



Developing a High Impact Learning Environment: Bite Size is the Right Size

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Universities today are often required to implement high-enrollment courses to save costs and make higher education more affordable. However, low student engagement is often typical in these high-enrollment courses. Students can ‘hide’ in the crowd and lack ownership of their learning (Glen, 2000). Moreover, today’s ‘net generation’ students have short attention spans and therefore, course content needs to be delivered in short, succinct bite-sized pieces to meet the needs of their working memory. In addition, students today prefer to learn from a multitude of information sources using hands-on, inquiry based learning approaches (Barnes, Marateo & Ferris) that help them to have personally meaningful experiences.

Therefore, this study looked into ways to increase student engagement, foster an interactive learning environment, increase student learning, and retention, through implementing improved pedagogical approach and innovative instructional materials for an apparel branding course. This course was identified since it was a core requirement for students enrolled in a 4-year undergraduate degree program at a major state university in the US. Additionally, the course content was industry oriented and involved practice-based, industry-application focused learning.

For the study, course content and materials were designed with four major considerations. First, previous research indicates that students’ attention span especially that of Generation Y, is low. Instead of extended lectures, students learn better when information is arranged into ‘bite-sized’ succinct and discrete topics (McClanahan & McClanahan, 2002). In order to effectively communicate the core learning concepts, as well as retain student attention, each in-class lecture was examined and divided into appropriate core concepts that can be portioned into 2-3 mini learning sessions. Duration of each mini-learning session was between 7-10 minutes. Second, research indicates that students prefer interactive environments with use of technology to create personally meaningful learning experiences (Glenn, 2000). Therefore, course material for each concept contained traditional lecture and video clip/industry example illustrating and extending the concept. Third, today’s students are also known to prefer immediate feedback. Therefore the most cost-effective in-class student response system was identified. It was used to understand real-time student learning and provide instant feedback. Response system questions were used at the beginning of every lecture to review learning from previous lectures and at the end of lecture period to assimilate learning from that specific lecture. Finally, the course project, quiz and exam questions ensured student assessment of core branding concepts.

First, a pilot test for the revised course content was launched in Summer 2015. 25 students enrolled for a summer section of the online course interacted with the new course structure and content. With the exception of in-class activities, all other improvements were implemented in this course. Student evaluations indicated an Overall evaluation of 4.55 (department average 4.06), Course Organization: 4.85 (department average: 4.03), Instructor Characteristics: 4.89 (department average: 4.09). In addition students indicated: “Really enjoyed the material covered in this course and it caused me to really think and concentrate on the

material“; “Overall the class was fine, I was challenged more given it was an online course but it was manageable.”; “I think my instructor was awesome and every time I had a question or concern she was there to help and de-stress me.”; “I think she set up this course beautifully and others should follow. I really enjoyed taking this course! :)”; “Great job overall, very good communication skills”, and “Overall it was a great class!” Feedback from this course was then taken into consideration to improve in-class course for Fall15, together with in-class activities.

The redesigned course was then implemented for Fall '15. Total scores of students were compared between Fall 15 and Spring 2015 (the total possible was kept the same across the two semesters at 700pts). Enrollment for Spring15 was 163 and that for redesigned Fall15 was 164. For exams, at least 50% of the questions were kept the same for the two semesters. In addition, the number of assignments and exams were kept constant with equal point distribution across the two semesters. Results indicated that total scores were higher for redesigned Fall15 (mean= 625.41) than Spring15 (mean= 609.57) ($p = .02$). Third, attendance rates (for redesigned Fall 2015 and Spring 2015) were evaluated for any significant change. In Fall15, attendance rate was 10.53% higher than Spring15. Finally, DFW rates were compared across the two semesters to monitor improvement. The Table 1 shows the comparison across the two semesters:

Table 1. Comparison of DFW grades across two semesters

	Spring 2015	Redesigned Fall 2015
Withdraw (W)	4 students (2.45%)	1 student (0.61%)
Fail (F)	10 students (6.1%)	2 students (1.2%)
Grade D	3 students (1.8%)	1 student (0.6%)

The study results indicated that succinct course lectures combined with videos, in-class activities and instant feedback using in-class student response system provided an engaging and interactive learning environment for students. Short lectures provided the core knowledge, and supplementary videos with class-activities encouraged an environment where students can think critically as well as participate in personally meaningful learning experiences. The improved pedagogical approach resulted in improved student performance, higher attendance rates as well as lower withdrawal and failure rates, indicating higher student success. Although the success of this interactive teaching technique was apparent, it is to be noted that constant improvement and update of the course materials are essential to keep this course (as well as any other course) as relevant as possible. This is particularly important in identifying suitable in-class activities as well as multi-media resources in order to remain updated with industry occurrences and trends, in order for classroom knowledge to find its true meaning in the applications of real life.

References

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