

Teacher Perspectives of Evidence-Based Grading

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Introduction

The University of Wisconsin defines competency-based education as, "...about what you know and are able to do, not how long it takes you to master the course materials" (2019, Paragraph 3). As higher education starts to transition to competency-based models of education; high schools are also starting to make the transition as well. With the passing of the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), Career and Technical Education (CTE) funding, in the state of Michigan, will be directly linked with completion of competencies by students in these programs (Pyles, 2020). Many of these programs will transition into using competencies, which will provide career and technical education with an opportunity to pilot competency-based grading systems. Evidence-Based Grading (EBG) is one of these competency-based education models. Authored by Troy Gobble, Mark Onuscheck, Anthony Reibel, & Eric Twadell of Adlai E. Stevenson High School in Illinois, EBG was created as a model for how to grade and implement competency-based education into a high school setting. The idea was to create a model of grading that showed a student's growth throughout a class by taking a mode of a student's grades rather than an average. The process is explained in the book *"Pathways to Proficiency: Implementing Evidence-Based Grading."* In short, this system of grading students are assessed on the core components of a class called a "Big Idea." The big ideas are things that can be assessed multiple times throughout the class and can be direct or indirect skills. These assessments are then given a score, which rather than giving a percentage are assigned a competency level (1-4, proficient, etc.). The scores are mode rather than averaged to show the growth of a student and to provide them with a chance to re-assess. Between assessments students are provided feedback on how to improve by the teacher and the student can then re-assess whenever they are prepared to do so. Newaygo County Regional Education Service Agency (NCRESA) Career-Tech Center, started learning about this practice in 2018 and a select group of teachers began to implement the practice in 2019. A lot of research has been conducted on competency-based or standards-based grading, but only a small percentage has focused on the secondary level. Of that small percentage, almost no research has been conducted on EBG. With more secondary schools looking to adopt these practices, it is important to understand what those teachers think about the new grading system compared to the traditional system. This study aims to understand the teachers' perceptions of assessment, student growth, and implementation of the EBG system. As more secondary schools look to transition into a competency-based model of education, educators currently implementing will be an important tool for those looking to add this idea into their curriculum.

Literature Review

The idea of competency-based education is not new. In 1989 John Burke published a manual on competency-based education in relation to vocational education in the UK. Currently rural high schools are beginning to investigate standards-based grading as part of their visions for the future. (Buckmiller et al., 2020) As we look forward to implementing these grading practices it will be important to understand the secondary educator's perspective on these practices. However much of the current research on competency-based education (or competency-based learning, standards-based learning, etc.) is focused on higher education. Students in agriculture education master's and doctoral programs were provided with competency-based models and it was found that students better understood the core competencies which may have increased student satisfaction, motivation and learning. (Dooley & Lindner, 2002) The studies that have been conducted evaluating competency-based education in

secondary settings focus on the goal of serving diverse learners. A study from Montana State showed "...increased teacher and student engagement and an increase in the academic rigor of the program." (Sullivan et al., 2015, p. 4), while in a study funded by the Bill & Melinda Gates foundation showed challenges in implementation and similar student experiences across different study locations (Steele et al., 2014). Student perceptions of a standards-based grading system have been investigated, and showed that students had some positive change in perception of feedback and the opportunity to re-assess with the new system (Tripp, 2018). The research however, has not covered secondary teachers' perspectives on EBG in relation to their assessments, student growth, and implementation of the model.

Methods

Interviews were conducted with a group of 8 teachers who have implemented EBG in their classroom. All of the educators worked at the Newaygo County Career-Tech Center and had been working there for at least 3 years. Teachers were both traditionally trained (i.e., completers of a teacher preparation program) as well as those who had come from industry (i.e., lateral entry teachers with a degree not in teacher preparation). Interviews were conducted one on one and participants were asked a series of 13 questions under the general categories of assessment, student growth, and implementation.

An example question to understand their assessment included, "Describe a typical assessment in your class." An example question focused on student growth included, "How, if at all, have you observed EBG influence student engagement?" An example question from the implementation section is, "Describe some possible hurdles you may have encountered while implementing EBG." Interviews were recorded using two devices to ensure accuracy and success and then were transcribed verbatim by a third-party service. Using the transcription, data were analyzed following an inductive coding process with open and axial coding. First, quotes were pulled out of each interview and organized into codes based on similarity of topic discussed among them. Upon finishing pulling quotes from all transcripts, codes were organized and refreshed before grouping them into categories. Finally, categories were then organized into the major themes that arose from the data. Audit checks were performed by another researcher at various points during the coding phases.

Results

Two themes emerged from this study. The first being *It's okay to not be okay*. This came from the idea that failure was an acceptable portion of EBG for both the students and the teachers. Students are expected to not fully understand concepts at first and then know it is okay to try again. It was also okay for teachers to not fully understand a new approach to grading and assessment at first and need time to fully understand what they want to do with this new system and how to implement it. Within this theme there are categories of learning-oriented assessment, which focuses on how assessments focused on a student's ability to learn rather than just rote memorization of content. One teacher summarized this idea perfectly with the following quote, "And, um, with the system, it's, it's feedback and it's learning and it's trying again, and that's how learning happens." The other area is preparing for failure, which focuses on how educators using this system should be prepared to struggle implementing these concepts at first, but it will be okay to try again. In the following quote one instructor explains how their feelings of needing perfection were a struggle for implementation,

There are a few times just, again, I kinda mentioned that perfectionist kinda anal-retentive stuff that it makes it really hard for me to let go of, because I feel like I'm supposed to have it all together because otherwise how can they?

One major highlight of this theme was that each of the educators interviewed expressed the idea that they don't feel satisfied or like they are done yet. One teacher captured this idea perfectly when they said "I have not arrived. And I don't think I ever will, but I'm trying." They had this feeling like there was more that they could or should do to improve their practice, even in year 3 of implementation.

The second theme comes with two sub themes. The theme of *reframing practice* focuses on changes in practice by the teacher and the outcomes of the students by the reframed practice. The changes by teacher subtheme is highlighted by a paradigm shift, a shift in instructor demands, and skill-based assessments. This theme focuses on how teachers will need an innate shift in their paradigm when it comes to how their classrooms should run and what students need to do. With this new lens for education the time that they used to spend in the old system will have to shift in new ways to accommodate for their new classroom structure. One of the reasons for these shifts is the idea of a skill-based assessment. Assessments in these class structures focus less on pure rote memorization and tend to focus more on tangible skills that students can be assessed on and show competency in. These ideas are captured by this teacher when talking about what they used to do in class vs what they do now,

I think also using this method changed how I gave assignments because I did have a lot more like worksheet type things before and then figured out that that wasn't really the best way to teach because we couldn't use them in the grades anyways.

The other sub-theme in the reframing practice theme would be the idea of how it impacts students. Through these interviews teachers reported two major areas of improvement among students. These were broken into categories of student ownership and enhanced student interactions. Teachers perceived that students took more ownership in the learning process by understanding what they need to do to improve on a task or skill and better reflected on their learning to improve. Teachers also said they experienced enhanced student interactions through peer-to-peer engagement as well as increased engagement and motivation from students for learning. One teacher summarized their experience with students in this system with the following quote,

I think it would be my same answer to your question about what do you think the students, you know, is, I just think my students have a greater understanding. They have a greater appreciation for learning in general, greater competency.

Conclusion

EBG is not a completely new concept, but rather a refreshed idea on how to implement a competency-based learning model into the classroom. Looking through the qualitative data collected in the interviews, the adoption of this model would be supported. However, it would also suggest that with its adoption will come some challenges with its success. The teachers who have implemented this system truly enjoy and see the benefits that it has for both them and their students. With a supportive administration and a willingness to learn, teachers could have the opportunity to change their practice to benefit their students and themselves.

Recommendations

EBG provides students with the opportunity to show what they have learned in a manner that allows teachers to assess them exactly where they are at on any given day. This system allows for teachers to have additional flexibility in both what and when they are grading their students. Teachers currently implementing perceive there are benefits into making the switch to this model of education.

Teachers that have not yet implemented but are looking implementing soon: We would suggest you enter with an understanding that it will be a challenge to fully implement. Teachers must become okay with the idea that this concept won't be perfect during its launch. With administration support and support of other teachers it can be accomplished based on the interviews that were conducted. Teachers not yet implementing should also understand that before they can go through the transition, there is also a shift in what is expected of you as a teacher. With any major change in structure, one could expect a shift in demand. Teachers will have to spend their time in ways that were different than before.

Teachers who have implemented, recognize the work it has taken to get to where you are at. Understand that it is acceptable to not feel done yet. Other teachers are in the exact same boat. Recognize the successes that you may have seen in your students compared to before.

Recommendations for further research would include more staff implementing at different times. This year NCRESA is having all teaching staff prepare to implement EBG by fall 2022. Having different instructors at different places in the implementation process would be interesting to add to the study. Adding other schools to the study. This study was a glimpse into one school's adoption of the practice. Interviewing other staff at other schools may provide insight into the model as a whole and provide for a better idea of what this model of education can do. Interviewing students in the system may also provide valuable insight into how this model of education can benefit students and help us to understand their perspectives on this style of learning.

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