

FLIPPED CLASSROOM APPROACH TO TEACHING: TRANSFERRING POWER FROM TEACHERS TO STUDENTS

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Introduction

The labor market is dynamic and frequently calls for new skills, knowledge, and abilities. The changing needs of industry place a higher demand on institutions of higher learning to monitor trends in labor needs, identify skill gaps, and to use industry insights for developing programs and curricula that mold human resources to create value for employers and society at large. While several institutions of higher learning are responsive to industry needs through curricula reviews and the development of new programs, little attention is given to pedagogical issues that affect the delivery of knowledge and the development of skills intended by various education programs. Consequently, teachers are entrusted with the freedom to decide the teaching methods that are appropriate under each circumstance. Despite the changing face of the labor market, not much energy has been channeled towards adjusting teaching methods for effective delivery of skills required by students. The failure to adjust teaching methods for training graduates has led to what is commonly known as ‘half-baked graduates’. In other words, graduates who lack the skills and abilities necessary for placement in the industry. However, the success of an institution of higher learning is illustrated by its ability to train people who perfectly match the needs of the industry.

The quality of education depends on the methods used by teachers to deliver knowledge. Methods of teaching have the effect of either creating independent thinkers and problem solvers or dependent knowledge seekers. Pedagogical methods used in institutions of higher learning vary over time, depending on the teaching context, technological developments for communication, industry needs and the goals of the teacher. Teaching methods can be broadly split into two categories consisting of the teacher-centered and learner-centered approaches. Whereas the teacher-centered approach uses the traditional lecture method to transmit knowledge to students, the learner-based approach facilitates the learning process by encouraging students to discover knowledge using a variety of means. In the teacher-driven approach, the teacher actively dispenses knowledge in a classroom environment (Danker, 2015). The “Flipped classroom”, also known as the inverted classroom (Arnold-Garza, 2014) is one of the learner-centered approaches that rely on active techniques and modern technologies to engage students in the learning process. Flipping allows students to engage more deeply with the learning materials thereby building their analytical abilities as the means for knowledge acquisition. Using the flipped classroom approach, students take responsibility of their learning. The approach frees time for gainful engagement between students and teachers in the class, it creates the opportunity for teachers to address the unique learning needs of students.

E-Learning at the University of Nairobi, Kenya

Pedagogy used by faculties varies widely depending on the nature of the course, teaching traditions developed by professors in each school, and the established cultural norms promoted by academic heads in the department. For a long time, the majority of courses, with the exception of science-oriented courses which combine lectures with demonstrations, especially in social sciences at the University of Nairobi, were taught in lectures. The lecture method relied on content preparation and delivery by the faculties in a classroom environment. With the changing time and the needs of modern society, the University introduced an e-learning platform which faculty members could use to improve their teaching experience. The platform allows for a wide scope of activities including uploading learning materials for access by students and administering and marking tests online. The platform is highly flexible, but it is integrated with other student information including fee payment status or course registration, among other details. Students can only access the e-learning platform when they register for a course. On the other hand, the faculty members prepare, upload, and review materials whenever necessary and create links to other learning materials located outside the platform such as YouTube videos. Although the platform has been in existence for more than six (6) years, its adoption among faculties has been slow at the school of business. Nonetheless, students find the platform user-friendly and more appropriate for their learning experience. Although the use of the e-learning platform is relatively low at the school of business, it is an active medium for teaching health sciences at the same University.

Flipping the Class: Our Approach

The adoption of the flipped classroom approach to teaching at the school of business, University of Nairobi, was as a result of my visit to Hochschule Bonn-Rhein-Sieg, University of Applied Sciences at Sankt Augustin, Germany, in May 2016. The visit was arranged through a staff exchange program under the German-African University Partnership project. During my two-week stay in Germany, I had the opportunity to accompany my host Regina Brautlacht to her classes where I learned about new teaching methods including speed networking (project-based learning) and the flipped classroom. The speed networking event was a teaching method deliberately designed to memorize entrepreneurial skills and to improve student's business management skills by subjecting them to real-life business through simulation. The flipped classroom approach was used to enable students to take control over their learning process. From observation, the process not only created an environment for learning by students but also developed students' confidence in their knowledge. It was this conviction that drove the desire to adopt the approach in Kenya.

The flipped classroom approach was introduced in two undergraduate courses namely: Business Values & Ethics and Applications of Marketing Research. The latter is a fourth-year course for students specializing in Marketing. Business Values & Ethics is a common third-year course taught to all undergraduate business students irrespective of the field of specialization. The first step in each course was to prepare course outline and identify topics to be taught using the flipped classroom approach. The second step was to identify relevant

videos and case studies for the topics and creating links to the videos using the University e-learning portal that was already in existence. Identification of the videos involved actual viewing of a variety of videos and selecting a few that were more relevant to the topic and had adequate content for achieving the learning objectives. The case studies were uploaded in the e-learning portal. Case studies were obtained from authoritative academic and industry databases. Some of the databases case studies came from were Emerald, EBSCO, and JSTOR. In addition, other learning materials including lecture presentations were uploaded on the e-learning portal.

The third step was to introduce the course and provide students with the video links and case studies. For each video and case study, discussion questions were uploaded to the e-learning portal. In each course, students were split into groups ranging from five (5) to seven (7). They were encouraged to view the videos and read the case studies individually but handle the discussion questions together in a group. Each group of students presented their work in class using PowerPoint. The students shared their learning experiences, outcomes, and challenges in class. Students were encouraged to react to their peer's presentation by asking questions, raising comments and offering suggestions for improvement. At the end of each presentation, the lecturer provided feedback on both strong and weak points of the presentation. The students were furthermore advised on ways of improving their work before submission for assessment.

Lessons Learned

The flipped classroom approach was more effective for teaching a large class as it created an avenue where students interacted more closely with the learning materials. Students were creative in discovering knowledge when adequately guided by the lecturer. Videos were more effective in flipping the class as compared to case studies. Students enjoyed watching videos more than reading case studies. Videos were found to be more engaging, less stressful, and entertaining to work with. Furthermore, the majority of undergraduate students is relatively young and prefers audio-visual content to long case studies. The videos worked more effectively in the Business Values and Ethics class than in the Applications of Marketing Research class. Our experience suggests that courses aimed at changing the attitude, values, and behavior of students can be taught more effectively using the flipped classroom approach by sharing recorded real-life videos and experiences. On the other hand, case studies were useful for teaching applications of marketing research, perhaps due to the nature of the course that requires students to understand the research process including problem definition, methodology, data collection, analysis, and interpretation. These can be understood better using case studies with the flipped classroom approach.

Our experience supports the view that the learning context determines features of flipping that are most appropriate to the students' learning experiences (Arnold-Garza, 2014). Flipping encourages students to think through content and to interact intellectually with fellow students during group discussion and presentations. Flipping the class improved the

overall performance in terms of understanding course contents and demonstrating the ability to apply the knowledge learned. The students' performance in examination was better when the class was flipped than when teaching was done using only the lecture method. The majority of students achieved better grades in both classes as compared to semesters where the courses were taught strictly through lectures.

Although the flipped classroom is more effective in teaching students as compared to the lecture method, it places new demands for time on both teachers and learners. As for teachers, more time is spent on identifying the right learning materials, reviewing them to assess their suitability, and uploading them on the available platform accessible to students. The teachers must create time for consultation and guidance to students. The approach requires students to explore multiple ways of engaging with the learning materials.

Conclusion

The flipped classroom approach transforms students from passive to active learners. Flipping shifts the control over the learning experience from teachers to students. It changes the role of teachers from a transmitter of knowledge to a learning facilitator who initiates discussions, guides students, and helps them discover knowledge. Although the flipped classroom is an effective teaching method, it does not completely replace other pedagogies. Instead, it complements them by improving the students' learning experience through the discovery of knowledge and the building of skills required by the industry.

References:

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