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Title: The Impact of Course Registration Time on Students' Academic Performance in an Online Undergraduate MIS Class

Extended Abstract

In this research, we study the impact of course registration time on students' academic performance in an online undergraduate business core course. Two online sections for the undergraduate management information systems (MIS) course were offered in the Spring semester. The registration for one of these sections (Web₁) was opened during regular registration time-frame. However, the second section (Web₂) was opened just a couple of weeks before the starting of the term. Both sections were taught by the same instructor with the same teaching pedagogy. We compare the students' academic performance regarding their grades and DFW (drop, fail, and withdrawal) rate and find that the students in Web₁ performed significantly better than the students in Web₂. We show that even in the online domain, the timing of the course registration is a significant factor in determining students' academic performance.

Prior studies have shown that the course registration time does matter in determining the academic performance of the students. The early registrants, students who register early during the regular registration period, tend to receive higher grades than the late registrants (Summers, 2000; Free-Weiss, 2004; Wang and Pilarzyk, 2007). Moreover, the early registrants are also more likely to complete the course than the late-registrants (Diekhoff, 1992). Zottos (2005) also confirm these results and shows that the late-registrants are also more likely to have higher DFW rates than the early registrants. The explanations provided by the previous studies for the lower academic performance of the late registrant include less career preparedness, focus, the financial factors, the demographics, and the level of commitment (Summers, 2000). The majority of these studies have been conducted in the context of the traditional face-to-face types of courses.

In the last couple of decades, the higher education institutes have embraced the technology advancements and integrated a wide range of initiatives such as the digitization of the course content, adoption of the learning management systems (LMS), and the offering of online and hybrid courses as well as degree programs (Pathak, 2016; Pathak, 2017). Convenience and flexibility are considered to be the major advantages of online education (Matthews, 1999; Swan et al. 2000). The students in the online courses may register late not because of less career preparedness, focus, or the level of commitment but because of their preference of convenience and flexibility. Hence, it will be interesting to study if the course registration time continues being the factor determining the students' academic performance in online courses.

Just like other higher education institutes, the Leighton School of Business and Economics at the Indiana University South Bend also offer online courses. We usually have multiple sections of our business core courses every semester and have adopted a policy to have at least one of these

sections online to provide flexibility to our students. In Spring 2016, we offered three sections of the undergraduate business core course in management information systems. The first two sections (one face-to-face and one online) were opened for registration during the regular enrollment period (October to December 2015). In December, a couple of weeks before the starting of the Spring semester, an additional section of the same course was offered online and made available for the registration. For this research, students enrolled in the first online section (Web₁) are considered as the early registrants and the students registered for the second online section offered in December (Web₂) are regarded as the late registrants. It is important to note here that the same instructors taught both sections with the same teaching pedagogy. We compare the academic results of the students enrolled in Web₁ and Web₂ to analyze if the late-registrants continue achieving lower academic results in the online courses. The Web₁ section had 41 students, and the Web₂ section had 26 students.

The following table shows the academic results of students. As can be seen from the table the DFW rate is significantly higher in the Web₂ section. Hence, the course completion rate is considerably lower for the late-registrants in online courses. Likewise, the average GPA of the late-registrants is about 0.5 points lower.

Table: K321 Grade Distribution

Grade	Web1	Web2
A	14.63%	3.85%
B	60.98%	53.85%
C	21.95%	19.23%
DFW	2.43%	23.08%
Average GPA	2.83	2.34
Total	100.00%	100.00%

Our results show that even for the online courses, the registration time continues to be the significant factor in determining the academic performance of the students.

References

- Deikhoff, G. M. (1992). Late registrants: At risk in introductory psychology. *Teaching of Psychology*, 19(1), 49-50.
- Freer-Weiss, D. (2004). Community college freshmen: Last in, first out? *Journal of College Student Retention Research Theory and Practice*, 6(2), 137-154. Retrieved from ERIC database. (EJ683620).
- Matthews, D. (1999). The origins of distance education and its use in the United States. *T.H.E. Journal*, 27 (2), 54-66. 9.
- Pathak, B. "Improving the Educational Effectiveness of MOOCs by Using Web-Based Information and Communication Technology." *Revolutionizing Education through Web-Based Instruction*. IGI Global, 2016. 186-201.
- Pathak, B (2017). "The effect of students' self-selection between the online and face-to-face mode on eLearning outcomes: a comparative analysis," *Proceedings of the Decision Sciences Institute*, Washington D.C.
- Summers, M. (2000, April). Enrollment and registration behaviors as predictors of academic outcomes for full-time students in a rural community college. Paper presented at the 42nd Annual Conference of the Council for the Study of Community Colleges, Washington, DC. Retrieved from ERIC database. (ED457940).
- Swan, K., Shea, P., Frederickson, E., Pickett, A. Pelz, W., and Maher, G. (2000). Knowledge building communities: Consistency, contact, and communication in the virtual classroom. *Journal of Educational Computing Research*, 23 (4), 389-413.
- Wang, Y., & Pilarzyk, T. (2007). Mapping the enrollment process: Implications of setting deadlines for student success and college management. *Journal of College Admission*, 197, 24-33. Retrieved from ERIC database. (EJ783978).
- Zottos, G. (2005). *The impact of late registration on academic outcomes of urban community college students*. (Doctoral dissertation). Retrieved from ProQuest database. (305422423).