



Motivation and Challenges Faced by Distance Education Learners: Insights from Bicol University Open University, Philippines

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Abstract

The increasing reliance on distance education (DE) requires a comprehensive understanding of student motivations and the multifaceted challenges they encounter in asynchronous learning environments. This study aims to explore the perceptions, motivations, and obstacles faced by 67 learners enrolled in Bicol University Open University (BUOU) programs during the first semester of the 2023–2024 academic year. Utilizing a descriptive research approach, the study identified that students were primarily motivated by convenience, flexibility in time management, and the ability to balance professional work with family responsibilities. However, significant challenges were identified, led by technical and connectivity issues (21.3%), time management difficulties (19.1%), a lack of face-to-face interaction (14.9%), and miscommunication (12.8%), followed by limited resource access (11.7%), self-discipline issues (11.7%), and insufficient technological proficiency (7.4%). Despite these hurdles, learners successfully navigated their programs through rigorous self-discipline and consistent support from the faculty-in-charge (FIC). The study concludes that while DE offers essential flexibility, its long-term success depends on addressing technical and interactive gaps. It is recommended that the institution establish a dedicated learning hub with stable connectivity, increase student engagement through diverse online activities, and strengthen synchronous sessions by incorporating high-impact topics such as emerging technological trends and international research publication strategies.

Keywords: Open distance e-learning (ODEL), higher education institution, online learning, Bicol Region, distance education.

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Introduction

Open and distance education (ODEL) has become increasingly popular and has essentially changed the educational landscape. It has grown into an educational strategy that resolves access to education (Garlinska et al., 2023). This significantly benefited the students and the institution in terms of course availability, affordability, and convenience. DE is not a new concept anymore. Understanding and adapting to different learning modalities plays a crucial role in ensuring successful learning outcomes. DE, by its very nature, requires students to take charge of their learning and utilize various resources and tools to acquire knowledge (Dickson & Enock, 2024). For graduate school students, it is imperative to recognize the different learning modalities and employ strategies that align with personal strengths and preferences. According to (Fresen, 2018), with the benefits of simple access to materials and interactive activities, distance education makes it possible for non-traditional students to attend in-person classes. However, there have been challenges with the dual-mode offering (Rocha Trinidad et al., 2000). The council on higher education in South Africa upheld mandates for distance education, which prompted the creation of rules and structures for contact institutions looking to increase their offerings. With many advantages offered by DE, there are also misconceptions about DE in the digital age, such as the idea that e-learning is a new form of education, the idea that objectives justify methods, and the idea that teachers have no place in the process of creating knowledge. It also identifies four areas of concern for further advancement: closing the digital gap, developing affordable technology, redefining teaching roles, and establishing systems for quality control (Mhlanga, 2024).

In 2022, the Philippines' internet population reached 76.01 million with an internet penetration rate of 68.0% at 46.44 Mbps fixed internet connection and 18.68 via cellular network. About 92.05 million (or 82.4% of the total population) are in the social media network. Approximately, 3.1 million increased between 2021 and 2022 (Sivakumar et al., 2023). That means social media become the fastest-growing market, especially for online teaching and learning activities. And, according to Statista Research Department (2023), over 95 million Filipinos will consume much of their time as social media users as there are more and more opportunities that can be discovered (Tetteh & Kankam, 2024). This data shows that online education is readily accessible. It provides opportunities for learners to access quality education remotely, regardless of geographical location. However, distance learning comes with its own set of best practices and challenges that students must be aware of. The type of study materials, the absence of multi-media instruction, learning insecurities, a lack of feedback, social interaction, support, and student training, the low status of distance education institutions, the strictness of university regulations, misunderstandings about the function of distance education departments, and discrimination are some of the issues.

The use of multi-media technology during PCPs, careful consideration of the unique demands of distant learners, effective planning and collaboration, instruction of computer basics, input from distant educators, and additional study into course development strategies are some of the solutions (Kumar Attr, 2012). There are numerous schools that have already been offering online learning modalities even before the pandemic began (Hadianti et al., 2023). DE has emerged as a crucial mode of learning, especially in the context of BOUO, where accessibility and flexibility are prioritized. The BOUO has been in existence for twenty-six (26) years and counting. As we delve into the challenges faced by distance education learners in the first semester of the school year 2023-2024, it becomes imperative to understand the significance of distance education and its relevance to BOUO. This aims of this study to explore the issues and obstacles encountered by learners in the realm of DE, examine the technological infrastructure and pedagogical approaches employed, evaluate the support services provided, and propose strategies for enhancing the distance learning experience. By shedding light on these aspects, we aspire to contribute to the advancement and improvement of distance education within the University, ultimately ensuring an enriching educational journey for all learners involved.

Methodology

The study used a descriptive type of research involving a quantitative data collection method. A Google Form survey was crafted and sent out to the students of BUOU for the first semester of school year 2023-2024 who are officially enrolled. The population of this study consisted of sixty-seven (67) students enrolled in various degree programs offered by BUOU. Forty-seven (47) of which are female, eighteen (18) males and two (2) preferred not to say the gender. The majority, or 64.2%, of the respondents are between 25 to 35 years old. Respondents between 36 to 45, and between 46 to 55 recorded 22.4% and 6.0%, respectively. The respondents are from region V, the National capital region (NCR), and the United Arab Emirates (UAE). Not all of the respondents work in the place where they reside; some have worked in Albay, Camarines Sur, Camarines Norte, Catanduanes, and Quezon City. A Likert scale was used to determine the responses as strongly agree, agree, neutral, and strongly disagree. The study used frequency to count the distribution of the response values that provide patterns and trends.

Results and Discussion

The discussion dwells on the issues and challenges of DE learners, which evaluate the program offerings and explore potential opportunities to improve the strategic administrative policies of BOUO. With the preparation of the survey instrument in Google Forms, the respondents were asked why they enrolled in DE programs. Table 1 shows the respondents' motivations for enrolling in distance education. Respondents are motivated because of time and convenience. The majority (or 46.9%) of the respondents believed that enrolling in DE would allow them to manage their time with their work, health, and family. Adult learners possess a variety of experiences, both personal and professional. they do not focus solely on the learning process, as they hold family responsibilities along with work responsibilities. 43.9% and 9.2% are motivated by convenience and reasons related to work and residence preferences.

Table 1. Respondents' motivation for enrolling in the DE program

Indicators	Percentage (%)
No time for in-person classes due to work, medical condition, and care for family	46.9
It is more convenient for me to work at my own pace	43.9
Most schools offering the program I am taking/took are/were far from my workplace/residence	9.2

The responses are gathered based on the classification of respondents. That is, 83.6% are employed full-time, and 11.9% are working as freelancers, entrepreneurs, and in a contract of service status. The respondents are working in the Bicol Region, NCR, and Abu Dhabi. These responses can be drawn that DE courses provide students with more convenience and flexible class schedules than those enrolled in residential programs or on-campus programs. Many studies revealed an increase in student preferences for online learning for several reasons such as physical distance, time management, accessibility and flexibility (Stephani et al., 2023) and disability. Motivation, support of the institution, and understanding of the environment may influence the student's performance to stay in the program and avoid filing a leave of absence (LOA), cross-enroll, or even considering dropping the program. One of the key advantages of distance education is its flexibility, allowing students to study at their own pace and convenience. This mode of learning has opened up opportunities for individuals who are working or unable to relocate for traditional campus-based education. It allows students to pursue their education remotely without the need to attend classes

physically. In India, distance education is offered by various universities and institutions, providing a wide range of courses and programs at different levels.

Challenges in Distance Learning

The DE learners need to exert extra effort to be updated with the trends in technology. During the COVID-19 pandemic, learner's challenges vary in terms of type and extent. The greatest challenge was linked to the learning environment at home, and the least challenging was technological literacy and competency (Barrot et al., 2021). The institutions, faculty, and students become evident in searching for appropriate platforms as it is necessary to transform the challenges into opportunities (Adedoyin & Soykan, 2023). In one of the institutions in Surakarta, Indonesia, students are faced with a lack of information technology infrastructure, e-learning platforms, time to adapt, and the difficulty of internet access. Teachers used WhatsApp groups to communicate and share resources with students (Makruf & Tejaningsih, 2023; Mithun R & Roopadarshini S, 2024). In Zimbabwe, lack of sufficient time for study, difficulties in access and use of ICT, ineffective feedback and lack of study materials were observed and a balanced teaching and learning system was highly recommended.

At BOUO, capability training on flexible learning was implemented to prepare and capacitate teaching personnel and administrators to adapt to the changing educational landscape, enhance pedagogical strategies, integrate technology in teaching, and develop skills and leverage technology for educational purposes. Teachers used the BOUO learning management system (LMS) as the teaching and learning platform. For BOUO, online teaching is not new; it has been used online delivery mode as the primary approach for teaching and learning environments. However, learners still encounter challenges. Some of these challenges are presented in Table 2. Among the challenges encountered are related to technical, time management, and communication channels. About 41.0% of the respondents faced difficulties in time management and self-discipline. The technical issues and problems in connectivity (23.1%), miscommunication between student and teacher (10.3%), lack of technological proficiency and activities not easy to accomplish (7.7%), self-motivation (5.1%), lack of face-to-face interaction, and limited access to resources (2.6%). Online engagement, to a degree, has to be engineered. That is, it needs to be part of an intended design. For example, you cannot expect students to engage in meaningful discussion on a particular topic if each student is at a different stage of the learning program. Group work and ongoing dialogues are best maintained if there is a common goal or purpose.

Table 2. Encountered challenges by learners

Challenges	Percentage (%)
Time management and self-discipline	41.0
Technical issues and connectivity problems	23.1
Miscommunication between student and teacher	10.3
Lack of technological proficiency	7.7
Activities not easy to accomplish	7.7
Self-motivation and discipline	5.1
Lack of face-to-face/ synchronous class	2.6
Lack of access to resources	2.6

Many students enrolled in universities offering distance education programs encountered the same challenges, only that they differ in type and extent. There is also a significant difference between a DE learner and an on-campus student. According to (Pierrakeas et al., 2004), there was a relationship between dropout with intrinsic (student-related) factors such as sickness and work/school conflict and extrinsic (institutional-related) factors such as study methods and materials, educational approach, and tutor influence.

Challenges in the use of Web-based systems as an education platform

Even in the use of web-based portals and systems as education platforms (Yilmaz & Karadag, 2023), studied the Turkish distance education platform in terms of program structure, program launching process, legislation, instructional design, assessment and evaluation, communication and interaction, support, technical issues, and program evaluations. Researchers concluded that DE web-based systems should start with good planning and focus on the requirements. While digitization presents numerous advantages, it also brings with it a host of challenges, particularly in the context of distance education in Algeria (Ndibalema, 2022). One of the primary challenges faced by Algerian institutions is the digital divide, with many students lacking access to reliable internet connectivity and electronic devices necessary for online learning. This poses a significant barrier to students in remote and underserved areas, limiting their ability to participate in digital learning experiences fully. With these challenges, learners have affected their learning ability. The greatest reason is time management, which balances family activities, work, and class schedules (Table 3). Technical and connectivity problems followed this. These were also observed in some parts of Indonesia, where students have problems accessing resources because of different demographical environments (Makruf & Tejaningsih, 2023).

Table 3. Challenges Encountered by the Learners

Challenges	Percentage (%)
Time management and self-discipline	41.0
Technical issues and connectivity problems	23.1
Miscommunication between student and teacher	10.3
Lack of technological proficiency	7.7
Activities not easy to accomplish	7.7
Self-motivation and discipline	5.1
Lack of face-to-face/synchronous class	2.6
Limited access to resources	2.6

Similarly, (Tarazi & Ruiz-Cecilia, 2023) found that students were less focused on online teaching and learning, had unsatisfactory learning platforms, had basic knowledge of the technology, had limited access to internet connectivity, poor internet connectivity, and students did not attend online lectures. Balancing work, family, studies, and activities can be difficult and needs intense energy. This implies that respondents are juggling for time to cope with challenges working on class requirements and activities, including technology problems, materials, and resources, demanding work schedules, and difficulties with class activities. Student workload is an integral element in how courses are designed and supported and how they are experienced by students (Kember et al., 1996). They lack focus as there are factors that allow distractions in their learning activities. Since respondents are professionals, they have office responsibilities, cope with report deadlines, attend trainings/seminars, and handle additional workloads. This suggests that learners should have effective time management and strong discipline, which are crucial key components for DE learners to succeed in their studies and achieve career growth and development. Table 4 presents the strategies employed by learners to overcome the challenges they encountered.

The majority of the learners overcome the challenges by self-paced learning (or 34.0%). It could be an impression that learners are aware that they must allocate time to balance work and school activities. Through self-paced learning, they can overcome the challenges. Careful design and pacing of study time, however, can deliver the benefits of online interaction without overloading students (Van Der Stap et al., 2024). Some of the activities include reading materials, mind focus, keeping motivated, adopting flexibility and addressing every challenge, on-time submission of activities, prioritizing and planning course of work actions, and facing the challenges and making solutions to

them. It also showed that 20.8% of learners overcome challenges through practicing proper time management and self-discipline. Learners set priority goal setting. In smart ways, they managed to prioritize tasks, work with plan, organize workload, and avoid multitasking. Meanwhile, 18.9% of the learners seek the help of colleagues and officemates to cope with the activities. The 15.1% and 11.3% are related to FIC assistance to learners and the use of technology resources.

Table 4. Activities of learners to overcome the challenges encountered

Activities	Percentage (%)
Self-pace learning: reading materials, keeping focused, determined, and motivated, checking communication like messenger group chats, being systematically resourceful, being flexible and adapting to every challenge, scheduling the activity, listing and prioritizing what needs to be done, self-motivation, focus and find time regarding the matter, focus on the goals, face the challenges and make the solutions to it, read and understand the topic thru audio-visual materials.	34.0
Practice and Proper Time Management, Self-discipline: time setting in a SMART way, -- to comply with the requirements, prioritize tasks, work with a plan, organize workload, and avoid multitasking.	20.8
Ask Colleague: ask for technical assistance from colleagues and officemates, asked classmates for help.	18.9
FIC: contact the professor to clarify something, and ask for technical support (via email, SMS, or consultation meetings).	15.1
Technology Resources: utilize the use of internet resources/ connectivity and visit LMS from time to time, provide backup devices in any medium phones, tablets, and power bank, and look for a strong signal – even going to the city proper, and high-speed internet connection.	11.3

The learner's learning activities were focused on knowledge-based, self-paced learning. That is, the learning activities are directed through an online modality where FIC delivers and monitors the progress of the learner. Respondents were asked about their behavior and class performance. In terms of FIC class performance, it was observed that all FICs are knowledgeable of the subject matter, provided relevant and up-to-date instructional and reference materials, fair and just assessment tools, and commendable teaching style. However, it was observed that in terms of the effectivity of the instructional materials, respondents were completely satisfied with a 72.7% rating, 24.2% were somewhat satisfied, and 3.0% were noted as neutral. Table 5 shows the respondent's rating of the FIC's action on the given indicator.

Table 5. Faculty-in-charge actions on certain situations

Indicators	Strongly agree	Agree	Neutral	Strongly disagree
FICs/ Program Advisers are approachable	68.7%	23.9%	6.0%	1.5%
FICs can easily be contacted.	55.2%	37.3%	6.0%	1.5%
FICs availability and communication	56.3%	35.8%	6.3%	1.6%
The FICs competent in handling the courses.	67.2%	26.9%	4.5%	1.5%
The FIC provided timely feedback in the tasks assigned.	50.7%	40.3%	7.5%	1.5%
The FICs provided technical assistance	55.2%	35.8%	7.5%	1.5%
The instructions given by the FIC are easy to understand.	50.7%	41.8%	4.5%	3.0%

Student-FIC engagement is crucially important in teaching online. This is because engaged learning in an online environment enables instructors to know what learners have been doing while teaching online (Hollister et al., 2022). It was observed that the FIC and Program Advisers are experts in their respective fields of expertise and disciplines, provided utmost attention in assisting the learners relative to the processing of documents from enrolment to defense, provided timely feedback on queries and faculty assessment questions (FAQ), timely uploading of activities, tasks, and lessons, and extending technical assistance. The FICs are in close contact with the learners through email, social media, or other forms of communication medium. These results were observed in the faculty individual performance commitment rating (IPCR) of which faculty were rated satisfactorily. This implies that FICs used different teaching strategies, combining institutional LMS, online chat, and video conferencing. The combination of both online chat and video conference in the online teaching and learning process was considered as one of the best teaching strategies applied by teachers (Lestyanawati, 2020). FICs are facilitative and approachable in many ways, and students are encouraged to submit subject requirements on time. Follow-ups, deadline extensions, lesson guides, and consultations are some of the best practices being observed. Similar to the other studies, FICs encountered teaching challenges in areas of technology, support for e-learning, and instructional materials. Nevertheless, the teachers expressed that through continuous usage of the e-learning system, they managed to conduct the teaching and learning activities. Respondents were also asked, "What is/are activities they find engaging in BUOU?" Table 6 shows that respondents perceived the student orientation, online Kapihan, dialogue with the Dean, and webinar series as engaging activities. These activities are facilitated by the BUOU student council with the support of the office and administration. A minimal fee was proposed by the council and approved by the office to finance the implementation of the activities.

Table 6. Respondent's engaging activities

Criteria	Percentage (%)
Student orientation	41.8
Online Kapihan	37.7
Dialogue with the Dean	18.0
Webinar series	1.6

A series of Online Kapitan sessions was implemented with invited resource speakers from the industry and BUOU alumni who were knowledgeable about the topic. The results show that these activities provided significant information on the policies, guidelines, and requirements of the institution. This implies that the majority of the students are more interested in attending the orientation, especially new students, so they can familiarize themselves with the policies, procedures, and requirements. Also, an opportunity for students to be familiarized with office organizational structure, FICs, and respective program advisers. Program advisers (PA) played an important role in students' subject and office activities. One of the best practices that PA holds is extending assistance and facilitating student's requests, especially requests for documents, filing leave of absence, and assigning thesis/dissertation advisers and panel members. In terms of the use of the learning management system (LMS), respondents were asked about the best features of the application. Table 7 presents the results of which the majority, or 54.5%, find the system easy to navigate, student-friendly tools, and grades can be easily accessed. Others find the system as easy to navigate only, student-friendly, and easy to navigate and student-friendly tools with 13.6%, 10.6%, and 9.1%, respectively.

The BUOU LMS was found to be readily accessible by the majority of respondents. In terms of performance, the system received positive ratings, with nearly all respondents (94.1%) indicating 'very satisfactory' or 'excellent'. Only a small percentage (6.0%) rated the system as 'fair'. Over the years, Moodle has gained the trust of educators around the world as a reliable and effective Learning

Management System for distance education (Alomari, 2024). The platform is constantly updated and improved to meet the evolving needs of online learners and instructors. Faculty members trust Moodle to provide a secure and stable environment for delivering course materials, interacting with students, and assessing learning outcomes.

Table 7. Respondent's assessment in using the BU LMS

Criteria	Percentage (%)
Easy to navigate, Student-friendly tools, Grades can be easily accessed	54.5
Easy to navigate	13.6
Student-friendly tools	10.6
Easy to navigate, Student-friendly tools	9.1
Grades can be easily accessed	6.1
Easy to navigate, Grades can be easily accessed	3.0
Student-friendly tools, Grades can be easily accessed	3.0

This trust in Moodle as a dependable LMS contributes to its widespread adoption in educational institutions globally. In terms of improvement, respondents were asked for possible recommendations on how to improve the services of the office. Table 8 presents the respondent's responses with specific notations. The responses are classified and categorized based on the weight and views of the learners into no recommendation, BU Portal, communication to learners, synchronous class, activity consideration, enrolment and payment, internet connectivity, library resources, scheduling, and student help desk. The classification is the result of the responses from learners when asked for possible recommendations.

Table 8. List of suggestions to improve the services

Criteria	Percentage (%)
No Recommendation: BUOU is now doing its best to ensure that all possible avenues are given to the students so that they have easy access to everything. The BUOU is doing great, enjoyable, and very satisfying. The BU distance learning already addressed the problems that students might encounter while undergoing online learning. And learners are fortunate to be part of the BUOU family.	36.2
BU Portal: The BUOU can generate its own online enrollment system, which allows students to enroll in their chosen subject easily. It is best and less hasslesome when signing, and remarks from the program adviser will be made and confirmed online. Suggested to reflect all subjects should be reflected in the BULMS. On-time posting of grades, improving the LMS, and providing online tutorials that can be accessed anytime and anywhere using YouTube, open educational resources (OERs), creating a group chat, and utilizing other platforms. It is recommended that synchronous classes be scheduled and other technology solutions be explored to streamline processes.	15.5
Communication to learners: Active engagement with the student, constant approach, and communication with learners through social media communications, FIC should provide effective and efficient communication, constant updates, and reminders on both ends – FIC and students. Notification of activities is important, dissemination should be improved, and updates on time. Include social media in the orientation activity.	15.5
Synchronous class: Provide synchronous classes at least once a month or twice a month and include schedules for online classes via Zoom or Google Meet.	6.9
Activity consideration: Give enough time to read and answer the task for a certain	5.2

subject, especially for those who are working, and provide more leniency, especially on the deadlines.	
Enrolment and payment: Provide convenient payment and enrollment processing. Utilize online applications for payment, such as GCash, for online transactions.	3.4
Internet connectivity: provide a strong and stable internet connection.	3.4
Library Resources: Provide access to library resources, particularly those references with online versions, and digitalize more books as much as possible.	3.4
Scheduling: Improve the scheduling system and make it course-specific.	3.4
Student Help Desk: establish a student help desk for student concerns and place a system to assist learners with a lack of knowledge. Provide on-time replies to queries either offline or online.	3.4

In 2023, the office performance rating was 4.01% (or very satisfactory) and 4.87% in the clientele satisfaction rating. In this sense, students perceived that they were satisfied with the services extended by the office. The respondents believed that BUOU is exerting all possible means and effort to improve not just its services but the curriculum, quality, and standard of graduates and that they are satisfied with the services. However, there are problems encountered the office needs to address. These problems are opportunities considering the focus and direction of BUOU is towards regionalization.

Conclusion

The rapid expansion of DE requires a balance between student motivation and the practical barriers of remote learning. This study evaluated the program offerings of BUOU by exploring learner motivations and identifying obstacles to improving strategic administrative policies. Using a survey-based approach, the research found that while learners are primarily motivated by the flexibility to balance work, health, and family, they frequently encounter technical issues, connectivity barriers, and a lack of face-to-face interaction. Despite these challenges, students demonstrated resilience through self-discipline and peer support. The study concludes that for DE to be effective, institutions must match flexibility with robust technical infrastructure and clear communication. Practically, this implies a need for dedicated learning hubs, increased online engagement, and targeted technology tutorials. Although limited by its focus on a specific cohort, this research highlights the necessity for future longitudinal studies to evaluate how policy changes impact long-term student retention and success.

Conflicts of Interest

The authors declare no conflict of interest.

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Author contribution

Benedicto B. Balilo Jr.: Conceptualization; Methodology; Writing- Original Draft. M.J. Ruivivar and Jose Carlo Lavapie: Writing-reviewing and editing.

Declaration of generative AI in scientific writing

During the preparation of this work, the author(s) used Grammarly in order to improve the language and grammatical clarity of the manuscript]. After using this tool, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the integrity and accuracy of the final publication.

References

- Adedoyin, O. B., & Soykan, E. (2023). Covid-19 pandemic and online learning: The challenges and opportunities. *Interactive Learning Environments*, 31(2), 863–875. <https://doi.org/10.1080/10494820.2020.1813180>
- Alomari, A. M. (2024). Perceptions of Faculty Members on Using Moodle as a Learning Management System in Distance Education. *International Journal of Technology in Education and Science*, 8(1), 75–110. <https://doi.org/10.46328/ijtes.507>
- Barrot, J. S., Llenares, I. I., & Del Rosario, L. S. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and Information Technologies*, 26(6), 7321–7338. <https://doi.org/10.1007/s10639-021-10589-x>
- Dickson, S. M., & Enock, S. B. (2024). Analysis of Covid-19 Pandemic and Migration to Distance Learning and Digital Education in Public Tertiary Institutions in Abia State. *Journal Of Digital Learning and Distance Education*, 3(7), 1175–1181. <https://doi.org/10.56778/jdlde.v3i7.369>
- Fresen, J. W. (2018). Embracing distance education in a blended learning model: Challenges and prospects. *Distance Education*, 39(2), 224–240. <https://doi.org/10.1080/01587919.2018.1457949>
- Garlinska, M., Osial, M., Proniewska, K., & Pregowska, A. (2023). The Influence of Emerging Technologies on Distance Education. *Electronics*, 12(7), 1550. <https://doi.org/10.3390/electronics12071550>
- Hadianti, S., Prakoso, T., Brillianing Pratiwi, Memet Casmal, Ucu Rahayu, Siti Aisyah, & Fitra Jaya. (2023). A Compatible Marketing Strategy for the Faculty of Distance Education Institution. *Journal Of Digital Learning and Distance Education*, 2(5), 589–599. <https://doi.org/10.56778/jdlde.v2i5.161>
- Hollister, B., Nair, P., Hill-Lindsay, S., & Chukoskie, L. (2022). Engagement in Online Learning: Student Attitudes and Behavior During COVID-19. *Frontiers in Education*, 7, 851019. <https://doi.org/10.3389/educ.2022.851019>
- Kember, D., Ng, S., Tse, H., Wong, E. T. T., & Pomfret, M. (1996). An examination of the interrelationships between workload, study time, learning approaches and academic outcomes. *Studies in Higher Education*, 21(3), 347–358. <https://doi.org/10.1080/03075079612331381261>
- Lestiyawati, R. (2020). The Strategies and Problems Faced by Indonesian Teachers in Conducting e-learning during COVID-19 Outbreak. *CLLiENT (Culture, Literature, Linguistics, and English Teaching)*, 2(1), 71–82. <https://doi.org/10.32699/cllient.v2i1.1271>
- Makruf, I., & Tejaningsih, E. (2023). Overcoming online learning challenges in the COVID-19 pandemic by user-friendly platform. *Journal of Education and Learning (EduLearn)*, 17(2), 307–316. <https://doi.org/10.11591/edulearn.v17i2.20513>
- Mhlanga, D. (2024). Digital transformation of education, the limitations and prospects of introducing the fourth industrial revolution asynchronous online learning in emerging markets. *Discover Education*, 3(1), 32. <https://doi.org/10.1007/s44217-024-00115-9>
- Mithun R & Roopadarshini S. (2024). Study on Distance Learning: A Developmental Leap towards Smart Education in Smart Cities. *Journal Of Digital Learning And Distance Education*, 2(7), 645–651. <https://doi.org/10.56778/jdlde.v2i7.175>

- Ndibalema, P. (2022). Constraints of transition to online distance learning in Higher Education Institutions during COVID-19 in developing countries: A systematic review. *E-Learning and Digital Media*, 19(6), 595–618. <https://doi.org/10.1177/20427530221107510>
- Pierrakeas, C., Xeno, M., Panagiotakopoulos, C., & Vergidis, D. (2004). A Comparative Study of Dropout Rates and Causes for Two Different Distance Education Courses. *The International Review of Research in Open and Distributed Learning*, 5(2). <https://doi.org/10.19173/irrodl.v5i2.183>
- Rocha Trinidad, A., Carmo, H., & Bidarra, J. (2000). Current Developments and Best Practice in Open and Distance Learning. *The International Review of Research in Open and Distributed Learning*, 1(1). <https://doi.org/10.19173/irrodl.v1i1.7>
- Sivakumar, A., Jayasingh, S., & Shaik, S. (2023). Social Media Influence on Students' Knowledge Sharing and Learning: An Empirical Study. *Education Sciences*, 13(7), 745. <https://doi.org/10.3390/educsci13070745>
- Stephani, N., Alvin, S., & Riatur. (2023). Exploring college students' motivations for choosing online learning program. *Cogent Education*, 10(2), 2266206. <https://doi.org/10.1080/2331186X.2023.2266206>
- Tarazi, A., & Ruiz-Cecilia, R. (2023). Students' Perceptions towards the Role of Online Teaching Platforms in Enhancing Online Engagement and Academic Performance Levels in Palestinian Higher Education Institutions. *Education Sciences*, 13(5), 449. <https://doi.org/10.3390/educsci13050449>
- Tetteh, P. K., & Kankam, P. K. (2024). The role of social media in information dissemination to improve youth interactions. *Cogent Social Sciences*, 10(1), 2334480. <https://doi.org/10.1080/23311886.2024.2334480>
- Van Der Stap, N., Van Den Bogaart, T., Rahimi, E., Van Ginkel, S., Nelson, T., & Versendaal, J. (2024). Supporting adult-learners' online interaction in computer-mediated learning. *Computers in Human Behavior Reports*, 16, 100551. <https://doi.org/10.1016/j.chbr.2024.100551>
- Yilmaz, R. K., & Karadag, N. (2023). Effects of Emergency Distance Education on Teacher Training Process in Turkey: Instructors' Opinions. *Education Sciences*, 13(9), 920. <https://doi.org/10.3390/educsci13090920>