Competency Based Education: A Closer Look…Zooming Out and Zooming In
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INTRODUCTION—Zooming Out…

What is Competency-Based Education?
According to a recent task force document written for the Iowa Department of Education in December of 2013, Competency-Based Education includes the following principles:
- Students advance based on proficiency;
- Competencies include explicit, measurable, and transferable learning outcomes that empower students;
- Students receive rapid, differentiated support based on their individual learning needs;
- Learning outcomes emphasize competencies that include application and creation of knowledge along with development of important skills and dispositions.

What it is NOT:
- Seat Time
- Teacher Centered
- Arbitrary Task Completion
- Industrial Model
- Linear

(Iowa Department of Education and Kamenetz)

Although the aforementioned document was written for K-12 Education in the State of Iowa, many of those same principles apply to the community college environment. In *the New America Foundation* research, the proposal indicates that community colleges are the most natural place and fit to initiate Competency Based Education. If students are preparing for careers within two year training programs, then students should be able to demonstrate that they are competent and ready for their career path to employers. Employers are more interested in the employee's skills and readiness to work than their GPA's.

Research Question(s):
This research focused on the following questions:
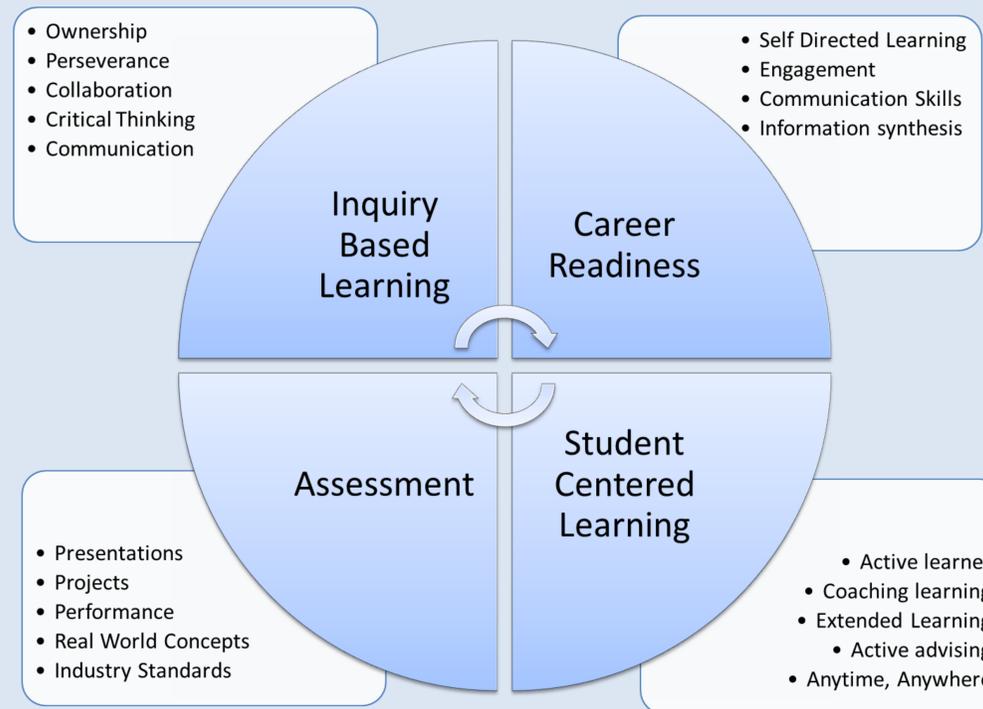What is Competency-Based Education?
How can Competency-Based Education help instructional practice and student learning in my own practices in Business and IT Department at Kirkwood Community College?

Purpose:
The purpose of this research is to better understand Competency-Based Education and how it can improve student learning in my Information Technology courses.

METHODS

After researching and discussing Competency Based Education with my colleagues, supervisors, family, and friends, I quickly realized this is not just an educational reform topic. This is a transformational vision that would mean that entire educational systems and practices would need to be overhauled. I knew that I had to start with a small step of gaining a better understanding of CBE as it relates to my own practice rather than trying to envision overhauling an entire system—either at Kirkwood Community College as a whole or even in my own department.

I started with the research at the state level—which is mostly K-12—then moved to national research at the community college level.

References

A Natural Fit?: Community Colleges and Competency-Based Education. New America Foundation, November 2013.
http://www.newamerica.net/events/2013/a_natural_fit_community_colleges_and_competency_based_education

Competency Based Education—Task Force Final Report. Iowa Department of Education Senate File 2284, December 9, 2013.

Iowa Department of Education—Competency Based Education Task Force and Legislation
https://www.educateiowa.gov/competency-based-education-task-force.

Kamenetz, Anya. *Are You Competent? Prove It: Degrees Based on What You Can Do, Not How Long You Went.* New York Times, Oct. 29, 2013.

Acknowledgements

Contact Information

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APPLICATION OF RESEARCH—WHAT DOES THIS MEAN TO MY PRACTICE? Zooming In…

My first steps into CBE involve flipping my Introduction to Programming Logic course. Outside of class students complete auto-graded review questions and quizzes. In class, students are required complete many exercises to learn how to take a problem, break it down into steps using tools such as pseudo code, and collaborate with each other to process the content learned outside of class. Students are asked to turn the problem into a small working program. At the end of the semester, they are tasked with designing and developing a working program that demonstrates their level of proficiency. A rubric is used to assess what level the have achieved. Throughout the semester, students are given the opportunity to redo programs that do not demonstrate proficiency. The focus of the course is learning by doing and redoing with the help of their classmates. My focus has shifted from a teacher centered classroom to a student centered classroom; they are owning their learning. The following graphic synthesizes my vision of what a Competency Based Education system could do for students in my Career and Technical Education courses:

- Ownership
- Perseverance
- Collaboration
- Critical Thinking
- Communication

- Self Directed Learning
- Engagement
- Communication Skills
- Information synthesis

Inquiry Based Learning

Career Readiness

Assessment

Student Centered Learning

- Presentations
- Projects
- Performance
- Real World Concepts
- Industry Standards

- Active learner
- Coaching learning
- Extended Learning
- Active advising
- Anytime, Anywhere

CONCLUSION

Competency Based Education a journey and a systems process. Small steps and moving slowly with careful design will hopefully allow my classroom systems to move more quickly later. Making the outcomes clear to my students and providing them more opportunities to collaborate with me as a facilitator in class has proven to give them more ownership in their learning. However, if the proficiencies or outcomes are not clear to me or them in the beginning, it is impossible to guide students how to gain more ownership.

There is much controversy about Competency Based Education—most of that controversy revolves around grading practices. Whether the research is from K-12 education or college courses, how to grade students' learning is a point of contention. If KCC would move towards Competency Based Education as a system, it would be crucial to have grading practices that aligned with standards based or outcomes based assessments; therefore, grading practices would have to shift as well.

The following big ideas were the results of my combined research analysis and application:
- Show What You Know—students own their learning
- Focus on Learning Not Grading
- Learning How to Learn—students have to fight through the struggle of learning
- Reflection on Learning—constant reflection through outcomes work is the key to the process—either portfolios or demonstrations of work
- Career Readiness—in order to be ready for the careers for which they are training, they have to be given realistic tasks and work experiences that are relevant with teams
- Personalized Learning—use students strengths to cater to their learning and also provide support for their lesser strengths—counseling into the right fit is also a key to the CC level
- Clearly Defined Measurable Outcomes for Every Course—without clear outcomes, neither the student or teacher will know the target

REFLECTION

I have every intention of moving my own practices towards Competency Based Education. My first step into establishing a "flipped" classroom has been both exciting and intimidating. It takes much more planning on the front end to ensure that my students understand the end outcomes of the learning they do on their own prior to coming to class. Instead of just assigning "Read Chapter Two," they are interacting with the text through online contexts so that they can get the "big ideas" through their own thought process instead of my thought process during a lecture. When they interact with each other during hands-on applications in class, they make so much more meaning out of the outside of classroom work. Prior to the flipped classroom design, I would lecture over the highlights, ask questions or quiz students over the reading, then move on to hands-on activities. Although that was not a disservice to students, I did most of the talking, which means that I was also the one doing most of the learning.

What intrigues me the most is the possibility that students can get degrees based on what they can do, not how long they went to college. If students can show demonstration of skill more quickly than others, does that mean that they have to be in courses all semester? OR if students need an extra two weeks to really demonstrate their learning, can we have a system that supports their needs? Again, the idea is both exciting and very intimidating. It will take a lot of work, but I believe it makes the most sense for a diverse group of learners. (Kamenetz)