

A CONCEPTUAL FRAMEWORK FOR OPEN DISTANCE LEARNING OF ECONOMICS IN MALAYSIA

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Abstract

The aim of the paper is to propose a comprehensive conceptual framework of open and distance learning (ODL) for economics courses to enhance the effectiveness and accessibility of economics education. The rise of ODL, fueled by advances in digital technology, has significantly transformed higher education, providing flexible learning opportunities that transcend geographical limitations. However, teaching economics in an ODL environment presents unique challenges, particularly in maintaining student engagement and delivering complex theoretical content. This research draws from literature review and key concepts to conceptualise a model for ODL in economics undergraduate teaching and learning. The proposed framework emphasizes the integration of synchronous and asynchronous learning methods, the use of Learning Management Systems (LMS) and the incorporation of interactive technologies such as virtual and augmented reality to facilitate an engaging and effective learning experience. Additionally, the framework addresses curriculum design, student engagement and assessment strategies, proposing a balanced approach that combines traditional teaching methods with innovative digital tools. By focusing on the goal of teaching students to "think like an economist," this framework provides a structured approach to ODL that enhances both the delivery and the reception of economic education. The paper's recommendations are to modernize the curriculum, strengthen institutional support and optimize the use of digital tools in the teaching of macroeconomics. This research contributes to the broader discourse on the potential of ODL to transform economics education in Malaysia and beyond.

Keywords: Open Distance Learning, Economics, Conceptual Framework

Introduction

The rise of Open Distance Learning (ODL) as a mode of delivering higher education has brought about significant transformations in the educational landscape. ODL refers to the provision of flexible educational opportunities in the aspects of access and multiple modes to acquire knowledge (MQA, 2008). With the proliferation of digital technologies, traditional classroom-based instruction is being complemented online learning environments. For a discipline like economics, which requires a deep understanding of both theoretical constructs and practical applications, there are challenges and opportunities in advancing ODL in teaching and learning of economics courses. The aim of the paper is to propose a conceptual framework of open and distance learning (ODL) for economics courses. This paper is based on the two approaches of ODL concepts and the teaching of economics for undergraduates. As succinctly described by Allgood, Walstad and Siegfried (2015), there is a broad consensus among economics faculty that the goal of teaching and learning economics is to enable students to "think like an economist". This implies that deductive reasoning along with parsimonious models helps understand economic phenomena. The proposed framework is grounded in educational theory and informed by practical considerations specific to economics education. By addressing the components of student engagement, curriculum design, technological integration and assessment strategies, this framework seeks to provide a comprehensive guide for educators and researchers in the field.

This paper is structured as follows: Section 2 discusses the literature review of distance education, ODL and the teaching and learning of economics. Section 3 proposes the conceptual framework for ODL of economics in Malaysia. Section 4 discusses some policy recommendations and conclusions for this paper.

Literature Review

Distance education and online distance learning

Distance education has passed through and embraces many applications including open education/open learning, distributed learning, flexible learning, virtual education/online learning and blended learning (Bramble & Panda, 2008). ODL refers to structured learning through synchronous or asynchronous communication. The success of this learning format is largely hinged on effective dialogue and communication

between student and instructor and students' peer to peer interaction. ODL, sometimes known as e-learning, are two terms used interchangeably. However, ODL programs should consider individual students' contexts and integrate globally diverse cohorts to ensure a positive experience (Harrison, Harrison, Robinson & Rawlings, 2018). Open and distance learning (ODL) is rapidly growing as an alternative education system, offering flexible learning opportunities and influencing various sectors of society (Ghosh, Nath, Agarwal & Nath, 2012). Open and distance learning (ODL) can effectively disseminate science and technology education, bridging the gap between those with access and those without and positively impacting the standards of living and quality of life in developing countries (Fozdar, 2015). Online learning can happen through the Internet, either asynchronously or synchronously (Mahoney & Hall, 2020). In both types, delivering the content of a course online will enable the students to join and follow the course regardless of geographic restrictions. However, in contrast to the asynchronous type, the synchronous type engages students in real-time face-to-face online meetings (Mahoney & Hall, 2020). Institutions such as Universiti Sains Malaysia (USM) and Open University Malaysia (OUM) have been at the forefront of this shift, offering a wide range of programs via ODL, thereby broadening the reach of higher education in the country. Open learning is a flexible, technology-enhanced education model that combines distance education and adult education. To maintain high levels of engagement, ODL programs should incorporate a blend of synchronous and asynchronous learning activities (Heilporn, Lakhal & B elisle, 2021; Giesbers, Rienties, Tempelaar & Gijsselaers, 2014). The role of teachers in digital learning environments has evolved, but they still need adequate digital competence and a positive attitude towards this new concept in education (Kalimullina, Tarman & Stepanova, 2020). These real-time interactions allow students to connect with instructors and peers, fostering a sense of immediacy and involvement. Asynchronous methods, such as discussion forums, also play a critical role by providing students with the flexibility to reflect on and contribute to discussions at their convenience. The study by Latchman, Salzmann, Gillet and Kim (2001) explained that flexibility is particularly beneficial in accommodating different time zones and schedules, making learning more accessible to a diverse student population.

Teaching and learning of economics

The teaching and learning of economics in ODL environments present unique challenges and opportunities. Student engagement is a critical factor in the success of ODL programs, with research consistently highlighting its role in reducing dropout rates and enhancing academic performance. Moore's Transactional Distance Theory underscores the importance of managing the psychological and communication gaps that can arise between instructors and learners in distance education. This theory is particularly relevant in ODL settings, where the lack of physical presence can lead to disengagement if not addressed effectively (Moore, 1991). Engagement encompassing behavioral, emotional and cognitive dimensions, all of which are essential for creating a holistic and effective learning experience (Fredricks, Blumenfeld & Paris, 2004). Curriculum design in ODL must be adapted to the unique context of online learning, where the absence of traditional classroom interactions necessitates a more flexible and student-centered approach. Constructivist teaching and learning requires arguments, discussions, debates, conceptual conflicts, sharing ideas, materials, reflections, meeting student needs and making meaning (Tenenbaum, Naidu, Jegede & Austin, 2001).

Furthermore, the integration of technology is fundamental to the success of ODL serving as the primary medium through which content is delivered and interactions are facilitated. Learning Management Systems (LMS) play an important role in organizing and delivering course content, tracking student progress and enabling communication between students and instructors. Bradley (2020) discussed that LMSs promote online collaborative groupings, professional training, discussions and communication among other LMS users, creating an engaging learning environment. Moreover, the incorporation of interactive technologies such as Virtual reality and augmented reality can be used in social learning spaces like classrooms and museums for visualizing and interacting with complex economic concepts (Scavarelli, Arya & Teather, 2020). The ability to collect and analyze data on student performance through learning analytics also provides valuable insights that can be used to optimize the learning environment and improve student outcomes.

Assessment strategies in ODL must be rethought to accommodate the distinct nature of online learning. Traditional assessment methods, though still valuable should be supplemented with formative assessments that offer ongoing feedback and steer student learning (Black & Wiliam, 2009). According to Beckers, Dolmans and Merrienboer (2016) that e-portfolios are most effective in facilitating self-directed learning when integrated into the educational routine, coached regularly and designed to facilitate goal setting, task-analysis, plan implementation and self-evaluation. These strategies, combined with timely and constructive feedback, are essential for maintaining the quality and integrity of assessments in ODL environments.

Research Methodology

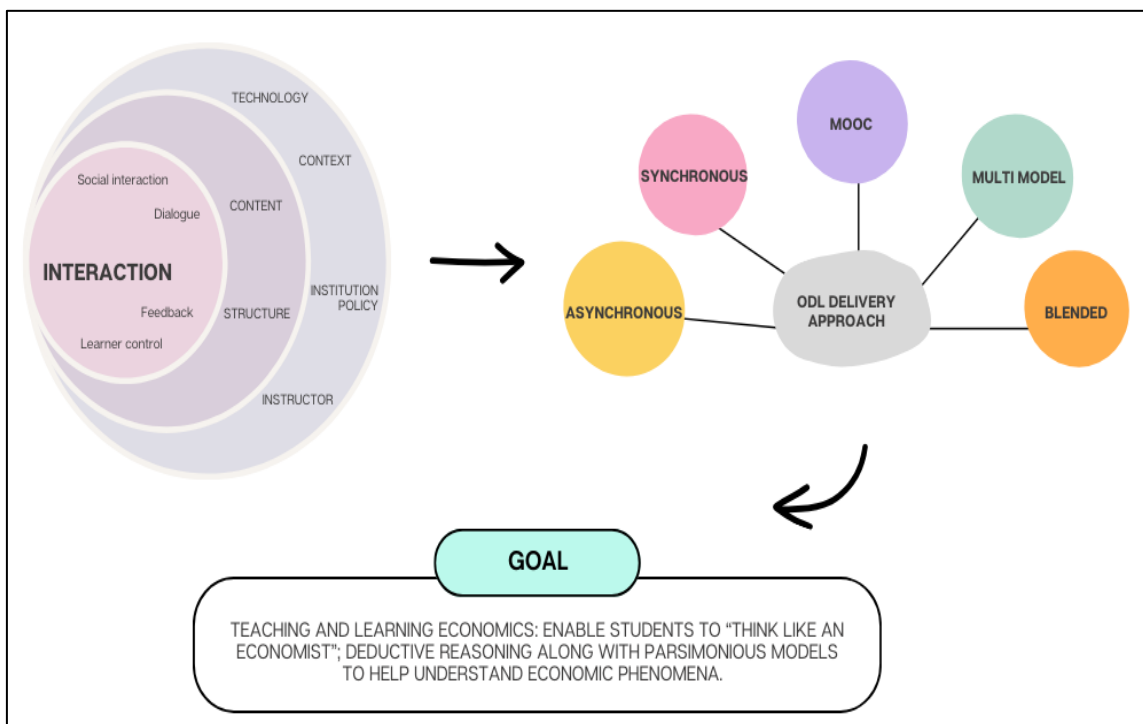
This research conducted a qualitative approach to identify key concepts within the context of open and distance learning (ODL) synchronized with the teaching and learning of undergraduate economics courses. The authors conducted a study on ODL in economics through a literature review to gather information on teaching and learning methods used in this mode of education.

The study emphasized the importance of focusing on specific pedagogical strategies that can enhance the quality of knowledge delivery in ODL learning environment. This involved identifying the challenges and opportunities associated with teaching economics through ODL such as the need for interactive content, the role of technology in facilitating engagement and the importance of providing timely feedback to students.

Conceptual Framework

The recent years have witnessed a big leap in economics studies towards digital (see Nunvarova, Poulouva, Prazak & Klimova, 2023; Adu & Zondo, 2024). This shift requires updating the curriculum to reduce the load of traditional manual skills courses in favor of extra digital-content courses. Appropriate approaches need to be identified to make sure the economics courses do not lag behind in the currently open and distance learning process. This is especially during the Covid-19 pandemic where distance synchronous education programs have been implemented. It should be emphasized that a comprehensive teaching approach should be carried out so that students get the same benefits as face-to-face learning. Fig. 1 proposed in this research has identified and explored the conceptual framework on this context of ODL for economics courses. The focus is to comprehensively focus on the goal of teaching and learning economics using the appropriate approach for both instructors and students.

Fig. 1 A Conceptual Framework for Open Distance Learning of Economics in Malaysia



Source: Authors' conceptualization based on Allgood et al. (2015), Rosman et al. (2023), Vrasidas and Glass (2002).

Interaction is a central issue of any learning experience. It is one of the major constructs in distance education research (Vrasidas, 2000). As highlighted by Dewey (1938), education is based on the interaction of an individual's external and internal conditions. Furthermore, the context of interaction in distance education consists of institutional policies, technologies used, instructors, students and course content. The content of an online course is a key component of the context of interaction and it influences the structure of the course (Vrasidas & Glass, 2002). In terms of learner control, learners in ODL are able to have flexibility in learning and have greater control (Chivers, 1999). ODL delivery approach for learning economics in Malaysia incorporates a variety of methods to accommodate different learning needs and preferences (Jegathesan, Noryati, Hisham & Nordiana, 2018; Abdullah & Said, 2022). Asynchronous learning allows students to engage with course materials on their own schedule, providing flexibility for those with other commitments (Koutsoupidou, 2014). This approach includes pre-recorded lectures, discussion boards and other resources accessible at any time making it a key component of effective ODL frameworks. In contrast, synchronous learning involves real-time interaction between instructors and students, typically through live video lectures, webinars and virtual classrooms. This method encourages immediate engagement and allows for instant

feedback, which can enhance the learning experience by promoting active participation and a sense of community (Bower et al., 2014; Divakaran, 2015).

Additionally, the integration of Massive Open Online Courses (MOOCs) into the framework offers access to high-quality blended learning programs to a large audience (Jong et al., 2019). MOOCs offer flexible learning opportunities and a flipped classroom model, transforming education by allowing students to interact with peers and access online resources before coming to the classroom (Brahimi & Sarirete, 2015). MOOCs provide a structured yet flexible learning environment, featuring video lectures, quizzes and discussion forums that feed to a global learner base. The multi-model learning approach combines various instructional methods such as asynchronous and synchronous learning to create a personalized and flexible experience that meets diverse learning preferences. This approach is particularly effective in ensuring that the delivery of content is adaptable to different student needs. Blended learning integrates traditional face-to-face instruction with online digital media, creating a hybrid model that leverages the strengths of both in-person and online education (Listiana & Jaharadak, 2019; Bhadri & Patil, 2022). This combination enhances the learning experience by allowing for direct interaction while also offering the flexibility of online components. Collectively, these approaches form a strong framework for ODL in learning of economics in Malaysia.

In terms of the goals of teaching and learning of economics, deductive reasoning in economics allows students to build and understand theoretical models that reflect the real-world situation to highlight essential economic principles. The core of economic education should focus on developing the ability to think critically and apply economic reasoning to various scenarios. Furthermore, the ability for students to make informed decisions and understand the broader implications of economic policies is important (Hansen, Salemi & Siegfried, 2002). In addition, Frank (2002) highlighted that the use of parsimonious models in teaching economics helps students grasp fundamental economic principles without getting lost in unnecessary complexity.

Policy Suggestions and Conclusion

This paper proposed a conceptual framework for ODL of economics in Malaysia. This framework contributes to the broader discourse on the optimisation of ODL for economics education. It is recommended that the curriculum for economics education be modernized to reflect the growing emphasis on digital learning. A balanced approach that combines both synchronous and asynchronous online learning methods should be adopted to provide flexibility while enhancing student engagement. Moreover, institutional policies and technological infrastructure be strengthened to support the effective delivery of online and distance learning (ODL) in economics courses. Additionally, there should be a focus on developing high-quality online course content and providing training for instructors to manage and deliver these courses efficiently. Moreover, policies should encourage the use of engagement tools, such as video lectures and virtual classrooms, alongside asynchronous platforms like discussion boards and forums. This approach will foster active participation, provide immediate feedback and cultivate a sense of community, all of which are essential for enhancing the learning experience and developing students' ability to apply economic reasoning in various scenarios. Future research should focus on the practical application of ODL frameworks in diverse educational contexts, exploring its impact on student outcomes and its adaptability to other disciplines.

References

- Abdullah, Z., & Said, M. M. (2022). Instructor attribute and feedback to empower mature learners in ODL education. *International Journal of Emerging Technologies in Learning (iJET)*, 17(3), 129-137.
- Adu, E. O., & Zondo, S. S. (2024). Enhancing teachers' digital skills in teaching of economics in south african secondary schools. *International Journal of Educational Research Open*, 6, 100310.
- Allgood, S., Walstad, W. B., & Siegfried, J. J. (2015). Research on teaching economics to undergraduates. *Journal of Economic Literature*, 53(2), 285-325.
- Beckers, J., Dolmans, D., & Van Merriënboer, J. (2016). e-Portfolios enhancing students' self-directed learning: A systematic review of influencing factors. *Australasian Journal of Educational Technology*, 32(2).
- Bhadri, G. N., & Patil, L. R. (2022). Blended learning: An effective approach for online teaching and learning. *Journal of Engineering Education Transformations*, 35(1), 2394-1707.
- Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability (formerly: Journal of personnel evaluation in education)*, 21, 5-31.
- Bower, M., Kenney, J., Dalgarno, B., Lee, M., & Kennedy, G. (2014). Patterns and principles for blended synchronous learning: Engaging remote and face-to-face learners in rich-media real-time collaborative activities. *Australasian Journal of Educational Technology*, 30, 261-272.
- Bradley, V. M. (2021). Learning Management System (LMS) use with online instruction. *International Journal of Technology in Education*, 4(1), 68-92.
- Brahimi, T., & Sarirete, A. (2015). Learning outside the classroom through MOOCs. *Computers in Human Behavior*, 51, 604-609.

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- Bramble, W. J., & Panda, S. (2008). Organizational and cost structures for distance and online learning. *Economics of distance and online learning. Theory, practice, and research*, 1-12.
- Chivers, G. (1999). Open, distance and flexible learning. Human Resource Development, Kogan Page, London, 263-84.
- Dewey, J. (1938). Experience and education. New York, NY: Macmillan.
- Divakaran, A. (2015). Enhancing Math learning using synchronous online teaching. *Artha Journal of Social Sciences*, 14(1), 27-36.
- Fozdar, B. I. (2015). Open and Distance Learning (ODL): A Strategy of Development through its Potential Role in Improving Science & Technology Knowledge. *International Journal of Emerging Technologies in Learning*, 10(2).
- Frank, R. H. (2002). The economic naturalist: Teaching introductory students how to speak economics. *American Economic Review*, 92(2), 459-462.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of educational research*, 74(1), 59-109.
- Ghosh, S., Nath, J., Agarwal, S., & Nath, A. (2012). Open and distance learning (ODL) education system: past, present and future â a systematic study of an alternative education system. *Journal of Global Research in Computer Sciences*, 3(4), 53-57.
- Giesbers, B., Rienties, B., Tempelaar, D., & Gijssels, W. (2014). A dynamic analysis of the interplay between asynchronous and synchronous communication in online learning: The impact of motivation. *Journal of computer assisted learning*, 30(1), 30-50.
- Hansen, W. L., Salemi, M. K., & Siegfried, J. J. (2002). Use it or lose it: Teaching literacy in the economics principles course. *American Economic Review*, 92(2), 463-472.
- Harrison, R., Harrison, A., Robinson, C., & Rawlings, B. (2018). The experience of international postgraduate students on a distance-learning programme. *Distance Education*, 39, 480 - 494.
- Heilporn, G., Lakhal, S., & B elisle, M. (2021). An examination of teachers' strategies to foster student engagement in blended learning in higher education. *International Journal of Educational Technology in Higher Education*, 18(1), 25.
- Jegathesan, R., Noryati, A., Amar Hisham, J., & Wan Nordiana, W. H. (2018). Learners' Satisfaction and Academic Performance in Open and Distance Learning (ODL) Universities in Malaysia. *Global Business and Management Research: An International Journal*, 10(3).
- Jong, P., Pickering, J., Hendriks, R., Swinnerton, B., Goshtasbpour, F., & Reinders, M. (2019). Twelve tips for integrating massive open online course content into classroom teaching. *Medical Teacher*, 42(4), 393-397
- Kalimullina, O., Tarman, B., & Stepanova, I. (2021). Education in the context of digitalization and culture. *Journal of Ethnic and Cultural Studies*, 8(1), 226-238.
- Koutsoupidou, T. (2014). Online distance learning and music training: Benefits, drawbacks and challenges. *Open Learning: The Journal of Open, Distance and e-Learning*, 29(3), 243-255.
- Latchman, H., Salzmann, C., Gillet, D., & Kim, J. (2001). Learning on demand-a hybrid synchronous/asynchronous approach. *IEEE Transactions on Education*, 44(2), 17-pp.
- Listiana, N., & Jaharadak, A. (2019). Blended Learning as Instructional Media: Literature Review. *Journal of Physics: Conference Series*, 1167.
- Mahoney, J., & Hall, C. A. (2020). Exploring online learning through synchronous and asynchronous instructional methods. In *Exploring online learning through synchronous and asynchronous instructional methods* (pp. 52-76). IGI Global.
- Malaysian Qualification Agency (2008). Code of practice for programme accreditation. Petaling Jaya: Agensi Kelayakan Malaysia (MQA).
- Moore, M. G. (1991). Distance education theory. *The American Journal of Distance Education*, 5(3), 1-6.
- Nunvarova, J., Poulouva, P., Prazak, P., & Klimova, B. (2023). Effectiveness of digital storytelling in teaching economics. *Education Sciences*, 13(5), 504.
- Rosman, S. H., Ismail, S., & Nawawi, A. H. (2023). Conceptual framework of open and distance learning (ODL) for studio-based architectural design courses. *International Journal of e-Learning and Higher Education (IJELHE)*, 18(1), 5-16.
- Scavarelli, A., Arya, A., & Teather, R. J. (2021). Virtual reality and augmented reality in social learning spaces: a literature review. *Virtual Reality*, 25(1), 257-277.
- Tenenbaum, G., Naidu, S., Jegede, O., & Austin, J. (2001). Constructivist pedagogy in conventional on-campus and distance learning practice: An exploratory investigation. *Learning and instruction*, 11(2), 87-111.
- Vrasidas, C., & Glass, G. V. (2002). A conceptual framework for studying distance education. *Distance Education and Distributed Learning*, 31.

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