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Bio

Dr. Larysa Nikolayeva is an Assistant Professor of The College of Humanities and Social Sciences at Zayed University. She is a PhD holder in Linguistics. She has been teaching in the Gulf for 13 years. Dr. Larysa's research interests focus on exploring student engagement with online learning materials and its impact on their academic success.

Online Learning Habits and Engagement of Male Emirati Students: Exploratory Study

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Abstract. Current study aims to identify online learner-content interaction style of Emirati students under the circumstances of unforeseen events. This investigation would help improve learning experience and academic success of Arab students in online media of instruction where online studies is the only option available. The data were collected during the period of Spring semester affected by COVID-19 quarantine. The information on students' behavior was retrieved through Blackboard course reports. Analysis results enabled discovery of Emirati students' behavior patterns in an online learning environment and their content type preferences; it helped identify students struggling with learning, take decisions on content amendment, and see the correlation between the level of their online activity and final course grades.

Keywords: Online Learning, Students' Behavior, Blackboard, Course Analytics.

1 Introduction

The study was conducted at Zayed University, Abu Dhabi, during academic year 2020–2021, Spring semester.

The classes were delivered online due to the ongoing pandemic of Covid-19. There were two platforms used for teaching and learning: Zoom

and Blackboard. Zoom was utilized for live sessions that included lectures, pre- and post-lecture in-class discussions, and topic-based tasks designed to practice the material learnt. Blackboard contained course related teaching materials such as book chapters, worksheets, videos and model writing on the topics assigned by the syllabus. The materials were arranged according to the class schedule. The platform was available to the students 24/7 which enabled their uninterrupted access to learning around the clock. The students could re-access the lectures of previous classes at their own convenience for studying and revision. Blackboard Discussion Board tool was used to complete and upload their work for the purpose of on board of practicing and getting individual feedback on the assigned task. Email was a supplementary communication platform utilized to answer queries of and provide support to individual students whenever needed.

The course under investigation was Business communication. It comprised a variety of topics on written and verbal communication aiming at improving students' interaction skills in the Business world. The course focused on embracing cultural differences and their importance for successful business communication, enhancing professional email writing skills, refining presentation skills and learning essentials of report writing. The course lasted for 16 weeks, from the 10th of January till the 13th of May (including Spring break and religious holidays). The classes took place twice a week, on Sundays and Wednesdays (note: in The Middle east week starts on Sunday and Friday and Saturday are weekend). The duration of the class was 80 minutes, from 8am to 9.20am. The schedule details are essential for the current study to know the online learning access habits and preferences of the group under study.

The sample consisted of 42 students. All the participants were male Emiratis studying in the undergraduate program of the College of Business, Zayed University, Abu Dhabi.

The purpose of this research was to explore online learning habits of male Emirati students, the way they engage with provided teaching materials

and their preferences in using them as well as establishing a connection between the above factors and students' academic success.

2 Background

Online learning has become a normality since the start of the Covid-19. The global pandemic determined a drastic change of our lives and education was not an exception. Being once an option or a platform supporting face-to-face studies, web-based learning has by now established itself as the only way educational institutions all over the world deliver knowledge to their students. Unprepared for the change, both teachers and students had to embrace new ways of communication that excluded direct human contact, and demanded improvement of their IT skills for utilizing available web tools in no time [1], [2].

Pre-Covid19 engagement and interaction with online course materials was different in terms of its frequency, duration and repetitiveness with the major process of teaching and learning happening on campus. Moving to online mode of studies made educators and learners revise their attitude to web-based learning. After several semesters of online learning students developed their ways, approaches, habits and strategies of working with digital content. There was no time to accustom to the novelty which appeared to be extremely challenging in terms of time-management and self-study requirements [3]. The circumstances demanded students to be more autonomous, develop their focus and attention skills during the screen time, adhere to assigned deadlines, take responsibility for their actions and learn using new technologies at a rapid pace [4], [5]. Research on students adapting new ways of engaging with online learning has become a vital part of digital classroom and a helping hand to many at the current time. It encourages instruction material designers to work on the quality of virtual education resources that would help overcome the challenge of online learning and lack of live communication [6]. Exploring students' behavior in the digital learning world is a way to improve teaching and learning

experiences nowadays. Investigating learners' engagement with online resources throughout the semester gives teachers an opportunity to enhance the quality of materials, explore ways of increasing participation, identify struggling students, and provide individual support to those who require it [7], [8], [9].

Blackboard is one of the platforms contributing to teaching and learning in many colleges and universities [10] and Zayed University is one of them. It is a commercial learning management system that was founded in 1997. Blackboard provides its users with the access to a variety of tools and solutions enabling active engagement with learning, assessment and communication [11], [12], [13]. It gives us an opportunity of fruitful online interaction, helps the teacher to deliver information virtually, successfully facilitates teacher-student communication, supports students' collaboration, and enables required assessment [14]. The system has numerous benefits among which are driving excellence, providing opportunities for learner improvement and learner-centered studies [13], [15] as well as equipping teachers with the knowledge of what really works in the process of education [16].

Apart from being a platform for sharing knowledge and supporting online teaching and learning processes, Blackboard is also a source of multifaceted data that enables educators to advance the quality of their instructional material, online teaching strategies and approaches and communication methods [17], [14]. Course evaluation option related to each of the sections one teaches equips a tutor with plentiful data, e.g. provides details on frequency and duration of individual student's and groups' overall access to the content. Advantage of this information consists in is the ability to amend and adjust available resources to students' benefit as well as provide individual support in the timely manner if required [7].

Researching preferences of the students in utilizing digital resources is an area that enables the tutor to identify and, consequently, improve the provided set of materials in order to ensure students participation,

understanding and academic success in the course. The three types of resources involved in the current research were video lectures, pdf copies of textbook chapters and model writing. *Video lectures* became an increasingly popular tool for digitalized education under the circumstances of pandemic. They are a highly effective resource that makes students feel presence of the teacher in the virtual classroom [18]. Advantages of video lectures range from enhancing understanding of the content taught through the tool and boosting engagement with learning materials [19] to creating social presence and the feel of connection with the lecturer [20]. They can be used by educators for either live session delivery or uploading to the online learning platform utilized by the institution in pre-recorded format [21]. Video lectures usually serve as starting point for a discussion on the topic taught. They are considered to be an advantageous solution in the era of virtual education [22], [18], [21] and proved being one of the most preferred types of E-resources for the purpose of learning [23]. *Model writing* is another resource widely used for acquiring and further enhancing students' writing through providing an example of how to apply strategies and techniques of writing a specific text [24] that help students improve the quality of a written text they are required to produce. Structure and language of the text are the components usually modelled in a sample provided to the students to illustrate how to approach the process of writing. It is a popular technique that allows to engage learners into the process of writing [25], helps them understand the steps of writing [26] and as a result perform better. *Textbook* is a traditional resource that is also used by students for studies and revision [21]. It is reported that reading is strongly related to academic success [27]. Hence, comparing students' interest to reading materials and their performance in the current study was a matter of interest especially as Arabs are considered to be less interested in reading. To illustrate, it was reported by Mohammed bin Rashid Al Maktoum Foundation in the year 2017 that an Arab citizen reads ca 35 hours a year, while a Western adult spends around 280 hours reading [28]. Hence, it is a special area to pay attention to as Arab

culture is mostly characterized is the oral one where the tradition of verbal communication is very strong and prevails over reading culture [29].

Identifying students' preferences in learning resources choice would benefit both of the parties involved in the educational process, teachers and students, by showing educators the way to empower their students with required skills and knowledge.

Characteristics of students' online behavior compared to their success in the course, i.e. final grades, is another way to establish appropriateness of the course content. Existing research outcomes demonstrate that there is no clear impact of students' engagement with the course on their achievement. Some investigators claim that academically more successful students tend to access provided learning materials more often and also spend longer time on the content than the others [30], [31]. Others, e.g. [17], conclude that academic achievement in the course is not related to students' activity online. Hence, it is important to identify if the above-mentioned relationship works for the current sample of male Emirati students.

3 Data collection

Current data was collected through Blackboard evaluation tools. A variety of statistics available on Blackboard and accumulated on the system throughout the course is the basis of this research. The data richness and its exhaustive nature enables a wide outlook on the process of teaching and learning from several angles. It provides educators with an invaluable opportunity to see the nature of students' engagement with the provided materials and coordinate further efforts in improving teaching aids accordingly. The information on the access frequency, time spent by an individual student or a group on a specific learning materials item as well as the course overall gives the teacher an opportunity to effectively manage teaching and learning process in online classroom. Instant availability of the

data facilitates immediate accommodation of individual students' needs and requirements.

The sample under study that included 42 male Emirati students was researched from several viewpoints. Firstly, time spent by all students interacting with content per day of the week throughout the semester was identified. This data demonstrated preferences of the sample in accessing learning materials by day of the week. Moreover, it helped identifying students' dependence on the class schedule and seeing whether they used the advantage of round-the-clock availability of teaching resources online. Secondly, the number of hours spent by each student interacting with the content during the course was established. This information, when compared to the grades in the first assessment, helped the tutor identify struggling students and provide them with required support. Thirdly, number of times each student accessed a document (clicks) was assessed. These numbers demonstrated success of teaching aids offered to the students. Lastly, time spent by each student on a content item was investigated. Details on document access frequency and time spent on it are beneficial for identifying students who need extra assistance with their studies as a high number of clicks as well as longer time spent on learning resources might signal of difficulties in the comprehension of the provided material.

The above data was compared to the overall grade of the sample in order to identify if there is a relationship between students' online learning engagement and their academic success in the course in question.

This information was extracted from Course Activity Overview which is part of Course Reports available on Blackboard under Evaluation Section of Course Management.

4 Research questions
The collected data was used to answer the following research questions:
1. What are the habits of male Emirati students' interaction with of online course content?

2. What is the preferred type of online content by male Emirati students?

3. What is the relation between the time spent on content and their course grades?

5 Findings

The sample of 42 male Emirati students of Business Communication course was studied in terms of their engagement with the set of course based online learning aids. The research was conducted to explore their habits and preferences of interaction with web-based teaching materials and identify the relationship of course engagement intensity with the course achievement.

Based on the Course Activity Overview provided by Blackboard statistics the sample under study spent the total of 2274 hours online with the average of 54.1 hours per student.

Course Analytics demonstrated dependence of the group under study on the assigned class schedule. The students preferred to access provided learning materials on the days of the course session that were Sunday and Wednesday (see Figure 1). The activity of the students was lower on Sunday, the first scheduled day of the course compared to Wednesday. They spent the total of 776 hours interacting with the provided teaching materials on Sundays and 946 hours on Wednesdays during the researched semester.

The rest of the weekdays were less popular with the students with the overall number of 430 hours of access time in total for Monday (106 hours), Tuesday (228 hours) and Thursday (96). It can be noted that there was an increase in the activity on Tuesday which can be explained by the requirement of completing homework for the upcoming Wednesday class.

Weekend was the least active time with 34 hours spent by the group under study on the course on Friday and 88 hours on Saturday.

The above data shows that students prefer to engage with teaching materials on the days as per the schedule. Based on this finding, a teacher

can consider planning topic related activities as per the assigned timetable. It would help to ensure desired students' involvement into learning under the circumstances of online studies.
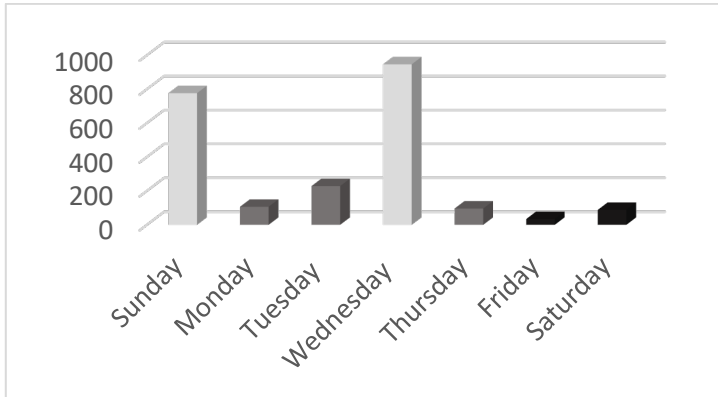

Fig. 1. Time in course

The data on the access per hour of day provides the information on what time was the most popular for interaction with online teaching materials during the Spring semester 2020–2021.

Figure 2 presents the results extracted from Blackboard Statistics tool. It clearly shows that the students under study usually engaged with provided web resources during two morning hours, 8am and 9am, which is the time of the Business Communication course class (8.00–9.20). The number of clicks during these hours equals 46.

This data disproves the stereotype about Arab students' preference to study at late hours. As Figure 2 shows there was little (1-2 clicks per some hours in the afternoon) to no (evening and night) access to the course materials observed during other hours of day that were outside the schedule. Similar tendency exists in the students' preferences of the day of the week and hour of day chosen for working with online teaching materials. In both cases scheduled timings are preferred.

Decreasing number of logs after the timetabled hours shows that provided learning flexibility and accessibility of the teaching materials was

not fully utilized by the students. They retain the habit of learning within their class time and show less interest to revisiting the content later. This reveals the need to raise students' understanding of the benefits and opportunities provided by around-the-clock availability of learning materials such as becoming an independent learner, improving personal time management, etc.
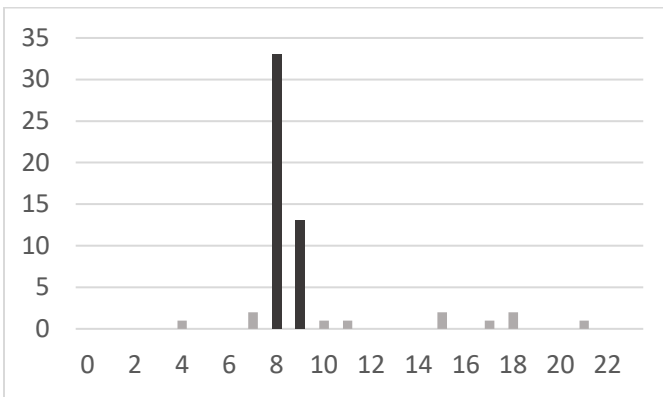

Fig. 2. Access per hour of day

Determining students' preferences in teaching materials choice was another aspect explored in the current study. There were three types of learning aids available to the students: book chapters, model writing, and video lectures. Book chapters were the most exhaustive type of the source. It provided the students with detailed information on the topics assigned by the syllabus, contained multiple samples and tasks for self-study. Model writing presented selected pieces of the excellent students' work or materials prepared by the course coordinator for the purpose of illustrating the topics taught in class and better understanding of the content. Video lectures were a summary of provided book chapters. They equipped the students with basic information on the topics and aimed to support their skills development along with related reading and samples.

Figure 3 presents the results of Blackboard statistics analysis. It indicates that the group under study preferred working with video lectures rather than the other two types of teaching resources provided on Blackboard. There was a total of 1488 clicks performed by the 42 students of the sample throughout the semester in question. The highest number of logs (846) was registered with video lectures. Model writing were accessed by the group 535 times. Book chapters were the least popular source of information as the number of related logs was 107 which is the lowest among all the available types of material.

The data demonstrates lack of interest of the students under investigation to reading. They tend to avoid working with text and prefer other sources of information instead. This proves the existing idea of insufficient reading activity of Arab students (Mahrooqi 2016, 6). They prefer to see a sample of the work they would be assessed on or listen to a lecture.

This finding would help educators develop successful teaching resources. To ensure student's academic progress and development of the syllabus required skills and abilities the teacher needs to consider their preferences and design teaching aids based on learners' choices. That means, online courses need to contain video-recorded, highly informative lectures of top-notch quality for students to embrace assigned topics and reach set learning outcomes.
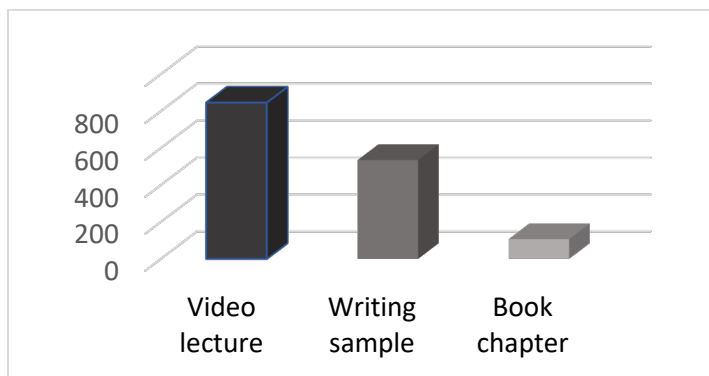
Fig. 3. Content preferences by access

The final aim of the current exploratory study was to see if there is any connection between the frequency of access of a student to online content and his final grade in the course. The scatter diagram shown in Figure 4 demonstrates the results of the comparison. The linear correlation on the below diagram is absent and the dots signaling on the connection between the access and the grade of each student are scattered without forming a straight line. It means that there is no relation between the number of clicks performed by the 42 students of the sample under study and their final grades. There are multiple instances of the following differences:

- students with the same/similar final grade performed considerably different number of clicks: e.g. 28 clicks vs 52 clicks made by students who equally obtained 80% final grade;

- students with the same/similar number of clicks whose final grades are considerably different: e.g. 59 clicks and 75% final grade vs 60 clicks and 90.7% final grade;

- students with high grade accessed the content less frequently than those with low grade: e.g. a student with a total of 58 clicks scored 92.2% while the one with 110 clicks got 76%;

- students who accessed the content more frequently and got higher grades than those who accessed it less frequently and scored lower: e.g. 60 clicks

were made by a student whose final score is 90.7% compared to 16 clicks and 22.2% overall grade.

This means that there is no direct connection between the frequency of access to learning materials of a student and his academic success.
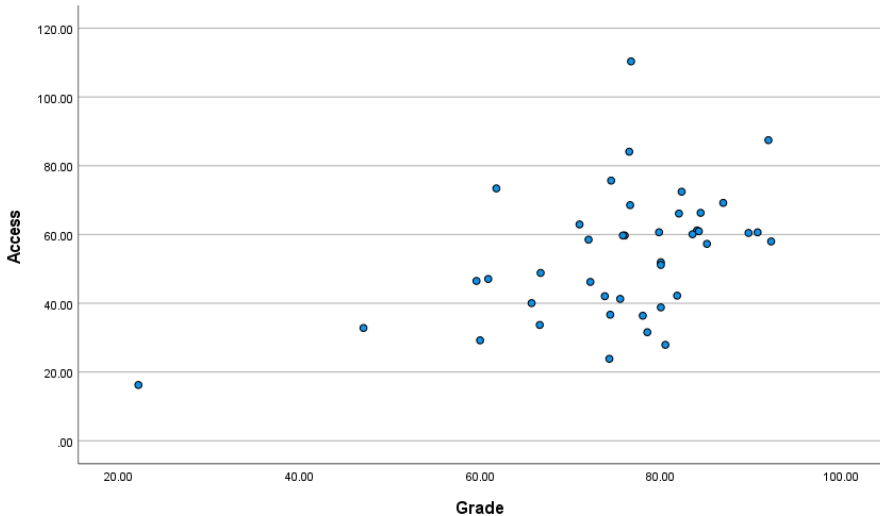
Fig. 4. Course access and grade scatter plot

6 Conclusion

A sample of 42 male Emirati students was studied from the point of view of 4 aspects related to their engagement with online learning materials. The research included four aspects: (1) the amount of time spent by the sample on the learning materials provided on Blackboard, (2) time spent by each of the students interacting with the content, (3) number of times the students accessed available teaching materials, and (4) time spent by each student on a content item. The overall grade of the sample was compared to the statistics on frequency, duration and item preferences of the students.

Analyzing the four above mentioned aspects of online students' activity helped identify their learning habits and preferences under the unprecedented circumstances of forced online studies. It also demonstrated

the extent to which students' online learning engagement is related to their academic success in the course under study.

The research showed that male Emirati students tend to access the content on the day & time of the class mostly. Their online activity decreases substantially outside the timetabled hours, which means the flexibility provided by online learning is not fully used. Our role as teachers consists here of educating students on the advantages of online learning accessibility. Understanding and utilizing the benefit of learning materials being available round-the-clock would help students use them at their own convenience outside the class time.

Investigation of teaching materials preferences demonstrated that of the three suggested options the group under study favored video lectures. Model writing was used less than lectures and book chapters were the least popular type of learning materials among the students of the researched group. It demonstrates favoring visually presented materials and low motivation to read. Reduced reading time and lack of interest to reading is currently an international issue and the Middle East is not an exception. Educating students on the impact of reading on their personal and professional life as well as motivating them to read should be one of the main responsibilities of a modern tutor preparing today's youth for the future.

The analysis also established that time spent by students on the content is not related to their grades. Students with more hours spent on Blackboard do not always score better in their assessment. Vice versa, those who interact with the learning aids less might be high achievers. Monitoring Blackboard Statistics regularly provides us with a clear overview of students' activity online. This information gives us an opportunity to assist those who require our help in a timely manner to ensure their success in the course. When compared to submitted tasks quality, discussion participation and the first assessment results, time spent on content by an individual student would provide us with a clear picture of what he lacks and needs

assistance with. High achievers identified by tracing their learning progress and engagement through Blackboard could be provided with personalized tasks suitable for their level to ensure their continuous studies motivation.

All in all, Blackboard Statistics tools are useful for monitoring students' academic progress and success, develop their motivation to study and support those who require special attention.

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