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MEASURING LEARNING, NOT TIME:
COMPETENCY-BASED EDUCATION AND
VISIONS OF A MORE EFFICIENT CREDENTIALING MODEL

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College of Education
at the University of Kentucky

By
Jessica Horohov

Lexington, Kentucky

Director: Dr. Jane Jensen, Professor of Education Policy Studies and Evaluation

Lexington, Kentucky

2017

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ABSTRACT OF DISSERTATION

MEASURING LEARNING, NOT TIME: COMPETENCY-BASED EDUCATION AND VISIONS OF A MORE EFFICIENT CREDENTIALING MODEL

Competency-based education is intended to benefit working non-traditional students who have knowledge and skills from prior work experiences, but it also enables self-motivated students to accelerate their time to degree, thereby increasing affordability and efficiency. Competency-based education clarifies what a credentialed student will be able to do and makes assessment more transparent and relevant to those outside of higher education. Competency-based education has arisen in response to the problem defined by the national reform discourses of accountability and affordability.

In the first manuscript, *History & Objections Repeated: Re-Innovating Competency-Based Education*, I review the history of social efficiency reform efforts in American education in order to re-contextualize the “innovation” of competency-based education as a repackaging of older ideas to fit the public’s current view of what needs to be fixed in higher education. I discuss the concept of “efficiency” and how it has been interpreted in the past and today with regard to competency-based education and its rejection of an earlier attempt at increasing efficiency in education: the Carnegie credit hour.

For the second manuscript, *Framing Competency-Based Education in the Discourse of Reform*, I analyzed four years of news articles and white papers on competency-based education to reveal the national discourses around competency-based education. I used thematic discourse analysis to identify diagnostic and prognostic narrative frames (Snow & Benford, 1988) that argue for and against competency-based education. These frames were put in the context of the politicized conversation around the current main issues in higher education: access, attainment, accountability, and affordability. Each of these issues provided a foundation of coding the discourse which was then shaped by the context of competency-based education, particularly its positioning as a solution to the Iron Triangle dilemma of decreasing cost while increasing access and quality.

The third manuscript, *Idea and Implementation: A Case Study of KCTCS’s CBE Learn on Demand*, involves an institutional case study of a competency-based education program, Learn on Demand (LOD), within the Kentucky Community and Technical College System (KCTCS). Eleven semi-structured interviews were conducted with student success

coaches, faculty, and staff who are directly involved with the program across seven different colleges, and documents such as marketing materials, presentations, and administrator-written articles were also analyzed as a representation of the official discourse of the program. As institutions start to explore and develop competency-based education programs, the faculty and administrators at those institutions are likely influenced by the intersection of pre-existing organizational and subgroup culture, societal beliefs about the definition and purpose of education, and how innovations may shape the experiences of individuals. Through interviewing individuals, I was able to parse out the impacts of both institutional politics and innovation-related concerns on the success of implementation.

KEYWORDS: Competency-Based Education, Credentialism, Institutionalism, Higher Education Reform, Accountability

Jessica Horohov

April 19, 2017

Date

MEASURING LEARNING, NOT TIME:
COMPETENCY-BASED EDUCATION AND
VISIONS OF A MORE EFFICIENT CREDENTIALING MODEL

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CHAPTER ONE: INTRODUCTION

Statement of Problem: What is Competency-Based Education?

Proponents will admit that there is no single definition of competency-based education, but in general, it refers to those programs of study that give credit to students based on their evidence of subject mastery rather than a set number of credit hours determined by weekly participation in a course (“seat time”) (Public Agenda, 2015; Gervais, 2016). Competency-based programs use a mix of prior learning credit (e.g. written portfolios of work experiences, or credit by exam) and self-paced coursework to grant students credentials upon demonstration of competencies rather than time in the classroom. These programs are intended to benefit working non-traditional students who have knowledge and skills from prior work experiences (Kelchen, 2015), but they also enable self-motivated students to accelerate their time to degree, thereby increasing affordability and efficiency (Porter & Reilly, 2014). Competency-based education clarifies what a credentialed student will be able to do with what they know and makes assessment more transparent and relevant to those outside of higher education.

Competency-based education has arisen in response to the problem defined by the national reform discourses of accountability and affordability. As an innovation, it is disruptive to the institution of higher education, both in its structure and symbolism. By unbundling the degree and the role of faculty, the traditional business model of higher education is changed, offering education by subscription and having students be the drivers of their own programs. As learning outcomes are encouraged to be more transparent to both students and prospective employers, the curriculum is not reflective of what the faculty’s vision of what a student should learn. Instead, content and assessments are shaped by what outside stakeholders deem as an appropriate use of time and money with the end goal of job-relevance. These changes can dismantle the institution from the inside, but the rhetoric that supports the growth of these policies is creating a more substantial dismantling of how society views the institution as a symbol of higher learning, versus a bloated bureaucracy of irrelevance.

This dissertation consists of three analyses. For these studies, I utilized discourse analysis to locate competency-based education in the history of education reform, identified

how proponents of CBE have framed the program as a solution to politicized issues in higher education, and analyzed the experience of faculty and staff at one institution in the implementing of such an innovation. The goal of this collection is to understand how competency-based education became positioned as a possible revolution in higher education and how it, like many revolutions before, has struggled to realize its vision.

Purpose and Significance of Study

The public discourses heard most often regarding competency-based education are those that have been reported in the media and in publications by advocates, and thus are often optimistic about the model's potential to revolutionize higher education (Kelchen, 2015; Meyer, 2005; Klein-Collins, 2013). My research, however, contextualizes that discourse in the history of education reform, current concerns about problems in higher education, and the realities of implementation through an institutional case study. In each of my three studies, I unpack the optimism about CBE being a panacea to such issues as rising college costs and gaps in relevance between the classroom and the workplace.

This study has implications that extend beyond competency-based education, which may end up as a mere blip in the history of fly-by-night innovations. The critiques embedded within the argument for competency-based education inherently challenge the current institutional model of American higher education. Changes in regulation of the credit hour and how institutions can award credentials for learning outside of the classroom have implications that go beyond CBE and include non-traditional providers: coding academies, MOOCs, badges, and course-offering companies such as StraighterLine and Udemy. Remarks by Lumina Foundation President Jamie Merisotis (2015) reflect an issue not just with the relevance of college degrees and their proof of outcomes, but the monopoly that higher education institutions have on credentialing: "Today's students have more options than ever before to get an education beyond high school, but federal rules that govern the way they pay for higher education are stuck in the last century."

While competency-based education has appeared more often in news stories and in the political arena than in higher education research journals, the literature on it is still dominated by traditional forms of CBE that incorporate competency tests into traditional classroom experiences, such as clinical exercises in nursing programs, and administrator-

conceived studies on best practices in program development. Competency-based education has existed for decades, but what sets this new form apart is its comprehensiveness in making competencies the foundation of entire programs which can then be entirely self-paced by the student. This study adds to the literature of this new form of competency-based education and its attempt at innovation in response to issues in higher education. It also adds methodologically to the literature of using critical discourse and frame analysis in higher education research. Critical discourse analysis is an approach to texts that takes into consideration its socio-cultural context and seeks to uncover how the nuances of policy are influenced by wider discourses. The framing narratives referenced in texts represent how the discourses of which they are a part define problems and their solutions. This study underscores the value that discourse analysis has for future studies in higher education research, particularly with regard to political and policy issues both outside and inside higher education institutions. It is the story of an innovation that attempts to challenge the structure of higher education to resolve issues that critics outside and within the system have, in ways, always seen, while contrasting the ideas of innovation in the reality of implementation as it struggles in the face of those structures which it challenges.

Project Overview

In the first manuscript, *History & Objections Repeated: Re-Innovating Competency-Based Education*, I review the history of social efficiency reform efforts in American education in order to re-contextualize the “innovation” of competency-based education as a repackaging of older ideas to fit the public’s current view of what needs to be fixed in higher education. I discuss the concept of “efficiency” and how it has been interpreted in the past and today with regard to competency-based education and its rejection of an earlier attempt at increasing efficiency in education: the Carnegie credit hour. I also discuss the development of this form of competency-based education from its beginning in the comprehensive degree programs at Western Governors University through the approval of Federal Student Aid Experimental Sites which would then be able to provide federal financial aid to students in these programs without relying on currently time-based regulations.

For the second manuscript, *Framing Competency-Based Education in the Discourse of Reform*, I analyzed four years of news articles and white papers to identify the national

discourses around competency-based education. I used thematic discourse analysis to reconstruct the diagnostic and prognostic narrative frames (Snow & Benford, 1988) that argue for and against competency-based education. These frames were put in the context of the politicized conversation around the current main issues in higher education: access, attainment, accountability, and affordability. Each of these issues provided a foundation of coding the discourse which was then shaped by the context of competency-based education, particularly its positioning as a solution to the Iron Triangle dilemma of decreasing cost while increasing access and quality.

The third manuscript, *Idea and Implementation: A Case Study of KCTCS's CBE Learn on Demand*, involves an institutional case study of a competency-based education program, Learn on Demand (LOD), within the Kentucky Community and Technical College System (KCTCS). This study asked: How do individuals working in the program “make sense” of it, and how does the context of the institution impact those impressions? Eleven semi-structured interviews were conducted with student success coaches, faculty, and staff who are directly involved with the program across seven different colleges, and documents such as marketing materials, presentations, and administrator-written articles were also analyzed as a representation of the official discourse of the program. I also drew from my own experiences with the program both prior to and during this research in my roles as a former employee of KCTCS and a third-party evaluator of a LOD enhancement grant. Discussions on the national level have the potential to influence future policy and how the public thinks about change in the system of American postsecondary education, but their impact upon individuals within the system have immediate implications. As institutions start to explore and develop competency-based education programs, the faculty and administrators at those institutions are likely influenced by the intersection of pre-existing organizational and subgroup culture, societal beliefs about the definition and purpose of education, and how innovations may shape the experiences of individuals. Through interviewing individuals, I was able to identify some of the impacts that institutional politics and change-related concerns have on the success of an innovation's implementation.

Researcher Statement

I first became interested in doing the study that became my third manuscript due to my experience working at Bluegrass Community & Technical College for three years, during which time I heard of Learn on Demand from my coworkers but never had any direct experience with it. Since then, I have also been part of the third-party evaluation team for two grants – one from the Gates Foundation and one from the Department of Labor – that KCTCS has used to build upon different aspects of the Learn on Demand program. It is through these experiences that I became aware of the controversy that exists around the program, both for ideological issues regarding proper collegiate pedagogical practices and for organizational and governance issues between the systems office and individual colleges.

My background was an asset in that it allows me to delve more quickly into the finer details of the program and to be able to speak the language of KCTCS acronyms and jargon, and I used my knowledge as a foundation for building rapport with my participants. Yet it risked an ethical issue, in that my preconceived notions about the program – specifically in what has been said to or around me informally – may result in my looking for empirical data to support my preconceived notions, creating a tunnel vision towards conflict rather than more nuanced perceptions that my participants may have. I hoped that by using discourse analysis as my primary method of analysis, I could focus on what is actually being said rather than what I am expecting to find. However, it is in the nature of critical discourse analysis for the analysis to be subjective with regard to my own interpretations of how individuals' words connect to broader discourses.

I did not want this project to be an evaluation of the KCTCS Learn on Demand program specifically but rather an investigation of the issues surrounding competency-based education as an innovative move in higher education. Thus, I developed the research studies for the first and second manuscripts in order to analyze the discourse of competency-based education in a historical and national context to see how the program fits into broader reform efforts in higher education. The first manuscript started as a timeline for my own reference, tracking the story of competency-based education in recent years through the news, and I was able to contextualize that timeline through my knowledge of the history of efficiency-minded education reform with special attention to the role of the credit hour in both old and new ideas of reform. The second manuscript began as contextualization for the

discourse I would uncover around the Learn on Demand program. My thought was that the conflicts around the program at the local level would potentially reflect those nationally. This contextual work quickly grew larger than expected as the national discourse proved fascinating in itself. With these three pieces, I learned much about competency-based education in particular and the public discourse's role in higher education overall.

The value of this dissertation is in part methodological – serving as a model for discourse analysis in higher education policy studies. Its value is also historical, as the story of a current idea in higher education reform which documents the motivation behind that reform and how it has been positioned as a revolutionary fix of essential defects in the traditional higher education model. The idea of outcomes-based education makes a degree of common sense – no pun intended – but a holistic analysis of the conversation both for and against enables a discussion about how higher learning can and should be defined and measured. Depending the result, the role that the institution and its faculty might have in the future may look very different from that of today.

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CHAPTER TWO: HISTORY & OBJECTIONS REPEATED: RE-INNOVATING COMPETENCY-BASED EDUCATION

Introduction

Given the growing public push for more affordable and efficient education and job training options, competency-based education (CBE), measuring learning by mastery and not classroom hours, has been increasing in popularity. It is replacing MOOCs as the new solution in an industry that has been plagued by public concern over rising costs without clear outcome measures. It has been called a “disruptive innovation” with the potential to overhaul the structure of a higher education system characterized by its stalwartness (Weise & Christensen, 2014). Competency-based education refers to programs of study, which give credit to students based on their evidence of subject mastery, often through rubric-based assessment, rather than after completion of courses with a set number of credit hours determined by the amount of interaction time between student and instructor (“seat time”). CBE offers students the opportunity to earn college credit for work or other life experiences and to fast-track completion through self-paced degree programs.

These programs are intended to benefit working non-traditional students who have knowledge and skills from prior work experiences, but they also enable self-motivated students to accelerate their time to degree, thereby increasing tuition-cost affordability and time-to-degree efficiency. Competency-based education also reflects a broader movement to make institutions of higher education accountable for student learning outcomes through quantifiable performance-based funding. Rather than assuming a correlation between classes taken and employability, CBE clarifies what a graduate will know and be able to do by prioritizing transparency and work-relevance in program curricula. The potential for CBE to act as a panacea to major issues in higher education, such affordability and degree completion, has attracted the interest of multiple postsecondary institutions, as well as the Department of Education. At a Federal Student Aid conference in 2011, then Education Secretary Arne Duncan remarked, “While such [CBE] programs are now the exception, I want them to be the norm.”

Competency-based education is considered an innovation, but like many innovations, it is preceded by a cycle of problem and reform, many of which are rehashes of older attempts at solution. Competency-based education itself has existed as outcomes-based

education, proficiency-based education, and programs that award college credit for experiences outside the classroom. These efforts at reform have been intended to improve the efficiency and quality of education productivity, but some researchers have argued that this as structurally impossible. Archibald and Feldman (2011) explained the rising cost of higher education as resulting from its nature as a service-providing industry that employs highly skilled professionals. Unlike a factory, which can produce more gadgets and maintain cost and quality through increased efficiency of the production of those gadgets, increasing the output of credentials while maintaining cost would result in larger class sizes, arguably reducing the quality of the education provided. Online learning has suggested a possible way around this, but its ability to maintain quality has been doubted. CBE, however, assures consistent quality through clearly demonstrated outcomes and thus has possibly opened a door for efficiency and productivity to enter education.

In this paper, I contextualize the innovativeness of competency-based education in the history of efficiency-motivated reform efforts, noting how efficiency changed from a public societal goal to one more private and consumer-oriented. As access to higher education has expanded, its credentials have become a commodity subject to economic demands, such as providing a good return on investment for students and the public, defined by both cost efficiency and a meaningful product. Turned into a commodity, the credential becomes the gadget, and competency-based education is enabled to produce a more efficient gadget, ironically, by attacking one of the original attempts at standardization and thus efficiency in education: the Carnegie credit hour. The focus upon competency-based education also enables a concrete look at how ideas in education reform are recycled and suggest why ideas continue to come short of true change.

Literature Review

The tension over the need for and direction of reform is a narrative that has run throughout the history of American education. For much of the 20th century, equality of access to higher education was a major concern of reformers, but since universal access – defined by Trow (1974) as entry above fifty percent of the age cohort – has been nearly achieved in the United States, that concern for equality has increasingly shifted focus to outcomes. The rising cost of college tuition, accompanied by consumer protectionism and economic

recession, has made the public more alert to questions over the return on investment of education. But the concept of a “return on investment” from education is more than just a phrase; it is an example of the capitalist economic discourse that has shaped America’s view of the purpose of education.

In this section, I overview the history of reform movements in education and postsecondary education to draw comparisons with how competency-based education is being promoted as a reform now. I do this primarily through Kliebard’s account of the diverse voices within the early 20th century progressive education movement and Barrow’s of the influx of capitalist ideals into the university a few decades later. I also touch upon the Carnegie credit hour, comparing its origin to the current critique levied by proponents of competency-based education, through Lagemann’s history of the Carnegie Foundation for the Advancement of Teaching (CFAT) and New America Foundation Higher Education Director Amy Laitinen’s direct critique. I end by discussing the new form which efficiency has taken under the influence of current neoliberal discourse and how this efficiency goal challenges postsecondary credentials.

Progressivism, or Social Efficiency?

The critiques levied against higher education today in 21st century public discourse – accountability for student learning outcomes, affordability and access for all populations – mirror some of the critiques that faced primary and secondary education at the turn of the 20th century. In each era, these themes produced multiple versions of what was causing the problem and thus how the problem could be solved. The way that proponents of competency-based education define the problem of higher education and CBE as the solution is a continuation of the strain of thought which promoted efficiency during the progressive era of education reform. Yet this continuation has included nuanced changes over the decades as broader societal values have influenced ideas of what education should produce and for whom. Below, I discuss the beginnings of these nuances and how they evolved over time.

Kliebard (2004) unpacked the historical concept of a unified early 20th century progressive movement in education to reveal four main interest groups: humanists, behaviorists, social efficiency experts, and social meliorists, each fighting for legitimacy in

the eyes of the public. He followed the ideologies rather than the actual impact they had in the schools, arguing that, ultimately, these interest groups were striving for their beliefs to be sanctioned. Part of the reason why the different groups have been previously grouped under the over-generalized umbrella of a single progressive education movement is that, often, separate interest groups would support the same change for different reasons. One of the main tenets of the efficiency doctrine was that the elements in a curriculum should serve the purpose of preparing the student for the specific role that they will hold in adult society. This curriculum would necessarily be as diverse and individualized as each of those roles, with the social utility of each class justifying its inclusion, thus rejecting the humanists' idea for a uniform and classically liberal arts curriculum. Efficiency reformers saw individualization as a way to reduce waste by offering education only to those who would benefit from it. Behaviorists also believed in the benefits of individualized curricula, but their intention was to benefit the student by attending to their interests regardless of the overall impact on the system.

The proponents of social efficiency within American schools do not initially appear prominently in Kliebard's history, but he conceded that it is this group that has ultimately dominated the curriculum, as evidenced by focus on the economic and "tangible" benefits of education. Sharing the view of the behaviorists that the humanist form of education was impractical outside of the school, the social efficiency supporters approached the question of preparation for life with a more logical approach than merely appealing to child development theories and student interests. Curriculum could be leveraged to maintain order and stability within society through reflecting the needs of industry according to the ability of each student. The value of each course would be measured not by its cost, but by its social utility outside of the school.

At the level of higher education, the influx of efficiency was influenced more directly by business interests. Barrow (1990) followed the early-20th century capitalization of the university, documenting the struggle between liberal-leaning academics and the influx of capital-rich businessmen trustees. He did not label the trustees' goal as being one of efficiency, but he identified the influence of business tactics, including fiscal calculations of teacher loads and the cost of particular subjects. What has resulted is a division of faculty and administrative labor of the university, allowing administration to become

professionalized and reflect corporate values as executives of the university. By applying management principles to higher education, the “material means of mental production” have been wrested from the intellectuals, and tenure has been reduced to bureaucratic rather than ideological protection (p. 217). To achieve greater productivity in teaching and research, professional administrators would need to apply business management techniques and the stakes of competition would have to be raised for faculty positions. Education turned from an end in itself to a means toward a more economically valuable end. The influence of businessmen within higher education turned institutions of higher learning into machines for economic growth.

The Carnegie Credit Hour

Higher education was also encouraged to mimic the corporate arena through the actions of the Carnegie Foundation for the Advancement of Teaching (CFAT), which advocated efficiency in the system through the introduction in 1906 of the Carnegie unit standard of measuring instruction time. By creating a system out of an array of postsecondary institutions, industry was allowing students, too, to behave as rational market consumers by assuring consistency in classroom time across colleges and universities. Barrow draws comparison from the monopolization efforts of industry and the use of the Carnegie credit hour to create a distinction between secondary and postsecondary schools. Universal adoption of the credit hour standard was assured by a requirement that only institutions that implemented could participate in a CFAT-funded pension program for professors, which still exists today as TIAA-CREF. The credit hour was intended to measure time and not learning, but the purpose of that measurement was to scientifically organize the system of American education in a way that would promote rational action on behalf of both institutions and consumer-students. The pension program enabled the creation of a hierarchy within higher education, driving out the most inefficient universities by providing pension-granted institutions a competitive edge, over those who were not eligible, to recruit the best faculty.

While federal and industry influences on higher education research have had a strong impact on research universities, the Carnegie Foundation had a broader impact on the system of higher education. Businessmen on boards of trustees and the college presidents on

the board of CFAT both believed in fostering greater efficiency within the system, but the nature of this efficiency differed from those of the efficiency experts in Kliebard's account. CFAT – though eligibility requirements of the pension system – aimed at systematic rationality across institutions. In her history of CFAT, Lagemann (1999) recounts the ambitions of the foundation's first president, Henry Prichett, which arose from his modernist faith in the power of science to bring harmony to society and the ability of experts to guide the social structure towards maximum efficiency, which aligned with the ideology of the early 20th century. The modern era was defined by positivism's belief in the ability of science to reveal quantifiable truth through empirical evidence. It did not take many steps for scientific methods to morph into tactics for measuring efficiency within industry. Growth during the industrial age accelerated with each new method of increasing productivity, and the excitement from that growth cast eyes to look for other sectors that could be improved. Prichett empowered experts to reform higher education to a unified system that would put research as a priority, seeing in research the solution to problems in society.

Lagemann's account of the formation and growth of CFAT is ultimately about the legitimacy of the few deciding what is best for the many. Each interest group can be understood as serving their own self-interests, but they are also benevolent, acting in what they believe is in the best interest of the public. Lagemann reminds her readers in the preface to her history of CFAT that "the public" is not as unified a body as many acting in its interest would assume. Inevitably, "the public" represents the interests of certain groups more than others. Social efficiency is meant to benefit society – the public – but the way the public and its interests are defined has consequence. Which definition prevails depends upon the definition of the public for whom it should benefit. If the public is instead equated with the economy in a way that puts primacy upon the interests of employers and future workers, efficiency is when education works as a transitory point between the home and work life, spending resources on those who can best use it in benefit to the national economy.

Problematizing the Carnegie Unit

The Carnegie credit hour is fundamentally under attack in arguments for competency-based education due to its disconnection to measuring anything besides time

invested. Barrow described the unit's role in determining institutional eligibility for the Carnegie-funded pension fund, and this connection has been turned around in current discourse which calls it as anachronistic given current needs, especially those of online education. The standard for calculating faculty pensions has also become the standard for student enrollment and financial aid regulations. More importantly to advocates of CBE, it measures time in a classroom rather than the educational outcomes that are thus only assumed to result. Credit hours mean little to employers when the content of those hours are unknown.

Controversy over the Carnegie unit accelerated following the release of Laitinen's New America Foundation report, "Cracking the Credit Hour," in 2012. In this, she recounts the history of the Carnegie unit as stemming from Andrew Carnegie's wish for better faculty remuneration, not for the benefit of the student experience: "The move to time-based units, however, was unrelated to educational quality. And the credit hour was never intended to be a measure of, or proxy for student learning" (p. 5). Competencies, however, are meant to be measures of student learning. Laitinen's dismissal of the Carnegie unit does not agree with the historical account given by others, particularly Barrow, who describe the unit as how CFAT established structure among educational institutions, utilizing the pension fund as a bribe to the colleges for playing along. Laitinen holds up competency-based education as a preferred alternative, with the "competency" as the new unit of learning to replace the credit hour.

For education, the issue has long been within its outcomes and whether they could be quantified. Supporters of competency-based education agree that we must consider more than the "units and hours" that go into a student's education. CBE is allowing it to act and look more like a business. By dividing up faculty roles, each faculty-worker can then specialize and become more efficient in their niche of the learning process. Repeatable online courses require a certain standardization of the curriculum, and the objectives-turned-competencies of these courses put economic goals at the center. Online courses can be cheaper to offer through increased enrollment capacities and a removed need for a physical classroom, but efficiency today is defined by results.

The New Efficiency

Issues of “seat time,” workplace relevance and curricular standardization go beyond this competency-based education. The history of American higher education has been, in part, characterized by a tension between academic and vocational objectives (Grubb & Lazerson, 2007; Kliebard, 2004), as well as between the interests of the student and of society. Labaree (1997) identified three different ideologies that value education as primarily a public good (democratic equality), private good (social mobility), or public-private good (social efficiency). The discourse of social efficiency has gained prominence as access to education has become more universal. As a result, conflicts between common education as a democratic rite of citizenship and as a method to selectively train different segments of the workforce have arisen and have shaped how education is understood by the public.

Per many scholars, this is a result of the growing influence that business has had in the public sector, bringing notions of quantifiable outcomes, economic efficiency, and managerial governance to education through neoliberal ideology that equates economic growth to investments in human capital (Barrow, 1990; Olssen & Peters, 2005; Ball, 2012). The rise of neoliberalism in education reform has resulted in calls for accountability and transparency in order to create a rational market and thereby increased affordability for student-customers. The intrinsic value of education has been overtaken by the need to assure the exchange value of the credential as the student’s job market investment. Educational outcomes – degrees and other credentials – have had an assumed value in society through emulating external expectations of what a higher education institution should look like (Meyer & Rowan, 1978). What actually happens in the classroom is unknown, but it has been assumed to meet the standards of a college education, enabling the institution to develop a flexible system of loose coupling. Meyer and Rowan described higher education degrees as having value through a “ritual classification” power whereby the institutions and their credentials are trusted to have value by the public (1978), but that trust has been replaced by a neoliberal desire for market transparency.

The increasing interest in competency-based education initiatives can be considered part of a larger movement that is acting as a backlash against credentialism. Researchers in higher education have been wary of the consequences of credentialing, citing evidences of credential inflation in job listings that do not match the actual demand of the market

(Collins, 1979; Brown, 1995). Brown (1995) defined the position of the university as an “agent for the production of agents,” trusted to produce a uniform product that performed well in managerial positions. Growth and diversification in higher education have disrupted that uniformity, and while diversity is often thought of as one of the strengths of American higher education, current national discussions are asking institutions for clear indicators of outcomes that are consistent across institutions. Competency-based education accepts the basic idea of education as the route to social mobility but attempts to remove the layers of ambiguity between the classroom and the workplace, echoing the economic discourses of accountability and transparency that often appear in political and media reports on higher education. What makes CBE’s attempts at structural change different are by keeping the credential but altering the meaning.

Social Efficiency and Individual Mobility

Brown (1995) described the development of regional accreditation and the Carnegie credit hour as part of the process that made the American education system “college-dominated” in the early 20th century. If so, the current push for competencies instead of credit hours could be seen as a domination of employer interests, enabling a translation of college courses into the workplace just as high school courses were translated into college preparatory credits. The discourse of scientific rationality does not exist for CBE. Instead, the discourse is that of economic rationality. The innovation is a form of consumer protection, offering transparency and clarity to both student-consumers and employer-consumers as a way to create rational actors within the free market.

In his forward to Brown’s book, Labaree praised Brown for his explanation of the growth in American higher education. Labaree’s (1997) own book, *How to Succeed in School without Really Learning*, rests upon his own distinctions between the public and private goods attached to education: democratic equality, social efficiency, and social mobility. Labaree’s position in the conversation of credentialism is in regard to the effect upon the student’s experience and actions within the educational system following the structural situation the previous researchers described. When the value of the credential is assumed, the education that was previously instrumental in socializing students into the status group is overshadowed by the economic value of the credential.

In the oft-cited *Academically Adrift*, researchers Arum and Roksa (2010) confirmed as much when they showed little to no growth in the abilities of college students following years of so-called education. Students are doing the work to get the credential that they need for life after education without gaining the skills that said credential is meant to represent. This, Labaree argued, is a result of social mobility overshadowing the other purposes of education, flooding the market too much to ensure social efficiency and dismissing democratic equality as irrelevant given the high stakes of the job market. While education was pushed in the direction of social efficiency through curricular reform in the first half of the 20th century, it is now, through the ideology of human capital and social mobility, seen as a resource for the private individual. It is in the best interest of that private individual to be efficient with their use of time in the competition for status, thus incentivizing him to study as little as possible as long as he can make the grade and get the “sheepskin.”

The nuances in the different definitions of credentialism do not matter with regard to what the result is – an inflation of credential value rather than a proportionate response to technological changes in the workplace – but does matter in the explanation of how it happened. While certain aspects of credentialism can be found elsewhere, the United States is experiencing the consequences of a uniquely open-access and stratified system. Students seek credentials in order to be more competitive in the labor market, but at the same time, public criticism over the actual ability of a college degree to prepare someone for the labor market has questioned the value of this increasingly expensive investment. Yet students are still enrolling because they cannot afford not to.

The increasing interest in competency-based education initiatives can be considered part of a larger movement that is acting to reverse credentialism. Brown defined the position of the university as an “agent for the production of agents,” trusted to produce a uniform product that performed well in managerial positions. Growth and diversification in higher education have disrupted that uniformity, and while diversity is often thought of as one of the strengths of American higher education, current national discussions are asking institutions for clear indicators of outcomes that are consistent across institutions. This is seen in the Lumina Foundation’s *Degree Qualifications Profile* (2014), which states standard objectives within the degree hierarchy (associates, bachelors, and masters) that every institution should strive toward in order to give meaning back to the degree. Given

what Labaree has argued regarding the hollowing out of the college education experience and the lack of retention after graduation, this distrust is unfortunately understandable. What competencies are able to provide in response to this issue is a focus on immediate project-based applications of the knowledge and skills learned. Traditional transcripts of 120 credit hours-worth of coursework are converted into statements of a student's mastery of competencies that are, ideally, grounded in workplace activities.

While many industries accept and build upon the rhetoric that schools are not properly preparing their graduates for the workplace, elite employers recognize that content does not matter as much as the social network that elite institutions welcome their attendees into. Credentialism, as a form of social status signaling, is a luxury for upper-level executives and bureaucrats. Traditional college students – defined not only by age but also by family income and occupational prestige – will continue to reap the benefits of the system as it stands. For the rest, especially those non-traditional students who are either going to lower-tier institutions or are delaying their entry into higher education until later in life, their institutions will be obliged to prove their value in job training. Some of those institutions have realized that the traditional form of higher education is not the right fit for non-traditional students, and they have embraced that through redesigning higher education in a way that centers on the student and their occupational goals. One such redesign has been a new form of competency-based education which combines an occupational training concept used since the 1970s – defining a student's achievement through demonstrated skills, or competencies – with the flexibility of self-paced online education.

Story of a Re-Innovation: Competency-Based Education

Early Forms of CBE

An initial search for competency-based education in any research literature database would turn up not only time-variable degree programs but also evidence that CBE is not a new concept. It long has been a staple of nursing programs, there defined in the clinical side of the curriculum as a requirement for students to demonstrate certain skills (i.e., taking a patient's pulse) in order to fulfill program requirements. Four institutions that are often positioned by proponents of CBE as early models for modern competency-based degree programs are Alverno College, Thomas Edison, Excelsior College (formerly Regents), and

Empire State University. These programs, developed in the 1970s, were designed for the adult learner and offered a form of competency-based education more akin to prior learning assessments of work experience. Also present was the American Council on Education and its push to award academic credit for military service. The Department of Education was also allocating funds towards programs that more resembled CBE as self-paced courses that focused on work-relevant competencies rather than time through the Fund for the Improvement of Postsecondary Education (FIPSE), which focused on increasing efficiency and affordability (Gallagher, 2014). These programs, however, were outliers, being geared toward the then less common adult student demographic. The increase in non-traditional students – as well as the increased ability of technology to create flexible delivery methods – would enable competency-based education to be seen as a more viable disruption to the traditional model of higher education.

A New Credentialing Model

Ninety years after the Carnegie Foundation established the credit hour standard, thirteen state governors – led by the governors from Utah and Colorado – envisioned Western Governors University (WGU), a private non-profit institution that they believed would quickly bring the end of the tyrannical and trivial credit hour through its innovative, competency-based focus on successful student learning rather than the time schools thought was needed to teach students, and increase access to higher education (Kinser, 2002; Meyer, 2005). Rather than focusing on the inputs of time and instruction, this new form of higher education would provide a more efficient environment where students could leverage their prior experiences in order to lessen their time to graduation.

While originally, competency-based courses were only part of WGU's intended mission, the institution moved to become independently financed and accredited, as well as produce its own courses to match its degree competency requirements, rather than functioning as a database of online courses from other colleges (Meyer, 2005). Given those events, this new type of higher education was slow to develop and become accredited, but its focused mission of awarding students credit for learning rather than time stayed consistent (Kinser, 2007). Previously, competency-based education existed as a component of traditional time-based courses, such as incorporating specific skill tests into a health

program, although Alverno College stood out as the first institution to apply this mentality to a liberal arts curriculum in the early 1970s (Alverno College, 2014).

What distinguished programs like Western Governors, and those of the innovators that followed, is the move towards awarding credit to students who move through a curriculum at their own pace. Online delivery of courses enabled the creation of a time-flexible model, resulting in a degree that is awarded once an individual student reached a pre-determined level of competency. This contrasts with most programs, which instead award credit based on set terms, with the assumption that the student learned something to pass those classes. A program that is fully divorced from credit hours is known as “direct assessment”: the degree is made up of competencies only rather than being tied back to credit-hour equivalents. Closely related to credit for prior learning tests and prior learning assessment portfolios, the focus of these programs is on individual mastery rather than a set number of instructional contact hours. By emphasizing the evidence of learning as the end goal, the program can be focused toward producing results. In addition, it is seen to be especially beneficial for those non-traditional students who may be coming into college with experience equivalent to that which would be otherwise learned in entry-level courses, and who also are particularly sensitive to time frames and tuition costs.

This new way of measuring higher learning posed challenges for accreditors – challenges that are lessening as more institutions are adopting the competency-based education method – but that challenge did not compare to the step after program accreditation: federal student aid eligibility. Financial aid regulations were built upon the assumptions of a time-based program, either credit or clock hour (Federal Student Aid, 2014b), and thus schools that intended to break out of this assumption risk the possibility of ineligibility and thereby limiting the access of students to the program and the enrollment that could sustain such programs. While Western Governors was given the opportunity to qualify for financial aid in a direct assessment program through Section 8020 of the 2005 Higher Education Reauthorization Act after their enrollment started to pick up in 2003, the university decided to continue tying their competencies to credit hours so as not to alienate employers who would likely not trust the still unfamiliar model (Kinser, 2007; Lederman, 2012; Fain, 2012b). The efficiency of the product would be meaningless if its value was not perceived and the end-users did not buy it.

While WGU was the first true CBE innovator, the diffusion of the program – and support through changes in financial aid policy – was slow to occur. Due to initial accreditation delays resulting from the governors pursuing approval from four regional accrediting agencies due to the transnational nature of the university – perhaps another equally as bold and unconventional move – and slow student enrollment up until 2003, WGU was supported primarily through private funding (Kinser, 2007). Meyer’s (2005) findings on the organizational development of WGU also suggested that the fact that the innovation was being driven forward by politicians and not higher administration, as evidenced by the initial counterproductive prioritizing of promotion for possible recognition and publicity purposes over actual program development.

Despite turning down the opportunity for financial aid eligibility with direct assessment, the university was able to follow federal regulations and thus stay eligible for federal student aid by tying competencies to their credit hour equivalents, and determining student academic progress and enrollment status through set terms and a minimum number of successful competencies for each term (Porter, 2014). In fact, the original allowance for direct assessment program eligibility likewise required institutions to tie competencies to credit hours (*Experimental sites concept paper*, 2014). While the federal government was open to innovation, it would not yet change the rules and welcome it through the door too soon.

Growing Outside Support and Resistance

The turning point for CBE started to appear after the 2008 recession, as third party foundations and government officials started to search for solutions for increased college access and reduced college cost. In 2008, the Center for American Progress released a critique of the credit hour, calling it outdated in comparison to programs such as WGU; and in 2009, Western Governors was given national publicity in a “What Works” segment during the NBC Nightly News (Kolowich, 2011). More importantly, however, given later events, was the Lumina Foundation’s release in January of 2011 of the Degree Qualifications Profile (DQP), which laid out standard definitions of what students should be able to do and know at each degree level for faculty and colleges, in the five areas of applied

learning, intellectual skills, specialized knowledge, broad knowledge, and civic learning (Lederman, 2011; Fain, 2013b; Johnstone & Soares, 2014).

Yet support was far from universal. In April 2011, an opinion column was published in *The Seattle Times* by Western Washington University history professor, Johann Neem, in response to a proposal in Washington to make WGU a public state university (Neem, 2011; Kolowich, 2011). WGU had started to establish in-person campuses in multiple states while maintaining an administrative center in Utah. Reflecting the essential argument of many faculty members then and now, Neem declared that “WGU does not offer a college education.” While the competency-based method may be able to determine what skills a student knows, to Neem, a college education is something that takes time for a reason and awarding credit for prior knowledge would only rob students of the chance to discover new things with other students under the guidance of faculty (Neem, 2011). Later, others who were more accepting of the legitimacy of the program would still lament the implied differentiation between those traditional students who could afford a credit-based college education and non-traditional students who would get a near-diploma mill experience through CBE (Slaton, 2013). This concern recalls Archibald and Feldman’s assertion that the ability to improve the productivity of education is limited before quality of instruction is diminished. The need to prove the quality of programs through their outputs – given the lessened reliance on inputs – would be essential.

Education Secretary Arne Duncan, however, soon showed his own support for competency-based education in a speech made at the 2011 Federal Student Aid conference (Lewin, 2011; Duncan, 2011). Though again, this support was not shared by other federal stakeholders who were cautious to accept other CBE programs beyond WGU, too aware of the inevitability of a repeat of the abuse that occurred earlier in credit-hour-based online programs. As a result, the Office of Federal Student Aid (FSA) would only approve CBE programs for aid on a case-by-case basis, initiated through a waiver application by an individual college (Lederman, 2012). Institutions that were interested in competency-based education needed to come together to push forward policy in a comprehensive and sustainable way.

In September 2012, this collaboration was facilitated by Lumina and the Gates Foundation, who held a meeting with 35 institutions, the Department of Education, and

other agencies (Fain, 2013b). That same month, both foundations sponsored a report by Amy Laitinen of the New America Foundation looking at the credit hour, describing it as an “antiquated” unit that is “putting our nation’s workforce and future prosperity at risk” due to its inability to measure actual student learning, citing grade inflation and employer dissatisfaction with graduates (Fain, 2013b; Laitinen, 2012).

The Carnegie Foundation later conducted a response study on its own unit in December 2012 amidst this growing concern over its relevance (Fain, 2012c). The result of this was a statement agreeing that the unit does not accurately reflect a quantity of learning but supported its continued use due to a lack of other options. The need for a standardized “currency” between higher education institutions was essential, and the credit hour would just have to do until further notice (Silva & White, 2015). This was hardly the final word. While Western Governors may have provided the vision and origin of innovation, the involvement of Southern New Hampshire University (SNHU), its president, and the support of the Lumina and Gates Foundations, caused interest in CBE to take off.

Early Adopters and Advocates

Unlike Western Governors, SNHU developed a direct assessment Associate in Arts program, named College for America (CfA), which would be completely independent of credit hours from the start, consisting of 120 competencies within nine skill clusters, instead of 60 credit hours (Fain, 2013c). Also unlike WGU, SNHU was an already established non-profit private university with a traditional campus and a large number of credit-hour-based online courses. It had also slowly moved towards competency-based education, developing less radical programs that still shortened degree time and cost, without putting the cart before the horse, as WGU arguably did, including a self-described “competency-based three-year bachelors” in business program that the school began in 1995 (LeBlanc, 2013). While the governors of Utah and Colorado functioned as the main proponents for the development of WGU and its novel form of competency-based education, it is Paul LeBlanc, president of SNHU since 2003, who took a central role in the push for federal policy to support CBE.

Students in CfA were coached and evaluated by the faculty, offered a variety of resources to students for them to prepare for each assessment (SNHU, 2014). CfA was

introduced in the fall of 2012 and launched in January 2013. Initial partnerships with companies, along with funding from the Gates Foundation, allowed the program to enroll students without first receiving Title IV approval (Fain, 2013f). SNHU's entry into direct assessment started a new surge of development for CBE policy in 2013. The for-profit Capella University also started a direct assessment program pilot for its employees and those of its business partners in January 2013 (Fain, 2013c). The next month, a new round of Next Generation Learning Challenge grants was announced, which is partially funded by the Gates Foundation and included CfA as one of its grantees, and Lumina released a report from a Gallup Poll on the growing public concern over the relevance of current models of higher education, suggesting mastery-based coursework as the solution (Lumina, 2013). That year's State of the Union address called for a focus on higher education results rather than seat time, reflecting the shift from inputs to outputs in defining quality and value in education. It laid the groundwork not only for the President's College Scorecard, but also for competency-based education (Nelson, 2013; Slaton, 2013).

In March, Federal Student Aid released a "Dear Colleague" letter in order to remind colleges of the direct assessment eligibility-granting Section 8020 of the 2005 Higher Education Act (Fain, 2013a). This letter was lauded in April by Lumina President Jamie Merisotis in a *Huffington Post* article promoting the organization's Degree Qualifications Profile, which had been expanding with the new involvement of the Gates Foundation and twenty-five other institutions (Merisotis, 2013; Fain, 2013b; Fain, 2013j). Also that month, SNHU's CfA became the first direct assessment program to take advantage of the opening that WGU had first been offered by the 2005 Higher Education Act and passed on almost a decade earlier (SNHU, 2014). That summer, Northern Arizona University and the University of Wisconsin received regional accreditation for their CBE programs (Fain, 2013d; Wisconsin's competency-based, 2013), and the Gates Foundation announced the first cohort for their Breakthrough Models Incubator project, which included many emerging CBE programs (Next Generation Learning Challenges, 2014a). With the new push by SNHU and the financial and political support of Lumina, Gates, and other foundations, competency-based education was growing in force just as the federal government was looking for a new strategy for higher education reform.

Getting Approval from the Feds

In August 2013, President Obama gave a speech on making college affordable, and his administration started to see the Experimental Sites Initiative as a way to pilot certain innovations that could lower college costs, with those successful pilots potentially to be incorporated into the upcoming reauthorization of the Higher Education Act (Fain, 2013g; “U.S. seeks experiments”, 2013). Yet other CBE-supporting politicians wanted to streamline the process for institutions, leading to the introduction of the Advancing Competency-Based Education Demonstration Project Act of 2014 in the House (H.R.3136), which would allow up to 30 higher education institutions to be granted waivers from conflicting federal regulations (Fain, 2014c). The Senate followed suit with a Committee on Health, Education, Labor, and Pensions hearing on issues in accreditation and financial aid for competency-based education programs, at which LeBlanc gave a testimony on SNHU’s success and the need for “safe spaces for innovation,” arguing for the virtues of CBE above and beyond traditional credit hours: “It requires building learning around individual students and where their strengths and weaknesses lie, not making students conform to rigid institutional structures. It requires actual demonstrated mastery, so students can no longer slide by with mediocre grades and receive a degree at the end” (Fain, 2013h; LeBlanc, 2013). SNHU had started to charge tuition for CfA the previous month at only \$1250 per semester, with already 500 students enrolled (Fain, 2013f). In December, the Senate followed up by introducing the Partnerships for Affordability and Student Success Act (S.1874).

In November, the New America Foundation sponsored a conference on CBE, and in December (Fain, 2013i), Lumina formed C-BEN, the Competency-Based Education Network, to foster sustainability communication among the stakeholders (Fain, 2013j). Between these two events, the federal government finally made its move. In 1992, Congress had given the Office of Federal Student Aid, through an amendment of the Higher Education Act, the authority to grant waivers to individual higher education programs through the Experimental Sites Initiative (FSA, 2012b). On December 6, 2013, the Department of Education released a notice asking for competency-based and prior learning assessment Ex-Site proposals (“U.S. seeks experiments”, 2013), an announcement foreshadowed by an earlier speech by Obama referring to work on a new “aggressive strategy to promote innovation that reins in tuition costs” (as cited in “U.S. seeks experiments”, 2013). Pam Tate

of the Council for Adult and Experiential Learning released a statement following the announcement, encouraging colleges to start developing direct assessment programs that are tied to credit hours rather than waiting for the regulatory hurdles to be fully resolved to pursue innovation (Fain, 2014a).

In January 2014, the Council for Adult and Experiential Learning (CAEL) and fifteen colleges with competency-based education programs submitted a concept paper to FSA with their suggestions on what a CBE Ex-Site would require (“Colleges pitch possible”, 2014). Yet even with this big step forward, Northern Arizona stumbled, being denied financial aid eligibility by FSA due to connecting its competencies to course equivalencies and thus not being a true direct assessment model (Fain, 2014a). In May, SNHU launched its first CfA bachelor’s degree program in communications (Fain, 2014b), and in July, FSA released a Federal Register notice inviting applications from colleges to participate in the new Ex-Sites, including Competency-Based Education and Limited Direct Assessment, the latter being for those programs that combine direct assessment with traditional time-based courses (Fain, 2014c). CBE Ex-Site status would grant approved colleges special waivers for calculating Return to Title IV funds for students who have withdrawn and Satisfactory Academic Progress for degree progress, as well as requiring schools to split a student’s financial aid award into direct and indirect costs with four payment periods each, the former according to number of competencies completed and the latter according to time enrolled in the program (Federal Student Aid, 2014c; FSA, 2014d). While still under the general bounds of credit hour-based regulation, these waivers would allow degree progress and non-tuition costs of attendance to be paid separately, thus taking a step toward paying for outputs rather than merely inputs.

The deadline for colleges to apply for Ex-Site participation was September 2014, and in a webinar held that month with representatives from the Department of Education and FSA, sponsored by C-BEN and EDUCASE, it was suggested that decisions would be made before the FSA Conference in early December (C-BEN, 2014). At the conference, a special invitation-only session for institutions who had been notified of the acceptance of their Ex-Site application was held, but the information for that session has not been made public (FSA, 2014a). Both the Senate and House have introduced different bills related to college affordability and access, understood as precursors to the reauthorization of the

Higher Education Act, and while it seems clear that CBE will be included in the ultimate bill, as noted by Michael Stratford in *Inside Higher Ed*, the ideological opposition between the House and Senate with regard to the content and structure of the new act suggests a long battle until then (2014).

Another difficulty CBE faced was the results of a September audit by the Office of Inspector General, an independent auditing group inside the Department of Education, which criticized the Department of Education's approval process for direct assessment programs, pushing for further safe holds against abuse and clearer faculty roles in the programs, once again underscoring the difficulty that FSA has with balancing the risk of fraud with the support of flexibility ("U.S. audit faults", 2014; Fain, 2014f). The concern particularly focused upon what made competency-based programs distinct from correspondence programs, the latter of which not being eligible for federal aid since students would essentially be teaching themselves. The value of a higher education credential was dependent upon the institution, but if the institution's role did not involve instruction, what was it providing? But stakeholders moved forward. The Department of Education responded agreeably to the audit, stating that they would reevaluate the potential for risk in approving direct assessment programs too easily and that they would soon release formal guidance to such programs. Though much to the frustration of colleges, this formal guidance would not be released for another year (Fain, 2015g).

By 2014, WGU had enrolled over 40,000 students (Johnstone & Soares, 2014). The institution has come a long way since its struggling enrollment and difficulties in seeking accreditation in the late '90s and early '00s. The governors who founded it thought it would spell the end of the traditional way of thinking about college education – in credit hours that represented how much time a student spent in an actual or virtual classroom – but the paradigm was slow to shift. The innovation of CBE started to attract bigger universities, promising to bring more publicity to the movement. The number of institutions working on CBE programs in 2014 was reported as more than 200 (Fain, 2014j), and universities such as Purdue, the University of Texas, and the University of Michigan have already developed CBE and direct assessment bachelor's and master's degrees in fields such as business and healthcare (Fain, 2014h; Fain, 2014i).

Most of the CBE programs developed were limited to specific program areas, particularly those that have applied knowledge and skills tied to them that can be clearly demonstrated with student projects, such as business and healthcare management. Among the programs, debates took place regarding those assessments that measure a student's mastery, such as a computer-graded test on area content, and those that demonstrate actual competencies, preferably actual activities that the student would also perform on the job (Ebersole, 2014). However, all programs shared a common vision of a system of education that focuses on knowledge, not time, and focuses not on what an individual student already knows, but only what they have yet to know, saving them both time and money.

However, regional accreditors and federal regulators remained strongly tied to the time-based system, causing obstacles for these programs along every step of the way towards becoming eligible for financial aid – a crucial resource for the many nontraditional students that CBE best services. A few accreditors, no doubt urged forward by their members, developed written policies on how direct assessment programs would be evaluated and approved, including SACS and the Higher Learning Commission. By the end of 2014, only four colleges had received special approval from FSA to award financial aid to students in direct assessment programs: Southern New Hampshire, Capella, Wisconsin, and Brandman (Fain, 2013c; Fain, 2013e; Fain, 2014d; Fain, 2014g).

Two Steps Forward, One Step Back

Proponents of competency-based education were relieved in early January 2015 when the Department of Education extended invitations to over forty colleges and universities selected for the competency-based education and direct assessment experimental sites (Fain, 2015a). However, the chosen participants were not able to hit the ground running, as it was not until September 2015 that the Department released a comprehensive reference guide for how the CBE experimental site should be administered (Fain, 2015g; Federal Student Aid, 2016). Meanwhile, colleges continued to apply for direct assessment approval and two more programs were granted it outside of the Experimental Site program requirements, Walden University and the Texas State College System (Fain, 2015c). The Council of Regional Accrediting Commissions released a common framework on competency-based education programs in June 2015, and the Department of Education

followed with an agreeable letter to the accreditors that signaled a way out of the muck (Lederman, 2015; Fain, 2015d).

However, the CBE movement was shaken once more in September 2015 by a letter from the Office of Inspector General, which criticized a regional accreditor, the Higher Learning Commission, and the Department for leniency in granting approval to direct assessment programs (Fain, 2015j). As a result, the Higher Learning Commission put a freeze on new CBE program approvals, though only temporarily. SNHU President Paul LeBlanc expressed his concern in an *Inside Higher Ed* op-ed, worrying that this news “may have a chilling effect on accreditors, who could become more concerned about running afoul of the OIG than of heeding calls to be supportive of much-needed innovation in higher education” (LeBlanc, 2015). But yet another investigation by the OIG would begin in January 2016, this time directed at Western Governors University and the role of its faculty (Fain, 2016).

During 2015, LeBlanc in March and then University of Wisconsin interim associate dean and previous Capella administrator Deb Bushway successively took on temporary appointments at the Department to advise on the new rules for these programs and other initiatives to remodel higher education accreditation (Fain, 2015b; Fain, 2015h). The involvement of these administrators in talk over accreditation overall showcases the stake that competency-based education has in accreditation reform, particularly with regard to student outcomes, faculty roles, and the credit hour standard. That year was characterized by talk over the future of higher education as reauthorization of the Higher Education Act loomed and the upcoming election suggesting a possible shift in power that would enable one vision to prevail over another. The Senate education committee (HELP) held a hearing in July 2015 on the issue of balancing innovation and quality in higher education as an aspect of moving forward with the HEA with regard to accreditation (Fain, 2015e). A glimpse appeared in October 2015 as a proposed alternative accreditation bill that would base approval on student outcomes (Fain, 2015i).

That October also saw the first major conference on CBE, CBExchange, which focused on providing resources and advice to schools that are developing programs (Fain, 2015f) and the introduction of another FSA experimental site, this time offering federal financial aid to students attending coding bootcamps (Fain, 2015k), providing legitimacy for

another alternative view of postsecondary credentials. In November, Southern New Hampshire released a self-study of College for America's associate degree outcomes using a standardized Proficiency Profile test from the Education Testing Service (ETS), comparing them favorably against traditional associate's degree-granting institutions (Fain, 2015).

Discussion and Conclusion

Increasing the efficiency of credential production has become particularly challenging as the quality of the product is no longer taken as a fact, as it was with Meyer and Rowan's higher education institution. Instead, colleges and universities must prove the quality of their product, and the creation of more transparent degrees through competency-based education models unpacks the product and draws clear lines from its parts to its application in the real world. Thinking of the split treatment of credentials discussed by Brown, it is likely that the increased number of credentials and variety of credential-granting institutions diluted the efficiency that credentials originally provided as signals of character outside of social networks. While certain top schools still carry the "ritual classification" of the higher education institution, others must concentrate on efficiency in production – thus reducing tuition costs – and employability in order to prove that they are a worthy investment product.

The efficiency of cost is stated primarily as a benefit to the student, leaving any benefit of reduced cost to the institution is out of public marketing. Yet the reduction is surely present. The CBE model breaks down the primary cost of faculty salaries by dividing up the role of the faculty member into multiple specialized roles: course designer, facilitator, evaluator, and student advisor-coach. Programs, however, must demonstrate "substantive" contact occurring between faculty members and students each week, even in asynchronous online courses, to remain eligible for aid (Federal Student Aid, 2013), thus the teaching professor is so far secure from the total automation solution to rising labor costs. Competency-based education undermines the assumption that a college education takes four years of classroom time and replaces it with the belief that each student can be college-educated in different amounts of time, depending on their motivation and prior knowledge of what is to be learned.

Whether for scientific rationality or business economy, increased efficiency has been pushed as a major goal for many industries, including higher education. The nature of higher education as a service provided by highly-skilled faculty restricts the extent of this efficiency, especially when the occurrence of education is determined in part by the number of hours in the classroom. The efficiency that higher education reformers are attempting to achieve through the implementation of competency-based education is one of cost through an initial efficiency of time. Rather than maximizing the number of students in a set amount of time in a classroom, competency-based education offers a way to minimize the time individual students need by redefining how education is known to have occurred. By focusing on the output of tested and measurable learning rather than the amount of teaching time, higher education institutions can become more efficient producers of credentialed members of the workforce.

Whereas in Barrow's account of efficiency in higher education, time usage was made more efficient by increasing teaching loads, the burden of efficiency now falls upon the student. Credit hours count the amount of contact hours between a student and teacher each week in a given semester, but in a self-paced program, the amount of time it takes to finish a course is up to the ability and endurance of the student. This burden for efficiency is especially true for those programs that utilize per-semester subscription tuition models rather than per-credit rates. Colleges offering these programs advertise themselves as increasing affordability and decreasing time to degree, but these are dependent upon the individual student. This move from institutional to student efficiency is related to the movement of discourse from describing education as a public good to a private good. As a publicly funded institution, the school is obligated to the public to make efficient use of tax-funded support. For higher education today, however, what a university offers to the public is advancement through research; the benefit of credentialing students is primarily enjoyed by the student herself. The transformation of higher education from a primarily public good – either for citizenship or workforce development – to a private commodity changes the focus of production to providing a quantifiably good return on investment: a job that pays enough to make the time and money cost of education “worth it.” It is certainly easier to measure the value of this benefit to the individual rather than that of the multitude of tangible and intangible benefits of an educated citizenry.

The Carnegie Foundation has renewed their belief in the credit hour as the best standard available for schools and programs to compare themselves given the time that history has given it to become well-defined and codified in policy (Silva & White, 2015), but national support for competencies has expanded beyond CBE to create a universal language of education inside and outside of higher education (Lumina, 2015). Silva and White used the fact that many CBE programs are able to translate their competencies back to traditional credit hour courses as evidence that the standard does not have to change. Kliebard, however, offered explanation for why such a structural change is still necessary for CBE to move beyond isolated innovation to a change in the structure of the system:

Calling attention to structures such as these [the Carnegie unit development] serve to remind reformers that winning the rhetorical battle is not even half a victory. For success to be achieved in terms of implementation, along with at least the prospect of durability, reformers need to contend with the relatively impervious structures of schooling that stand in the way of successful curriculum reform. (2004, p. 246)

Time will tell if competency-based education will be sustained as a reform towards more outcomes-based measures of quality, or will be just another “innovative” blip in the history of American higher education.

The implication of this review of past events and the growing story of competency-based education remains even if CBE fizzles, because its contemporary innovations are likewise pushing reform for the same reasons. Massive Open Online Courses (MOOCs), “bootcamp” code academies, and broader efforts such as degree “tuning” and regional accreditation reform are not all looking to make higher education efficient in the same way as competency-based education’s focus on measurable outcomes, but they do challenge current assumptions within the system, particularly how its inputs and outputs should be valued. Which of these has a lasting impact will depend on the ability of their proponents to both change the structure underlying assumptions and to raise the symbolic value of innovations to match that of the traditional model. Reform will only take hold if the incentive is there – such as the offer of pensions by CFAT to institutions adopting the credit hour – and as long as traditional higher education remains highly valued by its end consumers (students and their employers), the incentive to try an innovative program will exist only for those students for whom there is no other option.

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CHAPTER THREE: FRAMING COMPETENCY-BASED EDUCATION IN THE DISCOURSE OF REFORM

Introduction

Unlike other disciplines within the academy, education as a field of study has become politicized in both the public and private sectors. Education is something with which everyone has had at least some personal experience, and it is thought of as a major public concern. As a result, conversations about what education should be are often public, allowing lay persons into policy discussions as well as researchers. While the link from political stances to policy is often clear, less clear are how those stances are developed through public discourse. James Paul Gee (2014) distinguished two types of discourse: “big D” and “little d.” The latter is synonymous with conversation, but the former is more than that. Discourse with a capital “D” is what shapes and is shaped by individual conversations, developing identities and ideas that characterize different people and concepts.

Discourse analysis, in the context of current and historical education reform, can reveal how certain narratives of problem-and-proposed-solution dominate public and political discussions about the future of the system of higher education. Competency-based education (CBE) is one such reform, including a mix of prior learning credit (e.g. written portfolios of work experiences, or credit by exam) and self-paced coursework with an emphasis on awarding credentials based on a demonstration of competencies rather than time in the classroom. Competency-based education has arisen in response to a problem defined primarily by the national reform discourses of cost affordability and accountability for outcomes. As structural access to higher education has become almost universal, actual access has been reduced through prohibitive costs: tuition and student debt are rising every year. Even when those costs can be covered, the value of what is being purchased is scrutinized: is a degree worth it if a graduate cannot find a job?

Advocates argue that CBE reduces the costs of time and tuition while creating greater transparency for employers who wish to understand, in terms of a job candidate’s readiness, what a postsecondary credential means. The competency-based education model is designed to appeal particularly to the working adult student, who potentially has both the knowledge to bypass introductory courses and the motivation to accelerate their

progress in self-paced courses, saving both time and money. CBE also reflects a broader political movement to make institutions of higher education accountable for student learning outcomes through quantifiable performance-based funding. Rather than assuming a correlation between classes taken and employability, supporters argue that CBE clarifies what a credentialed student will be able to do and makes assessment more transparent and relevant to those outside of higher education. The potential for CBE to act then as a panacea to politicized issues in higher education, such college cost and graduate employability, has attracted the interest of multiple institutions.

Competency-based education is not new – and its proponents are more than willing to admit it. But why is CBE – a concept that has been present in education since at least the 1970s – now being positioned as The Next Big Thing that will resolve current problems in higher education? What distinguishes it now from previous incarnations is its application to programs beyond the technical sphere and, through that expansion, the belief that benchmarks of competency attainment can be established in both academic and technical subjects. Loaded but positive language is used to position this outcomes-focused approach as a common-sense solution to issues inherent in the current yet antiquated model of higher education. How could anyone disagree with education that guarantees that ultimately all students will be competent in what the course is meant to teach them?

But many do disagree, particularly faculty members who are wary of competency-based education providing a second-class education through courses that are more akin to self-taught correspondence courses than university lectures and seminars. Those who recognize the model's ability to ensure that students are learning still wonder, however, if that learning will be restricted to checking off boxes rather than providing a true educational experience. In both cases, the changing role of the faculty is clear and ultimately, skeptics inside and outside of academia wonder if what CBE is providing can still be called higher education, and, if it is, what does that mean for the traditional institution of higher education and its position as the provider of higher learning? In this paper, I argue that proponents for competency-based education strategically align their descriptions of the program with the frames of reform in higher education - access,

accountability, affordability, and attainment – in order to legitimize CBE and its disruption of higher education and the credit hour paradigm.

Theoretical Context: Credentialing and the Purpose of Education

Competency-based education, at its core, aims to replace the black box of the credential with objective assessments that can prove what students know and can do. In removing the black box, it also shifts the status of the institution of higher education from one of authority to one that must be held accountable. American higher education has historically been characterized as a diverse and decentralized system of autonomous institutions. Unlike other industries that can market clear and consistent products, the educational outcomes of colleges and universities are difficult to measure. However, through emulating external expectations of what a higher education institution should look like, these educational outcomes – degrees and other credentials – have an assumed value in society. Meyer and Rowan (1978) described higher education degrees as having value through a “ritual classification” power whereby the institutions and their credentials are assumed to have value by the public. What actually happens in the classroom is unknown, but it is trusted to meet the standards of a college education, enabling the institution to develop a flexible system of loose coupling.

Credentialism has been defined as the increase of education requirements for jobs despite no change in the actual education and skills needed for those jobs (Collins 1979). This results in a cycle of credential inflation as job candidates find that they will need continuously higher levels of education to compete for open positions and yet, simultaneously, that education is being criticized as being irrelevant to the workplace. Proponents of competency-based education accept the basic idea of education as the route to social mobility but attempt to remove the layers of ambiguity between the classroom and the workplace and better bridge this gap in relevance. What makes this attempt at structural change different is that competency-based education keeps the credential but shifts its foundation to more recognizable and solid ground. It thereby can affirm that the inputs are producing those outputs of student knowledge and skills, redesigning the role of the faculty by switching the focus from college teaching to college learning.

The piece of competency-based education involving prior learning assessment can be interpreted as either dismantling or abetting this form of credentialism. On the one hand, the process of giving students credit for prior learning – either inside or outside of a formal education setting – prioritizes what is learned rather than how long it takes for a student to learn it. On the other, it sees the value in learning but emphasizes the fact that the learning does not count in the job market unless it has been certified by an accredited educational institution. More broadly, the place of CBE as a niche in the system of higher education enables the bifurcated treatment of credentials that Brown (2001) described in the job market: lower level jobs are dependent upon concrete evaluations of skill to ensure technical ability, whereas higher level jobs utilize the credential as a signal of upper class and thus managerial mentality. And that bifurcation is no longer limited to technical associate’s degrees in the community college sector; CBE has been used to design four-year business and education programs, reflecting the rising demand for higher level credentials that are also practical.

As enrollment has expanded and a college degree has become more necessary for the job market, reports of employers being disappointed in the level of graduate preparedness have increased (Lumina Foundation & Gallup, 2014). Rising tuition costs have put pressure on higher education to be held accountable for demonstrated and relevant learning outcomes in order to deliver on the investment of students and taxpayers. Believers in innovations such as competency-based education are pushing for new structures within higher education organizations that will seemingly turn current loose couplings into tight couplings, enforcing a rationalization that can be improved for greater efficiency. Yet some researchers have argued that it is structurally impossible for education to increase in productivity and efficiency like in other industries. In their book, Archibald and Feldman (2011) explained the rising cost of higher education as resulting from its nature as a service-providing industry that employs highly skilled professionals. Unlike a factory, which can produce more gadgets and maintain cost and quality through increased efficiency of the production of those gadgets, increasing the output of credentials while maintaining cost would result in larger class sizes, arguably reducing the quality of the education provided. This reflects what Immerwahr, Johnson, and Gasbarra (2008) referred to as the Iron Triangle in which cost, access, and quality are in

correlation, restricting what can be done in one without having to sacrifice another. However, as I will discuss below, advocates of competency-based education, by challenging some of the fundamental aspects of higher education such as time, propose CBE as a way to resolve this dilemma and maintain quality while increasing access and lowering or maintaining cost.

The increasingly rational and vocational framing of higher education has depicted students as more focused on the end rather than the educational journey toward it, learning to pass courses rather than to become educated citizens. The meaning of the credential is reduced to its utility as a means to get a job. How the relevance of education is defined is dependent upon the definition and assumptions of its purpose. Labaree (1997) distinguished between public, private, and public-private goods in education. This concept provides a crucial lens in analyzing how competency-based education fits into the wider goals of higher education, particularly how the prioritization of certain kinds of goods over others would likely influence how various stakeholders would view competency-based education. Stakeholders outside of government and educational institutions – such as philanthropic foundations and policy groups – have influenced conversations about the purpose and form of education (Lagemann, 1999). These foundations and other external stakeholders, including policy think tanks, have been influential in shaping current national discourse, including support of competency-based education (CBE), for increasing higher education accountability and transparency. By studying this discourse and the ways it is used by stakeholders outside of the academy, the influence of these stakeholders on defining the problems and solutions in higher education can be understood under the microcosmic argument for competency-based education.

Methodological Approach: Discourse Analysis and Framing

Discourse analysis in American linguistics often involves taking a text outside of its socio-cultural context to analyze its structure, whereas the British tradition values this context as a crucial part to understanding what is going on within the text that can and cannot be seen. British linguist Fairclough's (2003) method of critical discourse analysis looks for evidence of the reinforcement of power and societal structure in texts, including

how such texts suppress the “dialogicality” – the presence of dialogue – of multiple voices and universalizes local events. A discourse is characterized not only by how it is operationalized in asking questions and providing solutions, but also by what is left out, either intentionally or by the effect of its assumptions. Critical discourse analysis is a way of situating a text – either a written text or a verbal text such as in an interview transcript – in larger socio-cultural contexts, with special attention to how these texts might privilege one interpretation of events and issues over other alternatives. Fairclough’s method focuses on power dynamics and how discourses preserve social structures, and power can also be broadly understood in terms of levels of influence that mask other discourses by effect rather than by intention.

While critical discourse analysis has not been widely explored as a methodology for higher education research, a handful of existent studies provide examples that utilize the lens of critical theory and a critique of neoliberal influences within the public education sector (Ayers, 2005; Levin, 2005; Levin, 2006; Suspitsyna, 2010; Suspitsyna, 2012). These studies privilege the influence of neoliberalism, given its position as the dominant political paradigm, and, when utilizing discourse analysis, utilize Fairclough’s concept of interdiscursivity in identifying how neoliberal discourse has overtaken that of education. For example, Ayers (2005) used critical discourse analysis to identify neoliberal influences on education, noting the shift in community college discourse from being an institution of democratic access – “the People’s College” – to one that was primarily responsive to training demands in the workforce. He looked at speeches from past presidential administrations, mission statements of community colleges, and documents produced by the American Association of Community Colleges (AACCC). His analysis stressed how the economic discourse of neoliberalism has “colonized” the community colleges, transforming the learner into an “economic entity” and the college as efficiency adapting to changing business needs (p. 539). He clarified the extent of discursive power in this: “As a result, the discourse of economics reconstitutes the meaning of education; the value and legitimacy of knowledge are determined purely by their market value” (p. 545).

In contrast, Haas and Fischman (2010) used a combination of cognitive linguistics and critical discourse analysis in a bottom up analytic approach to analyze opinion and editorial articles in mainstream newspapers to determine which “prototypes” existed

regarding the purpose and structure of higher education. Prototypes – a concept developed by cognitive linguists Eleanor Rosch and George Lakoff, among others – are idealized examples or mental generalizations that provide a reference for understanding specific cases. Haas and Fischmann identified different orders of discourse through inductive coding and analysis, as opposed to coming in with *a priori* conceptions of a neoliberal text. This grounded method of prototype identification opens coding to the empirical identification of multiple orders of discourse. I adapted this data-based version of discourse analysis to my research to produce a nuanced representation of the discourses around competency-based education. Utilizing an emergent coding method such as this consciously attempts to evade confirmation bias in interpretation of the discourse, allowing the data to alter the *a priori* categories given its context.

Fanghanel (2007) took a similar approach to Haas and Fischman, using the concept of “frames” similarly to “prototypes.” Her study’s intent was to identify how the background of individual faculty influenced their responses toward an institutional initiative of combining employability skills with a liberal curriculum across all departments. She interviewed six faculty members from different departments to determine “how respondents construct their own meanings about this text” (p. 188), drawing connections to how elements of their identities serve as filters in the positioning process. Fanghanel’s interview of the faculty members included an evaluation of the initiative’s guiding document’s clarity and degree of prescription, and an account of the ideology they held regarding the mission of the university. Through this, she determined their alignment or disjunction with the text and suggest how their filters – experiential, epistemic (disciplinary), ideological (view of university), and pragmatic – influenced their position.

The methodological approach of frame analysis has also been used in studies of social movement organizations (Snow & Benford, 1992) and mass media’s influence in the public discourse on educational policy issues (Tollefson, 2015; Ulmer, 2016). How issues are framed impacts how proposed solutions to those issues are received. Davies stated that “frame analysis examines how political actors strategically alter meanings in ways that resonate in a political environment” (1999, p. 2). In his article on coalitions for religious education in Ontario, Davies (1999) traced how the groups changed their

argument for religious education from the preservation of morality to that of multiculturalism and school choice, thus framing their cause within the modern values and rhetoric of public education. Referencing Kliebard's (2004) book describing how progressivism was not as unified a movement as others had seen, Davies (2002) utilized William and Benford's (2000) concept of the two faces of framing to explain how the internal contradictions of progressive policies can speak the same language and yet intend such different things. The first face is the consistent core of the progressive movement, while the second is the peculiar interpretation of that core given the current political and cultural contexts around the public's view of education.

While critical discourse analysis can reveal the assumptions of an author, frame analysis identifies how groups shape their messages to make sense at a particular political moment. Snow and Benford (1988; 1992) wrote extensively on collective action frames from the perspective of social movement organizations, and the concepts they developed – frame alignment, diagnostic and prognostic frames, etc. – can also be applied to the growing policy movement for competency-based education. Conceptualizing competency-based education as a “movement” aids in understanding the occurrence of inter-institutional networks and of promotional discourse that is grounded more on the idea of the program rather than its proven effects. Competency-based education has not been unitarily defined as a specific type of program. The label is rhetorical rather than exact, covering programs that range from simply not allowing students to advance in a course before passing the prior unit (“competency” as adjective) to ones which are devoid of courses and instead are composed of a set of skills and knowledge taken from job descriptions (“competency” as noun). Each program within this range can benefit from a discourse that builds up “competency” as something that makes sense for higher education at a time when the public discourse is one of skepticism over what a degree means.

Discourse can be narrowly defined as literal conversations between people, but it can also be understood as the ideas and concepts within a culture that provide meanings for individual conversations and how a problems and issues are assumed to be defined. The identification of credentialism in higher education has led to different interpretations, each with its own way of defining the problem – if it is a problem – and the likely

solution. The proponents of competency-based education see a problem where credentials are not reliable indicator for employers of what a graduate “knows and can do.” Those who are skeptical of competency-based education and other programs that are focused on degree outcomes see such innovations are worsening credentialism rather than improving it, reducing the value of education to its end: a diploma.

In addition to imaging competency-based education as a movement, it is also helpful to think of these two interpretations as opposing cultures, particularly ones focused on what the goal of higher education should be and how its value is determined. Swidler (1986) distinguished between the influence of culture during settled and unsettled periods, suggesting that the “tool kit” that a culture provides – its “strategies of action,” or its discourse – is most explicit during the latter when different cultures conflict over influence. The existing culture of higher education – that represented by the skeptics of competency-based education – is being challenged by the new values of CBE. This new version of higher education culture echoes the same end goals of the traditional – access, quality, and affordability – but its logic of how to define those goals and how to achieve them is laid out in contrast through the discourse discussed in this study. To uproot the traditional idea of higher education, the new is depicted as being the change that is needed.

Research Design

For this project, I first conducted a systematic document search of nationally and publicly available reports, news articles, and opinion posts published between 2012 and 2015 on competency-based education, gathered from online sources. I then thematically coded these documents and organized this coding into narrative frames. Critical discourse analysis concepts such as equivalence/different, inclusion/exclusion, and interdiscursivity (blending of discourse types) guided this interpretation (Fairclough, 2003; Sousa and Magalhaes, 2013). Below, I discuss the major narratives frames and the themes within each, providing examples from a range of texts to illustrate how these frames are developed in the national discourse.

Scope and Objective

To focus the analysis on the national discourse specifically around competency-based education, coding was restricted to those articles and papers that had competency-based education programs in higher education as their primary subject and were published between 2012 and 2015. These years consist of the period in which interest in the model was growing rapidly while the definitions and rhetoric around it were still being defined. This period is bracketed on the one end by Amy Laitinen's 2012 article criticizing the credit hour model which revitalized interest in education measured in competencies rather than time and at the other by the codification of CBE by federal financial aid regulation in 2015. News articles from trade sources such as *Inside Higher Ed* and *the Chronicle of Higher Education*, as well as from mainstream sources as *the Atlantic* and *the New York Times*, were collected through searches on the source websites using the keyword "competency-based."

Often, these articles would reference white papers released by third party groups such as the Lumina Foundation and the American Enterprise Institute, which were then also collected as part of the discourse on CBE. The websites of these organizations were also searched for additional white papers and reports on CBE. Starting in 2015, I set up a news alert through Google for competency-based education, and the articles produced from this method added additional industry publications such as *Evollution* and *Education Dive*. Articles and papers concerning competency-based education in primary and secondary education were excluded, as were press releases and articles informed strongly by press releases. Also excluded were peer-reviewed academic journal articles, given their avoidance of editorializing and the lack of access non-academics have to them, but those articles from practitioner-oriented magazines (*Community College Daily*, *Dean & Provost*, *Change: The Magazine of Higher Learning*, *Chief Learning Officer*, *Liberal Education*, *Campus Management*, etc.) were included.

Thematic Coding

I collected a total of 414 news articles, blogs, and other online documents and loaded them into NVivo 11 wherein I coded each document individually using concepts as my unit of analysis. Documents were coded in titular alphabetical order by type rather than chronologically to avoid intentional temporal bias in code development. The impact

of chronology on the development of themes could later be analyzed through the month and year attributes attached to each document. To contextualize competency-based education into the broader discussion of higher education reform, I chose to begin with a few broad thematic codes taken from the literature and broader topics in higher education reform, such as credentialism, public and private goods, and accountability.

These themes predominantly reflected values coding, which required greater interpretation of the texts, often reading between the lines of discourse to what was viewed as positive or negative in that author's concept of higher education. This coding is most typical of critical discourse analysis's objective to contextualize texts and their biases in the social and historical milieu in which they were written. After establishing the theory-driven code skeleton, emergent coding enabled me to map the language and ideas of the competency-based education movement. Some of these codes emerged from the text in-vivo – originating from specific phrases and buzzwords often repeated – while others were descriptive of concepts that were more often alluded to rather than overtly named (Saldana, 2009). Each document was also coded with attribute data concerning its source, author(s), and date of publication. I then explored the results of coding using cluster analysis within NVivo, and, referring to notes taken during the coding process, I identified patterns in how different concepts were combined and contrasted in the discourse. Certain individual articles were key in checking these patterns, including those that represented counterpoints of a given narrative. This analysis enabled me to define the key narratives within the discourse promoting competency-based education.

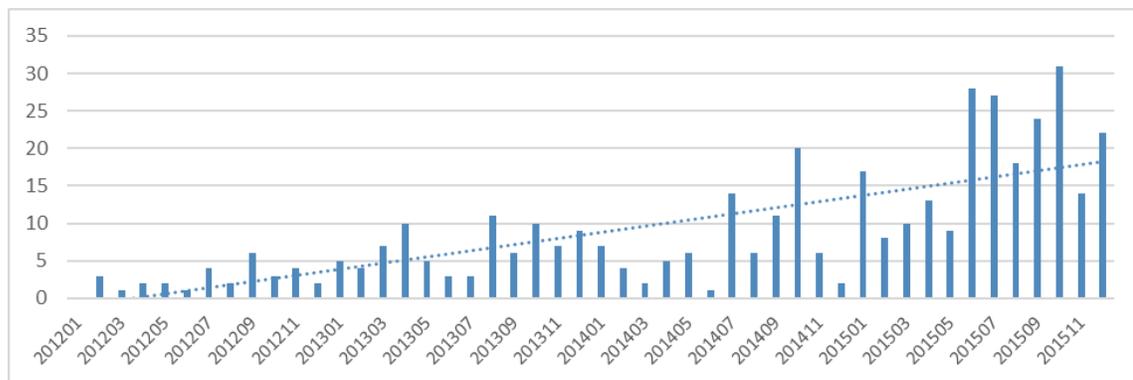
Findings

Overview of Document Attributes

Over the four-year period, the sources of CBE discourse averaged at eight published articles per month, with the great majority released in 2015 (see Figure 1). To put this into perspective, as the early stages of a growing movement, the number of CBE articles per month cannot compare to the level that its cousin innovation, Massive Open Online Courses (MOOCs), reached as a buzzword over the same time period. In October 2015 – the most prolific month for CBE in the table below – saw over a dozen articles about MOOCs published on *Inside Higher Ed* alone. Competency-based education had

much catching up to do. MOOCs are characterized by open online access, which CBE has to some extent, minus the lack of cost. But CBE has had the benefit of standing on a firmer business and credentialing model as programs that start with accreditation, whereas MOOCs are open-sourced and uncredited.

Figure 1. Distribution of analyzed CBE articles from 2012 to 2015.



Identifying Major Actors and Institutions

Authors – including both people and institutional sponsors – were identified and coded as attributes for each document. Not surprisingly given the data set, many of the most frequent authors were journalists: Paul Fain (Inside Higher Ed), Tara Garcia Mathewson (Education Dive), Goldie Blumenstyk, Dan Berrett, Jeff Selingo, Kelly Field, Joel Shapiro (The Chronicle), and Anya Kamenetz (NPR). Also not surprising were the government voices regarding competency-based education in these texts: former Secretary of Education Arne Duncan and Chair of the Senate Committee on Health, Education, Labor & Pensions, Lamar Alexander.

Many other authors were associated with major higher education institutions. The higher education affiliations of institutional authors showed a clear dominance of writings by employees – most often administrators – of Southern New Hampshire University (SNHU) (President Paul LeBlanc and Workforce Strategist Julian Alssid) and Western Governors University (WGU) (President Robert Mendenhall, Vice President Sally Johnstone, Indiana Chancellor Allison Barber, Provost David Leasure, Texas Chancellor Veronica Vargas Stidvent). Other CBE programs were represented as well: Kentucky Community and Technical College System (KCTCS) (President Jay Box and

former program directors, Jim Selbe, Sandy Cooke, and Bill Ryan) and the University of Wisconsin (Extension Vice President Aaron Brower, Dean David Schejbal, and President Kevin Reilly). Other competency-based education institutions whose administrators were involved in the national conversation are Rio Salado College, Brandman University, Thomas Edison State College, Northern Arizona University, Purdue University, and Excelsior College.

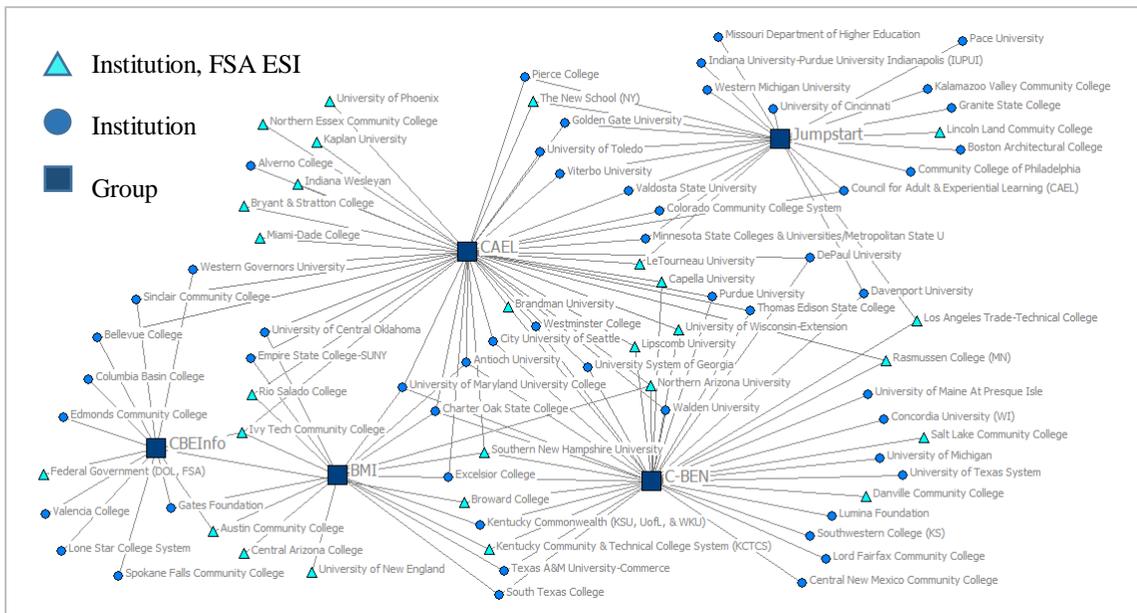
The individuals and organizations in the movement advocating for competency-based education could also be mapped through several CBE-centric groups. CBEinfo originated in a Department of Labor Trade Adjustment Assistance Community College and Career Training (TAACCCT) Round II grant awarded to a consortium of community colleges developing CBE programs under the advisement of Western Governors University. The Gates Foundation contributed to this group's funding, and it also provided funding for the Breakthrough Models Incubator (BMI) program, part of the Next Generation Learning Challenge, which has provided grant funding to multiple CBE programs. Jumpstart was a similar development program guided by the Council on Adult and Experiential Learning (CAEL).

CBEinfo, BMI, and Jumpstart are all incubators that way, existing primarily to aid colleges in the development or growth of their own programs. In addition, the Competency-Based Education Network (C-BEN) was formed in 2013 with the help of the Lumina Foundation, as a network driven by research in best practices and leveraging the knowledge of multiple institutions to create a more unified definition of CBE. I've also included non-Jumpstart membership in CAEL given the organization's focus on both Prior Learning Assessment and Competency-Based Education. In Figure 2 below, I have mapped the membership and participation of different CBE institutions in these learning networks. This does not include all colleges that are working on implementing competency-based education, but it does include those that are most active in the discourse on CBE discussed in this paper. The list of members for each of these organizations were found on the groups' websites.

The existence of the same institution in multiple organizations showcases the network which provided opportunity for the cross-pollination of ideas regarding how to define and improve the quality of competency-based education across institutions, as well

as the ability for individual institutions to leverage shared power to influence policy (such as providing a unified Experimental Site proposal for Competency-Based Education and Direct Assessment to the Federal Student Aid Office when requested) and to build a cohesive market for vendors to create technological solutions for the new model, including programs to disburse financial aid without credit hours and learning management systems (LMS) to build and deliver self-paced course modules to hundreds of students. While the design of an individual CBE program depends upon the context of a given college or university, the network facilitates a national voice for competency-based education policy and allows member organizations to build upon what others have learned about developing an innovative program.

Figure 2. Membership and participation in C-BEN, CBEInfo, Jumpstart, CAEL, and BMI. Also distinguished are those higher education institutions (HEI) that were chosen to participate in the Federal Student Aid (FSA) Experimental Site Initiative (ESI) for Competency-Based Education.



Also active in the conversation are representatives of foundations and think tanks that support the movement: Amy Laitinen with New America Foundation; Rebecca Klein-Collins, Dorothy Wax, Lynn Schroeder, and Pamela Tate with CAEL; Jamie Merisotis with Lumina; Deborah Seymour and Louis Soares of the American Council on Education

(ACE); and Michael B. Horn with the Clayton Christensen Institute and Michelle Weise – who went from the Christensen Institute to SNHU.

Less vocal advocates include Carol Geary Schneider, former president of the Association of American Colleges & Universities (AAC&U), and Cliff Adelman, senior associate at the Institute for Higher Education Policy (IHEP), who were two of the main authors of the Lumina Foundation-sponsored Degree Qualifications Profile. Their views toward CBE can best be described as hesitant approval. Also conflicted is the Carnegie Foundation for the Advancement of Teaching (CFAT), which acknowledges the limits of the credit hour it established in 1906 while maintaining its usefulness in the face of critique.

Many organizations also enlisted the help of higher education researchers to author reports and white papers on the growing program. The American Enterprise Institute (AEI) released a series of papers on CBE this way. Present but less likely to be authored by named individual were white papers produced by education technology companies, such as Pearson Education, Blackboard, and Brightspace. These companies are often more reactive than creative in their discourse, molding their services to tap into the expanding market of institutions interested in developing programs that are independent of the credit hour and thus likely do not mesh well with current vendors. Other organizations include technology groups and consulting firms: IMS Global, Public Agenda, Association for Talent Development (ATD), University Ventures, Chalk & Wire, Brookings Institute, Education Advisory Board (EAB), HCM Strategists, and WICHE Cooperative for Educational Technologies (WCET).

Along the sidelines of the conversation by proponents of competency-based education is that by skeptics and outright critiques, many of whom are faculty at institutions that have not been very involved in CBE, if at all: Amy Slaton (Drexel University), Johann Neem (Western Washington University), Dan Butin (Merrimack College), Sanoy Mahajan (Olin College), and Chris Gallagher (Northeastern University). However, a number of authors quoted below are from institutions that are not very involved but have more positive outlooks on the potential for competency-based education in the future of higher education, publishing in *Evolution* or *Inside Higher Ed*: Stephen Porter (North Carolina State University), Robert Gibson (Emporia State

University), Eric Riedel (Walden University), William Durden (Dickinson College), Matt Reed (Holyoke Community College), Steven Mintz (University of Texas-Austin), Phil DiSalvio (University of Massachusetts-Boston), Kelly Otter (Georgetown University), Jodi Robison (New Charter University), and Robert Hill (Nova Southeastern University).

Discourse Analysis

Framing the Iron Triangle Solution

The conversation around competency-based education is necessarily embedded within a larger conversation about higher education's need for reform. Understanding this, I entered coding with the topics of access, affordability, attainment, and accountability *a priori*. Yet rather than being able to parse out each of these distinctly, they blended together as proponents of the program touched upon each of these as problems that competency-based education was uniquely qualified to resolve altogether. Competency-based education as an innovative attainment-driven model for students earning credit for prior learning and in self-paced coursework would finally be able to resolve the Iron Triangle Dilemma of increasing quality and access while maintaining or reducing cost in higher education. This study analyzes how proponents have framed the program in ways that echo major reform discourses in higher education: expanding adult student access, increasing institutional transparency and productivity, and reducing the gap between higher education and the job market. In the following sections, I review the discourse framing competency-based education as the solution to the Iron Triangle and then delineate it among its three sides (access, quality, cost) to show how the conversation about problems in higher education writ large has been adapted to the promotion of CBE as an innovative education model. I also discuss the counter narratives of each to indicate how competency-based education conflicts with the assumptions of traditional higher education.

The discourse of the Iron Triangle preexists competency-based education and is used as shorthand to reference the dilemma facing current efforts at reforming the higher education system (e.g., Duncan, 2011). It is defined as the three goals of Access, Quality, and Cost, each of which is at risk if the attention given among them is unbalanced. But through the benefit of competency-based education, it is a three-legged problem that can

finally be resolved now that CBE can provide access and cost without reducing quality. CBE's potential to address these issues in a way that the system of American higher education has not been able to before lies in its divergence: "While it can be a tactic or a tool to improve teaching and student learning, CBE's greatest strength is that it provides a means for helping quality and affordability co-exist in higher education" (Sally Johnstone, WGU, & Louis Soares, ACE, *Change*, 4/9/14).

When administrators from institutions involved in competency-based education write for a more general audience, CBE is in the conclusion of an overview of the problems facing higher education, posing it as the solution: "It used to be that you could only adequately do two out of three: minimize costs and increase access, for example, and expect that quality will diminish. But this is no longer the case as universities begin to increase access through technological solutions for minimal or no long-term costs and maintain quality (however we may define that)" (Dan Butin, Merrimack College, *Huffington Post*, 7/10/15). Attention to this idea is no less fervent in outlets that are geared more exclusively to a higher education professional audience: "CBE is not a new idea, but its promise as a potential solution to critical issues in higher education (including affordability, completion, and transparency of learning outcomes) has stimulated renewed interest and significant growth, a trend forecast to continue" (Mark Leuba, IMS Global, *EDUCAUSE Review*, 10/12/15). Some proponents envisioned competency-based education as a force that could change the structure of higher education for all students, but the majority see it as finally providing the best fit for a growing number of non-traditional learners who are looking for pragmatic degree programs that offer flexibility and a learning model focused on their success.

Access and Attainment: Catering to the Non-Traditional Student

In the past, increased access to higher education has been defined by institutions being able to admit more students, but now, access without graduation is seen as wasteful, particularly for those students who are looking for a credential rather than mere learning experiences. The need for competency-based education is primarily framed as a non-traditional model for non-traditional students, who are a growing demographic in higher education. It increases access for these students in its flexibility, but it also

promises a form of education that is pragmatic and focused on their needs as learners. “The primary beneficiaries of competency-based programs typically have been identified as time-pressed, place-bound adults with some college credits who need maximum flexibility to complete their degree and usually have substantial work experience” (Pearson Learning and *The Chronicle*, 8/21/15).

Work relevance is often cited as a major concern for the working adults enrolling in the program, who are distinguished from traditionally-aged and -motivated college students in being more focused on the career benefit of education, again reflecting the dominance of the social mobility purpose of pursuing higher education. “Most adult learners select programs and classes for practical, career-related reasons.... Higher education needs to engage them in ways that show that their degrees and relationships are supportive, relatable and relevant to their lives and careers” (Eric Riedel, Walden University, *Evolution*, 6/22/15). In addition, the ability of competency-based education to either directly (through portfolio or similar) or indirectly (by advancing quickly through coursework) reward non-traditional students credit for their experiences makes completion especially more accessible. However, concerns exist that while these students may be gaining more access, that access is to a diluted degree and a second-class form of higher education.

Competency-based education is described as responsive to the “demands of the workplace” with assessments that have “real world” relevance, but some worry that this focus pigeonholes non-traditional student education into narrow vocational training against their will. However, proponents of CBE acknowledge that this focus is what adult students need and look for in an industry that has not been placing much priority on that focus. CBE is made for this new normal: “Adult learners have considerable experience in situational learning and must see the correlation between assignments and outcomes very clearly. They have an intolerance for busy work and seemingly irrelevant content” (Vicki Brannock, Brandman, *Evolution*, 6/3/15). Even when the target market is expanded to include more traditional students under the belief that CBE has relevance beyond the core demographic of working adults, most students are depicted as being vocationally-minded: “The important thing here is to realize that many students are looking to hire higher education to help them get a job, and institutions can really nail that for them” (Michelle

Weise, SNHU, *Evollution*, 3/13/15). It is noteworthy that attainment – also known as the Completion Agenda – is not overtly part of the Iron Triangle (access, quality, cost), reflecting perhaps the recentness of completion as something that should be taken as seriously as access. In competency-based education, the access goal is overtly intertwined with that of completion: “We have a national agenda that preaches ‘more college for all’ and highlights the degree as the ultimate goal, but we have so many students struggling to actually complete their degrees” (Michelle Weise, SNHU, *Evollution*, 3/13/15). While standard forms of online education focus on providing greater access, competency-based education can do one better by ensuring higher levels of attainment.

Focus on Learners, Not Teachers

To help busy adult students reach their goal of completion, access must also include support. Competency-based education is often described as “student-centered,” a vivid use of discourse, which implies that traditional time-based forms of education are not. This is particularly true when combined with the assumption that CBE’s way is the “right” way of approaching education: “CBE places students where they belong—at the center of the learning process” (Pearson Education, 7/15/15). This focus on the learner rather than teacher empowers the student in their educational experience: “Asynchronous, self-paced CBE models put the learner in the driver’s seat, which is a great thing for many adult learners; it promotes ownership of one’s own education” (Jodi Robison, New Charter University, *Evollution*, 11/21/12). The contrast between the new model and the old is implied through loaded language: “CBE learners are active contributors not passive recipients” (Public Agenda, 12/15).

This results in a switch of power between students and teachers: “This ‘power shift’ makes learners, individually — not teachers or professors -- aggregators of knowledge by and for themselves. Any approach to education that places them at the center of learning activity accommodates their perspective on education” (William Durden, President of Dickinson College, *Inside Higher Ed*, 10/22/13). The switch has been positively described as a fruitful change that benefits the students: “‘We’re focused on learning, not teaching,’ Larry Gruppen, who runs the competency-based Master’s of Professional Health Education at the University of Michigan, told me. It’s an important

development in the field of higher education, which has long been in need of some major changes” (Alana Semuels, *The Atlantic*, 7/31/15).

Counter to narratives about reducing faculty power, proponents of CBE highlight what this reduction can do to empower students to be successful: “This is a cultural transformation and a leap of faith in the students’ intrinsic motivation and ability to take the lead role in their education. The role of the faculty becomes to support and coach the student; the students take an increasing role in defining the content and speed of their learning” (Fatma Mill, Purdue, *Evolution*, 10/2/14). Though to some, this shift is not without risk: “[W]hat we are experiencing is the death knell of teaching. And what will determine the fate and role of colleges and universities in our society is whether we can transform the death of teaching into the birth of learning” (Dan Butin, Merrimack College, and Sanoy Mahajan, Olin College, New England Board of Higher Education, 3/23/15).

Two Tiers of Access?

For competency-based education, access is clarified as access to the same level of education as in traditional models. Again, in the Iron Triangle, the risk is quality decreasing along with costs. The burden of proof is on proponents of CBE to show that this new approach to education does not result in a diluted product: “While the benefits of the competency-based approach have been recognized by a number of higher education policymakers as increasing college affordability, there are detractors who take the position that the value of a college degree is diminished” (Pamela Tate, CAEL, *NEJHE* Interview, 9/2/14). But the narrative of increased access, particularly for non-traditional students, is problematized by critics of competency-based education.

The niche that this flexible and learner-centric model provides can be negative as well as positive, serving as a second-class education option for those who are not privileged enough for a residential four-year experience: “In such outcomes-focused college curriculums, stripped of ‘unnecessary’ instruction, open-ended, liberal learning easily is deemed wasteful.... The distance will grow between the student who can afford traditional university instruction and the one who needs to save money” (Amy Slaton, Drexel University, *Inside Higher Ed*, 8/8/13). Proponents of CBE, however, see it as offering a more pragmatic option for those who know what they need: “If you’re in the

privileged class and you can afford to send your kid off to college for four or five years to experiment with life and learn about things and drink a lot, and go to football games, great, do that.... What we're doing is providing an alternative, equally good educational experience, for the rest of the population" (Robert Mendenhall, WGU President, *The Atlantic*, 7/31/15).

This concern of a second-tier program is magnified when it does not fulfill its promise of helping student save time and money: "Only a minority of CBE students in established programs have been able to accelerate through their degrees, and, under many university subscription models, CBE degrees are only lower-cost if students complete at a quick pace" (Melanie Ho, Education Advisory Board, *Evollution*, 2/27/15). The efficiency of the program in both saving time and money is dependent upon the student's ability to finish requirements at a faster than usual pace, sometimes relying on faculty or coaches to keep them on track, but often dependent upon their own initiative to push themselves. This can be easily detrimental to students who cannot self-manage, but more often emphasized is the potential for CBE to enhance the experience of those who can. Some commentators even go further in the critique, suggesting that the non-traditional students who these programs are meant for may also be most ill-equipped to succeed in them: "Traditionally marginalized students, meanwhile, are likely to find themselves even more flummoxed and excluded than they had been before the advent of CBE. In these ways, CBE threatens to exacerbate, rather than ameliorate, the social inequities that currently plague higher education" (Chris Gallagher, Northeastern University, *Change*, 11/2014).

This split into two tiers of higher education is sometimes oversimplified into access to vocational versus academic education: "Collegiate education cannot be for the privileged few and vocational education for the rest" (Johann Neem, Professor at Western Washington University, *Thought & Action*, Fall 2012). The split is more interesting when defined by competency-based education's key problem: the credit hour measuring time in the classroom. The Carnegie unit, and thus credit hour, was intended to standardize measures of education, on the one hand to calculate pension eligibility, and on the other, to ensure that high school graduates looking to enter higher education had equivalent levels of education across the country. The Carnegie Foundation, in their self-evaluation

of the unit, echoed this concern of education equity: “The challenge is to maximize flexibility without eliminating some minimum guarantee of instructional time, or opportunity to learn, especially for traditionally underserved students.” (Elena Silva, Taylor White, and Thomas Toch, CFAT, 1/2015).

But competency-based education is not creating this two-tier system. It already exists, albeit on a spectrum that includes small liberal arts residential colleges, large research university lecture halls, and online community college courses. This spectrum is not bad; it is one of choice and reflects the diverse objectives that students can have when it comes to pursuing higher education: “Will there continue to be buyers of the traditional model? Undoubtedly. For some, college is—and will remain—as much about the learning process as about anything else. But for the increasing number of students who seek value and immediately applicable, industry-relevant skills, the competency model will prove awfully enticing” (Joel Shapiro, *The Chronicle*, 2/17/14). The risk of exacerbating inequalities of access to those choices is becoming more likely, and the need to save time and money is embedded in that risk. Once more, caution defines the growth of CBE: “It’s critical that, as competency-based education becomes more common, it’s not defined and treated as a second-class approach to degree completion.... We must be certain that we are not creating a second-class status of fast academic degrees as we try to save students both time and money” (Robert Hill, Nova Southeastern University, *Evolution*, 7/1/15).

From Inputs to Quality Outcomes

In the Iron Triangle discourse, the leg which covers institutional accountability for education outcomes is quality: “While we want to increase the affordability and accessibility of higher education, we must also maintain quality” (Robert Mendenhall, President of Western Governors University, to Senate HELP Committee, 2/2/12). It is a word which multiple industries beyond education use and is assumed to be something for which to strive. But how is quality defined, particularly in the realm of higher education, where the output cannot be tested as clearly as a concrete product’s integrity? Competency-based education – assuming that education is a means to an employability end – promises quality through clearly defined outcomes which are relevant to the

workforce. However, the focus on outcomes that makes competency-based education a strong model in the eyes of proponents worries skeptics who instead see a list of checkboxes without educative substance.

The question is then if competency-based education can define quality by quantity of learning rather than quantity of time: “The biggest misconception about competency-based education is that it doesn’t provide students the same quality experience, that they’re somehow compromised because they don’t have the benefit of an instructor sitting right in front of them and a class of 20 people in the room with them as well” (Cori Gordon, Northern Arizona University, 8/13/14). For critics, however, quality of learning is tied to a quantity of active educational time: “To overcome the credit hour in a way that reduces students’ time on campus would only make it more difficult for colleges and universities to offer a high quality and meaningful education. Such efforts might increase access to college degrees but not to the education that must accompany the degree” (Johann Neem, WWU, *Inside Higher Ed*, 1/30/15).

Accountability is an issue that has been getting increasing attention in the political arena, particularly as rising college costs to students and taxpayers furthers the need for higher education to prove itself as providing a product which has a good return on investment. It is argued that the worth of a school should be measured by its outputs rather than its inputs, particularly in discussions about accreditation reform: “Higher education has long been consumed with access rather than outcomes, but developing metrics for monitoring competency-based programs could provide an opportunity to change that” (Tara Garcia Matthews, *EdDive*, 6/18/15). One of the central components that distinguishes competency-based education from traditional models is its focus on what is learned rather than how. Through measuring the output (competencies, or learning outcomes) rather than the input (credit hours, or instructional time), cost-reducing efficiency can be sought while maintaining the quality of what should count. As a result, the return on investment is more directly linked to the product rather than the process.

Quality is established through assessments that can concretely show that learning has been accomplished: “One model for improving quality is competency-based education, in which an institution clearly defines the specific competencies expected of

its graduates” (Rebecca Klein-Collins, CAEL, 7/23/12). The key piece that is to be disrupted by competency-based education – the credit hour – is depicted specifically as failing to provide this guaranteed result of quality: “What policy leaders miss is that the credit hour was not designed to document the quality or level of student learning” (Carol Geary Schneider, President of AAC&U, *Liberal Education*, Fall 2012). Competency and its assessment must be clearly defined. Clear definitions facilitate transparency and objectivity for all members of the education marketplace: “Assessment is also meaningful to students and external stakeholders because it is objective, valid, and free of bias” (Dana Offerman, Rio Salado College, *Evolution*, 3/28/12). Clear definitions also provide a viewable efficiency, brushing away the excess of other programs and leaving busy students with only what they need: “We build clear pathways to learning and support that with engaging content so that the student knows their time is being well respected and what they’re working on is going to be effective in learning the materials” (David Leasure, Western Governors University, *Evolution*, 2/2/15).

“Real World”-Defined Quality

The quality of educational outcomes is to be universally recognizable: they must be clearly defined for both students and their employers, and they must have relevance underlying those definitions. The value of competencies is found in their applicability to the “real world,” reflecting the curricular complaints that define conversations about higher education’s relevance today: “CBE-designed courses include content that is real, contextual in its real-world application, and has learning activities, including assessments, that engage the student authentically and is integral to the learning process” (Bill Ryan, KCTCS, *Evolution*, 10/23/15). The value of credentials in the job marketplace that results from societal trust in the meaning of the institution’s output is put into question, and the solution is transparency and unpacking the degree into its component learning outcome parts. These individual outcomes can then be assessed objectively and in ways that can be understood by employers: “Convinced that grade inflation and a diluted liberal arts curriculum have eroded the value of a traditional college degree, a growing body of thought has come to favor an approach that emphasizes demonstrated mastery of essential competencies” (Steven Mintz, UT-Austin, *Inside Higher Ed*, 2/22/15). These competencies are validated also through “authentic

assessments” another value-laden phrase which makes anything else negative by disassociation. This authenticity is defined by plausibility of direct application in the workplace, rather than through academic pedagogy: “The idea is that through this kind of “authentic assessment,” institutions will be able to say with confidence to employers that their graduates are well prepared for the workplace” (Dorothy Wax and Rebecca Klein-Collins, CAEL, *Evolution*, 10/16/15).

While the symbolic acceptance of traditional degrees by employers may be fading, the value and success of new models such as competency-based education are still strongly tied to whether they will be accepted now: “Employer acceptance is the key to completing the student value proposition” (Chip Franklin and Robert Lytle, AEI, 4/15). The acceptance may be split in a way that is reminiscent of Brown’s (2001) argument of how credentials are seen differently for upper-level versus lower-level job applicants, the former of which benefiting from its signal while the latter is more likely to need the sort of degree that has more transparent proof of its outcomes. “Roughly half of recruiters would be very likely to hire a temporary worker, administrative assistant, or entry-level worker on the basis of demonstrated competencies over a general degree. That proportion falls much lower (to just over one-quarter) when thinking about how to hire managers or senior management.... This is the status quo that CBE programs will continue to combat in establishing new credentials with labor-market value” (Chip Franklin and Robert Lytle, AEI, 4/15).

Program success is defined by employers recognizing the value of the degree and hiring the graduate: “A key tenet of all the efforts is that employers, along with students, are likely best positioned to determine program quality—and programs that align their assessments to the competencies employers need will likely be in a strong place” (Michael Horn, Christensen Institute, *eCampus News*, 8/17/15). The outputs are emphasized over the inputs in competency-based education, and this focus on outputs is often cast as beneficial for employers looking for qualified candidates: “Competency-based education’s time is coming; the promise of lower costs for students and better outcomes for employers” (Gary Brahm, Brandman University, *Evolution*, 3/14/14). The importance of this view in the development of policy reform to support competency-based education is evidenced by remarks by former Department of Education Secretary

Ted Mitchell: “Some competency-based programs have been shown to improve degree completion, reduce costs to students, and better align learning outcomes with the marketplace and society” (Department of Education blog, Nov 2015).

The combination of future-job-seeking students and degree validation through employment combine into competency-based education providing individual mobility to those potential students who would not otherwise have access. Competency-based education facilitates individual mobility more than other higher education models due to its ability to accelerate someone’s path toward graduation: “Competency-based educational programs that allow students to demonstrate knowledge and mastery of workplace skills at their own pace can be a sensible way for experienced workers to advance their careers” (*US News & World Report*, 4/1/15). The CBE student understands the need to prove competence with that graduation: “They need this thing. They need this credential. They need these skills. They need these competencies. Their employers talk in terms of competencies” (Paul LeBlanc, SNHU, Interview in *The Chronicle*, 5/28/15).

Learning Lost in Outcomes?

However, skeptics of competency-based education wonder what might be lost if quality is defined so heavily by measurable outcomes. Secondary school concerns of “teaching to the test” are echoed in challenges to the reliance on assessments in competency-based education: “The primary weakness of competency models, however, is that they can be only as good as the assessment mechanisms they employ, and, unfortunately, no assessment can be a perfect proxy for deep and meaningful learning” (Joel Shapiro, *The Chronicle*, 2/17/14). While defining educational outcomes across departments and institutions can help to clarify what a degree means, setting standards to be reached can overemphasize the goal at the risk of the quality of the experience: “Some critics of competency-based learning fear its broader implications for education; while they concede that this approach may encourage faculty to set clear standards about what students know — thereby establishing a “floor” of quality assurance — it can also place a low ceiling on expectations” (Dan Berrett, *The Chronicle*, 10/28/15).

One of the fundamental critiques of CBE points out that defining measurable competencies and passing students once they meet them doesn't leave much room for the learning that happens unintentionally outside of the clearly-defined and competenced

syllabus. While proponents of CBE argue that the model has a potential to ensure strong learning outcomes above and beyond what a typical graded transcript would, skeptics point out the risk that, in the creation of clearly defined outcomes and objective assessments, deep learning may be lost in favor of easily measurable outputs. And not all skeptics are inside the Ivory Tower: “Most employers want to see some set of general skills—interpersonal skills, ability to adapt, or abstract thinking— and express concerns that these general skills will not be adequately developed in a targeted CBE program” (Chip Franklin and Robert Lytle, AEI, 4/2015). Is it only realistic to define competency in vocationally oriented programs, or might liberal arts programs be able to operationalize learning outcomes in an objective way? The feasibility of the latter defines the debate between proponents and critics of competency-based education: “While many may argue that competency-based education goes well beyond training and vocational skills, can competency-based education expose students to the same types of domains at the same or deeper levels? Many argue yes” (*Degree Prospects*, 7/2014).

Merrimack College Professor Dan Butin channels education reformer Paulo Freire in challenging the “education” that results from CBE’s clearly defined outcomes: “What this makes vivid – and highly problematic – is that competency-based education, much like the MOOC craze of the last two years, presumes that education is solely the ‘opportunity to learn’ a predefined and well-defined set of learning objectives. Not to be too cliché about it, but this is the classic mistake of thinking of education as the filling of a pail rather than lighting of a fire, of transferring information rather than transforming knowledge” (*Inside Higher Ed*, 6/23/14). Writing later, Butin laments, “And for all of the good intentions of such a model – for we all need benchmarks and a quality-control ‘floor’ to work from – it operationalizes a checklist-only framework of education” (*Inside Higher Ed*, 9/29/15).

For proponents of the program, however, this focus on outcomes defines what makes competency-based education an improvement over the status quo in higher education: “[W]e see huge opportunities to seize this disruptive innovation and transform our higher education system into a more affordable, student-centered one ... and transform our notion of quality and performance from measures of time and selectivity to learning and outcomes for all students” (Michael Horn, Christensen Institute, to Senate

HELP Committee, 7/22/15). This transformation of the institution of higher education is the key to overcoming the Iron Triangle.

Affordability through Institutional Disruption

Competency-based education addresses the issue of cost in the Iron Triangle in multiple possible ways which disrupt traditional higher education. On the one hand, it can provide only what students need to graduate by unbundling a degree into its necessary and “unnecessary” components. Part of what supports the frame of competency-based education being more affordable is the fact that it can be a “no frills” education. In opposition to the traditional college experience which has soared in price due to increasingly expensive non-essential and often non-educational amenities, an unbundled education charges for only what the student opts in to, not the whole package: “Our students generally aren’t looking for football teams and dorms. They’re looking for flexibility and affordability that allows them to complete their education without sacrificing their family and work responsibilities” (Veronica Vargas Stidvent, WGU, *American-Statesman* (Texas), 9/19/15). On the other hand, it can focus on the instruction itself, adjusting the costs through a new business model which shifts the unit cost from instructional time to learning outcomes. Revamping a historic institution requires innovation, but without care, space made for innovation also creates risk.

“Competency-based measures allow the possibility of finally achieving actual productivity gains, using the term ‘productivity’ in the Econ 101 sense” (Matt Reed, Holyoke Community College, *Inside Higher Ed*, 1/23/14). These productivity gains come out not only in cost savings for the institution, but also a better product for consumers: “It promises more efficient, affordable education through aligning competencies with workplace needs; allowing students to get credit for competencies as soon as they show they have acquired them; charging students on a pay-as-you-go model; and reducing expensive facilities, overhead, and labor costs” (Chris Gallagher, Northeastern U, *Change*, 11/1/14).

By taking a degree out of its black box and dividing it into competencies, any overlaps that would exist across classes could be taken out, along with anything that is not relevant to the student’s educational and likely employment objectives:

“Competency-based education programs can be seen as more efficient in that they focus on how best to help students demonstrate competence, potentially eliminating redundant coursework or unnecessary degree requirements” (Lynn Schroeder, CAEL, *Chief Learning Officer*, 11/23/15). This efficiency has a competitive advantage in the higher education marketplace: “Transcending time and place through technology-enabled learning and unbundling the elements required to earn degrees and credentials can create a competitive advantage over those institutions still mired in a higher education mindset long past its time” (Phil DiSalvio, UMass Boston, *Evolution*, 4/9/15).

Measuring Learning, Not Time

The base cost of education to the student comes from tuition, which is often measured by and billed in credit hours. The current model of how to price education is disrupted at its core when the metric of time is reconsidered. The most common phrase within the discourse is essentially the shorthand definition of competency-based education and what sets it apart from traditional higher education: measuring learning, not time. Students graduate when they show that they know the material, not when they complete a certain number of credit hours as defined by time in an actual or digital classroom. This distinction is set up as what makes competency-based education a better way:

To put it most boldly, what is important to validate in a student’s learning experience – the amount of time put into a chunk of instruction and the student’s ability to reiterate what was contained in that instruction, or mastery of a competency that is demonstrated by the student’s ability to apply it in a given situation? (ACE & Blackboard, 2/2015)

This comparison is crucial for depicting CBE as the future of higher education and furthering the replacement of the credit hour more generally: “In order to move higher education forward, we must leave time as a measurement of learning in the past” (Dana Offerman, Rio Salado College, *Evolution*, 3/28/12). This valuation is further implied when CBE is defined by what it is not: “What unites them is support of a skills-based educational alternative such as competency-based education (CBE), which measures mastery of skills rather than endurance through curriculum” (Julian Alssid, SNHU, *Huffington Post*, 1/9/15). Competency-based education is distinguished from other

outcomes-based reforms by its rejection of the time-based model in addition to having measurable outcomes.

Another comparative phrase used in the discourse is “learning is constant, time is variable,” often paired with the credit hour-based model and the contrasting “learning is variable, time is constant.” This comparison makes the idea of competency-based education seem like common sense and thus long overdue for higher education. “Competency-based education flips the traditional time-based model. Under a competency framework, learning is constant (e.g., a student has either mastered the concept or not), and time is variable (e.g., students may progress quickly through material which they find easy or with which they have familiarity, or slow down their pace and spend more time on material that is more difficult or less familiar to them)” (New America Foundation, 7/2013). The variance in time enables education to become more efficient, or, at least, allows students the option to be more efficient in their consumption of it and thus save on both monetary and opportunity costs.

While many competency-based education programs are still strongly tied to the credit hour model, such as Western Governors, those who are attempting direct assessment models that are completely separate from the credit hour suggest a paradigmatic shift of how higher education is defined: “Direct assessment looks nothing like a typical college class. As a result, it is both controversial and threatening to many in the academy. To some critics, testing competencies without teaching is not higher education” (Paul Fain, *Inside Higher Ed*, 4/17/13).

Recognizing Prior Knowledge

What is most challenging to the institution of higher education, however, may be the oldest program on the competency-based education model spectrum: prior learning assessments (PLA), or credit for prior learning (CPL). “It’s really pushing us toward this idea of competency-based learning as being a measure of, “Do you have what it takes to earn a credential?” ... Can I then, as a representative of this institution, certify that you have this knowledge that’s equivalent to what somebody else would get somewhere else with a degree?” (Marc Singer, Thomas Edison, *Evolution*, 4/3/14). The programs that are identified as historical precedents of CBE – Alverno, Thomas Edison, Empire State, Excelsior - are ones that offered PLA credits for adult students, but precedents can also

be found in credit-bearing tests (e.g., CLEP and Advanced Placement) and the American Council on Education's credit recommendations for military service. The institution of higher education is defined by its output of certifications of education, but is that education inherently delivered also by the institution? Is it still an institution of higher learning if learning is not occurring in classrooms? Furthermore, what is the student paying for if they are arriving in the classroom with the product already in hand?

While the crucial question for a direct assessment program would be in the validity and rigor of its assessments in confirming what a student “knows and can do,” prior learning assessments evoke a more complicated dilemma regarding the recognition of knowledge. The innovation again is compared to the old model of higher education, positioning the former as a better fit for the new normal: “I think it is short-sighted on the part of our education system—that is stuck in the past—to not recognize the potential that an adult college student has to accelerate because of the competencies they already have acquired through their life experience” (Allison Barber, WGU, *Evolution*, 11/21/12).

This recognition is depicted as particularly enticing for the adult student: “Adults, already in the workforce, with some college but no degree, are also a target audience for innovative models that value what these potential enrollees already know to accelerate their time to degree completion” (Patricia Book, WCET, 5/1/2014). Rather than being treated the same as a young high school graduate and a presumed *tabula rasa*, prior learning assessments that give college credit to adult students validates their time outside of the classroom and encourages further learning: “PLA is an important way to communicate to students that your prior learning is welcome here; we can build on that learning and make it stronger” (CAEL, 10/30/13). While the themes of increased access and attainment can be found in most educational narratives outside of competency-based education, CBE adds a level of student empowerment through the recognition of non-academic learning as credit-worthy knowledge.

But this equation of life experience and college courses does not sit well with everyone: “While some see PLA and CBE becoming the rule rather than the exception, others express reservations. American Council of Education President Molly Corbett Broad says the academy is skeptical because it assumes that college classroom is not the sole place where college-level learning occurs” (Pamela Tate, CAEL, *NEJHE* Interview,

9/2/14). While faculty concerns about competency-based education are more often spoken of rather than directly quoted or heard, Johann Neem, a history professor at Western Washington University, has authored several articles that reflect the other side of the discourse: “Yet to give credit for experiences that are not properly academic is to undermine the higher academic—that is, intellectual—purposes of formal higher education in the arts and sciences” (*Liberal Education*, Fall 2013).

This critique addresses the core of competency-based education’s challenges to the monopoly of the institution and its credentials; higher education is defined by the academic context: “Life, of course, is not higher education, and one’s negotiation of life in its infinite variety of feeling and manifestation does not constitute the set of criteria on which degrees are awarded” (Cliff Adelman, IHEP, *Inside Higher Ed*, 6/6/13). When the learning part of higher education is outsourced to self-study and life experience profiles, is the role of colleges and universities merely to provide the paper? “The main question I have is whether competency-based education is about education or if it is about credentialing” (Kevin Guthrie, President of JSTOR-Provider ITHAKA, 3/12/15). Neem, however, questions this, arguing that the focus on outcomes removes power over learning from both faculty and students: “WGU's labor model leads instead to a world in which neither faculty nor students participate in the life of the mind, where knowledge is consumed rather than produced” (Western Washington University, *Thought & Action*, Fall 2012). Those who are pushing the movement forward argue that the ultimate learning outcomes should take precedence: “Worry less about what kinds of learning count (Prior Learning Assessments, for example) and more about the actual outputs: what students know” (LeBlanc, SNHU, to Senate HELP Committee, 10/1/13).

A More Efficient Faculty

The cost of quality faculty time is what Archibald and Feldman (2011) identified as the reason why college could not be made increasingly more productive. Competency-based education changes the role of the faculty, but can there be learning without teaching? As the lecture hall is labeled archaic in favor of more engaging pedagogy, the lecturer finds herself pushed out of the role of the “sage on the stage” into that of the “guide on the side,” as coined by Alison King in a 1993 article in the journal *College Teaching* and now repeated by proponents of CBE’s student-centered model. Though more common is

the description of an unbundled faculty model where a traditional professor's role is split into at least three individual roles: course developer, assignment evaluator, and advisor-coach. The last of these is often the faculty face for students, being there throughout a student's program to develop goals and work through issues. This unbundling is what enables the programs to be centered on the learner and for its instructors to specialize: "Many CBE programs have more specialized, or "deconstructed," faculty roles than traditional programs; the many roles faculty play in traditional programs (teaching, course planning, student advising, and curricular development) are divided up among CBE faculty." (Rachel Baker, UC Irvine, AEI, June 2015)

The divided model is said to have strong pedagogical benefits: "Rather than delivering lectures, our faculty, all full time, serve as mentors, and are fully engaged in the learning process, leading discussions, answering questions, and serving as role models for their students" (Mendenhall, WGU President, to Senate HELP Committee, 2/2/12). This change in faculty roles is depicted either as a modern innovation, or a reduction and potentially an erasure of the profession: "The problem is that if education is viewed solely as the adequate transmission of academic knowledge, then we will indeed be replaced" (Dan Butin, Merrimack College, and Sanoy Mahajan, Olin College, NEBHE, 3/23/15).

While resistance to change at the policy level may result from inertia in the face of having to revamp a historical institution, faculty concerns over competency-based education are ideological: "Competency-based education is controversial, mostly among faculty members who fear it may wrest control of learning from their hands -- and perhaps be a means of replacing teaching professors with coaches and tutors" (Paul Fain, *Inside Higher Ed*, 5/5/15). Competency-based education and other forms of online education often rely on part-time faculty, or untenured full-time faculty that are divided into lecturers, curriculum developers, and advisors: "Many faculty remain concerned about the nature and quality of such programs, which contribute to the increase in the use of contingent labor" (Chris Gallagher, Northeastern University, *Change*, 11/1/14). This contingent labor, of course, is what enables flexibility and efficiency.

The Office of Inspector General (OIG) in the Department of Education has cited multiple stakeholders in the definition of "regular and substantive contact" between

faculty and students. Also reminiscent of concerns over online education in general is the possibility of fraud committed by students outsourcing their assessments, though many CBE programs try to account for this through online proctoring technology which can verify student identities. Again, leaning on the side of caution by the federal regulators is equated into further roadblocks to innovation: “The OIG’s more rigid reading of the rules for faculty interaction with students may have a chilling effect on accreditors, who could become more concerned about running afoul of the OIG than of heeding calls to be supportive of much-needed innovation in higher education.” (Paul LeBlanc, SNHU, *Inside Higher Ed*, 10/26/15).

A Disruptive Innovation

These fundamental changes in defining time, learning, and teaching are innovations that can greatly impact an institution. One of the greatest barriers to innovation, when the enthusiasm of the administration is assured, is what can be best termed as institutional inertia, from both the policy and academic sides of the institution. Proponents of reform look at how the demographics of college students have changed and urge higher education to reflect that change: “We keep trying to wedge nontraditional students into inflexible educational structures that were built for 18 to 22 year olds and have barely changed in almost a millennium” (Aaron Brower, University of Wisconsin, EDUCAUSE, 11/10/14). Others justify the need for change through criticism of the current system, suggesting a more fundamental change for more than just the new types of students: “The assumption that higher education’s status quo is working, and that there is no need for change, is the biggest impediment to the innovation and transformation of institutional models and structures” (Kelly Otter, Georgetown University, *Evolution*, 9/18/15).

Many if not all descriptions of competency-based education as an “innovation” – and especially a “disruptive innovation” – can be traced back to the influence of Harvard Business Professor Clayton Christensen on some of the top proponents of CBE, particularly Paul LeBlanc at SNHU. Christensen is best known for his book *The Innovator’s Dilemma* (1997), which introduces the concept of disruptive innovation in industry as the way that a new business is able to usurp major companies and change the industry through innovation. “The sector’s leading organizations often dismiss [disruptive innovations] because they don’t look terribly good in comparison to the way people have

traditionally thought of quality. But they also redefine the notion of what is quality and performance” (Michael Horn, Christensen Institute, *ECampus News*, 8/17/15).

Christensen first identified online education as the disruptive innovation for higher education (Christensen & Eyring, 2011), though unlike a true disruptive innovation, it has not usurped the traditional model. Now he and his followers have made the status-quo-disrupting claim for competency-based education (Weise & Christensen, 2014), with the most adamant expecting CBE to take down the credit hour and the traditional higher education model with it: “A new disruptive force in higher education promises to cut down the time and cost of obtaining degrees while providing employers with a skilled workforce” (Shelly Neal, Brandman, *Dean & Provost*, Jan 2015).

The new business is able to enter the industry by appealing to current non-consumers that are underserved by the mainstream, which finds enough success in serving the majority that creating innovative ways to serve non-consumers is not worth the investment. This concept matches well with the goal of increasing access to those students who cannot take classes that are restricted by time or location: “For some institutions, CBE is an innovative and disruptive way to provide access to populations of learners that have not been well-served by traditional modes of education or have perhaps opted out entirely” (Pearson Education, Nov 2015). This innovative niche then grows to change the entire industry as current customers are also drawn in, thus creating a disruption in business-as-usual. Whether or not competency-based education will become “disruptive” in this sense is yet unknown, but it is part of a disruptive discourse that challenges previous assumptions about education’s purpose and worth: “CBE represents a paradigm shift in higher education, focusing on what students actually know and can do with that knowledge in ways that can far better align with workforce needs, untether from time-based models of education (time being a poor proxy for actual learning), and spur innovative new delivery models” (C-BEN letter to Senate HELP Committee, 7/22/15).

Rather than merely aiming to further improve access to higher education, the flexibility of the program offers new markets to universities looking for customers, and while it may be risky to innovate, those institutions who are not thinking about CBE are at risk of falling behind the competition: “Leaders said that developing CBE programs gave their colleges an edge in an increasingly competitive marketplace for students”

(Thad Nodine & Sally Johnstone, WGU, *Change*, 7/31/15). “Focusing on student assessment rather than instruction is one way institutions can reduce their operating costs and find success in the commoditized higher education marketplace” (David Schejbal, University of Wisconsin, *Evolution*, 6/10/13).

Innovation versus Regulation

Probably the most monumental challenge facing competency-based education – especially direct assessment programs that completely divorce their courses from the credit hour – is the fact that many legal aspects of higher education institutions are defined by the credit hour. The Iron Triangle cannot be resolved if innovation is restricted by how access and quality can be defined and measured. Multiple state and federal regulations, from rules for financial aid disbursement to the minimum number of credits required for a degree, use the credit hour as standard. Outside of institutions that are willing to rethink their model, definitions that currently exist in federal regulations complicate key components of competency-based education, including rejection of the credit hour as measurement of learning and reducing faculty roles in self-paced courses. These definitions are fundamental barriers to change: “It’s not because institutions aren’t ready and willing. They are. But the Department of Education has been dragging its feet” (Amy Laitinen, NAF, 8/12/15).

The two primary elements of the regulatory obstacles to change are program accreditation and financial aid approval for programs without the crutch of credit hour conversion. In each of these, proponents of competency-based education – including actors within the Department of Education and accrediting agencies – emphasize the need for innovation in improving the current system of higher education and despair at the hesitation in loosening regulations, particularly those that are strictly defined by the credit hour. The reason for this hesitation, however, is the risk of fraud: institutions receiving financial aid money without providing an education. The past abuses of diploma mills and online colleges – still being dealt with now as the Department of Education threatens and removes the accreditation of a number of for-profit institutions – hint at the fraud that may happen again if the rules for student financial aid are too lax for the sake of innovative programs such as CBE.

Proponents of competency-based education fall on a spectrum of responses to this caution, from recognizing its importance to lamenting the credit hour's continued dominance and the dragging feet of regulators: "It is vital that Congress support new, more cost-effective models of higher education. We need our legislators to highlight and promote new models and ensure that future legislation and regulations support, rather than hinder, development of new models" (Robert Mendenhall, WGU President, to Senate HELP Committee, 2/2/12). While sometimes recognized as just, the caution is most often framed as overly so, blocking much-needed change in the system. However, the memory of the early days of distance learning provides enough evidence for others to understand the caution: "We need to ensure due diligence in conducting a thoughtful analysis of all the current players' programs and their graduates. Otherwise, this may not be just another educational fad, but the opening of the floodgates" (Robert Hill, Nova Southeastern University, *Evolution*, 7/1/15). The future of competency-based education and other innovations like it depend on the ability of the system to move, with caution, but move nonetheless.

Discussion

Credentialism has been discussed in higher education research as a theory of the consequences of increased educational attainment and the demand for that attainment, but interpretations of these consequences also exist as discourses inside and outside of the academy. Within, the traditional values of higher education value the educational experience and how that experience can be nurtured after graduation, while the disruption of CBE and other innovations outside value what they perceive is the real goal for the student-consumers: getting a credential, particularly one that is proven to have value in the workforce. The case for competency-based education is made in the identification of the traditional form and structure of higher education as being the central problem that must be solved and that the innovative model of CBE is "uniquely positioned" to solve. As access to postsecondary education has increased for non-traditional students and the costs of pursuing education have risen for all, the need to maintain affordability while preserving quality has resulted in stakeholders both inside and outside of higher education institutions to look for ways to reform. Faced with the Iron Triangle dilemma

of access, cost, and quality, proponents of innovations such as competency-based education argue that it is necessary to change the assumptions of the system.

However, how competency-based education resolves the Iron Triangle dilemma is likewise restrained by its own assumed definitions of each part of the triad. The counternarratives of each of the themes discussed above point out the limitations of these assumptions. Reducing the temporal and fiscal cost of education to the student increases access to the social mobility that they are seeking through furthering their education, but the quality of education which is access is limited to how its outcomes are defined and measured. This access is also limited to the end of the degree rather than the full educational experience that is available within traditionally structured semester-based programs. And Swidler's caveat to the success of new ideologies to replace tradition in unsettled periods is particularly valid given the limits of regulation in truly remodeling the system of higher ed: "concrete situations ... determine which take root and thrive, and which wither and die" (1986, p. 280). The new culture of competency-based education is up against the tradition of the faculty and the structure of the institution. This new culture, however, is supported by that of mainstream economics and politics, which do preference products that have clear outcomes, such as the clearly defined competencies and assessments that are at the core of these programs. While this study was not based on a thesis of understanding the influence of neoliberalism as played out through competency-based education, the influence is clear in the treatment of students as consumers who are looking, above all else, for a ticket to the job market at the best price.

Conclusion

Proponents of competency-based education want to move focus to the educational experience, but only as far as that experience is centered upon the student as learner. CBE reduces the process of learning to only content that the students need to achieve the specific goals that make up a given notch on the credential ladder. The unquantifiable objectives of current credentials will be replaced with concrete statements of competency, and the actual educational experience will be valued only by its utility in the market.

But does that matter for the individual students whom such a program is meant to cater to? Credentialing as signaling theory – which argues that employers of college

graduates are responding more to the fact that the student has attempted to get a degree rather than they have the knowledge that the degree represents – would interpret CBE as realistic and efficient, giving students the degree that they need and greater certainty that the degree is meaningful for employment eligibility (Brown, 1995). If the purpose of financial aid is to support students in getting degrees needed for jobs, does it matter that CBE is cutting the time that it will take to do so if it can accurately measure a student’s mastery in the subject and their subsequent ability to perform their job well?

The problem is not merely lack of relevance to the real world, but also a question of whether colleges and universities are even delivering the sort of learning that they are purporting, work-relevant or not. Meyer and Rowan (1978) defined higher education institutionalism by the trust of society in the worth of credentials, but this trust is now in doubt: “Traditional higher education has generally been hazy on defining and assessing the learning outcomes of its degree programs, and for a very long time society trusted a degree to be a reliable signal of largely assumed outcomes.... This is no longer the case” (Paul LeBlanc, SNHU President, to Senate HELP Committee, 10/13). Credit-hour critic Amy Laitinen gets to the heart of the conflict between the institution of higher education and the doubts over its product: “There is a curious disconnect between the widely held belief that American universities are great and the growing recognition that their graduates are not” (New America Foundation, 9/12). By enhancing transparency and defining clear learning outcomes, this disconnect is hoped to be resolved.

Competency-based education’s focus on assessments and clearly defined outcomes suggest a level of transparency that is assumed to currently not exist in the majority of higher education institutions: “Policy makers can’t rely on credential attainment as a reliable performance metric for holding education and training providers accountable for students’ learning outcomes” (Lumina, 4/2014). The call for greater accountability in degree outcomes reflects the commodification of the degree as a product purchased in part with government funds, including financial aid. Accreditation is part of the regulation, which determines which institutions are eligible to receive financial aid and thus reform proposals often include outcome metrics to create accountability in the system. “Redesign and reform accreditation to strengthen the quality of colleges and universities, promote competition and innovation in higher education, and provide

accountability to government stakeholders and taxpayers” (Senator Lamar Alexander, IHEP Committee, 4/2015). Even if competency-based education fades into the background as have many innovative reform efforts before it, the idea of a measurable competency will likely spread throughout higher education through accreditation reform.

Competency-based education does not sit well with many people – especially university faculty – who see the use of the “best resources,” sometimes from for-profit entities such as Pearson and McGraw Hill – as counter to academic freedom and a rich college experience that needs time to flourish within each student, standardizing the curriculum and creating greater stratifications between different types of higher education institutions. In addition, the coaching instead of teaching model is seen as threatening the traditional role of faculty, slicing up the profession into fractions of a teacher. Competency-based education courses are often standardized by necessity. When CBE classes do not follow the academic calendar and students do not follow the schedule of their professor, the courses no longer vary based on who is “teaching” it and when.

An online CBE course is a module that is available at any time, and the role of the teacher is broken up into coach, grader, facilitator, and course developer. The continuation of the culture of the administrator – efficiency and accountability – is clear, but the culture of the faculty may end up being more-or-less dismembered. If this is true, what will be the impact upon the institution? Competency-based education can save time and money for students, either by allowing them to accelerate through their coursework, or even giving them college credit for learning outside the classroom. But is something fundamental lost when time becomes variable? Those who see the unbundling of higher education as a tragedy rather than an opportunity see the teaching mission of colleges and universities reduced to that of merely signing the credentials, a figurehead of education for the sake of its ends. The monopoly that higher education institutions have on “higher education” will be broken, opening the marketplace for alternative providers that can contort in ways that a centuries-old institution cannot.

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CHAPTER FOUR: IDEA AND IMPLEMENTATION: A CASE STUDY OF KCTCS'S CBE LEARN ON DEMAND

Introduction

Competency-based education has arisen in response to public concerns of accountability and affordability, promising greater cost efficiency with reduced time-to-degree and clearly defined outcomes that prove the workforce relevance of the degree. Competency-based education has the potential to change the structure of higher education by redesigning the foundation of learning and instruction. These changes necessarily impact the individuals within an institution, especially faculty and their experiences of teaching, and staff involved in enrollment management and student services. While these are important aspects to consider in interpreting the discourse used by faculty and administrators regarding CBE, the core question of competency-based education and its impact are framed most interestingly by a tension between the symbolic value of higher education and the structure of how it delivers that value. The vision of what education should be and how a college should provide it are impacted by the organizational hierarchy of the college and who has the power to officiate that vision.

The purpose of this study is to unpack the frames through which employees understand a competency-based education (CBE) program in the Kentucky Community and Technical College System (KCTCS). The program, Learn on Demand (LOD), started as an initiative from the central office of KCTCS as a strategy to reach those populations who needed more flexibility than traditional semester-based online courses provided. The structural changes of the LOD program included flexible enrollment, online asynchronous delivery, and a modularized curriculum. Further innovations produced a multi-tiered advising structure consisting of home college advisors and LOD “coaches”. Any one of these innovations would likely require changes to organizational structure and culture; as a group, they reflect a substantial disruption to business-as-usual and serve as a useful case study of competency-based education in action.

As institutions explore and develop competency-based education programs, the faculty, staff, and administrators at those institutions are necessarily impacted through the intersection of pre-existing organizational and subgroup cultures, societal beliefs about the

definition and purpose of education, and how innovations may shape the experiences of individuals. Utilizing discourse analysis to understand how KCTCS employees have “made sense” of Learn on Demand as a part of their system’s larger mission and how their interpretations compare to the program’s marketing rhetoric, I hope to contribute to an understanding of the realities of innovation for individuals in higher education. I also consider the impact of the context of the institution upon the innovation – how pre-existing structures and politics impact implementation – and how the innovation impacts the institution’s structures and politics in turn.

Theoretical Framework

Competency-based education is an innovation that has the potential to impact an entire organization. Faculty and curricular changes coming from the delivery model impacts the educational experiences of individuals and invites new parties – often employers – into the conversation. In addition, changes in the timing and organization of courses requires new business models for budgeting labor and new rules in support management. Understanding an institution’s culture is necessary for implementing change because tying change to that culture will maintain coherence and minimize conflict. However, institutions also hold onto tradition, and any change within the organization must navigate the culture of that organization – or, in the case of KCTCS, the cultures of each sub-organization. Masland (1985) highlighted the value that attention to organizational culture has had in higher education research, given that colleges and universities are defined by weak external and internal controls – defined as formal regulations and hierarchies – that are balanced by stronger unobtrusive control created through culture (p. 166). Masland emphasized the essentialness of building a strong culture in colleges and universities that have faced internal department-based fragmentation due to growing institutional size.

Ravasi and Schultz’s (2006) research in a large organization revealed the importance of maintaining a stable organizational identity through change. Their study focused on how an organization responds to external threats to its identity through internal “sensemaking” and “sensegiving.” Their conclusions combine the social actor perspective (“sensegiving”) with the social constructivist perspective (the “sensemaking”); the former see organizational identity as constant and overt, preserved in the face of external threats, whereas the latter

understands identity as something evolving due to both internal and external stimuli and that is constructed and remade through collective action. Colleges and universities are often characterized by an institutional inertia that resists new ways of doing things, due to both traditionally-minded people and fixed bureaucratic policies and structures.

Salancik and Pfeffer's (1974) identified the impact of institutional politics, creating an explanatory model of subunit power within an organization. From their point of view, a university-type organization does not function as a bureaucracy or even as a collegial institution, but instead could be considered a coalition with subunits that have different objectives and preferences for the distribution of resources within the organization. Rather than being determined by a rational model for maximum efficiency, the distribution of resources within a university is determined by the power of the department. Power primarily comes from the subunit's ability to deal with uncertainties, especially when those uncertainties are about particularly critical things for the university, such as funding. As resources are scarcer in an institution, power becomes a more important factor in the department's ability to acquire those resources.

While change is by definition new, grounding it in the existing culture allows it to be interpreted as a new take on the old rather than a foreign threat to tradition. Locke and Guglielmino (2006) supported this through their research on how a community college adapted to change as an organization through paying attention to the interests of its subgroup cultures while retaining holistic agreement in the organizational culture. In the community college Locke and Guglielmino studied, the subcultures were broken down into senior faculty, junior faculty, administrators, and support staff members. While all shared the values of quality and responsibility to the greater community, the new initiative – a program to foster continuous improvement through professional development and restructuring – was understood by each in different, albeit supportive, ways that reflected their individual values. By addressing each subculture and its values in the plan for the initiative, the leaders of the organization facilitated buy-in from each. Locke and Guglielmino argued for a long-term view of change that modifies the current culture without invalidating the old. Through integrating subculture differences, the dominant culture can be strong and the organization can rely less on a tight hierarchy to accomplish its goals.

Weick (1976) expanded upon the nature of educational organizations and how subunits are tied together despite their relative independence. Weick offered the concept of “loose coupling” and “tight coupling” to sensitize researchers to unique ways in which educational organizations work. The structure and behavior of educational institutions often runs contrary to bureaucratic theories of organization that assume rational decision-making and clear hierarchies, but educational institutions share certain structures in common with each other due to their common goals. Weick wished to identify the elements (events, persons, intentions) in the institution that may be coupled and to recognize the independency of those elements, as well as their potential for interaction. He identified a set of couplings in educational institutions: tight couplings on who does what work to whom (certification) and loose couplings on how well that work is done (inspection).

It is part of the nature of higher education—especially institutions with more independent subunits—to be loosely coupled with a “weak” culture. The loose coupling of higher education results in decisions having to be made under uncertainty, causing individuals within the organization to “substitute belief for action,” but also allows for subunits to individually be more responsive to change and innovative. The consequences of decisions made in education rarely have an immediate impact that can be measured and learned from. Thus, higher education institutions must “make sense” of the past and present according to the symbols that have been established as part of the institution’s culture. However, cultures that conflict within an institution – or a supposedly coordinated system of institutions – can overshadow present possibilities for change with past grudges and misconceptions. The implementation of Learn on Demand in KCTCS has gone on for many years, but while this time might have allowed for growing understanding, conflicts in institutional culture and over system resources have impacted how individuals have made sense of this innovation and how it has been integrated into the system.

Background

What is CBE

In general, competency-based education refers to those programs of study that give credit to students based on their evidence of subject mastery rather than having a set number of credit hours determined by weekly student participation in a course (“seat time”).

Competency-based programs use a mix of prior learning credit (e.g. written portfolios of work experiences, or credit by exam) and self-paced coursework to grant students credentials upon demonstration of competencies rather than time in the classroom. These programs are typically intended to benefit working non-traditional students who have knowledge from prior work experiences that can be translated into college credits, but they also enable self-motivated students to accelerate their time to degree through self-paced coursework. Designers of competency-based education clarify what a credentialed student will be able to do and make assessment more transparent and relevant to those outside of higher education.

CBE in Community College History

Community colleges and competency-based education programs overlap in the demographics that are best served by them. While traditional students are part of both, the working adult is the population for whom they are meant to provide access and flexibility – things that are not as available at four-year colleges or in non-online courses. In addition, the workforce development mission of the community college – enhanced through a need to establish a market niche (Brint & Karabel, 1991) – is also a hallmark of many CBE programs, some of which even directly partner with employers for curriculum development. The program that is the subject of this case study was developed prior to many other community college CBE programs. This was primarily due to the increase in grant funding available that, through the growing political interest in competency-based education and credit for prior learning, often incorporated both in their visions for grant-worthy innovation in higher education.

The grant program that is most worth mentioning for its size and its impact on the case study college is the Federal Department of Labor’s Trade Adjustment Assistance Community College Career Training grant, consisting of multiple rounds of multimillion-dollar funding for four-year grants exclusively at community colleges. Round Two of the grant included a consortium of community colleges working with Western Governors University – the most established CBE-only institution – to develop CBE programs in multiple states (Fain, 2013). Funding from the grant and the Gates Foundation enabled the development of CBEInfo, a networking group for colleges developing CBE that has

organized a conference for community colleges that are developing CBE programs (CBE4CC) and a series of online webinars, and it also has begun publishing a CBE-specific online journal for practitioners. Dozens of institutions have implemented competency-based education programs, but I chose to study the Kentucky Community & Technical College System's program, Learn on Demand, due to my knowledge of its history and the role its administration has had in the early years of the recent surge in interest in the innovation. A significant amount of time has also passed both since the system itself was formed and Learn on Demand first started offering classes, offering the opportunity to see how the program has evolved over nearly a decade.

The Context of KCTCS

The site of this study is the Kentucky Community and Technical College System, focusing on those colleges within the system that have been directly involved with its competency-based education program, Learn on Demand (LOD). The Kentucky Community and Technical College System (KCTCS) was created by the 1997 Kentucky Postsecondary Education Improvement Act and now includes 16 colleges across 70 campuses. The act resulted from the Kentucky governor's push for creating a comprehensive community and technical college system that would increase access throughout the state. Previously, the technical colleges were controlled by the Cabinet for Workforce Development and the community colleges were nested under the flagship public university, the University of Kentucky.

The unification of the colleges across the state was paired with the formation of a central System Office, which would be responsible for administration and policy decisions across the state. Over time, the programs and courses at the individual campuses aligned so that multiple colleges would be able to offer the same degree programs in different regions of Kentucky. Within the new system, students also could take online courses offered by other KCTCS colleges, with the tuition for those courses being paid to the delivering college rather than the student's home school. Former KCTCS President Michael McCall identified the beginning of Learn on Demand in the forming of the Kentucky Virtual University in 1999, an initiative to create a centralized online program that would leverage courses from the different colleges to potential students throughout the state (2013). However, it was a

single KCTCS college, Jefferson Community and Technical College (JCTC), that first developed a self-paced online program, called Learn Anytime and later known as FlexTerm, in 2007 (JCTC, 2014). This program has since been discontinued in favor of Jefferson's involvement with Learn on Demand. In 2006, KCTCS administrators brought in outside consultants to advise the system on the best way to increase access to unreached populations in the state, focusing on working adults with families of all ages who are able to handle an online course and, most importantly for success, have the motivation and desire to take a course that is flexible to their schedule (Box, 2013).

The development of the self-paced "Virtual Learning Initiative" program began in 2007, including with it a three-year cyclical quality assurance review process for each online course's module, but it was not able to be launched until 2009 – under the new name of "Learn on Demand" – due to a longer development process than was originally anticipated (McCall, 2013). Significant developments since the launch of Learn on Demand in 2009 included a Complete College America grant in 2012 by the Gates Foundation. The funding from this grant allowed the program to create the role of the "Student Success Coach" who would be available 24/7 to assist the students in any issues they had with their courses. Multiple degree programs within Learn on Demand have been further enhanced through the Department of Labor Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program. Administrators in KCTCS have also been active members of the national competency-based education community, as evidenced by system President Jay Box's position on the steering committee of the Competency-Based Education Network (C-BEN). Box was previously the system chancellor, and his new role as president has cemented Learn on Demand's future.

Courses in the LOD program are regular KCTCS courses that have been modularized and are evaluated through a quality assurance process every three years after initial development. Each LOD course is split into three to five modules, each of which students must pass – either through a credit for prior knowledge pre-test or by working at their own pace through the assignments – before moving on to the next module, demonstrating competency before encountering new material. Each module begins with a pre-test to evaluate the student's current level of competency with the module's material, which, if passed along with a second test, allows a student to earn credit and skip to the next

module in the course. Students who do not pass the pre-test proceed at their own pace through assignments and assessments within the module which are graded by a facilitator, often a full-time faculty member in KCTCS. The disciplines that have courses delivered by Learn on Demand include: developmental reading and writing, business administration, developmental math, English, communications, college mathematics and statistics, social science (economics and psychology), computer information technology, integrated engineering technology, Spanish, history, humanities (art, music, philosophy, and religion), and science (biology, chemistry, and physics).

Learn on Demand is a strong case example of the impact of the institutional context on the implementation of an innovation due to the age of the program and the diversity of courses that are offered, which result in a diverse population of faculty and staff who at least somewhat familiar with the program. The involvement of KCTCS administrators in the national scene of competency-based education also makes their discourse likely to reflect some of the narratives within the national discourse promoting CBE as a way to reform higher education. One limitation is that LOD is not a direct assessment program – which abandons the use of credit hours completely – and thus it does not differ as strongly from traditional online courses as other CBE programs. However, LOD has been developed with the intention of delivering flexible and competency-based courses, and for the purposes of my research questions, the details of its delivery method are not as important as its perceived role and its implementation within a loosely connected system of colleges that each varied in their involvement and support of the program. Six of the sixteen colleges in KCTCS are known as “charter colleges,” those who were involved in the development and profit-sharing of the program since its beginning (between 2007 and 2009), but other colleges within the system have also developed courses. However, colleges that have not been involved tend to see themselves in competition with LOD for traditional online student enrollment.

Research Design

This project is a local case study of a competency-based education program and how its implementation is impacted by the culture and context of the higher education system in general and the participating colleges in particular. While political stump speeches and

inflammatory new articles may not directly impact higher education, the response of administrators at individual institutions to these discourses and ideas are significant for their employees and students. For this case study, I conducted eleven semi-structured interviews (Glesne, 2011) with student success coaches, faculty, and staff who had been directly involved with the Learn on Demand program across seven different colleges. The interview questions were written with the intention of revealing how KCTCS faculty and administrators understand the role of Learn on Demand in relation to the overall mission of the college and their assumptions of what higher education should be. This understanding of the system's background and the history of the LOD program enabled me to better understand how faculty and administrators have "made sense" of the program in the context of KCTCS (Birnbaum, 1988). I also analyzed documents related to LOD and prior online course delivery. The data were analyzed for emergent themes using discourse analysis, with the institutional context in mind.

Document Selection and Analysis

The public face of Learn on Demand is defined as that which is easily accessed by the public, broadly defined to include potential students as well as administrators from other colleges, which may look to LOD as an example of how they may implement CBE at their own college. Document sources included official KCTCS materials, such as the Learn on Demand website, the KCTCS catalog, and public meeting materials from KCTCS's Board of Regents, as well as presentations and articles by KCTCS administrators at professional conferences – when available online – and in such online publications as *Change: The Magazine of Higher Learning*, *Evolution*, and *EDUCAUSE Review*. These publications and conferences were identified through an Internet search as the KCTCS website does not mention them.

Semi-Structured Interviews

The overall question for this case study was how KCTCS faculty and administrators understand the role of Learn on Demand in relation to the overall mission of the college and their assumptions of what higher education should be. Qualitative analysis was determined to be best suited for my research questions in determining the perception of individuals and

how assumptions are played out in dialogue. The interviews were conducted by phone, at the preference of the interviewees, during the early part of the spring 2016 semester and were each approximately one hour in length. A study design involving semi-structured interviews was determined to be most appropriate for the question of faculty and staff perceptions as they allow time for that discourse to naturally be revealed through the conversation and enable discussion to go in unexpected directions, revealing new topics and concepts for analysis (Glesne, 2011; Weiss, 1995).

The four open-ended questions that I used for the semi-structured interviews with participant concerned what their involvement has been with LOD, how they understand and describe individual courses within the program, what sense they make of the program in relationship to the overall mission of KCTCS, and what they have heard from others and what they think about those other discourses. Each of these questions had a series of probes to guide the direction of the conversation. While the third question clearly echoed my research question, the others provided context and room for a broader conversation. The first two questions are descriptive and thereby grounded the conversation in the facts of the participant's experiences before asking for reflection. The last question was intended to incite conversation about the everyday discussions that KCTCS employees may have about the program and of higher education in general, focusing on how the participant reacts to these other discourses through their own understanding. I piloted these questions with a KCTCS staff member who had worked for many years with the Learn on Demand program.

To select my interview participants, I used purposeful sampling, selecting only those employees of KCTCS who have personal experience with the program. This method of sampling did reduce the possible population from which to draw participants, which may limit the level of anonymity that can be assured, but the position of the participant in the program is crucial for assuring data validity through not confounding their discourse with ignorance. Pilot tests of my interview protocol revealed that those colleges who have not been as involved in the program are more likely to have issues with the program due to misunderstandings rather than ideological disagreements.

I contacted individuals in the six KCTCS colleges that are known as "charter colleges," those who were involved in the development and profit-sharing of the program since its beginning: Big Sandy (Prestonsburg), Elizabethtown, Jefferson (Louisville),

Somerset, Southeast (Harlan County), and West Kentucky (Bowling Green). I also contacted potential participants at Hazard, which is not a charter college but developed one of the first Learn on Demand programs offered to students. I decided to limit my interview population to these colleges and those employees who were likely to be most familiar with Learn on Demand and how it has changed over time. I combined the interviews with an analysis of written documents such as LOD promotional materials, KCTCS Board of Regents meeting minutes, an external consultant report from 2007, and KCTCS college mission statements. Analysis of this publicly available discourse is important for interpreting the impact of the national CBE movement on KCTCS given the system's exposure to the national discourse through its president's involvement.

For certain aspects of this study, I relied upon informal conversations that I have had prior to the beginning of this study and throughout it. Especially crucial in these conversations were updates on how the implementation of the program had been changing each semester. As a member of the evaluation team of the TAACCCT grant for Learn on Demand, I conducted participant observation during staff meetings and KCTCS events regarding LOD from 2013 to 2015. The purpose of this fieldwork was to document the ways in which changes related to LOD were being implemented. This implementation analysis informed the research design and fieldwork for this project, particularly in helping me understand the ways in which system policies and politics affected college staff.

Design for Case Study Analysis

I transcribed the interviews verbatim with recordings of the interviews, indicating emphasis on words when applicable and focusing on how individuals talk about the program. Transcriptions were done within 48 hours to ensure data quality, and the audio files with their transcriptions were kept on two secure flash drives. I was able to triangulate the "official," public discourse on Learn on Demand – that in formal written texts – by speaking to administrators, who were more likely to have either influenced the wording of texts or were obliged by their position to echo that language. I also implemented member-checking by confirming in subsequent interviews some of the issues mentioned by others. I incorporated new prompts while maintaining the core four questions to reference ideas mentioned by other participants, such as asking about academic freedom after it was

mentioned in a pilot interview. The desire for this flexibility to follow themes as they emerged across interviews was what led to the use of a semi-structured interview protocol. These new prompts would serve as reminders to ask new interviewees for details about what had previously been said, but the main questions of my interview protocol did not change.

Analysis consisted of first coding for emergent themes within broader discourses of education, such as public and private goods, accountability efforts, affordability, and academic freedom. I went into coding with a set of themes taken from the literature discussed above, but I used a constant comparative approach, balancing these theoretical themes with emergent coding from the data to not overlook novel concepts coming from the local discourse. My intention was to understand how faculty and administrators have “made sense” of the program in light of the organizational culture of KCTCS (Birnbaum, 1988) and how national higher education discourse might influence this sense-making.

Findings and Discussion

The design of this case study was to explore staff and faculty experiences with Learn on Demand by interviewing individuals who are directly involved with the program. The “official story” of Learn on Demand was gathered through similar thematic analysis of documents created by KCTCS administrators, such as marketing materials and presentations.

How employees made sense of LOD was influenced not only by the pedagogical and educative value implications of an online competency-based education model, but also by the institutional context, for better or for worse. For the rest of this paper, I discuss the problems of the program’s implementation and, by aligning the emergent themes of my analysis with the literature, unpack its symbolic and structural causes.

Idea versus Implementation

Since this project is not meant to be an evaluation of Learn on Demand, I was careful to word my questions towards the issues surrounding competency-based education rather than focusing on what has happened within KCTCS in particular. However, it quickly became evident that the two could not be separated: the technical issues in the implementation of the program were tied up in system politics and thus both aspects

influenced how faculty and staff perceived it. Thus, ideas of change faced roadblocks in implementation.

As one of my interview participants put it, “Sometimes, a lot of the view of the System Office is that there is – that they have all these great ideas, but they’re not actually the ones implementing those great ideas.” In the context of my research question, this is the issue of what “on the ground” barriers confront and challenge the discourse of innovation and reform in higher education. Administrators that were making decisions about the program were removed from the front line and were not likely to understand the labor required by faulty mechanics and the politics of loading resources into a program that a minority of colleges supported and invested in. Interview participants, who had been involved directly with Learn on Demand, recognized the value of the idea behind the program while lamenting difficulties in its execution. What is lost between an idea of how CBE should be defined and how the program should be defined and the actual implementation is a theme repeated throughout the country as various types of higher education institutions join the bandwagon (see Chapter Three).

Great Ideas...	With Problems in Implementation
Students can work and complete a course at their own pace	Facilitators monitor all course shells created for each section and grade different assignments at multiple points in the semester. Also, students who misjudge the amount of time needed end up not being able to finish by the end of semester deadline
Standardization of course content allows for quality assurance and the leveraging of resources across the system	Faculty no longer have full control over their courses, academic freedom is restricted as instructional design teams determine the curriculum and assessments instead
Courses do not follow traditional academic terms, allowing students to enroll anytime during the year	Financial aid regulations do not allow for courses to cross terms, resulting in programs being ineligible or being forced to put restrictions on enrollment

Flexibility in delivery models allows students to pick what works for them	Older programs must compete with new courses for student enrollment and tuition dollars
Students gain credit when they demonstrate competency in course content and skills	While competencies can be easily defined by skills in technical programs, creating competencies and assessments in academic subjects is likely impossible to do objectively

Learn on Demand is overtly positioned in official marketing as an innovative program, as seen in the KCTCS Catalog: “Learn on Demand is a revolution in online education.” Those individuals who I talked to were all directly involved with Learn on Demand and each saw the potential that the program had, even as they were conscious of its weaknesses: “I’ve always thought that Learn on Demand is a great thing. I know it’s flawed, as far as the operational side. But I think everyone realizes that it’s being worked through. And I’m excited to be on this path.” They were also optimistic about the program moving forward, recognizing that the administration had learned from its past mistakes in rushing implementation and speaking too soon about fluctuating policies: “I think it’s headed in the right direction.... I feel like the right things are being done, and I think more importantly, ... they’re taking time, I think, to make decisions now ... really fact-check and determine is this going to work before we implement it, versus throwing it out there and seeing if it sticks.”

Those who saw it as more politically inevitable than revolutionary were pragmatic: “This is probably a next step forward in the educational system, and we need to figure out how to make it work for us.” This inevitability was defined by the investment that the System Office had made in Learn on Demand: “It’s not going away.... [Learn on Demand] is like his [Dr. Box’s] baby. This is something that he pushed and he supported and obviously he has a lot of confidence in it. And the fact that it needs to be within the System Office and offered to students throughout the KCTCS system.” Regardless of its reception by individuals in the colleges, the System Office would move forward in their investment, with the potential to eclipse the status quo of the entire system’s online education model: “I know that Dr. Box – he wants us, as far as online, to go in the direction of being truly competency-based, but he wants it across all courses, not just LOD.”

A simplification of an oppositional debate over competency-based education would be administrators and outsiders wanting to innovate and “disrupt” an archaic system on one side and faculty wanting to preserve the pursuit of knowledge, for its own sake, on the other. Interview participants recognized that some faculty were more than happy to teach in the new format. However, as one commented, “A lot of people are ... ambivalent, they just don’t care one way or another because it’s affecting them or not, and then there’s a lot like me that think that this is a good option.... That this is probably a next step forward in the education system, and we need to figure out how to make it work for us.” One interviewee recalled a meeting with the System Office where a top administrator made the analogy of Learn on Demand as a train leaving the station whether or not everyone was on board. This sense of inevitability was further enhanced when Dr. Box became president of the system and all but assured Learn on Demand’s support given his prior involvement with it and the national competency-based education movement.

However, to what extent would others within KCTCS, who were not so involved in the program, see its potential beyond the obstacles in implementation? The physical disconnect between those who plan a program and those who implement it provides space for unforeseen issues to develop. Resistance to the program could reflect friction from it being primarily a top-down initiative. Presentations by KCTCS administrators at conferences follow a predictable fast facts format of introducing the program. After overviewing the target audience for the program (working adults) and characteristic design elements (modular courses, student success coaches, 24/7 help desk), the challenges of implementation were discussed. These challenges alluded to some of the issues that my interview participants went into more detail on: delays in program development, issues with financial aid and determining faculty course loads, concerns about competition with Learn by Term, resistance to recruiting in college service area markets, misunderstanding about the program design, and miscommunication to students by individual colleges.

Implementation for Students: Access If You Can

How someone “makes sense” of competency-based education is dependent on their definitions of what an institution of higher education is and should be, as defined by structure and culture. The problem, which is uniquely caused by competency-based

education, is a result of conflict between the symbolic institution and the bureaucratic organization. The business-like efficiency goals of the structural frame contrasts with the symbols that define the institution of higher education. Contrasting the assumptions of CBE-supporting reformers with institutional theory further emphasizes this point as the autonomy of the organization itself comes under attack through implementing more direct measures of accountability to external stakeholders.

Community colleges are unique in American higher education for their mission of universal access, providing opportunity for those who were not able to attend a four-year school for reasons of cost, ability, or time. The competency-based education model furthers this by increasing flexibility of both time and cost, proving particularly valuable for those students whose work-life balance already struggles with an unpredictable schedule. As in the national discourse, a key question is which students are best served by this new delivery method, and which, if any, are put more at risk if they are placed in the model without the right academic capital to be successful.

The narrative assumed in the marketing of Learn on Demand is that you are a student who wants to get a college degree but have been unsuccessful due to a lack of time and funds. The website implores to students: “You've put off earning a college degree because it's been too expensive or too time-consuming.” Even online colleges have “rigid schedules” that require students to follow the institution’s timeline rather than that of their life. LOD is the solution to this, offering education that is “affordable, flexible, just for you.” It is “designed to fit the busy, working adult’s schedule” by offering “a truly on-demand education.” Modularization of courses gives students “the power to build [their] degree” and “Student Success Coaches” guarantee just that: success.

What interview participants agreed upon was the match between competency-based education and the access and workforce missions of the community college. For students who had unpredictable or overloaded schedules, Learn on Demand was the only viable option for attending college and thus it addresses a key goal of the consultant report which led to its fruition. As one participant noted, “We have students [that] wouldn’t be able to come to school if it weren’t for [LOD].” For many, the qualms of non-charter colleges about students enrolling in LOD was frustrating as those colleges appeared to put system politics above what is best for the students who could truly benefit from the model. Beyond

providing the flexibility for those students whose schedules do not work with semester-based classes, LOD could also supplement the other delivery methods to improve student completion, as one interviewee recalled: “[It’s] been really beneficial [for] students who have realized, they’re getting ready to graduate this semester – I’ve already had three this semester that realized they needed to take a course.... They can get in and they were able to stay on target to graduate.”

The program’s benefits to students who have the discipline for self-paced learning was clear, but participants also recognized that not all students who come to LOD understand what they’re getting into. Said one interviewee, “Once I got more hands-on with LOD, I found out that it’s a great opportunity for the correct students, and it’s a black hole for the students who are not prepared for it.” Staff and faculty in the program were sure to intervene with those students who were not prepared: “I know that there’s no less work than what a typical student would receive in the course and the work is not any easier. And that is something that I try to be very clear to students on.” The experience of implementation at the college-level resulted in faculty-led adjustments in course design, creating a best practice which dialed back the model’s assumptions of student time management while still maintaining flexibility: “[Students are] really not aware when they first start how much content is in the course where it’s adaptive release, so that’s where we got the idea that every course should have a checklist.” While the courses would still be self-paced and the next module would not open until the former was successfully completed, giving students knowledge of the whole course and encouraging them to set their own due dates in advance made success more realistic. This policy change from the local level underscores the importance of continual feedback between ideas and implementation.

Implementation for Faculty: From Instructor to Facilitator

Multiple possible job titles exist under the umbrella of “higher education faculty,” and the use of one over the other is often intentional, implying within the choice where the job falls on the continuum of job security, teaching responsibilities, and choice in curriculum. The definition of each can vary across institutions, but the distinction is often clear within an institution. One interviewee’s comments clearly reflected this: “Well, you know, we don’t call them instructors with Learn on Demand. We call them facilitators. And

that kind of speaks to what they do.” The job title of “facilitator” implies a more passive role than that of an “instructor,” but the delivery of the self-paced courses as separate course sections within Blackboard ensured no lack of work. This work, however, was made passive and repetitive, as facilitators would follow grading rubrics and spend much time juggling multiple sections of multiple courses: “A lot of faculty that are teaching these classes, if they have a lot of students that are spread out all over the place in terms of course progression, it can be a big load to grade those items individually.”

Beyond the financial implications of lost ownership of courses, faculty would also face a loss of control over the content and curriculum. The Learn on Demand modules allow for some customization, but the core components are determined by the faculty members who designed it originally or updated it. In addition, the role of facilitator involves a different set of tasks than that of instructor, enabling more one-on-one interaction with students but also reducing the experience of teaching a course to a (literal) checklist of how to set up the course in Blackboard. While some faculty appreciated the opportunity to work one-on-one with self-paced students, others were clearly not interested: “I’ll tell you, I don’t have faculty knocking down my door to teach Learn on Demand, because some of them are still stuck on the ideal of being the sage on the stage.”

The standardized Blackboard course shells for LOD allowed for minor customization by individual facilitators, but some participants still emphasized the passivity: “LOD’s design is a canned design where the instructor is not necessarily engaged in the class.... You don’t add or subtract from the class, simply cover the material, sorry, the material covers itself, you simply answer the questions. So there’s no individuality to a LOD class.” However, many LOD courses were being facilitated by their creators. The deeper conflict across colleges came from a lack of curriculum design agency, given the all-or-nothing policy of college control over courses that had been developed: “I think that is a big reason why a lot of our faculty are not, or don’t see LOD so favorably, because it’s something that they can’t be involved in for their own particular discipline, if those classes have already been claimed by another college.” Once a course was developed for Learn on Demand, the college that developed it would maintain control over its structure and content. To maintain standardization across courses and to avoid duplications of effort, once a course was developed, it could not be made again for LOD.

The design of Learn on Demand necessitates standard course shells that can be set up as different course sections that correspond to each possible start date. While this would likely be considered reasonable if the courses stayed within the bubble of Learn on Demand, the possibility of Learn on Demand replacing Learn by Term as the de facto form of online education in the system would likely not. One interviewee expressed the likeliness of this scenario: “I know that Dr. Box – he wants us, as far as online, to go in the direction of being truly competency-based, but he wants it across all courses, not just LOD... I just have a feeling that something’s coming down ... They’re working on a new distance learning strategic plan and I know that [Dr. Box] has said that he wants competency-based education involved with that.”

Increased national concerns about accountability for student learning outcomes has supported the growth of competency-based education and its focus on assessments of measurable outcomes. How individuals within a higher education institution reflect upon the idea of accountability of learning for both students and instructors impacts their interpretation of an approach that advocates for transparency above blind trust in faculty teaching.

Implementation for Competence: More than Learning Outcomes

How institutions define competency-based education is a recurrent theme nationally as well as in my interviews. In a 2014 presentation by Dr. Box on Learn on Demand, competencies are described as “explicit, measurable, and transferable.” While technical programs have traditionally thought of competencies as demonstrable skills (competency as a noun), Learn on Demand – at least originally – operationalized competency as the completion of a module before advancement (competency as an adjective). The difficulty of having faculty understand the distinction between student learning outcomes in regular courses and competencies in LOD courses was one example of where assumptions could impact how innovative these courses would be compared to term-based online courses, as a staff member explained: “The competencies are a lot more focused and specific, and are often more skills-based, saying the student should be able to do this, versus our learning outcomes are more commonly a student should know this.” Definitions of competency-based education and its related terms are not universal across the multiple institutions

developing these programs, but staff note that the language is here now more than in LOD's beginning: "The first couple of years when we were first designing LOD, we didn't realize that's what we were developing for. We knew that we wanted to make it related to the competencies, but we didn't – well, I'll say that I didn't realize that's what we were doing until the lingo started coming out a couple of years ago."

Another interviewee remarked on the difficulties of defining competencies compared to programs that are more skill-based: "If you take a class like history and say that you're going to make it be competency-based, that makes it a little bit more vague for what kind of competencies you will have when you come out... It's more along the lines [of] the student learning outcomes from the class that are listed on the course form." Others echoed this, noting the unequal challenge in defining subjective academic competencies versus objective technical competencies. In addition, the self-paced aspect of the model reduced the potential for interactions between students, risking the loss of educational benefits inherent in the classroom environment: "We're trying to make sure those [soft] skills get integrated, and how you do that online, especially LOD can be a little more challenging, especially if you only have one person that is enrolled in a course and they're supposed to be collaborative in teamwork."

A major question regarding competencies is whether such structured outcomes could only make sense in career-focused programs. While Learn on Demand does offer transfer degrees, the module format of the courses was originally conceived to also serve the workforce development mission of the colleges. The website does not assume the purely pragmatic reason of seeking a credential for upward mobility in the workforce, but that path is more defined in the narrative provided to the working adult target demographic: "You can start right here and build toward a new career. With Learn on Demand, you can quickly gain valuable job skills at a fraction of the cost of other colleges.... At Learn on Demand, we offer programs designed to prepare you for today's high-demand careers." The pre-test and post-test option for bypassing each model is described in the language of credit for prior learning, emphasizing how this particularly benefits the adult student who is coming in with prior educational or professional experience. Again, the website addresses the potential student: "Instead of making you rehash material you already know, we make it easy to earn

credit for prior learning.... You also don't have to work for weeks to receive credit. You quickly get the credit you deserve.”

While much of the promotional materials available online are geared directly toward potential students, the workforce training mission of KCTCS is referenced in the “For Employers” section of the website: “Well-trained employees can make your organization more productive, more efficient and more competitive. Learn on Demand is the perfect solution for affordable, targeted workforce training.” However, the workforce development portion of LOD has not been as clearly developed as it is in other competency-based education programs that work extensively with employers who provide tuition benefits. But my interviews suggest that KCTCS is following this and other national trends: “It was promoted to employers as something that employees don’t have to take off work to go do. I think the authentic assessment piece is starting to catch up though.... I think we’re going to see a lot more of that... and really selling this to employers as your employees don’t just have flexibility in when they go to class, but we at the System Office have flexibility in how we shape these classes for your needs.” This flexibility existed structurally when students could take courses one module at a time: “We’ve always tried to tout when we had modules ... that it would be easy for the workplace or employers to pull out different modules as their employees needed them and for them to be able to upgrade skills.”

Implementation for the Institutions: Resistance and Inevitability

While the entire KCTCS system can be seen as a collection of loosely connected colleges with tighter connections within each campus, Weick’s (1976) differentiation between loose and tight coupling provides an interesting way to look at the two business models that the system was considering regarding the administration of the Learn on Demand program: integrated and auxiliary. The integrated model is more reflective of tight coupling: the administration of the program is concentrated at the central office and divergent policies for competency-based education can be isolated; the auxiliary model relies more upon the local strengths in loose coupling: individual colleges administer services for their students. While loose coupling can allow room for regional differences throughout the state, the lack of tight connections regarding policy risks to miscommunication. As Ravasi and Schultz (2006) predict, a lack of communication results

in individuals who “substitute belief for action,” and this played out regarding Learn on Demand with myths circulating that furthered skepticism about the program. The lack of clear and consistent communication about policies due to continued change, such as in the development of manual processes for financial aid, overshadowed the program’s potential.

The current overall loose coupling within KCTCS is problematic, but would be less so were the system to have a meaningful and dominant culture uniting the subcultures of each college and campus. This is especially true for institutions during periods of change, such as the development of an innovative new program. Any policy change in an organization can have implications for institutional structures, but CBE is a conceptual change as much as it is a policy change. Given the conflicting college cultures of the system and the disruptive nature of competency-based education, the organizational impacts of Learn on Demand is important for analyzing how employees within the system “make sense” of the program.

Masland (1985) states that a college must have a strong culture to prevent inter-department fragmentation as the institution grows larger. For KCTCS, the fragmentation was preexisting as separate junior colleges and vocational-technical schools. Many of these schools were still under institutional umbrellas – such as vo-tech under the state workforce development office and many junior colleges under the flagship University of Kentucky – but their distance from each other fostered separate cultures and ways of doing things. The system is still going through the lengthy process of standardizing existing policies, and the introduction of a new and often changing program – such as Learn on Demand – adds complication. The need for a stable organizational identity during periods of change that Ravasi and Schultz (2006) identified underlines this.

The reaction of different colleges to the program reflected differences in campus cultures across the system, of course, but the reason for a negative reaction was complex, combining concerns over the delivery model and of perceived top-down change. As an interview participant observed, “Some campuses are a lot more open to online in general. Some campuses don’t like online at all. So even – what online they do have, they want to keep there. Some of that I think is territorial, and I think because On Demand is so – it’s so – you just have to adapt and be flexible because it’s so new. And I think a lot of people have trouble with that. I think they’re so used to ‘this is how we’ve always done it.’” For those

who were more willing to innovate, there was a sense of frustration due to a lack of perceived agency in how Learn on Demand would be implemented for their students: “[It] can be frustrating, to have so many people involved in the decision-making process. It’s a system-wide program, but at the same time, we have very little local control about any one thing.”

Some of the issues that faculty were purported to have were not exclusive to the LOD model and could be said of online education in general or of initiatives that would remove individual faculty control from course design, such as the same book being used for a course taught throughout the system or even across multiple instructors in a single college. Some of my participants – who are directly involved with and thus more informed about the program than the average employee – saw this resistance as either backward – “You have a lot of advisors on campus, faculty members, who are old-fashioned. They don’t even like online learning.” – or prioritizing individual choice over productive collaboration: “[Faculty are] all like well I want to use my book, I don’t want to use anyone else’s book. So they’re still stuck on using what they think is best for the student versus working together as a group to determine what’s best for the student.” Were opponents to this innovation program merely carrying on prior hesitations about online education in general, or was it something about the self-paced Learn on Demand model that raised eyebrows? Or was the delivery method irrelevant and the ire instead the result of institutional politics? Prior negative views on models of higher education outside of the face-to-face classroom would likely put acceptance of LOD at a large disadvantage.

Learn on Demand was destined to cause ripples within the system through intercollege competition for students, because, as one participant stated, “For every KCTCS college, one thing that’s important is headcount. We receive our funding based on headcount.” Under this funding model, a student that chooses to take a LOD course from a charter college rather than a semester-based online course from their local college means money lost. In addition, the power of the System Office to distribute funds was seen as biased toward Learn on Demand due to its value to top administrators: “I think it has been very clear to all of us that LOD has been the recipient of all these resources... whereas Learn by Term, though it’s many times over a lot bigger in terms of enrollment than LOD, we haven’t gotten the same amount of attention and resources.” The lack of shared power

over the programs of study and tuition funding drove the campuses apart rather than leveraging them together to build a strong and coherent program. Salancik and Pfeffer (1974) described the impact of power on a department's ability to gain resources, and the value that Learn on Demand had at the System Office level – versus the local influence of individual college's Learn by Term programs – clearly advantaged it.

The impact of power on funding in Learn on Demand was also true at the college level as those schools who were initially involved as charter colleges received a majority of the benefits. The business model of KCTCS was that while students from any college could take almost any online course from any of the sixteen colleges, the tuition revenue from that course would go to the college that “owned” that course. A college in eastern Kentucky could have recruited fifty new students to an online program but would not receive the tuition benefit if all fifty enrolled only in those online courses provided by a college across the state. While this disbursement of funds is logical given that money is needed to pay faculty for teaching courses that students are enrolled in, it created an environment of competition rather than collaboration. This problem of fiscal fairness was exacerbated by the move from an auxiliary to integrated business model, because under the integrated model, non-LOD local colleges would have to provide student services such as financial aid without the benefit of tuition dollars: “The money is divided among the six LOD colleges even though they're [a non-LOD college] student. So I think this resentment – we're doing all this work and we don't receive any money for it and that's not fair.” At some colleges, this resentment resulted in Learn on Demand not being spoken of to prospective students and a resistance to help success coaches find the resources to help students when issues arose: “We started out with the auxiliary model and we moved to the integrated model... Well that was a horrible situation for me because my college was totally against [LOD] in the first place.”

Articles written for administrative audiences, such as in *Evolution* and *Change*, focused on details of design and implementation, such as comparing the integrated and auxiliary business models for competency-based education administration (Rhonda Tracy, *Evolution*, October 2015). As in the presentations, conflict would be alluded to, but the overall message was one of how innovation can be implemented successfully: “Learn on Demand offers lessons that go far beyond delivery methods, funding mechanisms, or policy

constructs. It is a model for what organizational success can look like when institutions commit to a vision, to their colleagues, to their partners, and to their students” (McCall, *Change*, May/June 2013). Administrators would emphasize the seamlessness of Learn on Demand and the rest of KCTCS, clarifying that Learn on Demand was not to be considered a new and separate program, but instead as just another delivery model, akin to the difference between term-based in-class and online courses. However, the business model adopted for the administration and budgeting of LOD did not assure this sense of institutional continuity. The gaps between idea and implementation for the program were further emphasized in the financial and decision-making tensions across the System Office and the individual colleges.

The lack of unity among the sixteen colleges is a result of geographical distance and their historical independence prior to the formation of KCTCS. Possible conflict from the introduction of the CBE model has been mitigated elsewhere by separating it from the rest of the institution, such as Southern New Hampshire University creating College for America as an independently administered program. In this way, the original institution can maintain its identity as a brick-and-mortar while enabling the side innovation to serve those students who could not be served by the original. In this institutional context, an innovative program for the benefit of students can have its benefit be overshadowed by politics. As a participant remarked when talking about competition over online student enrollment, “This is for student success, not anything else. And when we’re talking about Learn on Demand, we really have to look at the student and see what’s best for them.”

Conclusion

I began this study hoping that it would not turn into an evaluation of the Learn on Demand program, but the success of its implementation greatly impacted how employees made sense of the program. The reverse was also true: the perception of the program by employees impacted how well the program could be implemented, especially when resistance to LOD resulted in some advisors directing students away from enrolling in it. Issues were only magnified by the pre-existing “sibling” rivalry between the sixteen colleges, which was itself intensified as enrollment and available tuition dollars would ebb and flow throughout the system. The addition of a seventeenth sibling – Learn on Demand – increased

competition for resources, and continual policy changes early on did not inspire confidence in its viability over the long-term. Learn on Demand does serve a certain population of students well, and its visionaries are slowing down the rate of implementation so ideas can be well vetted. But when an innovation has not been clearly defined, the institution is torn between the old and new. In the case of Learn on Demand, the lack of consistent policy and definitions over the years presented it to those not involved as a misguided initiative. Even after issues were resolved, that history haunted it.

Each aspect of the conflict between idea and implementation discussed above highlights the impact that a disconnect between stakeholders within an institution can have on the success of a program. A lack of clear messaging and collaboration across units can result in myths that overshadow the real potential of an idea. However, with Learn on Demand, those who were more familiar with the program did recognize the potential of those ideas. By grounding their understanding of the program in the needs of the students who need another option, these employees could instead overshadow the politics of the system and concerns of faculty with the institution's valued mission of providing access. Competency-based education has the potential to benefit many students who are looking for flexible ways to get a degree which is also compatible with their work experiences, but a lack of collaboration across an institution weakens that potential by depriving the innovation of the experience of those who are working throughout the institution. For colleges that are looking to implement competency-based education in the future – or any innovative program that challenges the structure of the organization and the duties of those working within it – the lesson from Learn on Demand is to prioritize program messaging that highlights the role of the program within the institution's mission and culture. An institution must also develop the ideas for a program with a diversity of stakeholders who can determine what steps of implementation would best make sense for all in the system.

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CHAPTER FIVE: DISCUSSION AND CONCLUSIONS

The three manuscripts that make up this dissertation are examples of three different impacts that a self-described innovative program can have historically, nationally, and within a single institution. Historically, the innovation can often be old news: another attempt at shaking up a system using many of the same ideas for which the previous innovation pushed. Nationally, it *is* news as stakeholders try to influence policy in order to fix the problems that are on the mind of the public. But within an institution, the ideas of what could or should be are sometimes derailed by structural rather than symbolic reasons, showing again how strong institutional inertia can be. For competency-based education, how something is defined – either a learning outcome or concept of a “competency” at all – complicates what sounds like common sense on the surface: students who graduate should have learned something and, through that, be employable. What distinguishes CBE from other innovative ideas is its disruption of the fundamental aspects of the system, asking the question: what is higher education?

Institution vs. Innovation

Competency-based education is put in contrast to more traditional methods of higher education through highlighting its uniqueness in prioritizing the resolution of current gaps between higher education and the workforce. The problem is alluded to in purported feelings of employers: “Competency-based learning also addresses a frustration experienced by hiring managers. Employers find a disconnect between typical resume information, such as degrees, awards, and certificates, and the actual skills of the people they want to hire or promote” (Galagan, 2015). Others are more direct, identifying the impact that this innovative program will have on education itself: “At its heart, CBE envisions a future where curriculum and outcomes are better matched to jobs, and where the timing and content of education are more personalized to individual needs” (Ho, 2015).

The challenge to the institution of higher education is tightly connected to a similar concern over credentialism, both in its monopoly of job qualification and its inflation from that demand: “I think we’re at a moment of time where the meaning and quality of a

credential is a question. The exclusivity of the institution in having control over credentials is under challenge, if not direct assault” (Wolff quoted in CAEL, 2013).

Predictably, these also tied into the theme of attainment, especially when CBE was spoken of in the context of alternative postsecondary education options such as badges and micro-credentials. Like CBE, these alternative options both support and shake the institution of colleges and universities. On the one hand, alternative forms of postsecondary education can earn legitimacy through traditional institutions that award college credit, thereby also legitimizing HEIs in their unique role as awarders of degrees. On the other hand, badges and micro-credentials offer a solution to inflated HEI credentials in shorter programs with tangible results, thus removing the unique role and undermining the institution of higher education as it is traditionally known.

The potential disruption to the institution is seen in how competency-based education intends to change the unit of education attainment (from credit hours to competencies) and the dynamic of the classroom (from teaching to learning). The credit hour can be understood as a historical tool of coercive isomorphism (DiMaggio & Powell, 1991), as it was developed by the Carnegie Foundation in the early twentieth century as part of a larger attempt at rationalizing higher education into a true system with shared definitions of instructional time and admission qualifications (Lagemann, 1999). While the Carnegie Foundation still stands behind the value of the credit hour for measurement across the system of higher education (Silva & White, 2015), critics see it as a major barrier to innovations such as CBE being realized to their full potential (Laitinen, 2012).

Professional issues such as academic freedom and autonomy in CBE are inherently political, as faculty struggle with administrators to maintain power over curriculum and pedagogy. The competency-based education model has the potential to decrease the need for faculty with terminal degrees, but faculty cannot be completely removed from the process. To avoid disqualification from federal financial aid by resembling correspondence courses more than semester-based online courses, CBE programs must demonstrate “regular and substantive contact” between faculty and students (Federal Student Aid, 2013). Faculty have been concerned about CBE automated the content and direction of their courses, but this automation – at least according to current policies – cannot be absolute for institutions that wish to keep intact their eligibility for federal financial aid.

Accountable to Whom?

Accountability is a topic touched on throughout current discussions around education, but to whom must education – and higher education in particular – be accountable? Given the balance of cost tipping ever more toward student tuition and away from state funding, should higher education be accountable to those who are being educated? But if we define the outcome for accountability as a credential earned to get a job, the quality of that outcome is also dependent upon the ultimate consumer of that credential in the job market: employers. Both the student and their future employer are private stakeholders and thus the perception of their desires overshadows views of education as a public and democratic good. This overshadowing is seen in how the narratives of accountability, affordability, and attainment dominate compared to previous ones of mass access to procure an educated citizenry.

Institutional accountability can be defined as being for the students or taxpayers who pay for higher education, but the system of American higher education is accountable to the economy in producing a strong workforce. This assumption of both institutional and system accountability feeds into the other aspects of the iron triangle, as the goals of accountability revolve around holding in rising costs and aligning educational outcomes with the demands of the labor market. The traditional model of higher education is depicted as no longer compatible with the current environment which demands universal utility along with universal access: “The country needs to address its 21st century education needs, which includes not only a conversation about who gets affordable education but also its efficacy and application to the real world” (Alssid, 2015).

Labaree (1997) found that the public good of educating a democratic citizenship is overshadowed by the private good of enhanced access to social mobility and the public-private good of building a more educated workforce for employers to choose from, and that is especially evident in the goals of competency-based education. Any mention of education for the public good of the nation is defined as economic rather than democratic strength, following the rhetoric of many politicians that call for better education outcomes to maintain economic competitiveness on the world scale. The tension instead is limited to that between the student or employer as the ultimate consumer of the degrees and how programs should

be designed to satisfy those consumers. However, the student-consumer is in harmony with the employer-consumer so the tension is, really, a matter of wording rather than ideology. Does the program tout itself as transparent in design so students are aware of the reason for learning what they are learning, or is it transparent so the future employers of those students will know exactly how what they have learned can be applied to a given job? This harmony is primarily due to the target demographic of CBE: adult students returning to school in order to improve their career prospects.

The Next Big Thing?

A criticism of competency-based education – and innovative educational programs in general – is that interest is growing in these programs because they are the newest fad in a string of fly-by-night experiments. Fortunately, the proponents of change recognize that “the challenge to learning institutions is to innovate with a purpose rather than with an eye to being the ‘next big thing’” (LeClair, 2015). After all, the cycle of reform movements has proven that it takes more than a good idea to make change. A Carnegie Foundation report on the credit hour following Amy Laitinen’s critique builds the defense of the unit on the fact that while change is needed, it is easier to have an idea than to implement it: “American education has a long history of promising reform ideas that have failed to achieve their intended outcomes. It is one thing to have good ideas for change; it is another to execute effectively and efficiently in our large, complex educational systems” (Silva, White, & Toch, 2015). Regardless of which innovative program is being advocated for – CBE, MOOCs, badges, micro-credentials – the motivation for innovation is the same: the current way we do higher education is not working as well as it should.

After reflecting upon my research, I believe there is another way to understand competency-based education embedded within the narrative of non-traditional student access and empowerment. The monopoly that colleges and universities have on defining college-level learning can be fruitfully challenged by the students themselves. The earliest forms of competency-based education are most reflective of the prior learning assessment side of the spectrum rather than self-paced coursework, and this form is also reminiscent of such democratic education concepts as recognizing the “funds of knowledge” that students come with into the classroom (Moll, Amanti, Neff, & Gonzalez

1992), or meeting individual students where they are and working in partnership towards higher learning (Dewey, 1902/2008). The recognition of students' prior knowledge make higher learning seem more attainable, especially for non-traditional students who have learned since high school. Future discourse in the spirit of John Dewey could do much to reform the view of competency-based education as a checkbox of restrained learning outcomes

Future Research

The themes uncovered from the Learn on Demand interviews could lead to the development of constructs that would then be operationalized into a close-ended survey, which would then be distributed to all faculty and staff in the system in order to compare the experiences of employees directly involved with the program with those who are not. Survey items would include questions about both the mission of the community college and the structure and politics of the system. Alternatively, a survey could be developed for distribution to any college with a competency-based education program to see if the issues of implementation have been encountered in other institutions.

The idea of competency-based education as a reaction to credentialism should also be investigated once more of its graduates enter the workforce. Will employers treat these degrees equally to traditional ones in the evaluation of candidates? To what extent is the acceptance of self-paced online education limited to certain levels and sectors? Given the limited number of students in some programs, it may be difficult to evaluate these questions completely and objectively – though Western Governors and College for America have released data on themselves showing positive results – but interviews with graduates on their experiences in the job marketplace would illuminate how the discourse for competency-based education plays out in the real world.

On the other hand, competency-based education may already be on its way out, leaving space open for another innovation to wow stakeholders with its potential to change the game of higher education. Why an innovation does not become more than a fad – and potentially the role that institutional inertia versus limitations within federal regulations plays in it – would begin to answer the question of why innovation is often the repackaging of seemingly common sense ideas and yet those ideas have not taken hold through those

multiple cycles. Another approach to understanding the cycle would be in looking at the motivation for an institution to pursue an innovation – CBE or otherwise. How administrators “make sense” of innovations – particularly as a means through which to help their institutions stay competitive in the postsecondary marketplace – might then be better understood and perhaps critiqued as a continuation of the influence of neoliberal discourse in higher education. There is the potential of a college to leverage cost-efficient online education as way to balance out more cost-prohibitive traditional programs, thus creating within the institution two tiers of education in which the tuition revenue of the “lower” tier benefits the “higher” rather than itself improving. Southern New Hampshire President Paul LeBlanc was, in fact, accused of this by Senator Elizabeth Warren in a 2013 Senate Education Committee Hearing (C-SPAN, 2013).

From a policy perspective, the next step in research would be to look further into the structure that limits innovation, particularly the impact of regional accreditation agencies. My research of competency-based education focused more on how federal financial aid’s use of the credit hour as a standard of measurement complicated the delivery of these potentially non-credit hour programs, but each program had to gain approval from the college’s accreditation agency before it could apply for financial aid eligibility. Some of the regional accreditors created policies to guide the approval of these programs, but doubts by the Department of Education’s Office of Inspector General over the amount of student-faculty interaction in these approved programs slowed down expansion. The interweaving of colleges, federal offices, regional accreditors, and the politicians who wish to pass legislation affecting all three provides a wealth of avenues for future research in the hurdles that lay in the way of higher education reform.

Conclusion

Throughout my research, I wondered what the lasting relevance of it would be if competency-based education had already reached its peak in 2015 and it was on the decline by the time I wrote it all down. I knew, however, that discussions about needed reform in higher education would not be in decline. While CBE may not have a lasting impact, it represents a shift in focus toward outcomes-based accountability. Accreditation was a major hurdle in the development of competency-based education due to its need to be recognized

by an accrediting agency on the way to being approved for federal financial aid. It is also become a major political issue in higher education as reform-minded stakeholders push for accrediting agencies to approve based on measurable outcomes, displacing the current model which is more based on inputs. Such an idea, again, makes common sense, but the complexities of the lives and educational experiences of students are lost in such metrics.

The impact of the competency-based education model upon the educational experience is what I found most interesting, defining experience from the perspectives of both students and faculty. The issue of CBE providing a second-class version of higher education to those who cannot afford the traditional model is true also of community colleges, but competency-based education – or, rather, prior learning assessment – challenges the power that colleges and universities have had over defining college-level learning and knowledge. The equating of college coursework to life experiences – or an individual’s topical reading list – begs the question of what value college provides, particularly when tuition costs for students are rising. If what happens in the classroom is understood only be measurable outcomes such as employment, the benefits that a graduate enjoys within life are overlooked so that education is reduced to training, no matter the major. Recognizing prior knowledge can be depicted as empowering students – in the context of recognizing funds of knowledge – but the identification of credit-worthy knowledge can also be limiting them, checking the box rather than lighting the fire.

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APPENDIX A. ACRONYM GLOSSARY

ACE	American Council on Education
BMI	Breakthrough Models Incubator
CAEL	Council for Adult and Experiential Learning
CBE	Competency-Based Education
C-BEN	Competency-Based Education Network
CDA	Critical Discourse Analysis
CPL	Credit for Prior Learning
ESI	Experimental Site Initiative
FSA	Federal Student Aid (Department of Education)
KCTCS	Kentucky Community and Technical College System
LOD	Learn on Demand
MOOCs	Massive Open Online Courses
PBL	Project-Based Learning
PLA	Prior Learning Assessment
ROI	Return on Investment
SNHU	Southern New Hampshire University
WBL	Work-Based Learning
WGU	Western Governors University

APPENDIX B. SEMI-STRUCTURED INTERVIEW PROTOCOL

1. Tell me about your involvement with Learn on Demand.

[Were you working with online education before? Have you heard of CBE? CPL?]

[When did you first hear about LOD?]

[What has been your experience with LOD since?]

[How have your views of LOD changed over time?]

2. How would you describe a typical LOD course?

[What goes into its development? (If applicable.)]

[What are the assessments like?]

[How does it differ from a traditional online course?]

[How does this mode of delivery impact the instructor?]

3. How does LOD relate to KCTCS's overall mission?

[How does it reflect workforce development? Educational access? Student success?]

4. What have you heard others say about LOD?

[Administrators – college and system office, staff, faculty, students? When? What context?] [Proponents' vs. opponents' discourse]

[How have the views of others changed over time? How have they impacted yours?]

[How has the Systems Office's relationship with the college(s) impacted the reception?] [*Is participant being careful with wording?* "Official" vs. on-the-ground story]

5. Do you have anything else to add that is important for me to know?

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Education

M.S.Ed., Higher Education, University of Kentucky, 2013

B.A., Philosophy and Asian Studies, Transylvania University, 2010

Professional Experience

Associate Governmental Program Analyst, Jan 2017-Present
California Student Aid Commission

Collections Rep/Exit Counselor, June 2016-Jan 2017
University of California-Davis

Research Assistant, TAACCCT Grant Evaluation, Oct 2013-Present
University of Kentucky, College of Education Evaluation Center

Financial Aid Counselor/Loan Coordinator, Dec 2012-Jan 2014
Bluegrass Community & Technical College

Research Assistant, Complete College America Grant Evaluation, Nov-Dec 2012
University of Kentucky, College of Education

Academic Advisor, Oct 2011-Oct 2012
Bluegrass Community & Technical College

Student Records Assistant, Aug 2010-Oct 2011
Bluegrass Community & Technical College

Publications

Jensen, J., and Horohov, J. (In Press). Applied opportunity: Transfer pathways of the associates in applied sciences degree in Kentucky. *The Community College Journal of Research and Practice*.

Horohov, J. (2016). College Disrupted: The Great Unbundling of Higher Education by Ryan Craig (review). *The Review of Higher Education*, 39(2): 463-466.

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Scholarships and Honors

The Honor Society of Phi Kappa Phi, University of Kentucky, 2015-16

Sarah Ruth Geurin Graduate Scholarship, University of Kentucky, 2014-17

Kappa Delta Pi International Honor Society in Education, 2014-15

J. E. Partington and G. G. Partington Scholarship, University of Kentucky, 2012-13

Holleian Society member, Transylvania University, 2010

Graduated summa cum laude, honors in Philosophy from Transylvania Univ., 2010

William T. Young Scholarship, Transylvania University, 2006-10