace. The order in which students master learning targets, both within and across academic disciplines, may vary. Learning can happen inside and outside of school through projects, in blended learning models, or through formal and informal learning opportunities, including community projects and work-based learning. Competency-based education meets students where they are to ensure that each learner can attain the same high standards, which includes intentionally teaching social-emotional and durable skills in addition to academic knowledge in order to prepare students to actively apply their learning to new problems in novel contexts.

Who Is Implementing Competency-Based Education Today?

Across the United States, we see bright spots of innovation where competency-based practices and systems are taking root. In 2012, only a handful of states had policies to support moving from seat-time to competency-based education. But a decade later, every state has taken steps to advance policies that support competency-based education.

Two districts in Utah – Juab and Davis – are seeing deep changes as a result of implementing competency-based approaches. The Juab School District has been incorporating student portfolios, standards-based reporting, and time to support individual learner needs. Juab also leads in competency-based learning microcredentials for educators, which rethinks educator professional learning to be competency-based and personalized. The Davis School District is offering a districtwide online school, learner voice and choice, and a shift to standards-based reporting in all schools. The Juab School District believes the learner-centered
approach has led to increased graduation rates and CTE (career and technical education) pathway completions. The Davis School District has seen the development of learner agency and an increase of student resilience, as reported by teachers and staff throughout the district.2

In New York City, the Competency Collaborative, a network of public middle and high schools that are shifting toward greater implementation of competency-based education, uses competency-based, equitable grading3 and culturally responsive and sustaining practices. The learning process integrates support for students’ cultures and ways of being. Grades serve as feedback for learners and families about what the learner knows and can do, and teachers ensure that students are clear about how grades are calculated and how to improve.

In Los Angeles, students at the Da Vinci Connect High School can participate in a competency-based dual enrollment program. They can graduate from high school having already earned enough credits for a college degree. Da Vinci has developed a rigorous, streamlined process that enables students to work on high school requirements efficiently, thereby creating time and mental space for them to also work on college completion.4

Additionally, we see components of competency-based education in innovative education systems across the globe (though they’re usually not referred to as competency-based education). In Canada, British Columbia showcases the policy language of competency and personalization, innovates with pedagogical architecture, and enables student choice in the classroom through a flexible core curriculum.5,6 New Zealand has core attributes that are aligned with competency-based education, such as a system that articulates a broader set of knowledge and skills for student success.7 In Scotland, a number of competency-based education components that focus on being responsive to student needs have been phased in at the policy level: national standards encourage teacher autonomy, formative assessment is the norm, and classroom supports focus on the “whole child” rather than solely on academic performance. And in Singapore, teachers are seen as learners and researchers. Teacher research groups focus on best practices in single subject areas that cut across different educational levels, as is typical with competency-based practices in the United States.8

Where’s the Evidence?

You may be thinking, “This all sounds great, but how do we know that it actually works?” Well, a substantial body of evidence supports the effectiveness of individual practices that collectively comprise high-quality, competency-based education. In a national study, the American Institutes for Research found “promising evidence that students’ experiences of specific CBE practices are indeed associated with positive changes in learning dispositions, skills, and behaviors.”9 School districts in the United States have implemented aspects of competency-based education and seen significant impacts. California's Lindsay Unified School District reported student proficiency in English language arts and mathematics on a state test from the Smarter Balanced Assessment Consortium growing from 26% to 47% after implementing a learner-centered model, inclusive of competency-based approaches.10 An evaluation of the Chugach School District in Alaska, the first school in the United States to really adopt competency-based education in the 1990s, found that student performance on a state achievement test rose
over a five-year period from the 28th to the 71st percentile in reading, from the 26th to the 72nd percentile in language arts, and from the 54th to the 78th percentile in math.11

**Getting Started**

Just as each learner is unique, there is no one right way to jump into competency-based education. Multiple entry points are available for a community interested in getting started. It’s often possible to build upon prior efforts and new innovations, balancing local wisdom and expertise with educational best practices. The initiative I lead at the Aurora Institute, CompetencyWorks, provides a basic framework to kickstart transformation into a competency-based system:

- Frame the change toward reimagining teaching and learning with a shared vision for redefining student success that includes building transferable knowledge and skills such as creativity, collaboration, critical thinking, problem-solving, self-awareness, goal-setting, and decision-making.
- Build capacity for change through personalized, competency-based professional development for educators at all levels.
- Use a field-tested definition of competency-based education to guide the planning, design, and implementation to move toward competency-based learning systems and modernize practices.
- Design with integrity to your community’s needs, vision, and co-created new definitions of success, while learning from the research and the work of others.
- Collect and disseminate holistic and inclusive data about what quality implementation looks like and use outcomes to gauge progress and check for equity.

Community conversations that explore broader definitions of success, centered around what students should know and be able to do upon graduating, can help create a Profile of a Graduate,12 which often serves as a first step and catalyst for shifting to competency-based education. Balanced local assessment systems that include performance-based, student-centered assessment experiences, such as exhibitions, portfolios, and capstones, are important for supporting a competency-based system. It is also imperative that we invest in educator capacity for competency-based education, both in pre-service training and continued professional development. Incentivizing and creating opportunities to pilot new approaches is also critically important — learning from early innovators with strong evaluation and learning agendas.

If we truly want the talents of all of our learners to be available to communities across the globe, we must ensure that the systems to support teaching and learning are preparing young people not just for today, but also for tomorrow. Competency-based education systems can get us to this goal by ensuring students build the knowledge and skills they need by demonstrating mastery before advancing to the next level.

Notes:

3 www.competencycollaborative.org/competency-based-equitable-grading
5 Curriculum redesign | Building student success - B.C. curriculum. Available at: https://curriculum.gov.bc.ca/rethinking-curriculum
10 Sommer, B., & Nchise, A. (n.d.). Building solid evidence – it’s working at Lindsay Unified. Lindsay Unified School District. https://docs.google.com/document/d/1c1Ak6EA4dkeBMb61z3w5cT-bv2g9KADKnFm-WR1AsA/edit
12 Patrick, S., Worthen, M., & Truong, N. (2017). Redefining student success: Profile of a graduate. iNACOL.