

Exploring the Impact of MyInspire Utilisation on Academic Performance at Open University Malaysia

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Abstract

Open University Malaysia is a renowned institution that has pioneered the open and distance learning mode of education in Malaysia. It provides students with a rich, all-encompassing educational experience that crosses geographical boundaries with its advanced online learning platform, extensive support services, and committed instructors. Open University Malaysia has earned a reputation as a leading institution in Malaysian open and distance learning thanks to its unwavering commitment to democratising education via technological innovations. Many elements, including course design, institutional support, and student characteristics, influence the complex topic of academic performance at an open and distance learning institution like Open University Malaysia. This study examined student participation in Open University Malaysia's learning management system, MyInspire, which provides students with access to subject content, opportunities for tutor interaction and peer collaboration, and online tutorial participation. This study provides information on the number of students who accessed the platform during an academic semester and those who participated in online classes. A student's yearly academic performance is determined through an assessment that is held over three semesters. The assessment results comprised results from take-home final exams, online assessments, and assignments. The study focused on the effects of e-learning on academic performance at Open University Malaysia, as measured by online class attendance and use of the MyInspire platform. The results indicate that students' understanding and performance in their studies are positively influenced by their active participation on MyInspire.

Keywords: academic performance, e-learning, learning analytics, MyInspire, open and distance learning, student engagement

1. Introduction

Open University Malaysia (OUM) is distinguished as Malaysia's premier and largest open and distance learning (ODL) institution, boasting a substantial learner population. With an average enrolment of more than 25,000 active learners per semester, OUM conducts courses through the MyInspire learning management system and self-directed learning utilising provided materials. A significant portion of OUM's learner population comprises adults, primarily employed. Given the challenges they face in balancing responsibilities related to family, work, and studies, they may also encounter certain difficulties in learning. Acknowledging this, OUM allows learners to choose their preferred mode of learning. Participation in online discussion forums is actively encouraged, but not strictly mandated, in recognition of the unique circumstances of adult learners striving to juggle their various commitments.

ODL is a growing trend in education. It allows students to learn at their own pace and from anywhere in the world. However, ODL can also be challenging, as students may not receive the same level of support that they would in a traditional classroom setting. There is a growing body of research on academic performance in ODL, defined as the extent to which students in ODL programmes can achieve their academic goals. Students in ODL programmes in Malaysia and other countries can achieve similar levels of academic performance as students in traditional face-to-face programmes.

Learning analytics is a growing educational trend that uses data to predict academic performance. It can help identify at-risk students and provide targeted interventions, but there are privacy and ethical concerns (Foster & Siddle, 2020). Learning analytics is the process of collecting and analysing data on student behaviour to improve learning and can be used to assess student engagement and academic performance in ODL institutions by tracking student activity in online courses such as course logins, time spent on course materials, participation in discussions, submission of assignments, and test scores. By tracking student activity in online courses, learning analytics can identify students at risk of disengagement or academic failure. This information can then be used to provide targeted interventions to help them succeed.

Academic performance in ODL institutions is a complex issue influenced by various factors, including student characteristics, course design, and institutional support. According to Hayat et al., (2020) there are additional challenges that can influence academic performance in ODL, such as lack of motivation, difficulty in managing time, and limited access to support services. Moreover, Mwaniki, et al. (2020) asserted that students in ODL institutions may not be familiar with technology, lack support from family and friends, and face financial constraints. There are also potential problems with using learning analytics to predict academic performance. Predictions about academic performance based on learning analytics may not be accurate. This can lead to students being unfairly labelled at risk of failure or denied opportunities because of their predicted performance. Thus, this paper focuses on the academic performance of OUM students as evidenced by attendance in scheduled online classes and use of the MyInspire platform in one subject in a particular semester.

2. Literature Review

2.1. Open and Distance Learning

Many educators see technology as a tool for effective self-directed online learning. Nevertheless, critics question the effectiveness of learning in an online environment compared to traditional classroom instruction. It should be noted that in this digital age, when learning is often considered a lifelong endeavour, traditional classroom-based delivery modes may not be appropriate for adult learners, the majority of whom are working professionals.

ODL is primarily regarded as a viable alternative to traditional learning. The development of ODL has triggered a paradigm shift in the landscape of modern education. Garrison and Kanuka (2004) asserted that online learning environments successfully foster a sense of community and engagement among learners, thus challenging the concept that physical proximity is required for meaningful educational interaction. Furthermore, Means et al. (2013) found that ODL improves accessibility by breaking down geographical barriers and giving educational opportunities to a broad and frequently underserved audience. The advancement of technology and the introduction of sophisticated learning management systems have further facilitated the seamless integration of multimedia resources, collaborative tools, and interactive assessments, thereby improving the overall learning experience in virtual classrooms.

While the development of ODL has received widespread commendation, a growing body of research has highlighted the inherent limitations associated with this modality. Studies have looked into student persistence and attrition in online courses, identifying such relevant aspects as self-discipline, motivation, and the requirement for strong support systems (Shea & Bidjerano, 2009). Furthermore, research highlights the importance of instructor presence and effective communication tactics in promoting student satisfaction and success in online environments (Swan, 2001). As more institutions implement

ODL models, educators, administrators, and legislators must have a thorough awareness of both their benefits and downsides in order to realise the potential of this educational approach fully.

OUM learners are given access to MyInspire, a comprehensive online learning platform designed to enhance their educational experience at the university. Prior to the Covid-19 pandemic, OUM utilised a blended learning approach, which required students to attend classes at designated learning centres physically. However, since the start of the pandemic in 2020, OUM has transitioned to a fully online learning model, making MyInspire a crucial component of the students' academic journey. Students use MyInspire to access a wide range of resources and materials for their enrolled subjects (Kaur et al., 2021). The platform allows for a structured learning path, with students being assigned an e-tutor for each topic, who is responsible for presenting the subject matter and guiding the students through the semester (Chiam & Woo, 2019). The e-tutors play a crucial role in facilitating the learning process, as they engage with students through interactive online discussions, fostering collaboration and knowledge-sharing (Hamidon et al., 2023). Integrating MyInspire into OUM's study ecosystem has been a significant asset since the pandemic, enabling the institution to transition to a fully online learning environment seamlessly. The platform's user-friendly interface and comprehensive features have been instrumental in ensuring a smooth and engaging learning experience for students despite the challenges posed by the pandemic.

2.2. Learning Analytics

The discipline of learning analytics, which collects and analyses students' learning data, aims to improve the entire learning experience. Studies have investigated its various uses, which include predicting academic achievement, identifying at-risk pupils, personalising teaching approaches, and providing tailored feedback (Viberg et al., 2018). Learning analytics, which scrutinises data such as login frequency, time spent on learning activities, discussion participation, and assignment submissions, has the ability to predict students' academic progress, thus allowing instructors to intervene proactively and provide assistance essential for long-term success by identifying students who are struggling or disengaged.

According to Arroyo et al. (2018), learning analytics plays a crucial role in identifying students who may be struggling academically by detecting patterns in their data. These interventions are essential for promoting academic achievement. Furthermore, learning analytics makes it easier to customise instruction. Learning analytics improves efficacy and student satisfaction of the educational journey by customising the learning experience to each individual student's interests, learning preferences, and needs (Hooda & Rana, 2020). Moreover, learning analytics is essential for giving students feedback on how well they are learning. This gives them the ability to assess their own progress and modify their study methods by providing them with knowledge about their strengths and weakness (Banihashem et al., 2022). Notwithstanding these potential benefits and advantages, it is imperative to recognise and confront privacy risks and ethical issues related to the use of learning analytics in educational settings (Yilmaz & Yilmaz, 2020).

2.3. Student Engagement

Student engagement is a complex and multifaceted construct that has been the subject of much research in recent years. The academic literature on student engagement has explored a variety of factors that contribute to student engagement, including motivation, interest, participation, and belonging (Coates, 2005; Gray & DiLoreto, 2016). The literature has also identified a number of its benefits, such as improved academic performance, increased retention rates, and reduced dropout rates. Motivation may stem from intrinsic factors, like a genuine interest in the subject matter, or extrinsic factors, such as the pursuit of grades or rewards (Ferrer et al., 2022; Thomas, 2013). Moreover, fostering interest involves presenting students with stimulating and challenging content while affording them opportunities to explore their individual passions. Encouraging participation entails cultivating a classroom atmosphere conducive to learning and offering avenues for students to assume leadership roles. Finally, Kiefer et al. (2015) and Ainley (2012) contended that nurturing a sense of belonging involves cultivating a classroom community characterised by safety, respect, and a shared sense of purpose beyond individual selves.

2.4. Academic Performance in ODL Institutions

Local studies have focused on the academic performance at ODL institutions, thus reflecting their increasing prominence in Malaysia's educational scene. Yusof et al. (2016) conducted research on the elements that affect academic success in virtual learning settings, finding that technological competence, self-motivation, and the calibre of virtual interactions are important contributors. Their findings illustrate the complexity of academic success in an online setting and the necessity of having a thorough grasp of the variables influencing student performance.

Furthermore, other studies have examined how well Malaysian ODL institutions' support systems work to improve student success. Studies by Omar et al. (2018); Azmi and See May (2021) and Zamri et al. (2021) evaluated how academic support services, such as virtual libraries and online tutoring, contribute to successful learning outcomes. Their findings underscore the significance of strong support networks in alleviating obstacles encountered by remote learners, ultimately leading to enhanced academic achievement (Jegathesan et al., 2018; Azmi & See, 2021; Nkolo, 2021). Understanding the dynamics of academic performance and efficacy of support mechanisms thus becomes increasingly important for institutions looking to maximise their students' learning experiences as online education continues to develop in Malaysia. As well, the academic performance of open and distance learners can be improved by addressing the factors that affect their learning. ODL instructors can provide support and guidance to help them stay motivated, self-regulated, and connected to others. They can also use technology to make learning more engaging and interactive.

2.5. Research Objectives

The research objectives of this study are to:

- i. Examine the correlation of student access to MyInspire towards academic performance at OUM, and
- ii. Examine the correlation between student participation in online tutorials and academic performance at OUM.

2.6. Research Questions

Based on the research objectives, the research questions are thus the following:

- i. What is the correlation between student access to MyInspire and academic performance at OUM?
- ii. What is the correlation between student participation in online tutorials and academic performance at OUM?

2.7. Conceptual Framework

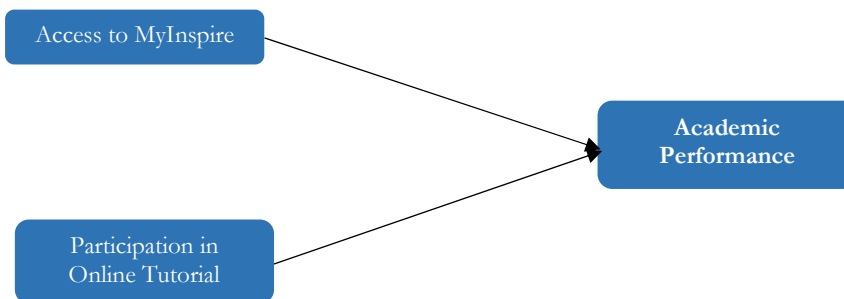


Figure 1. Conceptual Framework

3. Research Method

This study analysed the participation of OUM students in MyInspire. The data focused on the number of times students accessed MyInspire in one particular semester and their participation in online tutorials conducted by the tutors. The retrieved data was then mapped against their academic performance for that semester, derived from the students' exam results across three semesters in a subject conducted at OUM. The formative assessment results were based on online assessments and assignments, while the summative assessment was based on a take-home final exam. The comprehensive evaluation of student performance is a rigorous process that includes assignment outcomes and final exam results. At the start of each semester, students were given assignment questions, for which they were also given ample time to produce their work. Comprehensive discussions were held during tutorial sessions to ensure that everyone understood all relevant aspects in the topic. As an online communication tool, MyInspire is a useful resource for anyone needing additional assistance. The assignment format has two components: written assignment and online class participation, accounting for 50% of the overall topic evaluation. An evaluative rubric is carefully used to guide the assessment process, ensuring a consistent and fair review.

As the semester progressed, students were provided with the examination schedule in preparation for the final assessment, which adopted a multiple-choice-question format. Comprising 40 questions, each with three answer choices, the final exam contributes 50% of the total marks for the course. This dual assessment approach, comprising assignments and the final exam, establishes a comprehensive framework for evaluating student performance, with the combined scores forming the basis for the cumulative assessment total of 100%. This systematic approach not only encourages continuous engagement throughout the semester but also emphasises the significance of both ongoing coursework and final assessment in determining overall academic achievement.

The total assessment score and total exam score for each student were then plotted against the number of times they accessed MyInspire for the content of the subject during the semester. In addition, the number of times the students attended e-tutorial sessions was also analysed and mapped towards their total academic performance. The results were sorted based on the increasing order of overall marks. A trend line was added to evaluate any trend in access to the subject content. According to Atherton et al. (2017), this is a new and expanding area of research, with the methodology used in this study being less common in the ODL research area. As a result of this method, this study will be a pioneer in descriptive research at an ODL institution.

4. Findings and Discussion

This section discusses data analysis for this study.

Table 1. Respondents' Profiles

Respondents' Profiles		Frequency	%
Location of Learning Centre	Borneo Region	26	21
	Central Region	39	32
	Eastern Region	6	5
	Northern Region	24	20
	Southern Region	27	22
	Total	122	100
Gender	Female	96	79
	Male	26	21
	Total	122	100
Race	Others	12	9
	Chinese	39	32
	Indian	34	28
	Kadazan	1	1
	Malay	35	29

Respondents' Profiles		Frequency	%
	Sikh	1	1
	Total	122	100
Marital Status	Divorced	2	2
	Married	43	35
	Others	4	3
	Single	73	60
	Total	122	100
Religion	Buddhist	31	25
	Christian	12	10
	Hindu	33	27
	Muslim	41	34
	Others	5	4
	Total	122	100

The respondents' profiles reveal a diverse and representative sample from various regions and demographics. Many were from the central and southern regions of Peninsular Malaysia, comprising 32% and 22% of the respondents, respectively. Gender distribution showed a notable imbalance, with females dominating at 79%. Ethnic diversity was evident, with Malay and Chinese students constituting the largest groups at 29% and 32%, respectively. Regarding marital status, single students represented the majority at 60%, followed by married students at 35%. Religious composition was also diverse, with Muslims (34%), Hindus (27%), and Buddhists (25%) being the most populous. These findings underscore the importance of considering demographic factors in interpreting study results and ensuring the applicability of findings across different groups within the population.

4.1. Access to MyInspire

The results show that the frequency of accessing MyInspire plays a significant role in contributing to academic performance in their enrolled subject. As the main platform for online studies at OUM, MyInspire is always accessible, allowing students to interact with tutors, access learning materials, and discuss with their peers. Tools and components within MyInspire are also utilised as part of student assessment. Thus, to complete a semester, students must use the platform for self-managed learning.

This study categorised 122 students enrolled in one subject (i.e., Taxation) into two groups, and found a significant difference between the two. The first group consisted of students who spent more time using MyInspire: they accessed the platform more than 100 times during one semester for self-managed learning. The second group spent less time on MyInspire: they accessed MyInspire fewer than 100 times in a semester. In terms of academic performance, these two groups achieved very different results. Of the 122 students, 56 (or 46%) belonged to the first group, with a maximum number of access of 813 times, demonstrating the intent to maximise the use of MyInspire to excel in the subject enrolled. As shown in Figure 2, the overall marks for the students show clear consistency. These students managed to score a C grade or higher. The highest mark obtained was 81%, which was an A grade.

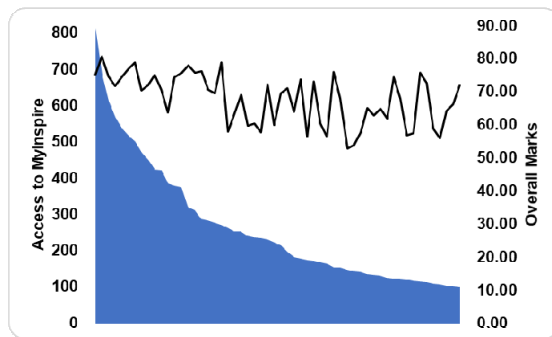


Figure 2. Performance of students with high-frequency access to MyInspire (more than 100 times)

A total of 66 students (54%) were in the second group. This group spent less time on MyInspire, with a range of only three to 99 times and an average of 48 times accessing the platform in a semester. As shown in Figure 3, this group demonstrated a varied overall academic performance in the same subject. Even though several students managed to obtain high marks, the majority in this second group failed to do so. On average, students in this group obtained 48%, which awarded them a C grade.

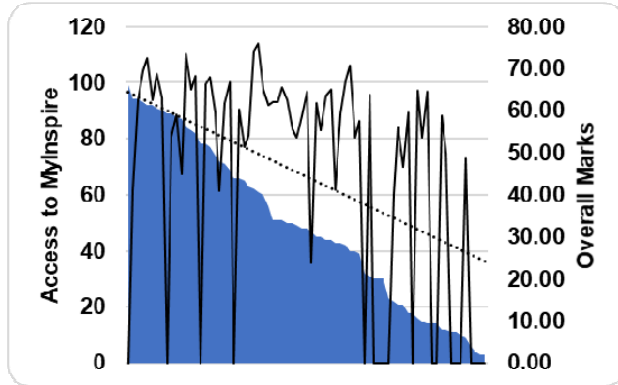


Figure 3. Performance of students with low-frequency access to MyInspire (fewer than 100 times)

4.2. Participation in Online Tutorials

Every semester, OUM students are assigned an e-tutor, who acts as the main guide in each assigned subject for the whole semester. The e-tutor provides information and communication on the specific assigned subject through MyInspire. In addition, the e-tutor also conducts online tutorials (i.e., e-tutorials) based on a planned schedule. Before the semester starts, e-tutors will schedule online sessions so that the students can plan their individual study timetables. However, many OUM students, the majority being working adults, face difficulties in attending the e-tutorials. To overcome this problem, students are provided links to recordings of the e-tutorials, which allows them to watch and re-watch the sessions at their convenience.

Due to various personal commitments, only 30% of the 122 students enrolled in the Taxation course were able to attend the scheduled online sessions. However, of those who did manage to attend the e-tutorials, 27% scored an A grade, 53% scored a B grade, while the rest (20%) scored a C+ grade. Thus, attending the e-tutorials appears to be important, as it gives students the opportunity to interact with the e-tutor directly, and obtain first-hand information for the courses they are enrolled in.

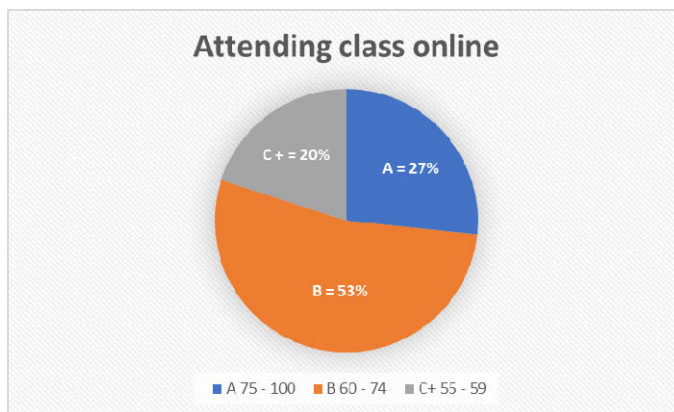


Figure 4. Academic performance of students who attended online tutorials

5. Discussion

This study presents a critical analysis on the relationship between student engagement on MyInspire and academic performance in one subject taught at OUM. The empirical analysis highlights a significant correlation between the frequency of access to MyInspire and students' academic performance. Specifically, students who accessed the platform more than 100 times during the semester (Group 1) performed better than those who did so less frequently (Group 2). This finding suggests that active utilisation of MyInspire, which provides access to course content, and facilitates interaction with tutors and collaborative learning with peers, positively influences their understanding and performance in the assigned subject. Furthermore, Group 1 students exhibited greater consistency and better academic performance, with some achieving excellent grades. This is in contrast to students in Group 2, who showed a range in performance and generally poorer results, with most of them averaging only a C grade.

This disparity underscores the importance of encouraging and supporting students to engage extensively with digital learning resources for improved academic outcomes. MyInspire serves as an essential tool for self-managed learning at OUM. Given its round-the-clock accessibility and comprehensive features like tutor interaction and content access, promoting its effective utilisation is crucial. OUM should introduce strategies that can encourage students to maximise the resources provided to them, thereby enhancing their learning experience and improving their academic performance.

5.1. Implication of the Study

This study has pedagogical implications, as it suggests the critical need for customised support mechanisms that can encourage students to utilise the platform and develop digital literacy. It is crucial that OUM lecturers and e-tutors actively strive to integrate MyInspire effectively into course delivery, emphasising its significance as a learning tool. By providing thorough and comprehensive guidance on navigating the platform, accessing resources, and fostering online interaction, students can be empowered to leverage MyInspire effectively to achieve academic success. Moreover, this study highlights the challenges faced by adult learners, such as limited participation in scheduled online classes due to external commitments. While recorded sessions can help mitigate this challenge to a certain degree, prioritising active participation in live sessions would be key to optimise learning outcomes. Encouraging attendance during online classes facilitates direct interaction with e-tutors, thus fostering a deeper understanding of course material.

The data on e-tutorial participation further underscores its significant role in academic achievement. Despite difficulties in attending the e-tutorials, students who actively participated in online classes demonstrated higher success rates, with many achieving top grades. This highlights the importance of facilitating accessible and interactive online learning environments to maximise student engagement and learning outcomes.

In summary, this study emphasises the crucial role of student engagement on MyInspire in shaping student performance in a course taught at OUM. It underscores the necessity for strategic interventions aimed at promoting active utilisation of digital learning resources, enhancing online tutorial participation, and providing targeted support to empower students in their academic endeavours. By effectively leveraging platforms like MyInspire and addressing associated challenges, OUM can create a conducive learning environment that fosters student success and achievement.

5.2. Future Studies

Based on the study's findings, future research can incorporate a longitudinal study to trace students' MyInspire usage across multiple semesters to assess the sustained impact on academic performance over time. This may involve conducting an analysis of the evolution of platform engagement patterns and their correlation with changes in academic achievement throughout a students' academic journey. Additionally, a qualitative approach using interviews or focus groups can be considered to delve into the motivations, experiences, and challenges students encounter when using MyInspire for self-managed learning. Gaining a comprehensive understanding of students' perspectives through these research efforts will facilitate

more profound and deeper insights into effective strategies to enhance platform engagement and optimise learning outcomes. Further studies could also indirectly examine the broader consequences of MyInspire usage beyond academic performance. This may include investigating its influence on students' self-efficacy and digital skills. Hence, these future study directions can provide OUM with deeper insights into the dynamics of digital learning platforms, optimise strategies for promoting student engagement and success, and ultimately, enhance the quality and effectiveness of online learning delivery.

6. Conclusion

The research highlights the need for customised support mechanisms to encourage students to use MyInspire and improve their digital literacy. In order to empower students to achieve academic success, lecturers and e-tutors should actively strive to integrate the platform into course delivery. They should also provide guidance on navigation, resource access, and online interaction. Adult learners can overcome obstacles like time constraints if they prioritise attending live sessions in addition to using recorded materials. Students who interact directly with e-tutors in class can improve their understanding of the material. Participation in online tutorials greatly influences academic achievement, with students who are actively involved in the process yielding higher success rates and better grades. To maximise student engagement and learning outcomes, it is imperative to create online learning environments that are both interactive and accessible. To sum up, this study highlights how academic performance at OUM is shaped by students' engagement with MyInspire. The study emphasises the need for targeted support to help students succeed academically, increase participation in online tutorials, and the active utilisation of digital learning resources through strategic interventions. OUM can establish a favourable learning environment that promotes student success and achievement by cleverly utilising platforms such as MyInspire and resolving related issues.

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