

# Beyond the Carnegie Unit

February 11, 2015 by [Chris Sturgis](#)

*“The person who says it cannot be done should not interrupt the person doing it.”*

– Chinese Proverb

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It’s striking, isn’t it – the juxtaposition of the [Center for the Advancement of Teaching’s recommendation](#) that we keep using the Carnegie Unit (CU) because we don’t really have anything better, and [Scott Marion’s incredible post](#) describing a new, interlocking system that better defines student learning goals and targets, teacher goals and outcomes, and assessments that promise a more meaningful measure of learning. The contrasts could not be clearer: one is a system to engage students deeply in learning in a competency-based environment where schools claim responsibility for ensuring that students learn, compared to the less than meaningful Carnegie Unit, in which we only promise exposure to a topic, thereby leaving students to sit through one more lecture in a traditional classroom setting.

Across our country, educators are coming to the conclusion that we can’t wait for think tanks or federal policymakers to lead the way to a personalized system. Instead they are creating a new personalized system of education piece by piece. (You can read all about leading states, districts, and schools here at [CompetencyWorks](#).)

No one expects any one organization to come up with all the answers, but certainly the Center for the Advancement of Teaching (CFAT) could have offered something more in their report than telling us what we already know – that the CU is rarely a barrier, with the exception of financial aid and getting the full benefit from online learning, but neither is it a valuable unit of learning. Thus, it allows the standardized system to continue to operate with lower quality than our students deserve and contributing to the inequity that plagues the standardized education system. The report by CFAT was a major disappointment at a time when our country needs leadership and creativity about how we can proceed in re-engineering the standardized system into a personalized one in which students are at the core.

There are three major problems with the paper in regard to the K12 public education system.

First, they fail to ask the question, “What is the impact on students?” They consider equity, transparency, and flexibility, but never provide an analysis that considers the costs and benefits for students.

Second, they claim that although not designed to do so, the CU has value as an opportunity-to-learn standard – without a full analysis regarding whether it is really needed.

Third, it doesn’t help us move forward. Even with their findings as limited as they are,

the paper itself could have provided a deeper analysis so that those of us who are willing to think beyond the standardized system could have used it as a launch pad for re-thinking the core elements needed to support a personalized system.

Below is a deeper discussion on each of these concerns.

### **Consider the Student**

*What is in the best interest of kids?* That's the mantra found in the most highly developed competency-based schools. It's all about making decisions that are student-centered first and foremost, and then figuring out how to manage the adult issues that arise. In defining the issues using a student-centered analysis, educators are currently challenging the traditions, practices, and policies of the standardized system.

However, the report by CFAT was firmly focused on the adults in the systems, with limited attention to whether the CU and how it is used in the current system is beneficial for students in their pursuit of an education. CFAT outlines all the issues the dysfunctional combination of the CU and A-F and the 0-100 grading scale has created. Such dysfunction has allowed schools to indicate to parents and students that their children have learned more than they actually have. CFAT returns to a defensive stance that it isn't the fault of the CU because it was never designed to be about learning. This is hard to swallow when millions of parents have watched their children graduate after accruing all the necessary credits only to feel terribly betrayed when they discover their children don't have the skills to go to college without remediation. This is hard to swallow when it is children and parents who have to pay the financial cost of a low quality system.

Furthermore, the authors seem to suggest that online and blended learning is a reform that can be stopped rather than a broad societal change as we integrate technology into our lives, and that the policy goal to ensure that all students are successful in school is a reform rather than a social expectation that has taken root across the country. They encourage us to be cautious – indicating these reforms might not work – rather than asking the questions: What will make them work? What type of research is needed? And what type of system needs to be in place to make it so?

CFAT is very focused on the efficiency of the system, but there's no use for an efficient system that is not delivering what students need. In fact, one can partially blame the emptiness of the CU credit as a measure of exposure to instruction as one of the major disconnects between high schools and college. It certainly helped to expand the education system, but has little value to ensuring a quality system that works for students. It has contributed to the loss of millions of dollars in precious educational funds when schools are forced to offer full course credit recovery. Rather than directing resources to the specific areas where students need help, failure to gain the needed CU puts the "failed" student right back in for another 120 hours, subject to the same thing in the same way. Is it any wonder that many students disengage and become part of the large dropout population in our nation's schools?

Just think of the cost to students who have had to bear the brunt of the disconnect over the past century – and how this has slowed down our effort to create an equitable system, as year after year after year, students were awarded credits that only indicated they had been exposed to the subject matter.

### **Regarding Equity, that Horse is Out of the Gate**

Elena Silva responded to [my critique](#) of the CFAT report by raising the issue of equity and the role the CU plays in ensuring a minimum of instruction. So I read through the paper again, asking myself: How is the CU protecting equal education and how isn't it? (The paper would have been much more helpful if they had broken it down in terms of these types of question so that we could all follow their full line of thinking.)

Although the CU was not designed as a way to ensure equity, CFAT points out that:

*No less importantly, the Carnegie Unit has, since its inception, helped to ensure that the vast majority of the nation's students, regardless of their backgrounds or the institutions they attend, receive the same number of instructional hours in high school and college courses – supplying an often-undervalued component of equal educational opportunity in American education.*

and

*...continues to provide a valuable opportunity-to-learn standard for students in both higher education and K-12 education, where inequitable resources and variable quality are more the rule than the exception.*

I agree with the first statement. But is it a really “a valuable opportunity-to-learn standard” today? If we didn't have the CU as a guardian of instructional time, what would happen? We have rules that kids need to go to school (with some jurisdictions actually bringing parents to court when kids are truant), and in fact most states have hiked the age attendance requirements from sixteen to seventeen or eighteen. We have rules about the number of days or hours that schools need to deliver service. We have rules about the number of minutes of instruction in a day.

As the authors point out, the CU is only exposure to instruction and does not guarantee the quality of instruction. So we have rules about who can teach what and what it means to be a highly qualified teacher. It also doesn't tell us about the rigor or standards resulting in students having a lot of credits but middle school skills. So we created state accountability tests (I refuse to call them assessments as they have little to do with learning) and then the Common Core.

The essential question of this issue is: With all these other mechanisms in place, do we also need the CU, a unit that links us to time but not to quality?

And then I realized that the point is nearly moot in K12. From the report (emphasis my own):

*K-12 educators frequently suggest that state policies require them to adhere to traditional instructional pacing linked to the Carnegie Unit. And some states do make public education course credits dependent upon students spending specific amounts of time in classrooms. But a Carnegie Foundation analysis of state policies for this report found few prohibitions against school systems uncoupling course credits from instructional time; while the extent and nature of flexibility varies considerably from state to state, **a majority of states have no laws or regulations prohibiting public school systems from using alternatives to the Carnegie Unit to measure student progress.***

*And many states that do tie course credits to instructional time are considering revising their regulations, including North Carolina and the District of Columbia. In Pennsylvania, where the use of time- or proficiency-based credits is already allowed, a gubernatorial panel recently called for a “new, individualized approach” to education. In its report “Awarding Credit to Support Student Learning,” the panel noted that different types of students and their parents “are asking schools to provide new and diverse models of course delivery, and models that incorporate educational technology and emphasize the student’s ability to master course content.”*

It may be that the Carnegie Unit could in fact be an opportunity-to-learn standard – but from what I can tell, this issue has left the station. It’s out of the gate. Our job now is to determine what are the key mechanisms we need in place in a personalized system to ensure equity. Competency-based structures is one of them.

### **Missed Opportunity**

Certainly the biggest problem with the report is the lack of leadership. As I understand it, CFAT had substantial resources to support this effort to revisit the Carnegie Unit. The limited focus on whether or not the Carnegie Unit acts as a barrier is entirely inadequate at a time when innovators are in fact building the next system – a personalized system from the ground up – in schools, districts, and a handful of courageous states across the nation.

If a [tiny district in Alaska](#), with the courage to recognize the standardized system was failing their students, can create a new personalized, performance-based system, it seems to me that CFAT, the keeper of the Carnegie Unit over the past century, could explore questions such as, “How could the CU be upgraded to support a personalized system?” or return to one of the questions that led to the development of the Carnegie Unit, “Given the desire for a personalized, competency-based systems, what is needed to ensure that students graduating from high school have the pre-requisite skills needed for higher education?”

For the next organization that decides to tackle the Carnegie Unit, please consider your task as the re-engineering of the system rather than a review of one piece of it in isolation. Below are a few ideas to consider in shaping your work:

***Deconstruction of the Standardized System:*** We need a formal deconstruction of the role the CU plays in both sectors, but most importantly in higher education. Start with a flow chart indicating the exchange points, where it impacts the quality of the system, and then suggest alternatives. For example, the Carnegie Unit is used for transcripts for external communication. However, registrars do not need to be afraid of dismantling the CU – they can still have credits without it being time-based, as New Hampshire has demonstrated.

We need an analysis that looks deeply and creatively at the impact on the quality of the system, including estimating the value and reliability of the currency in each of these exchange points. The Carnegie Unit credit is involved with budgeting – how accurate is it as tool for managing costs and deploying resources, especially in the context of online learning? How effective is it as a common language between institutions of higher education as students transfer? How effective is it as students transfer between high schools? How many credits are denied each year during transfers and transitions, and what is the cost to students?

***Outline the Personalized System as Currently Developing:*** Many of the pieces of the personalized system are under development in the states and districts. The elements of each need to be lifted up and reviewed, especially at how they interconnect, to begin to identify where there is a need for a systemic approach to ensure an effective and efficient personalized system. CFAT acknowledges some work has already been done in thinking through how to create a new unit of measurement of learning or to upgrade the CU. We need to be able to draw from the work done by European Union, states, districts, and schools to continue to shape these new ideas.

This is a work in progress, but we already know many of the elements of the personalized system: student-centered with an emphasis on student agency, transparent standards (or competencies) with calibrated understanding of proficiency, expanded learning (anywhere, time, and/or place), adequate supports, standards-referenced grading, an emphasis on developing higher order skills, and teachers who are facilitators of learning armed with highly developed assessment literacy. From there we can draw out the design principles and begin to start thinking about a new currency upon which a system may be built. We know there is unlikely to be a perfect currency – but neither is the Carnegie Unit. We should still continue to push our thinking as far as we can about what is possible in 2015 that wasn't at the start of the twentieth century.

***Start Asking What is Possible:*** This isn't work for an educational think tank alone. We need to draw on the most creative business minds to help us look past our assumptions about how educational organizations need to operate. If we didn't have a Carnegie Unit to estimate budgets, what else might we use? Could we look at real time and costs for students to learn specific topics that are considered essential courses in high school or college? Perhaps by having a median cost, we could start to understand how different interventions and deployment of resources would provide the additional supports some of the students need to make progress or be "on pace." We could start benchmarking – how did you get your students to learn Algebra 1 so deeply and quickly at that cost per

student?

For example, let's take a look at calibration (or what higher education refers to as tuning) as an important element in a personalized system. At this point in the development of a competency-based system, educators are working together with their colleagues to calibrate their understanding of proficiency. It's a critical step for building capacity internally, as well as ensuring that credits in fact indicate that students have learned. The next step will be to develop ways to do this more systematically. Technology will certainly play a critical role. Just imagine – an app that teachers could use to help them in determining what proficiency looks like, pointing out a few questions to ask to help them build confidence in their assessment, and perhaps suggests places where students often have trouble regarding that specific skill. Or perhaps what we will see is students themselves using such an app.

Read the CFAT paper for the historical perspective and the overview of today's efforts to move towards personalization...but please don't think it will offer a meaningful analysis to help you set your course for the future. Nearly 100 years ago, the president of CFAT called for an improved Carnegie Unit, and based on this paper, if left to their own devices, CFAT might be issuing the same call in 2115.

However, in the meantime, let's keep working together, sharing ideas, working collaboratively to push our thinking, and engaging people with other skills sets and experiences to help us move beyond our assumptions and traditions. Perhaps we might turn to another Chinese proverb for insight here. How about:

*“Reading ten thousand books is not as useful as travelling ten thousand miles.”*

In other words, those who are going to create the future education system are our practitioners – the teachers, principals, district staff, and state education agency staff who are doing the work, never wavering from the mantra – we are going to do what is best for our kids.