Competency-Based Education: A Conceptual Framework

Introduction

National indicators suggest that traditional methods of educating students are diminishing the quality of education accessed while also leaving large swaths of students behind. Competition in the global marketplace, coupled with lagging proficiency in college and career readiness, has accelerated the need to embrace innovative methods of educating students, particularly those with economically disadvantaged backgrounds. For any educational innovation to be both successful and impactful, it must be student-centered and personalized. As a result, traditional strategies, including the use of seat time to assess student mastery, have come under scrutiny.

In the past decade, states like New Hampshire and Maine have implemented Competency-Based Education (CBE) practices within their K-12 systems. Under a CBE provision, local education agencies award students credit in a particular course without requiring the student to complete classroom instruction for a certain amount of seat time, so long as the student has demonstrated a sufficient level of understanding in that subject. The potential for CBE to transform the lives of North Carolina’s students is enormous, but also daunting, since it requires a systemic and sustainable change in pedagogical ideology. In preparation for this work, North Carolina New Schools and the Friday Institute for Educational Innovation convened a work session in late December with various national and state CBE experts. A summary of the work session can be accessed here. This conceptual framework, the outline for which was developed during the December work session, presents the vision for competency-based learning in North Carolina and examines policy enablers and barriers to its implementation. The paper concludes with a discussion of recommendations for expanding competency-based learning in the state.

Background

Many students are not adequately prepared for college or careers; in fact, “four of every 10 new college students, including half of those at two-year institutions, take remedial courses, and many employers comment on the inadequate preparation of high school graduates.” Additionally, assessments and grading in the K-12 system do not accurately reflect student performance, particularly with respect to non-academic skills such as collaboration, creativity, communication and critical thinking. Competency-based education could alleviate some of these concerns through content that is personalized, thereby challenging students based on their unique skills and needs. Additionally, CBE encourages the use of authentic assessments, including project-based tasks. CBE could also lead to the expanded use of out-of-school opportunities, including work-based learning strategies that better prepare students for careers.

Educators and legislators have a moral responsibility to consider the advantages of CBE as well. Economically disadvantaged students, particularly Hispanics and African-Americans, are
currently being underserved by the education system. Their proficiency, as measured by the National Assessment of Educational Progress (NAEP), has significantly lagged behind their white peers. While the achievement gap cannot be wholly attributed to the education system since poverty and family background also help shape student experiences, the continued persistence of this disparity indicates that many students’ needs are not being met. This gap threatens the notion of equal opportunity for all, the foundational pillar of public education in our country. CBE could provide more autonomy and flexibility for educators to innovate and personalize content for such students.

Currently, North Carolina has a narrow CBE policy. In 2012, the state approved a Credit by Demonstrated Mastery policy, aimed at gifted students and credit acceleration. The North Carolina Community College System Office is also considering implementing aspects of CBE within its colleges. CBE provides a critical next step in this progression to ensure that educational opportunities remain student-focused and highly personalized.

Policy Enablers of Competency-Based Education

Evidence from states and districts that have successfully implemented components of CBE indicates three necessary enablers:

- **Capacity**: Educators, district leaders and policy makers must remain deeply invested in the long-term potential of CBE. In New Hampshire, for example, Deputy Commissioner of Education Paul Leather has helped lead the statewide implementation of CBE for nine years. In Maine, organizations like the Maine Cohort for Customized Learning and the Great Schools Partnership have championed much of the state momentum around CBE, including development of policy as well as sharing of best practices. This level of “deep championing” ultimately ensures that stakeholders are invested in the commitment needed to sustain this work. Educator capacity must also be carefully considered, particularly with respect to adequate professional learning opportunities in teaching colleges and professional development for in-service educators, especially around assessments and grading.

- **Policy**: School systems that have been purposeful about implementing CBE have considered flexibility around scheduling, staffing and teacher effectiveness systems. Such policies have also been accompanied by embracing grading that emphasizes mastery. While the existence of certain policies does not necessarily indicate successful implementation of CBE, they can help enable conditions for systemic and sustainable change. North Carolina has already begun considering policy changes as evidenced by the State Board’s approval of a Credit by Demonstrated Mastery.

- **Resources**: Certain practices also enable successful conditions for the implementation of CBE including Professional Learning Communities for educators as well as development of training and professional learning materials. Development of pathways or progressions could also support districts and schools. Model schools, particularly in Maine and New Hampshire could also serve as valuable resources in implementing CBE.
In North Carolina, prototypes of such models already exist, including select early colleges and the state virtual public system.

Policy Barriers to Competency-Based Education

The continued use of seat time as a proxy for student learning is one major barrier to the adoption of CBE by school systems. However, other factors can also serve as major impediments:

- **Capacity:** Lack of stakeholder involvement can inhibit the expansion of CBE. In New Hampshire, for example, much of the resistance to CBE came from parents who were hesitant about how changes in grading would impact their children’s GPAs and college acceptances. Another challenge came from school athletic programs in New Hampshire since it became difficult to determine athletic eligibility. Part of what drives these concerns is the idea that CBE is often interpreted differently by different stakeholders. Thus, it becomes necessary to develop a common vision of what CBE is and what it is not.

- **Policy:** Creating policies that allow for a coherent and integrated K-12 system is a huge barrier to the successful implementation of CBE. For instance, changes in accountability, including teacher effectiveness systems and testing, will pose huge challenges in North Carolina. Integrating current state mandated policies with CBE is a task that will require “deep champions,” particularly in the General Assembly and the State Board of Education.

- **Resources:** Reconciling the role of technology within education is an ongoing challenge and will be amplified within a competency-based system. First, it is important to note that technology does not necessarily drive CBE. Conversely, there is a tendency to over-rely on technology in order to deliver content to students as evidenced in Detroit, which began piloting Student-Centered Learning, a competency-based approach, in 2012. Several districts do not have access to the type of technology or data systems required to implement CBE. Addressing these issues of equity and ensuring that certain students are not left behind will remain fundamental to expanding CBE in North Carolina.

A Look at the Case of New Hampshire’s Extended Learning Opportunities (ELO)

One important aspect of CBE implemented in New Hampshire is the Extended Learning Opportunities (ELOs). ELOs refer to “the primary acquisition of knowledge and skills through instruction or study outside of the traditional classroom methodology” and could support efforts in North Carolina since the state has implemented a few initiatives which are similar in nature, goals, and approach to CBE. According to findings from the University of Massachusetts’ Donahue Institute, ELOs can be an effective place to start. Researchers found that “[d]istricts and schools can significantly enhance their prospects for a successful launch of ELOs if they establish conditions” such as committed district and school leadership and a core of teachers willing to “pioneer” ELOs. Another key factor to the success of CBE in New Hampshire
was the idea that ELOs should not be viewed as being “tailored exclusively to underserved or high achieving students, but promoted as a learning opportunity intended to benefit all students.” The success of implementation can be measured, in part, by the degree to which the initiative meets the claim to offer an innovative approach to instruction; the evaluation found that “ELO assessment differ[ed] substantively from traditional grading practice, emphasizing student reflection and demonstration of learning, with little reliance on traditional tests or attendance.”

When implementing any sort of educational initiative or pedagogical change, leaders must consider many stakeholders. In this case, a variety of stakeholders, including leadership, teachers, students, and parents, were in agreement, referencing the many notable benefits of CBE. Students believed they learned more through the ELO initiative than they would have in a traditional setting. Teachers saw a marked improvement in a number of instructional areas, including students’ ability to use competency-based assessment techniques. In fact, “a vast majority of faculty (92%) agreed that ELOs should indeed be sustained.”

**Recommendations**

Evidence from states like New Hampshire suggests that implementing CBE with fidelity necessitates the existence of certain factors, a few of which are explored below.

- **Shared Vision and Understanding:** State leaders, policy makers and other stakeholders need to begin by building a common understanding of why CBE will matter to students and the state. This will also enable state leaders to consider how to connect their vision to action and ensure continued investment in the notion of CBE.

- **Research and Design:** States like Iowa and Oregon have undertaken the task of researching CBE through the use of exploratory committees. The General Assembly's innovation committee could be tasked with a study that explores the factors necessary to implement CBE in the state. The committee could also examine the issue of equity and strategies to design CBE in such a way that it promotes student equity. Finally, borrowing from states like New Hampshire, North Carolina will need to develop a readiness rubric that assesses district ability to implement CBE with fidelity.

- **Educator Training:** Teachers will need extensive support to help design competencies, assessments and communicate redefined expectations to students and stakeholders. Another strategy to enhance educator training could involve instituting some form of CBE for teachers and creating experiences for teachers that model the experiences that students will have, such as micro-credentialing or badging as a measure of professional learning. Additional support will also need to be provided to help facilitate a peer learning network for educators to share challenges and provide guidance to each other.


8 Ibid.

