Using a Balanced Formative and Summative Assessment Model of Teaching to Improve Student Learning Outcomes

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Author Biography

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2019 Pedagogicon Proceedings

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Hattie's (2018) synthesis of 1200+ meta-analyses provides an extensive view into what actually works in schools and classrooms to improve student learning. Overwhelmingly, evidence shows that the most positive student-learning outcomes stem from teaching and learning that is explicit, deliberate, transparent, goal-based, feedback-oriented, and appropriately challenging. In this paper, I discuss how I used findings from Hattie's (2012) research Visible Learning for Teachers to transition my curriculum design approach from "planning for instruction" to "planning for learning." Specific high-impact strategies to be discussed include formative evaluation, explicit success criteria, and feedback.

Introduction

Most teachers are highly interested to learn about what works best in education; however, with educational trends constantly coming and going, it can be difficult to decipher where we should invest our energies. With just a quick glance at my bookshelf, I see many different "bandwagon books," as veteran educator Stephen Hurley (2010) calls them, about educational initiatives ranging from portfolio assessment to cooperative classroom structures, technology integration to backward design, authentic task development to integrated curriculum, and growth mindset to inquiry-based teaching. While all of these initiatives have some degree of validity and usefulness, it is an arduous task to sort through the immense body of educational literature in an attempt to figure out what works best for student learning.

As a former K-12 teacher and a current teacher-preparation educator, I am dedicated to finding out what works best for my students, as well as for their future students. This commitment to student learning compelled me to reflect on my teaching practices and ultimately shift my summative assessment model of teaching (plan, instruct, assign, and grade) to a more balanced formative and summative assessment model. The ongoing "back and forth" between instruct and assess allows me to respond to what student work shows they know and do not know before assigning a grade and moving on. This "feedback loop" (Hattie, 2009) is what was missing

from the plan, instruct, assign, and grade approach. Chappius and Stiggins (2017) reason that educators should:

> make space for students to grow their learning before grades are assigned so that students understand that not knowing is not a problem—it's a place on a continuum that all learners pass through. (p. 27)

I liken this type of "assessment for learning" to the real-world process of learning to operate a motor vehicle. Learning to drive takes time and patience. No one is a born driver: we all have to learn the rules of the road and make a few mistakes along the way. After enough practice, feedback, and possibly even a failed driving test or two, most who try will eventually succeed and achieve a valid driver's license. Once a license is issued, it does not matter whether or not the driver achieved a passing score the first, second, or third try, it only matters that the vehicle operator is now a certified and safe driver.

Students in traditional classrooms are all too often "punished with grades" while they are still in the process of learning the skills and content within a course. The balanced formative and summative model however, supports and grows student learning by allowing students time to learn and make mistakes. In the remainder of this paper, I will discuss several high-impact strategies that I use to ensure that my teaching and assessment remain focused on student learning.

Overview of Strategies and Application

Many of the strategies shown to have the greatest improvement on student learning, with the least cost, sit within a balanced formative and summative assessment model of teaching. According to Hattie (2009), these strategies are those with a Cohen's effect size above a .40—the equivalent of one year's student growth over the course of a school year. The high-impact strategies that I use in my classroom and will discuss here include: setting explicit success criteria—describing in specific terms what successful achievement of the learning goal looks like (.77 effect size); formative evaluation—collecting detailed information that can be used to improve instruction and student learning while it's happening (.91 effect size); and feedback—providing learners with information allowing him/her to reduce the gap between what is evident currently and what could or should be the case (.75 effect size). All three of these influences have an effect size that is well above the hingepoint of .40 effect size.

Modifying my classroom instruction and assessment model meant thinking first and foremost about what it is that I want my students to know and be able to do upon completion of the course. Using Wiggins and McTighe's *Understanding by Design Approach* (2005) as shown in Figure 1, I mapped out student learning goals, followed by what I would need to see from students as evidence of their mastery of the goals. Lastly, I planned the instructional activities that would take students from point A to point B. My previous curriculum planning model began with my instructional

activities, but the backwards design approach shifts the focus to outcomes of student learning.

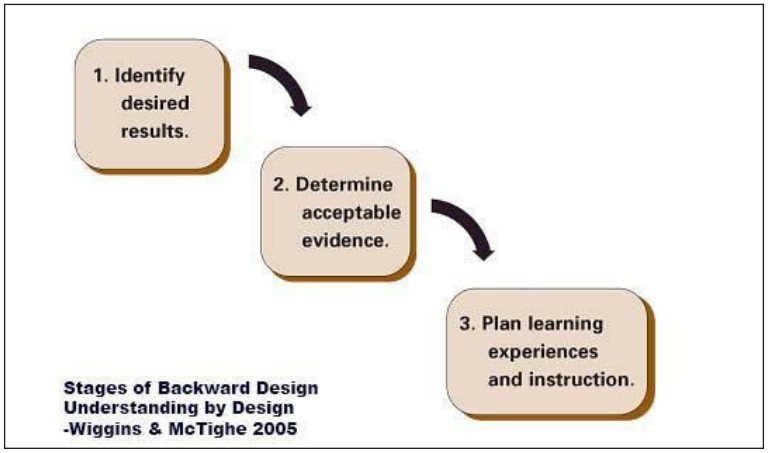

Figure 1. Backward Design Template

In order for students to understand their learning expectations and outcomes, it becomes necessary to provide students with explicit success criteria related to each learning goal (.77 effect size). To do this, I use a culminating key assessment accompanied by an analytic rubric to measure learning objectives. During class, students spend time becoming familiar with the learning objectives and scoring rubric, as well as engaging in activities where they evaluate work samples according to the criteria on the scoring guide. Taking the time to establish and communicate explicit success criteria to my students helps paint a clear picture of what they are expected to learn, thus giving them ownership of their own learning. Defining explicit success criteria for students not only helps them clarify and maintain appropriate focus, it also allows them to identify where difficulties lie, make a plan for improvement, and monitor their own progress to know when they have achieved mastery of the learning goal.

Like explicit success criteria, feedback sits within a balanced formative and summative assessment classroom culture (.91 effect size). While clear success criteria communicate to students what learning mastery looks like, meaningful feedback is the ongoing mechanism that helps students get there. I now provide students with multiple opportunities to receive and give feedback on their work via self-assessment, peer-assessment, and teacher feedback conferences (.75 effect size). Consequently, my "gradebook" looks quite different than it did in the past. I no longer assign "grades" for practice. Rather I allow time for practice, mistakes, error, feedback, and learning. I avoid recording "grades" while students are in the process of learning. I regularly spend time conferring with students, and I make time for individual conferences with each of my students. While individual conferring can be time-consuming, it is well worth the time and effort spent as I am able to provide each student with meaningful feedback and support while there is still plenty of time to rework and revise. Students submit multiple drafts of work where feedback is given

and recorded. Students spend the majority of the semester learning, and knowing that they will not be graded and punished before the learning is complete. Students have until the end of the course to master the learning goals assessed by the key assessment and course portfolio.

Discussion and Considerations

After shifting my instruction and assessment model from a linear approach to a feedback loop, I now have a more student-centered classroom where checking for and affirming understanding is specific, non-evaluative, manageable, and focused on a learning target. In keeping student learning at the forefront of everything I do in my classroom, students feel that it is okay to make errors and mistakes. I emphasize what Carol Dweck (2014) calls "the power of yet." This phrase is a reminder that deep understanding takes time, and it reminds us that we need to allow ourselves time to ask more questions, work with peers and teachers, or consult additional resources to master the material. As one of my teacher candidates noted, the word 'yet' gives students hope.

I have significantly adjusted the way I assign grades following this pedagogical approach. I no longer have a long list of summative scores for each student, rather, I have a tracking sheet of student progress and documentation of submissions, feedback, and resubmissions. Because students are so involved in self-assessment throughout the term, they are always aware of where they stand in the class. Grades should never be a surprise to students as they have ultimate control over their learning. I feel that student expectations have also increased. In the traditional approach to teaching, student learning or performance would often end once a grade was assigned. This new approach allows for learning to continue until mastery is achieved. This means that students may need to complete multiple revisions, iterations of work, or retakes of learning checks.

With tests and quizzes, my new approach allows for retakes. If a student does not master the learning objectives on the first try, I allow the student more time for learning, and the opportunity to do a retake. Similarly, with major assignments, I chunk them into manageable portions, each one with a due date. Students are given feedback and expected to implement that feedback prior to moving on to the next portion of the task. This process of regular check-ins helps students with time management and prevents students from falling behind. Further, the message communicated to each student is that I care about their individual performance and support them at every stage of the learning process.

Since transitioning to a more balanced system of formative and summative assessment in my classes, I have received many positive comments from students on my teaching evaluations. Some of that feedback is included below:

I liked how she used a lot of formative assessments in the class. This helped me learn and get ideas for formative assessments in my own classroom.

She gave very good descriptive feedback.

She really broke down the content and gave us time to learn instead of rushing.

The portfolio was an excellent way to give us a model upon which to base our future instruction of students in collecting their work in a growth portfolio for formative assessment. In using this method, instead of having to cram information last minute for a summative exam, or even periodical unit exams, students can work throughout the year to earn their summative grade at the end. This is a better measure of what a student has achieved.

She provided great feedback!

She helped make assessments seem less stressful.

The detailed feedback from the instructor helped me learn and improve my work.

In summary, there have been multiple positive outcomes resulting from the changes made in my classes. The atmosphere is now one of trust, motivation, and hope; student self-efficacy has improved as they know that learning is a process and that they will all eventually be successful at our course goals; and I feel like a facilitator of student success, rather than as a judge of performance. I recommend that other educators take the challenge to transition to a more balanced approach of formative and summative assessment for the benefit of students.

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