***Title***

**I hate starting class with a quiz: So why am I still using them in my flipped hybrid?**

***Abstract***

Non-traditional students with conflicting ‘life’ (job(s), children, financial) demands are the norm particularly at an open admissions institution. Hybrid courses provide flexibility for student’s time demands, a flipped classroom ensures effective use of face-to-face course time and weekly quizzes encourage and measure learning. All are important to the course outcomes, particularly in the non-traditional student environment. I will share the three approaches intended to maximize the use of quizzes to support the course design and improve student learning. I will lead a discussion seeking ideas for improvements as well as identification of other potential issues/quiz alternatives that may emerge.

***Keywords***

Non-traditional students, hybrid courses, flipped classroom, ***quizzes***

***Overview***

Meeting the needs of our business students becomes a balancing act for time between the student’s personal life and student life. While not the ideal for all students, hybrid or blended learning provides increased flexibility for students that are self-disciplined and computer savvy. But ideal is not the norm so the challenge becomes ‘developing an effective and engaging learning environment and approach’ for the greatest success of students. As faculty, I have the autonomy to determine, to a significant degree, the structure (all classroom, hybrid/blended, flipped) as well as the format of class sessions.

Faculty continue to explore creative approaches to a learning environment that will meet the needs of the non-traditional student. According to U.S. News and World Report (Business Wire, 2016) “70 percent of Americans who have pursued a bachelor’s degree qualify as non-traditional students”.

Research on hybrid learning suggests that “hybrid or blended models most frequently emerge as the most effective learning strategy” (Skill & Young, 2002, p.24) and evidence suggest that hybrids have been effective in a variety of business courses (Chen & Jones, 2007 & Mortera-Gutiérrez, 2006).

Further, the flipped classroom as an active student centered learning approach may not only better engage the non-traditional student but be more effective for students to increase the skills to think, apply, evaluate and synthesize which makes students more eager to learn (Bergman & Sams, 2014)

In the flipped environment, students bring knowledge of course topics to class each time in order to use class time to then expand critical thinking and real world applications. (Baepler, P., Walker, J., & Driessen, M. 2014)

Keeping the non-traditional student “on-track” by frequently monitoring their learning may best be accomplished by frequent quizzes. Quizzes are designed to reward preparation, improve retention and improve student satisfaction. While students agree that the fewer quizzes, the better, (Tallarico & Wisniewski, 2017) frequent testing does enhance student performance (Kika, McLaughlin & Dixon 1992; Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T., 2013).). Student surveys indicate that due to frequent quizzes, certain behaviors change including the reduction of delay in studying, procrastination and cramming for exams (Mawhinney, V. T., Bostow, D. E., Laws, D. R., Blumenfeld, G. J., & Hopkins, B. L., 1971; Bruce, W. 1998)). The quiz effect goes beyond the snapshot of learning at the time of the quiz. Information retrieval from memory significantly impacts the retention of content (Karpicke & Roediger, 2007).

The challenge that emerges is to determine how best to optimize the benefits of quizzing students. Over six semesters, three approaches have been used to administer 10-question multiple choice quizzes to over 350 students and include:

* Professor directed/online/weekly/graded/one attempt/quizzes
* Student directed/online/semester long access/ ungraded/ multiple attempt quizzes
* Professor directed/classroom/weekly/graded/one attempt/quizzes

***Learning Objectives of the Session***

The session objectives are to:

* Understand the learning environment for non-traditional students and how hybrid/blended courses address some of the challenges of student learning
* Discuss the use of a flipped classroom in the hybrid environment
* Demonstrate the use of weekly quizzes to support the course learning objectives
* Engage in shared feedback and learning from the session participants

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***Proposed timeline***

* Introduction (2 minutes)
* Presentation of learning environment, quiz formats and quiz outcomes (9 minutes)
* Review of student course performance and feedback (4 minutes)
* Group discussion including experience and challenges with keeping non-traditional students engaged and successful. (15 minutes)