



February 23, 2015

Don't capitulate to the credit hour, recreate it

by Julia Freeland

Last month, the Carnegie Foundation for the Advancement of Teaching released a report titled "[The Carnegie Unit: A Century-Old Standard in a Changing Education Landscape](#)." Chris Sturgis of CompetencyWorks reacted quickly by authoring [two fantastic blogs](#) that analyze and criticize the report's defensive and reactionary take on the Carnegie unit.

Sturgis's remarks are on point. Given that it's been a month since the report appeared, I didn't want to rehash her thorough criticisms, but instead add the below points to the conversation, particularly as they relate to competency-based approaches in K-12 education.

The result of a two-year study, the report examines the history of the century-old Carnegie Unit and its impact on education reform in K-12 and higher education. Although the authors acknowledge that time is not necessarily the best metric for learning, the report grasps continuously at the virtues of the credit hour. As Sturgis aptly pointed out, the paper seems to ignore that the Carnegie unit is—like Carnegie's very own steel mills and library buildings—manmade. Instead, it treats this artifact as something of an inevitability in a functioning education system. Indeed, the authors are correct that entire systems for funding, tracking, and measuring attendance are tied to the Carnegie Unit. Yet this does not mean that, as is alluded to throughout, the credit hour ought to maintain a life of its own. The researchers also take pains to insist that the Carnegie Unit grounds certain normative values—particularly equity—that are central to American values. Yet, they rarely pause to consider that the credit hour has only been a background condition as those norms have evolved: it is not necessarily the lever making equity possible, but instead a firmly fixed feature of a system that has begun to care deeply about equity only in recent decades.

Still, the report did get me thinking about the role that the credit hour stands to play in the future. I hope that as the Carnegie Foundation continues to wrestle with this work, it invests time in tackling a far more interesting and urgent question on the horizon: how should we measure time within emerging competency-based systems?

Often when I talk about competency-based education, I fall into a semantic trap that persists in many attempts to describe the phenomenon: I contrast competency-based systems with time-based systems. The comparison makes sense in that competency supplants credit hours as the key metric in a system in which students advance based on mastery rather than seat time. But by contrasting competency and time, I think we oversimplify a basic reality: in practice, teachers and students within competency-based schools are still experiencing time in their day-to-day lives. And teachers and administrators in these contexts are still stewards of instructional time, as they try to ensure that students develop and evolve over time. How that time gets used, then, remains of vital importance.

The real hope in a competency-based system is that instructional time is being used in new ways that allow students to learn in a more flexible or personalized manner. There are at least three major ways that policymakers and practitioners in competency-based systems are *rethinking—not rejecting*—time.

First, the concept of *minimum pace* has emerged as one policy to ensure that students are not falling behind within the bounds of a competency-based system. The basic idea is that although students advancing upon mastery will inevitably move through material at different paces, there is a minimum pace at which students need to progress in order to remain on track to graduate. Taken too literally, I worry that minimum pace policies either replicate the ills of the credit hour or create a perverse incentive to only address learning targets in a shallow manner so as to maintain a given speed. But in another light, minimum pace may be of vital importance to an accountability framework that allows for competency-based progressions to flourish while still holding schools to the job of educating all students. In this sense, the minimum pace conversation begs for a rethinking of the credit hour as a realistic (and perhaps variable) benchmark of where we think students should be on the road to being prepared and inspired to achieve their most ambitious dreams and plans, rather than simply a record keeping of hours and minutes in class.

Second, I wonder if in competency-based systems a new credit hour is not a fixed number but rather something of a ratio that actually charts time (inputs) to learning or mastery (outcomes). Rather than being fixed, then, the credit hour becomes a more accurate metric of the quality of instructional hours and of the time-based inputs different students need in order to reach particular outcomes. Such a ratio may be different for different students, subjects, or circumstances, but would help provide realistic timeframes in which students might be expected to master material in a given learning progression.

Finally, the reality on the ground is that scheduling in a competency-based system can prove to be a total nightmare. Few tools are designed to shuffle students in and out of courses based on individual performance. Innovations in scheduling—be it tools or pedagogical approaches—will be one way that more schools can organize time around competency rather than around cohort-based courses measured in credit hours.

These are just three time-related challenges that competency-based schools face. The Carnegie Foundation could be an important player in ushering in new criteria for what effective use of time looks like in these new paradigms. Rather than capitulate to historical forces, the Foundation has the opportunity to revise the credit hour's legacy moving forward. Let's hope it embraces this opportunity.



Julia Freeland

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Excellent pickup to Chris Sturgis' timely (pardon the pun) and well written work on the recently released Carnegie report. You mention the term 'minimum pace' which, I fear, could be a built in barrier for struggling students. Yet, realizing that kids can't take extended periods for many reasons, what about thinking of 'negotiated pace'? This is a concept Kim Carter uses in the MC2 model. For many kids, it is the habits of mind, or dispositions that gets them off track. In a highly personalized environment, the teacher and student are connected to how and when work is done. Negotiated pace has a sense of being able to dynamically work with the student over time with an expectation, and support that there is a forward momentum to the work at hand. It also holds the students to a level of expectation that they can't move on until they demons strange mastery. I think 'negotiated pace' fits competency based learning models better than a minimum pace concept that may be as arbitrary as the Carnegie unit and could get institutionalizedbas easily as the Carnegie Unit was in 1906.

by Rose Colby on Feb 23, 2015 3:26 PM PST

[REPLY](#)

**Edit for above: “It also holds the students to a level of expectation that they can’t move on until they DEMONSTRATE mastery.
(ipad autofill error above—sorry!)**

by Rose Colby on Feb 24, 2015 6:36 AM PST

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I would like to suggest that the switch from time-based education to competency-based education, to be truly effective, requires changes throughout all the other parts of an educational system — it requires paradigm (or disruptive) change rather than being a piecemeal (or sustaining) change. Rather than talking about scheduling students in and out of courses, we need to recognize that courses are part of the problem — that they need to be replaced with projects that are designed or selected by students to meet their particular learning needs.

As described in the recent book, “Reinventing Schools: It’s Time to Break the Mold,” competency-based student progress requires competency-based student assessment (criterion-referenced assessment, a different paradigm of assessment from norm-referenced assessment) and competency-based student records (an inventory of competencies that are checked off as each is mastered — very different from the report card showing courses and grades that only serve to compare students and tell you nothing about what each student has learned).

Competency-based education requires personalized learning — learner-centered instruction rather than teacher-centered instruction. This means projects rather than courses for meeting the standards. It requires a different role for the teacher (guide on the side rather than sage on the stage), a different role for the student (active, self-directed learner rather than passive, teacher-directed), and a different role for technology (primarily to support the student’s work, rather than the teacher’s work).

Competency-based education is an idea whose time has come. During the industrial Age, when manual labor was the predominant form of work, we needed to sort out the future laborers from the managers and professionals. We needed a time-based system with norm-referenced assessment. But now that knowledge work is becoming predominant, we need to educate far more people to far higher levels — we need a competency-based system.

But don’t try to piggy-back it onto our current structures of courses, grade levels, teacher roles, student roles, and metrics for student learning. Disruptive change is all about paradigm change — change in the deep structure of an educational system. For more about this, see <http://www.reinventingschools.net>.

by [Charles Reigeluth](#) on Feb 25, 2015 11:52 AM PST

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