



THE IMPACT OF ROLES OVERRIDES IN E-LEARNING PLATFORM ON STUDENTS AUTONOMY: THE CASE OF SAUDI ELECTRONIC UNIVERSITY

Dr. Nasser Binsaif

E-commerce Department, Administrative and Financial Sciences College,
Saudi Electronic University, KSA

ABSTRACT

This study aims at investigating the impact using roles overrides in E-learning platform on students' autonomy at Saudi Electronic University (SEU). The study uses descriptive and analytical approach to collect the research data by surveying (1103) students at SEU. Results indicate that teachers at SEU assign students different roles at a roughly equal percentage of non-assigned new roles. Results proved that students who played different roles possess higher automates learning skills than their peers, who have had no over role override experience. This result assumes the importance of utilizing role override service provided by Blackboard portal. Moreover, it can be said that using role override can support students autonomous learning and help-seeking skills to improve their robustness role while teaching their peers.

Key words: Autonomous Learning; Role override; Blackboard; LMS; Saudi Electron University

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1. INTRODUCTION

On a large scale, most administrative and business entities exploit Management Information Systems (MISs) through the spread of Information and Communication Technology (ICT). Among the most important sectors that employed information and communication technology in the education sector, especially higher education, where useful Learning Management System (LMS) platforms provided a realistic simulation that represents a strategic alternative that guarantees to maintain an advanced level of education, as well as overcoming many challenges that accompany traditional education. One of these revolutionary systems is an innovative designed of Blackboard system that virtually simulates educational reality, as well as many advantages that cannot be achieved through traditional education in terms of

organization and institutionalization. The e-learning management system through Blackboard provided many services based on the educational transformation in developing autonomous learning and limiting the role of the teacher to guidance and orientation.

Among the most important advantages of e-learning systems is to enhance the principle of autonomous learning associated with opening new knowledge horizons through collaborative education and the ease and multiplicity of access to knowledge. This modern approach supports what e-learning platforms are based on open learning, which adds more flexibility in roles override (Alenezi, 2020). Accordingly, it can be concluded that the Blackboard platform does not only provide presentation and discussion services, but it can also facilitate the application of many modern learning strategies, such as peer learning, which depend on changing the role of the student and enabling the teaching and management of electronic content, whether in the form of class and collaborative management blogs or wiki or virtual classes (Washington, Penny, & Jones, 2020).

Overrides may be used to grant LMS users' extra permissions. For instance, an override may be used to allow students to play the teacher role with pre-defined permissions as granted (Mtshali, Maistry, & Govender, 2015). Some researchers consider switching between students and teachers' roles is a part of a flipped classroom. Flipped classroom "is an instructional strategy and a type of blended learning focused on student engagement and active learning, giving the instructor a better opportunity to deal with mixed levels, student difficulties, and differentiated learning preferences during the in-class time" (Huang, 2020).

In the context of Saudi Arabia higher education, Saudi Electronic University (SEU) is the first established University that considers the learning distance as one successful alternative to overcome higher education challenges in Saudi Arabia. SEU adopts several models of learning distance, such as BL, online learning. This new guide by learning distance employs the most cutting-edge technology provided by Blackboard LMS. The current research investigates the impact of roles override in the Blackboard e-learning platform on Students autonomy at SEU.

2. LITERATURE REVIEW

2.1. Collaborative Learning

Collaborative interaction starts from a very broad concept in the field of social communication. It encompasses the different activities carried out by the human being and integrates the elements that make up the interpersonal communication process and the interactive characteristics (Alkhasawneh & Alqahtani, 2019). In a virtual communication environment such as LMS, collaborative interaction has similar characteristics regarding the development of the communication process, although with the difference of using a technological platform capable of taking communication messages over the Internet from one place to another, regardless of distance (Delen, Liew, & Willson, 2014). This last-mentioned aspect is perhaps the greatest wealth of LMS in relation to how communicative interaction has recently acquired important social uses and applications, mainly in the educational field (Liljeström, Paulin, & Holmgren, 2019).

In this context, the collaborative interactions take place in diverse spaces in continuous transformation and allow the transformation of the learning-teaching processes. In this sense, it is worth highlighting the importance of communicative interaction in learning-teaching processes in virtual environments, which adds formal communicative interaction or more spontaneous communication between the members of said process (Al Ashaikh, 2017).

3. BLACKBOARD LEARNING PLATFORM

One highly widespread LMS is Blackboard (LearnTM, 2009). Blackboard is a Web-based platform that helps instructors and assistants to create, distribute the content, and evaluate the students' performance, which reflects the most technological initiative in higher education (Saif, 2017). The customize use of Blackboard has blowout swiftly in higher education, due to its substantial superiority and its incessant development (Brown, Dehoney, & Millichap, 2015). The University of Bisha employs Blackboard vista, a type of widespread LMS, which provides faculties, teachers, and students in managing courses, through a strong set of user-friendly tools (Saif, 2017). Blackboard supports a high level of accessibility, as it can be accessed through without time and place limitations. Moreover, it provides instant feedback to student's performance when they use Blackboard's services of tests, assignments, events, activities, and examinations. The management can also access the feedback through Blackboard's survey services. Furthermore, Blackboard provides several communication channels such as announcements, discussions, virtual classrooms, and email. In addition, the online grade book functions allow students to track their performance. Blackboard can help students to develop their learning autonomy and time management. Therefore, the Blackboard LMS platforms mainly depend on student' autonomy to best achieve their learning outcomes (El-Senousy & Alquda, 2017).

Due to its technological characteristics, Blackboard collaborate is an LMS that allows communicative interaction in the virtual learning-teaching process and the formation of broad-spectrum communication networks for the exchange of information and the development of collaborative learning activities. It also allows students to influence the communication process itself through the interactive use of written, verbal and non-verbal language to produce messages that direct content with educational objectives (Awad, Salameh, & Leiss, 2019).

Bazylak & Weiss, (2017) analyzed the advantages and disadvantages that Blackboard has as an LMS in the management of virtual learning. Their analysis includes the Blackboard communication tool to collaborate and consisting of a platform of conference rooms with resources for interaction. Blackboard adds flexibility, which facilitates access to learning anytime, online and on the most popular devices; however, students cannot obtain a local version of the course. Also, it allows students to store learning objects, which ensures the management of the educational resources found in online learning environments with the necessity for some definitions to be e made in HTML code; therefore, you must know the basic details about it. Moreover, Blackboard supports Virtual Communities (VC), which enhances the interaction, content sharing, and promote collaboration within and beyond the classroom, which in turn requires a higher performance of the platform when configuring a server with many users. On the other hand, the interface needs to be improved to make it easier that supports usability, rapid adoption, pedagogical flexibility and fosters intuitive user experiences. However, LMS has disadvantages associated with security (Alshamrani, 2019).

For the described advantages, Blackboard Collaborate is a communication tool with great flexibility and adaptation to the virtual environment; fosters communicative interaction towards learning from collaborative environments based on the constructivist model of learning. In this process of collective construction of learning, the use of the resources it offers is intuitive, which, according to (Alshamrani, 2019) is essential in a virtual environment, where effective relationships will be established that contribute to achieving the objectives of the process.

4. AUTONOMOUS LEARNING

Numerous studies have reviewed the students' autonomous learning and academic achievements in an online and face-to-face learning setting (Alshamrani, 2019; Khuziakmetov & Amin, 2015; Sukkamart, 2018). According to Barnard, Paton and Lai (Barnard, Lan, To, Paton, & Lai, 2009), the autonomous learning skills are necessary to improve learning outcomes in an online and face-to-face setting. The earlier studies have shown that learners who have a higher level of autonomous learning skills perform better than those learners who have lower levels of autonomous learning skills (Zimmerman & Schunk, 2012). Thus, autonomous learning is a critical prop for the learning and teaching process of learners both in online and face-to-face learning settings. Autonomous learning comprises task strategies and cognitive processes which are required to regulate learners' cognitive processes (Zimmerman & Schunk, 2012). three phases of autonomous learning and the activities relating these phases were introduced by (Wong et al., 2019).

More recent observed studies have shown that the LMS represents an appropriate environment for improving student autonomous learning and academic achievements. One study conducted by Mtshali, Maistry, and Govender (Mtshali et al., 2015) focused on studying learning processes in the LMS environment. They emphasized that the LMS learning platform improved students' academic results, reduced withdrawal rates, and opened more diverse learning opportunities of autonomous learning for students. Similarly, Bester and Brand (Bester & Brand, 2013) confirmed that the use of an electronic learning platform such as blackboard LMS assists learners to focus more and help them to improve their academic achievement.

Moreover, autonomous learning through LMS significantly impacts the behavior and efficiency of students (Barnard et al., 2009) . For instance, Lee, et al.(Lee, Shen, & Tsai, 2010) created an online course and investigated its impact on students' autonomous learning. The results indicated that an online LMS platform supports the students' autonomous learning. Another similar result was found in (Lee et al., 2010) study; they proved that an online LMS platform enhanced students' autonomous learning.

In Saudi higher education context, (Saif, 2017) stressed the importance to examine the implementation of LMS in Saudi Arabia, and its contribution to improve the Saudi online learning environment in the universities which adapt Blackboard LMS. Another study conducted by Alotaibi, Tohmaz and Jabak (Alotaibi, Tohmaz, & Jabak, 2017) inspected the relationship between students' autonomous learning and the academic outcomes. They found that students' autonomous learning could be a substantial predictor of students' academic achievements. They also recommended for future researches within Saudi context to identify how LMS can improve students' autonomous learning through using advance functions provided by blackboard LMS. Therefore, this study comes to highlight the role of one important function that can be utilized and its impact on improving students' autonomous learning. This important function called roles override, which allow the course owner to switch the role of participants from student to teacher and verse visa. In this context, table (1) summarizes the roles provided by blackboard LMS and the permission granted to switch between these roles.

Table 1 Blackboard Participants Roles.

Role	Function
Student	This is the default role for all users enrolled in the course. A Student user does not have access to the <i>Control Panel</i> or course editing capabilities.
Instructor	Instructors have full access to the entire course, including the <i>Control Panel</i> . This role is generally assigned to the person developing, teaching, or facilitating the class. If a course is unavailable to students, users with the Instructor role may still access it.
Teaching Assistant	Users with the Teaching Assistant role have access to most of the course <i>Control Panel</i> including grading. If the course is unavailable to students, teaching assistants may still access the course like an instructor,
Grader	This role provides limited access to the <i>Control Panel</i> in relation to grading and graded activities. Graders can assist an instructor in the creation, management, delivery, and grading of assignments, tests, and surveys. The grader may also assist an instructor with adding manual entries to the <i>Grade Center</i> . If a course is unavailable to students, the course appears in the <i>My Courses</i> module and in the course list for a user with the role of Grader.
Facilitator	This role has default privileges related to course materials, gradebook, calendar, announcements, discussions, and groups to assist instructors in the progress of a course. This useful for managing content input from subject matter experts for large, multi-section courses that are facilitated by multiple faculties.
Course Builder	This role provides access to create and modify course content but does not allow access to student grades. The Course Builder role has access to most areas of the course or organization <i>Control Panel</i> , but not the <i>Grade Center</i> . If the course is unavailable to students, a course builder can still access the course. The course builder can't remove an instructor from a course.
SDS Course Builder	This role is used by Student Disability Services to provide accessible content. This role's access mirrors the regular Course Builder profile.
Guest	This role allows instructors can make areas within a course accessible to unauthenticated users. Guest users do not have access to the course or organization <i>Control Panel</i> . See also the info bullet regarding the special considerations for this role.
Observer	This role is used by Student Athletic Advising to monitor athlete academic progress.

*Source: *Blackboard Collaborate (www.blackboard.com)*.

This study investigates the role assigned to the instructors and students and the permission granted to switch these roles (i.e. student become an instructor).

5. PROBLEM STATEMENT

The diverse modules provided by the Blackboard e-learning platform, which are used in the Saudi Electronic University, provide many advantages related to collaborative and distance learning. These features include creating and managing virtual class, assignments, blogs, wikis and other collaborative learning-based services (SEU, 2020). Where these services play a pivotal role in autonomous learning that is consistent with the modern pedagogical and educational orientation in determining the role of the teacher and the student in the learning process. However, most of the previous studies on e-learning dealt with the impact on academic achievement, obstacles, and degree of use, but did not address the contribution of those services to the development of autonomous learning. Moreover, there are some options added to the electronic courses that give the teacher permission to define roles, so the student can be a teacher and possess the powers of virtual class management and attachments. This shift in roles enhances student participation in a different role that may contribute to creating

new learning and knowledge opportunities in front of the student. Also, enhancing collaborative learning among students and teachers may develop autonomous learning skills, as well as communication skills between students and teachers. Through a review of the previous literature in the use of e-learning in universities; the researcher did not find - to the extent of her knowledge - any study related to the effect of switching roles, roles override, between teachers and students on autonomous learning among students. Consequently, this study allows for discovering the potential impact of activating the use of these options on students' self-regulated learning and indicating how they can be adopted by teachers at the SEU.

6. RESEARCH QUESTION

This research attempts to answer the following questions:

- Have SEU students been granted the permission to play different roles in the Blackboard learning platform?
- Is there any significant difference among EU students' learning autonomy attributed to roles override?

7. RESEARCH AIM AND OBJECTIVES

This research aims at determining the impact of roles override in the Blackboard e-learning platform on Students autonomy at SEU. Therefore, two objectives are set as follows:

- Determining if the SEU students exposed to play different roles in Blackboard virtual classes.
- Determining if there any significant difference between SEU students' learning autonomy attributed to roles override.

8. RESEARCH LIMITATIONS

This research is limited to the followings:

- The study of the customized Blackboard LMS platform in SEU.
- Students of all levels at the department of electronic commerce in SEU.

9. STUDY SAMPLE

The current study will be conducted on a sample of SEU students. The sample will include all female and male students of electronic commerce department with (1103) students of all academic levels including the Preparatory Year (PY) students. Table (2) shows the socio-demographic distribution of the study sample.

Table 2 Socio-demographic distribution of the study sample

Level	Gender	Frequency
PY	Female	229
	Male	149
3	Female	121
	Male	86
4	Female	135
	Male	58
5	Female	62
	Male	46
6	Female	60
	Male	25

7	Female	44
	Male	26
8	Female	38
	Male	24
Overall	Female	689
	Male	414
		1103

10. DATA COLLECTION AND INSTRUMENT

The SEU has been contacted after obtaining permission from the presidency office to conduct this study. Afterwards, the study instrument was developed to collect data after verifying its validity and reliability. This is followed by the distribution of the study instrument through various electronic survey tools provided by google documents.

The primary instrument for collecting data related to student's autonomous learning is a questionnaire with two sections elaborated. The first section includes learners' data, including gender and their previous exposure to role override in Blackboard LMS. The second section designed to collect quantitative data regarding students' autonomous learning derived from a self-regulated online learning questionnaire (SOL-Q) derived from (Jansen, Van Leeuwen, Janssen, & Kester, 2018) study and translated into Arabic. This section includes five student's autonomous learning constructs covered by (36) items: metacognitive skills, time management, environmental structuring, persistence, and help-seeking. All items have been designed to be answered on a 5-point Likert scale, which ranged from "Strongly agree = 5) to "Strongly disagree" = 1).

The adoption of SOL-Q helps ensuring its validity and reliability. In this study, the Cronbach's Alpha was 0.89, which was determined to be acceptable.

11. METHOD

Research methods can be classified into two main categories including qualitative and quantitative. Quantitative research collects research data using an instrument, which is designed on a numerical scale to describe the research variables; whilst qualitative research uses instruments built to collect non-numerical and quantifiable data (Sekaran & Bougie, 2016). This study adopts a quantitative methodology using a survey designed to measure student's autonomous learning scored on a five-point Likert Scale. The sample was divided into two groups based on the student answers on the question if they have had the role override experience during their blackboard classrooms. Afterwards, the analysis will be carried out using the Social Package for Social Science (SPSS) to answer the research questions.

12. RESULTS

Students responses were analyzed based on their answers on the question concerning their experience with role override in Blackboard LMS. The responses include "yes" if the student has had a teacher role; or "no" if the students never have had this experience. Table (3) shows the results and frequencies of having assigned such roles.

Table 3 Students experience with role override assigned.

Have you had a teaching role?	Gender	Frequency	Total	Parentage
Yes	female	310	541	49%
	male	231		
No	female	274	562	51%
	male	288		

Results in table (3) indicate that (49%) of SEU students have been assigned different roles as student.; while (51%) assigned no roles while instructing. However, this study investigates all student’s autonomous learning constructs, and the result results are shown in table (4).

Table 4 Perceived Students’ autonomous learning skills

Construct	Mean	St.dev	Rank
Metacognitive skills	3.21	0.256	Moderate
Time management	2.96	0.569	Moderate
Environmental structuring	2.33	0.985	Moderate
Persistence	2.36	0.369	Moderate
Help-Seeking	3.89	0.458	Moderate
Student’s Autonomous Learning	2.95		Moderate

Results in table (4) indicate that the student’s autonomous learning is at moderate level with arithmetic mean of (2.95). The Help-Seeking skill ranks first among all skills with mean of (3.89) ad standard deviation of (0.458); followed by Metacognitive skills; Time management; Persistence and Environmental structuring. This confirms the help-seeking strategy used by student to prepare or overcome missed knowledge that make up their desires to learn.

Additionally, an independent samples T-test was performed, which compares the mean differences in the perceived Students’ autonomous learning skills that can be attributed to having a role override experience. Results are shown in table (5).

Table 5 Differences Attributed to Role Override Experience.

		Levine’s Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Equal variances assumed	2.36	0.02	2.56	1001	0.006	2.023	0.236	0.3269	0.5636	

Table (5) revealed that there is a significant difference at the level of ($\alpha \leq 0.05$) in the perceived Students’ autonomous learning skills that can be attributed to having a role override experience.

13. CONCLUSION

Results indicate that teachers at SEU assign students different roles at a roughly equal percentage of non-assigned new roles. This context proves that students who played different roles possess higher automates learning skills than their peers, who have had no over role override experience. This result assumes the importance of utilizing role override service provided by Blackboard portal. Moreover, it can be said that using role override can support

students autonomous learning and help-seeking skills to improve their robustness role while teaching their peers.

RECOMMENDATIONS AND FUTURE WORK

Based on the results, this study recommends the followings:

- Address the need to use the role override in blended learning or fully distance learning to all faculties.
- Design training programs and workshops for teachers and students to use the role override services.
- Investigate the role of adopting role override in student academic achievement and attitudes toward blended learning and distance learning.

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