

Exploring the Barriers to the Use of Blackboard Learning System at Arar University College in Saudi Arabia

Aliyah Kayyad Hakem Almijlad¹ , Mohd Mokhtar Muhamad^{2*}, Mas Nida MD Khambari³

¹Faculty of Educational Studies, Universiti Putra Malaysia (UPM), 43400 Serdang, Selangor, Malaysia.
Email: alaliah_3@hotmail.com

²Faculty of Educational Studies, Universiti Putra Malaysia (UPM), 43400 Serdang, Selangor, Malaysia.
Email: mk_mokhtar@upm.edu.my

³Faculty of Educational Studies, Universiti Putra Malaysia (UPM), 43400 Serdang, Selangor, Malaysia.
Email: khamasnida@upm.edu.my

ABSTRACT

CORRESPONDING AUTHOR (*):

Mohd Mokhtar Muhamad
(mk_mokhtar@upm.edu.my)

KEYWORDS:

Blackboarding
Barriers
Technology
Culture

CITATION:

Aliyah Kayyad Hakem Almijlad, Mohd Mokhtar Muhamad & Mas Nida MD Khambari. (2022). Exploring the Barriers to the Use of Blackboard Learning System at Arar University College in Saudi Arabia. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(8), e001673. <https://doi.org/10.47405/mjssh.v7i8.1673>

The success of lecturers in adopting innovation in this age of digitization has a direct impact on their student's academic performance and, ultimately, institutional goals. However, many teachers have not integrated technological resources into their classrooms, such as the Blackboard learning system. As a result, this article explored lecturers' perspectives on potential obstacles to the use of the Blackboard in teaching. The study was carried out at Arar University College in the Kingdom of Saudi Arabia in the 2021-2022 academic session. Semi-structured interviews were conducted with nine lecturers. Findings indicate that technological, institutional, and cultural barriers as the main themes that emerged from the lecturers' interviews. Thus, for effective utilization of the blackboard system, there is a need for technological advancement in both hardware and software infrastructures, continuous technical support, training, and institutional commitments of the government of Saudi Arabia and Arar university college in particular. Moreover, the design and development of software should bridge gender gaps and retain the cultural norms of the kingdom of Saudi Arabia.

Contribution/Originality: This study is among the few researches explored the barriers to the use of the blackboard system at Arar University College, Saudi Arabia. The findings bridged the cultural gaps between male lecturers and female students since blackboarding improved communication, collaboration, and interaction without altering traditional and cultural norms.

1. Introduction

Numerous technological tools supporting educational processes are used in the institutions of higher learning. Most of the technologies used in education poses the power to transform those higher institutions from conventional environments into interactive, and creative environments. Because of their accessibility, ubiquity, and ease

of use, educational technologies have been adopted by numerous institutions (Sharifov & Mustafa, 2020). Blackboarding technology is the most popular e-learning system adopted in higher institutions across the globe (Moonsamy & Govender, 2018). According to its definition, Blackboard is an educational software package created for helping educators to design and develop high-quality online courses (Choy et al. 2005).

A variety of factors, including technology, institutional goals, culture, and the gender of lecturers and students, impede acceptance and use of learning management systems. The Blackboard learning platform is becoming popular among higher institutions worldwide. Blackboarding technology includes several functions designed to aid classroom instruction (Al Meajel & Sharadgah, 2018). Thus, the blackboard system has the potential to foster communication and collaboration among lecturers and students (Faisal & Kisman, 2020). Thus, using the blackboard system, students can learn outside of the classroom at any time and from any location (Aljawarneh, 2020). This is accomplished by allowing them to interact with the course materials via a variety of tools that have been made available to them.

However, the current study opts to concentrate on the perceived challenges in the use of blackboards from the perspectives of the lecturers. The purpose of the study is to explore how usage barriers to the blackboard learning system affect its level of acceptance and use. To do this, the researchers posed the following question: What challenges do lecturers at Arar University College in Saudi Arabia encounter when using the Blackboard learning platform?

To understand how lecturers adopt and use BLS, the Unified Theory of Adoption and Use of Technology (UTAUT) is used. UTAUT combines various viewpoints on user and innovation acceptance (Venkatesh et al., 2003). As a result, UTAUT recognizes that four fundamental factors performance expectation, effort expectation, social influence, and enabling circumstances are direct drivers of behavioral intention to comprehend culturally relevant issues (Venkatesh et al., 2003). The importance of this research lies in its attempt to investigate the barriers to using Blackboard from the perspective of Arar University College lecturers. Views on the perceived barriers to the use of Blackboard are very crucial since the findings may offer suggestions on how to overcome these obstacles. Moreover, the continuous integration of technology into education for effective course delivery to students, particularly following the COVID-19 outbreak, necessitates studies to investigate e-learning technologies like the Blackboard learning system to learn about barriers impeding it is used in Arar University College, Saudi Arabia.

2. Method

To gain insight into the phenomenon under investigation, namely lecturers' use of the Blackboard learning system at Arar University College in the Kingdom of Saudi Arabia, this study used a case study approach within an exploratory qualitative research design. A case study provided a more in-depth understanding of the issue and influenced practices (Tsang, 2013; Welch et al., 2022). As a result, case studies have proven to be especially beneficial for researching educational innovations, evaluating programs, and informing practice.

Lecturers from Arar Community College at Saudi Arabia's Northern Border University were chosen for this study. The college only has two academic programs: computer science and accounting. The semi-structured interview was conducted with nine (9)

lecturers who were purposefully chosen as participants in this study. Scholars such as Hill et al. (2005), Daniel (2019) and Lakens (2022) have suggested that fewer participants are required when more than one interview is conducted per participant or when the group of participants is particularly homogeneous. Morse (2000) recently argued that in a phenomenological study, fewer participants could be used; perhaps only 6 to 10 participants are sufficient.

The human resources department at the college provided a list of email addresses for lecturers. All lecturers were sent an email inviting them to participate in the research. Each email contained information about the research's purpose as well as other pertinent information such as voluntary participation, confidentiality, privacy concerns, and time. The instances in this study, however, are limited by the fact that only lecturers from Arar Community College participated, and these participants used the blackboard learning system as their sole mode of instruction.

Based on the semi-structured interview protocol, data was initially categorized or coded. After evaluating the responses, the researcher categorizes the responses to each interview and themes that emerged from the categories. The researcher is in charge of all aspects of data collection, and analysis. The transcripts were emailed to participants after each interview for individual review. Any instances of potential bias were identified by the researcher.

3. Findings and Discussions

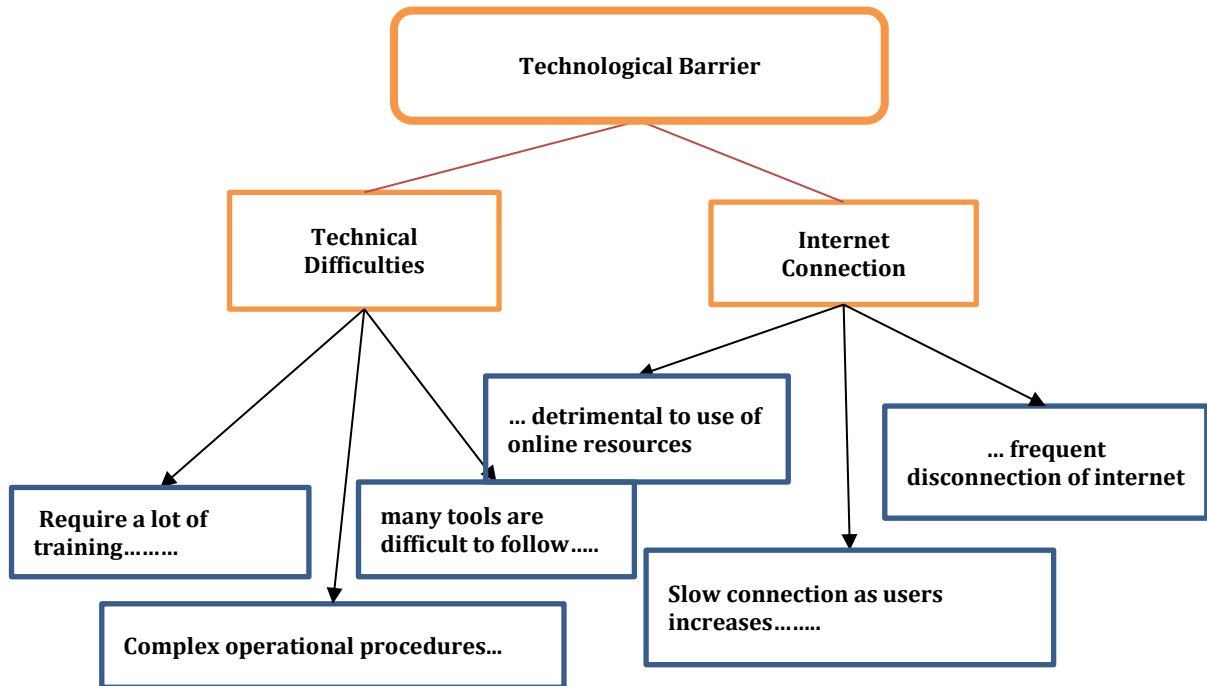
To answer the research question, "What are the commonly reported barriers to using the Blackboard system by lecturers?" lecturers were given an interview protocol. The responses of the lecturers revealed three major themes. Technological, institutional, and cultural barriers.

3.1. The First Theme: Technological barriers

According to the lecturers in using Blackboard, the first theme appeared to be technological barriers, which included two related codes: technical difficulties and poor internet connection. Figure 1 depicts the emerging theme, codes, and related quotations from the lecturers' points of view.

According to the lecturers who used Blackboard, the first theme appeared to be technological obstacles. Agreeing to the data gathered, all lecturers concurred that Blackboard has numerous technical issues. Technical issues undoubtedly decrease usage, which makes it challenging for lecturers to use the system. They also stated that when using the blackboard system, the internet connections slow down as the number of users increases on the system. The third most frequently mentioned obstacle was Blackboard's abundance of challenging-to-use tools. Similarly, Helsper (2021) observed frequent disconnection and slows down of the internet as users increases as the most common disadvantage of using internet resources. However, all lecturers dissented from the statement and pointed out that a potential obstacle to using Blackboard might be the scarcity of computers. This indicated that lecturers believed there were enough computers available to accommodate students at once when using blackboard in their classroom.

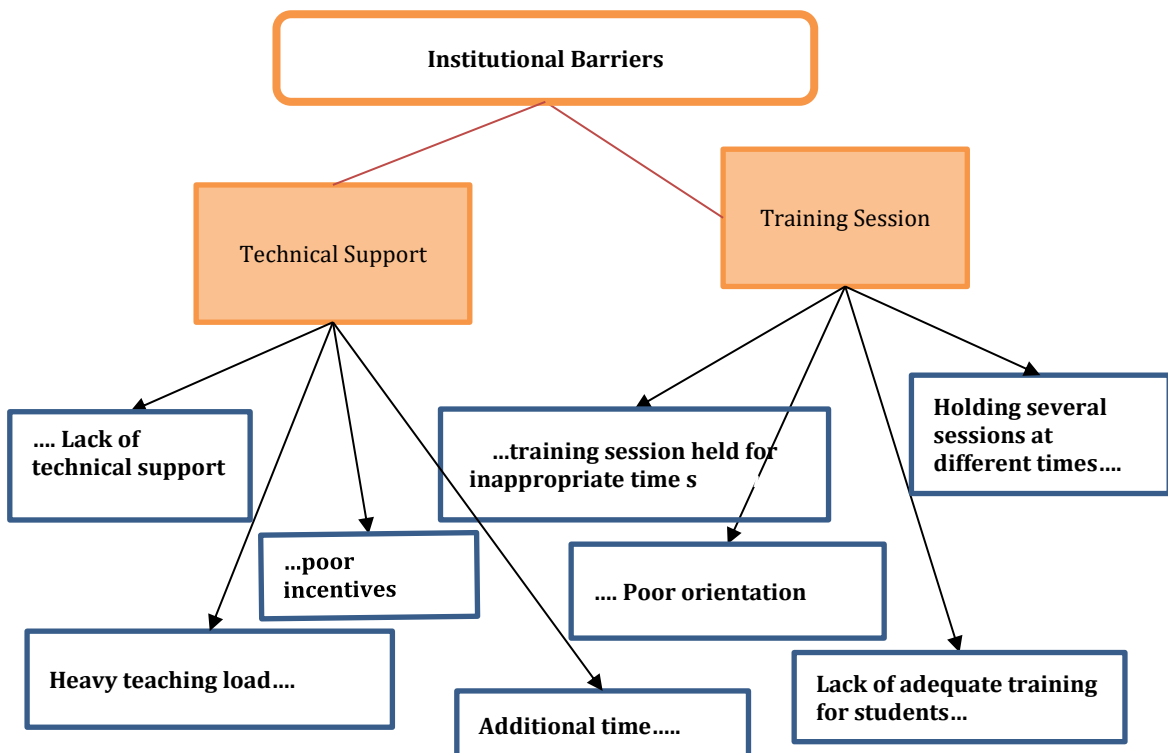
Figure 1: Technological Barriers



3.2. The Second Theme: Institutional Barriers

The second theme, institutional barriers, appeared to be based on how Blackboard was used by lecturers at Arar University College, Saudi Arabia. Figure 2 displays the emerging theme, codes, and pertinent quotes from the lecturers. Technical support and training are two codes that have emerged under the theme of institutional barriers.

Figure 2: Institutional Barriers



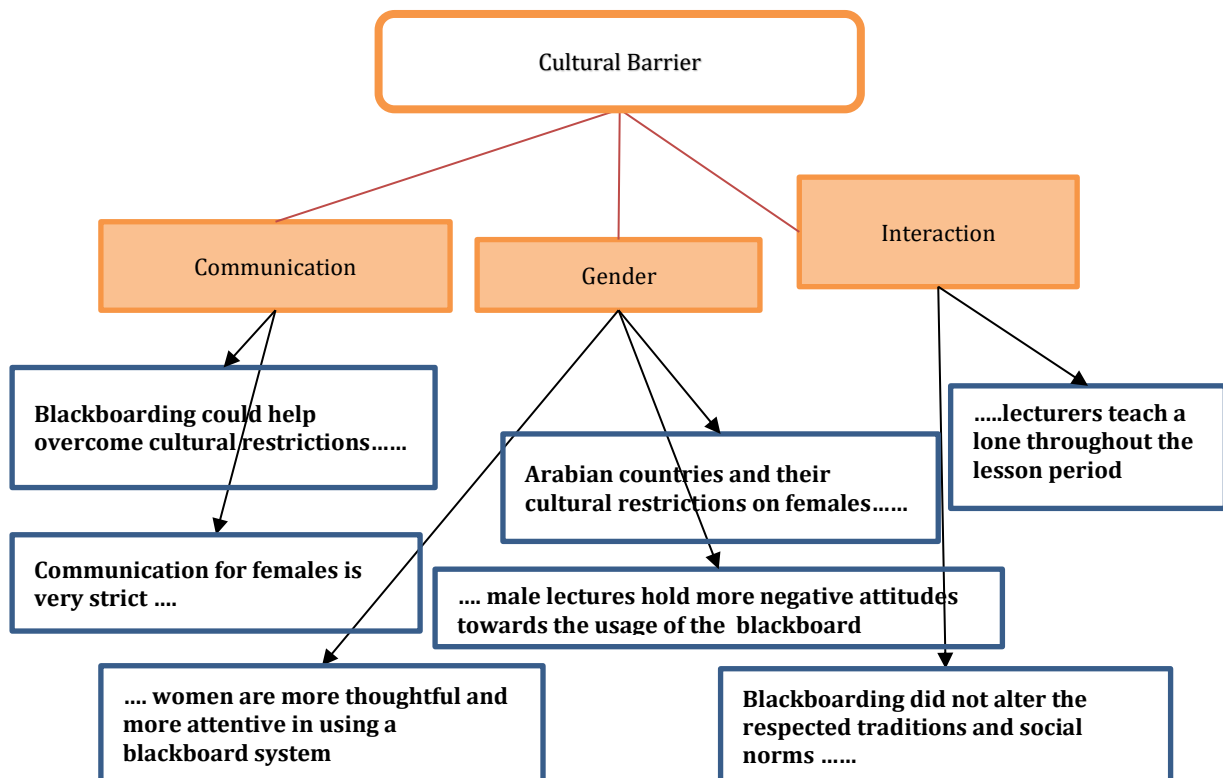
Technical support is a crucial component for lecturers to successfully implement the Blackboard system. However, [Kudale and Wanjale \(2015\)](#) observed that the lack of ongoing technical support prevented lecturers from using computers. Another significant barrier to effective Blackboard use, according to the lecturers, is inadequate student training. According to the lecturers, it is critical to remember the need for orienting the students on how to use the blackboard as an educational technology software. The educational institution should be responsible for making training available to students, just as it is for lecturers.

It is also observed that lecturers are not given enough time to receive training on how to use the Blackboard teaching system ([Tawalbeh, 2018](#)). Lecturers stated that training sessions were scheduled at inconvenient times and not based on their specialties. Teaching using a blackboard system is time-consuming. The teaching weight and time required for planning lessons in the Blackboard system were cited as one of the factors affecting its use by lecturers ([Scully & Kerr, 2014](#)). Participants lamented that the higher the workload, the less likely they use Blackboard in their teaching. However, "ease of use" and "usefulness" are important factors influencing lecturers' use and acceptance of any technological innovation ([Davis et al., 1989](#)).

3.3 The Third Theme: Cultural Barriers

Gender, communication, interaction, and collaboration are three related codes found in the results under the culture barrier theme. [Figure 3](#) depicts the emerging codes and related quotes using schematic diagrams.

Figure 3: Cultural Barrier



Analysis of the lecturers' interviews indicates that Arab women are motivated by cultural norms and restrictions to use technology to open up to the outside world, leading to an

increase in Blackboard usage in Saudi Arabia which has strict laws governing how women should behave, and communicate. The blackboard system might assist in overcoming the cultural boundaries, obstacles, and challenges by offering alternative ways of interacting, communicating, collaborating, and maintaining the respected traditions and social norms of the Arab societies (Al-Fadhli, 2008). Thus, male lecturers were more likely than female lecturers to encounter obstacles in using the blackboard system. DeNeui and Dodge (2006) suggest that when using a Blackboard, women may be more circumspect and attentive while male lecturers may have more negative attitudes. This study, however, conflicts with studies that found no discernible variations in the use of the Blackboard.

4. Conclusion

Despite cultural differences, the Blackboard system has given university education a dimension by providing lecturers with significant teaching benefits. The Blackboard system makes it simple for lecturers to access course materials during and after class. It can also help them have more opportunities to interact with one another, regardless of gender, and improve lecturer-student communication. However, the top themes influencing Blackboard use have been identified as technological barriers and institutional barriers.

In the current environment, lecturers cannot communicate freely due to cultural limitations. Based on the findings of this study, therefore, the government of Saudi Arabia and the Management of the Arar University College should encourage the use of the Blackboard system through training and technical support since it does not alter traditional and cultural norms. The university must thoughtfully address these issues for lecturers to successfully use the Blackboard system in their teaching.

Ethics Approval and Consent to Participate

The researchers used the research ethics provided by the Research Ethics Committee of Universiti Putra Malaysia (RECUPM). All procedures performed in this study involving human participants were conducted in accordance with the ethical standards of the institutional research committee. Informed consent was obtained from all participants according to the Declaration of Helsinki.

Acknowledgement

This article is part of a doctoral thesis submitted to the University of Putra Malaysia.

Funding

No funding is received for this study.

Conflict of Interests

The authors reported no conflicts of interest for this work and declare that there is no potential conflict of interest with respect to the research, authorship, or publication of this article.

References

- Al-Fadhli, S. (2008). Students' Perceptions of E-learning in Arab Society: Kuwait University as a case study. *E-Learning and Digital media*, 5(4), 418-428.
- Aljawarneh, S. A. (2020). Reviewing and exploring innovative ubiquitous learning tools in higher education. *Journal of computing in higher education*, 32(1), 57-73.
- Al Meajel, T. M., & Sharadgah, T. A. (2018). Barriers to using the blackboard system in teaching and learning: Faculty perceptions. *Technology, Knowledge and Learning*, 23(2), 351-366.
- Choy, K., Hopgood, A. A., Nolle, L., & O'neill, B. C. (2005). Performance of a multi-agent simulation on a distributed blackboard system. *Int. Journal of Simulation Systems, Science and Technology*, 6, 57-72.
- Daniel, B. K. (2019, June). Student experience of the maximum variation framework for determining sample size in qualitative research. In *18th European Conference on Research Methodology for Business and Management Studies* (p. 92).
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.
- DeNeui, D. L., & Dodge, T. L. (2006). Asynchronous learning networks and student outcomes: The utility of online learning components in hybrid courses. *Journal of Instructional Psychology*, 33(4).
- Faisal, P., & Kisman, Z. (2020). Information and communication technology utilization effectiveness in distance education systems. *International Journal of Engineering Business Management*, 12, 1847979020911872.
- Helsper, E. (2021). The digital disconnect: The social causes and consequences of digital inequalities. *The Digital Disconnect*, 1-232.
- Hill, C. E., Knox, S., Thompson, B. J., Williams, E. N., Hess, S. A., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology*, 52(2), 196.
- Lakens, D. (2022). Sample size justification. *Collabra: Psychology*, 8(1), 33267.
- Kudale, A. E., & Wanjale, K. (2015). Human-computer interaction model based virtual whiteboard: A review. *International Journal of Computer Applications*, 975, 8887.
- Morse, J. M. (2000). Determining sample size. *Qualitative Health Research*, 10(1), 3-5.
- Moonsamy, D., & Govender, I. (2018). Use of blackboard learning management system: An empirical study of staff behavior at a South African university. *EURASIA Journal of Mathematics, Science and Technology Education*, 14(7), 3069-3082.
- Scully, G., & Kerr, R. (2014). Student workload and assessment: Strategies to manage expectations and inform curriculum development. *Accounting Education*, 23(5), 443-466.
- Sharifov, M., & Mustafa, A. S. (2020). Review of Prevailing Trends, Barriers and Future Perspectives of Learning Management Systems (LMSs) in Higher Institutions. *The Online Journal of New Horizons in Education*, 10(3), 166.
- Tawalbeh, T. I. (2018). EFL Instructors' Perceptions of Blackboard Learning Management System (LMS) at University Level. *English Language Teaching*, 11(1), 1-9.
- Tsang, E. W. (2013). Case study methodology: Causal explanation, contextualization, and theorizing. *Journal of International Management*, 19(2), 195-202.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.
- Welch, C., Paavilainen-Mäntymäki, E., Piekkari, R., & Plakoyiannaki, E. (2022). Reconciling theory and context: How the case study can set a new agenda for international business research. *Journal of International Business Studies*, 53(1), 4-26.