



Addressing Student Attrition in Open and Distance e-Learning Settings using Effective Hybrid Learning System

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ABSTRACT

This study aimed to establish how the hybridisation of in-person and e-learning approaches accounts for attrition in the ODeL environment. The study was informed by the following research questions: What are lecturers' experiences of hybrid learning systems in reducing attrition rates in open and e-learning institutions? What are lecturers' perceptions of increasing the effectiveness of hybrid learning systems? Data was collected from lecturers using in-depth interviews to determine their experiences of hybrid learning systems and correlations between hybrid learning modalities and attrition rates. Findings reveal that using hybrid learning systems effectively and with a comprehensive support model can improve student engagement and persistence and reduce attrition rates at lower postgraduate levels in ODeL by providing a flexible, supportive learning environment. The study provides valuable insights for lecturers, policymakers, and the management of ODeL institutions.

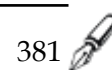


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INTRODUCTION

The issue of student attrition in open and distance e-learning (ODeL) contexts remains a subject of growing concern among ministries of education, institutions of higher learning, lecturers, higher education leadership and management, and policymakers. Research shows that high attrition rates are a global concern, and they impact the budgets of academic institutions (Tinto, 2025). Attempts to address attrition include the adoption of a digital pedagogical approach, although this presents other challenges leading to attrition. This is indicative of the complex nature of the attrition. Hybrid learning systems attract students due to their accessibility and flexibility in learning and the use of traditional and online learning technologies. However, studying in a hybrid learning setting requires self-regulation and engagement, a factor leading to student attrition (Xavier & Meneses, 2021).

The rapid advancement in the technological landscape has reshaped teaching and learning in traditional distance education, giving birth to an ODeL form of higher education. ODeL is a form of hybrid learning system that was introduced to complement the conventional pedagogical approach and to respond to the growing demand for higher education by increasing accessibility (Lumadi, 2021) through incorporating technology-mediated teaching and learning methods. The advantages derived from both in-person and online teaching and learning have resulted in institutions implementing an integration of various technologies and conventional teaching and learning modes to expand accessibility to higher education and flexibility, thus enabling students to study wherever they are, at their own pace and time. This integration is referred to as a hybrid learning system.



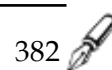
Hybrid learning models attempt to use the best of in-person traditional learning methods to enhance the student learning experience and e-learning tools (Xavier & Meneses, 2021) to create a virtual classroom (Rausch & Crawford, 2012). Furthermore, as Raes, Depaepe, Windey, Beernaert, Vanherweghe, Detienne, Pieters, Huysentruyt & Desmet (2022) contend, the use of hybrid educational modalities and dual-mode teaching bridges in-person traditional learning and online learning and creates flexibility in both synchronous and asynchronous learning environments.

A plethora of concepts exist in the literature to refer to hybrid learning. Other pundits, such as Monteiro, Lencastre, Osório & Silva (2016); Adigun, Mpofu & Maphalala (2025); and Cao, He, Zhang, Tang, Chen & He (2025). The discourse in instructional practices in the literature has juxtaposed conventional teaching and learning modes with widely adopted online pedagogical approaches to determine their relevance and significance in this era. While Gamage et al. (2022) study, undertaken to determine students' perceptions of engagement in learning activities through online and hybrid learning, revealed significant student engagement in learning activities in face-to-face settings, the perception of engagement in the sole use of online platforms was doubtful.

The literature details the benefits and setbacks of implementing a hybrid learning system. For instance, e-learning helps academic institutions attain their educational goals (Zaineb, 2016). On the other hand, the literature has also shown that the complete move to full digital learning could exacerbate the attrition problem in the higher education landscape. Rotar (2022) asserts that there is a sufficient proliferation of studies that have uncovered that attrition rates in the ODeL environments are higher than in traditional face-to-face educational systems. Attrition for online education students, as observed by Monteiro et al. (2016), is higher than those learning in face-to-face settings by 15–20%. Rizwan, Nee & Garfan (2025) observed that attrition is still a major challenge in online courses. Their study on the use of massive open online courses (MOOCs) in promoting academic achievement and student engagement revealed that an increased attrition rate and low persistence rate contribute to the ineffectiveness of MOOCs. This assertion makes face-to-face teaching and learning modes a valuable strategy to reduce attrition even in the era of the wide adoption of online learning pedagogy.

The face-to-face and online learning approaches are complementary (Mulenga & Shilongo, 2025), and this adds towards reducing attrition. This positions the hybrid learning system as a strategic approach to addressing contemporary educational challenges, including student attrition. However, student attrition, irrespective of the range of benefits presented by the integration of in-person and online teaching and learning, remains a significant challenge that impacts student success, completion rate (Lumadi, 2021), and the overall performance of the institution itself. While the documented literature has a plethora of studies that investigated, inter alia, the relationship among learner motivation, burnout, and dropout for students learning online and, in a hybrid system (such as Yusof, Harith, Lokman, Abd Batau, Zain, & Rahmat, 2023), studies that examined the effective use of the hybrid learning approach to address attrition remain scant.

Student attrition is a multilayered phenomenon, difficult to address, and requires proper research (Rahmani, Groot & Rahmani, 2024). While education is a key to success, student attrition contributes to an educated society's widened poverty scope in the country. It is therefore important for institutions to find ways to reduce student attrition because, the costs associated with attempts to retain students tend to be higher than those of enrolling new students. Institutional departments in ODeL institutions and their staff, particularly lecturers and support staff, are stakeholders that can play a significant part in increasing student retention and student success rates as well as institutional excellence, which is measured by throughput. Due to their significance, lecturers' perspectives are essential to understanding the challenges leading to student attrition in ODeL environments and ways in which hybrid learning systems can be



implemented effectively. Therefore, this study investigated how hybrid learning systems can be implemented in ODeL environments to address high attrition rates. The study employed a qualitative case study design and used the University of South Africa as a typical ODeL institution. The Advanced Communication Research module, which is taught at the honors level in the Department of Communication Sciences, was used as a case module. Lee and Choi's study (2011) on attrition in online subjects has revealed that much of the focus has been on attrition at the course level. This study adopted in-depth interviews as an approach to soliciting lecturers' experiences on using hybrid learning modality, the challenges they encounter as they teach through an integrated approach, and suggestions to improve the system to promote student engagement and reduce the attrition rate.

In supplementing institutional measures of student dropout and continuity, it is vital to give voice to the lecturers' experiences and perceptions of their instructional practices, particularly in the era of the hybrid learning system and rapid technological advancement, which constantly force them to adapt to pedagogical transition. By gaining valuable insights into the causes of attrition and low persistence rates, ODeL institutions can properly strategize to increase persistence rates and student success and ultimately decrease student attrition.

This study was informed by and framed its arguments within the amalgamated self-determination and student integration theories to investigate attrition factors and effective hybrid learning systems in the ODeL context. While there is a sufficient volume of studies that investigated student attrition in ODeL, there seems to be very little that investigated the effect of a hybrid learning approach on student attrition. In addition, there seems to be no study that used a combination of self-determination and student integration theories. Osei & Bjorklund (2024) contend that Self-Determination Theory underscores the students' abilities to learn autonomously, making it an appropriate conceptual framework to delve into the effective use of a hybrid learning approach within the ODeL contexts and the degree to which it can reduce attrition. The theory emphasizes the significance of motivation through responding to three basic psychological needs: autonomy, competence, and relatedness (Farikah, Astuty, Mazid & Mulyani, 2023). The goal was to recommend guidelines for the successful implementation of hybrid learning pedagogy to reduce attrition effectively at lower postgraduate levels in an ODeL environment.

Self-determination theory (SDT) is a psychology-based theoretical lens that emphasises human character or personality and intrinsic and extrinsic motivations as psychological needs that lead to experiencing a sense of belonging (Deci & Ryan, 1985). Humans need self-directedness and the competency level to study and need to be integrated successfully into institutional environments. When these needs are met, students feel a sense of belonging and are encouraged to study, leading to enhanced psychological well-being (Ryan & Deci, 2000). ODeL institutions offer flexibility to learn. They are educational spaces for people of all ages, who can study from wherever they are and learn at their own pace. Thus, being autonomous is important for ODeL students because lecturers tend not to be authoritative in teaching but become facilitators. To complete the education programs or courses, students must be self-determined, competent, and connected to other students. SDT offers a unique lens to understand various support services that ODeL can plan and implement to encourage students to study and to retain these students.

Vincent Tinto developed student integration theory (SIT) in the 1970s to gain insights into student retention and attrition in the higher education system (Tinto, 1975; Karp, Hughes & O'Gara, 2010; Mittelmeier, 2025). This theory is based on the doctrine that when students are socially and academically integrated into the institutional environment, they will be able to interact with their peers and institution, and as a result, they can feel a sense of belonging and persist in their studies (Payne, LaDue, Dugas, Winitkun & Schmidt, 2025). This can help not only to increase the persistence rate but also to reduce attrition and to promote student success. Tinto's

SIT was used to gain insights into support services that must be incorporated in the hybrid learning system to not only reduce attrition but also contribute towards attaining institutional goals such as a high throughput rate. Study aims:

1. To understand how hybrid learning systems are used to increase student engagement and persistence.
2. To understand how to improve hybrid learning to reduce open and distance e-learning attrition.

Research questions:

1. What are lecturers' experiences of hybrid learning systems in reducing attrition rates in open and e-learning institutions?
2. What are the perceptions of lecturers on increasing the effectiveness of hybrid learning systems?

RESEARCH METHOD

Participants and Instrumentation

The study employed a qualitative methodological approach to study student attrition and the role of the hybrid learning approach in addressing the attrition in ODeL. A purposive sampling technique was used to select fifteen lecturers teaching the Advanced Communication Research subject taught at the lower postgraduate level in the Department of Communication Science. The purposive sampling method (also referred to as the judgmental selection technique) allows the researcher to sample participants who represent the target population of the study (Elmusharaf, 2012). I included lecturers who had at least five years of experience and above in the module. Lecturers who were teaching other subjects and those with less than five years of experience were excluded. An in-depth interview with each of them was conducted in their offices. Each interview lasted between 30 and 45 minutes. The laptop, tablet, and notes taken during the interviews were utilized as instruments for data collection.

Analysis and Reasoning Paradigm

Analysis was done using thematic content analysis. The researcher organized and ordered data into meaningful patterns (Aneshensel, 2012) in such a manner that only the appropriate segments were obtained and interpreted (Wood, Kerr & Ross-Kerr, 2010). Content analysis of the in-depth interviews with the 15 lecturers was carried out. The study applied the six steps to analyze qualitative data, namely organizing data, determining and organizing ideas and concepts, determining and grouping data thematically, ensuring dependability and credibility in findings and analysis, getting reasonable explanations for findings, and presenting an overview of the final steps. The researcher adopted an inductive reasoning approach because, as Sunday (2015) comments, it fits the research, whose methods are qualitative. In inductive reasoning, McAbee, Landis & Burke (2017) state, theories are developed by drawing overall inferences from cases of empirical data.

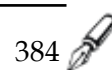
Information Privacy and Participants' Anonymity

The researcher ensured that the names and other identities of the participants were not recorded anywhere, and participants' involvement remained unknown except to the researcher and the participants alone. They were given pseudonyms during data analysis.

RESULT AND DISCUSSION

Themes That Emerged from the Research Data

Guided by the integration of self-determination theory and the student integration model, the study examined the effectiveness of the hybrid learning pedagogy and its importance in reducing student attrition at the lower postgraduate level in an ODeL context.



The study employed O'Connor and Gibson's qualitative analytical approach to analyze qualitative data. The table below in the study provides a synopsis of the findings that this study divulged. In the first column, the table lists all the steps followed during the analysis, what the focus was on, and the findings revealed.

Table 1. Qualitative analysis in the study

Data analysis steps and focal points	Application of O'Connor and Gibson's steps in the study	
Step 1: Organising data	Data was organised according to participants and the order in which it was collected.	Lecturers
Step 2: Determining and Organising ideas and concepts	Ideas and concepts	Unpreparedness Lack of time management Lack of technological skill and readiness Lack of access to technological resources Students' poor relationship with lecturers Lack of access to the required research data Lack of academic achievement Racism Inadequate academic support Lecturers' workload Lack of self-reflection on teaching pedagogies Lecturers' poor relationships with students Lack of lecturers' interactions with students Lack of subject library support Awareness of support services Lack of financial support programmes Lack of emotional support
Step 3: Determining and organising data into themes	Themes that have emerged	Controllable and uncontrollable factors Dropout factors that are associated with students' environments Dropout factors that are associated with lecturers' environments Dropout factors that are associated with the institution's environment Dropout factors that are associated with external environments
Step 4: Ensuring the dependability and credibility of the analysis procedure and the findings	Trustworthiness of analysis techniques and findings	Data was analysed in tandem with the notes jotted down during the interviews. Interpretations of findings considered participants' body language, and meanings assigned to the findings were put into context. The defined concepts and categories, which were the result of the researcher being highly immersed in the repetitive perusal of the content, were verified through consultations with participants.

Data analysis steps and focal points	Application of O'Connor and Gibson's steps in the study	
		Perusing the whole interview transcript several times further enabled the researcher to categorise data and analyse it.
Step 5: Getting reasonable interpretations for findings	Coding techniques	This study's findings were compared with those reported in the literature, checking if they were expected or not, and assigning meanings between ideas and concepts by classifying similar information and themes – what Rubin and Rubin (1995) call “coding techniques”. Thus, ascribing meanings to the unveiled findings considered what is documented in the related preceding studies and what the empirical study revealed.
Step 6: An overview of the final steps		The epistemological approach towards attrition at lower postgraduate level in ODeL, the limitations, the strengths of the study, areas where improvements must be made and the implications of the findings have been explicated.

Through this integrative theoretical approach, this study found that attrition at lower postgraduate levels in the ODeL environment is led by factors that institutions can control (such as unpreparedness and lack of motivation) and those that are beyond institutional and human capacity to control (for instance, falling sick and death). These three themes are grouped in this study as controllable and uncontrollable factors and consist of three subthemes, namely the student's environment, the institution's environment, and the external environment. The ensuing section discusses themes in detail.

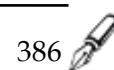
Theme 1: Controllable Attrition Factors Students' Environments

The study sought to uncover lecturers' experiences of the hybrid learning system used in the university and its role in addressing the attrition challenge in open and e-learning institutions and their perceptions of the effectiveness of the hybrid learning system.

This study revealed that most of the challenges leading to attrition at the lower postgraduate level in ODeL emanate from students' environments. The findings support a greater fraction of findings made by previous research (e.g., Strumpher, 2018). However, they contradict the argument by Myers, Glover & Stephens (2021) that student and social influences often play a much more vital role than institutional issues in retention and attrition.

L1: “...And of course, other students drop out because of issues such as health problems or getting sick during the studies and even pregnancy problems...”

This quote highlights some key reasons for the attrition that occurs from unforeseen student circumstances. The response indicates a lack of self-directedness and emphasizes the importance of family planning for students, particularly female students, who become pregnant and have children that will ultimately require their mothers' attention. Family planning can help reduce the attrition caused by unplanned pregnancies. It may also be vital to organize workshops for both male and female students, focusing on preventive measures to avoid unplanned pregnancies and potential health issues related to unprotected sex. ODeL institutions must establish clinic centers and hire professionals to provide treatment for illnesses and offer counseling.



L3: *"Our students drop out because they do not understand how an ODeL university functions. They are supposed to know that in an ODeL learning institution, they must take charge of learning processes, including consulting lecturers whenever they encounter some difficulties and building a good bond with them, not to keep quiet and wait for us to detect that they have problems. We have many responsibilities that go beyond just teaching."*

L3's response blames the students, indicating that they are not taking ownership of their learning trajectory. The self-determination theory principle of autonomy argues that self-control or ownership in learning could potentially result in students achieving their educational goals. It emphasises the significance of being motivated in learning to promote student engagement.

Theme 2: Institution's Environment

Analysis and synthesis of data collected from lecturers have proven that student attrition is indeed a multilayered challenge caused by many factors. The study revealed the institution's environment as a major determinant of student attrition in ODeL. While there were contradictory perspectives regarding academic support to students, many lecturers felt that academic support from lecturers was inadequate. In addition, they pointed out that heavy workloads that incorporate, inter alia, recruitment and teaching many undergraduate and postgraduate students reduce their attention to students. In addition to inadequate academic support, participants' responses showed that a lack of time management was also a major concern contributing to attrition. The direct quote below captures one of the lecturer's responses to reasons for attrition at the lower postgraduate level in an ODeL environment.

L1: *"...I think another factor is that there is little support from the supervisor or the lecturers because most of them have heavy teaching loads. As a result, you will find that they hopefully supervise and teach undergraduate students. Others are also involved in recirculation projects, which means they have limited time to attend to honours, in particular..."*

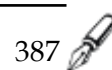
L1's response shows that the institution's environment also leads to attrition if it does not support learning. It reveals that lecturers struggle to effectively manage the large volume of their work. It points out the existing incapacity. These factors demonstrate the need to create a more supportive learning environment by offering diverse support services to postgraduate students, such as academic support. It also implies that support services must be given to lecturers themselves in areas where there are challenges inhibiting teaching diverse students effectively. For instance, training for lecturers on time management is important. These support interventions may have to be tailored to those who are struggling to manage their time. From the student integration model, a lack of support services for students can become a barrier to integration in the learning environment. To increase student engagement and learning experiences, depending on the lecturer-student ratio, it may be necessary to use tutors to assist in enhancing learning. This could help students feel a sense of belonging and reduce the attrition rate.

L3: *"The other problem is that, with the increasing volume of students we supervise annually, how we teach, and the quality of our teaching must also be assessed. Otherwise, we will just carry on with inappropriate teaching methods and fail our students. Of course, if they feel that they have not been taught properly, they cannot come to register in the next registration period."*

According to the L3's response, the quality of instructional practices can potentially help reduce the attrition rate. If students feel that the teaching methods are inappropriate, they can prematurely discontinue learning the subject.

Another role the ODeL institution should play, as proposed by one of the lecturers, in stimulating the increased attrition rate is using subject librarians who must train students to use different search engines to search for relevant study materials.

L4: *"If the university may assist students to gain access to technologies like the internet... Em...and the subject librarians, I think, should proactively, I think, train students on how they should search for relevant materials because of the frustrations and problems related to the*



inability of our students to search for... I think the know-how. How to search for relevant materials..."

L6: "To address the intervention, going forward, I think one of the things that we need to do is to restructure our undergraduate offerings to ensure that they are biased toward research methodology."

This shows that the undergraduate level does not lay a strong foundation for the lower postgraduate level. Students, therefore, struggle to finish the course, and some do not complete.

Another dominant view that confirms the essence of creating a strong basis on which to build knowledge at the postgraduate level is the view that suggests that students' academic performance can be traced to projecting any possibility of dropping out. This speaks to pre-entry unpreparedness (Tavares, Antunes, Luz & Sá, 2025). Below is a response from one of the lecturers, showing that unpreparedness negatively affects students' performance and ultimately leads to attrition.

L5: "...The first reason could be probably how the student performed in his or her research module at the third-year level, and if we go deeper into how the student has performed in social science research which is the college-sort of signature module or which deals with research because the college module, which is done in a year module feeds into communication research ..."

Although contextualised within the undergraduate level, Heift's study (2016) found similarly that there is a need to support first-year students, preparing them for the higher intensity of higher education. ODeL institutions could reduce attrition rates by embracing preparatory courses in their support programmes, tailored to respond to individual students' needs and challenges, to enhance student integration and increase the persistence rate.

Views of lecturers also uncovered that the traditional face-to-face teaching and learning approach is still a crucial mode of delivering education in an ODeL context. It plays a complementary role to online learning. Thus, hybrid learning, which integrates face-to-face and technology-based learning, offers students flexible choices over which mode to learn through and at what time to set an appointment with lecturers to consult on parts of the content. Student-lecturer interactions can take place in-person and online, and students have a choice to use whichever is convenient for them. The response below serves as evidence of the significance of conducting workshops on research aspects, interactions that may occur through face-to-face and online technologies, and the complementary role played by both traditional face-to-face and online pedagogical approaches.

"I think workshops are important and, eer yah but we also have some lecturers who have face-to-face consultations, which are also helpful, and telephonic conversations with students are also helpful, and there are also lecturers now who are already employing technologies like Google Hangout to communicate with their students."

Despite various support services available for students, a lack of adequate awareness was raised as another major challenge leading to attrition. The quote from one of the lecturers below serves as evidence:

"I don't think our students are aware that there are other services that they can access under being students at Unisa when they encounter plenty of personal problems."

Lumadi's study (2021) to promote student development by offering a range of support services in an ODeL institution also found that, irrespective of the fact that support services were offered, many postgraduate students registered for a Postgraduate Certificate in Education were not receiving them.

Uncontrollable Attrition Factors

External Environment

Uncontrollable factors refer, in this study, to all other attrition determinants, including social issues, such as ill health and deaths of students or family members (Mercy, 2014). Support services for these factors are beyond the control of the institutions.

As evident in the response below, the death of a close family member, a friend, or a relative was also identified as a factor contributing to the higher attrition rate of lower postgraduate level-students.

"It is natural that when a family member has died, especially the one you were too close to, you become affected and can lose focus in your studies and, subsequently, leave your studies."

The researcher posed a probing question to establish if the participant knew personally of a student who once dropped out of the module due to the death of a family member. The participant replied:

"Yeah...yeah, one of the students that I was supervising once called me almost three months after the due date, asking if I could allow her to submit her portfolio. I felt sorry for her when she explained that three of her family members died a few weeks before the due date, and that's the reason why she didn't submit her examination portfolio."

When asked to suggest what the university can do to support students regarding death as an attrition factor, the participant said: *"We are all going to die, and it's your time to die; no humankind can prohibit that from happening. So, there is nothing the university can do, but it is not the student who died; emotional support and counselling must be given to the student."*

This finding resonates with previous studies' findings. For instance, Wood, Kiperman, Esch, Leroux & Truscott (2016) explored factors leading to attrition from individual and institutional viewpoints and found that the deaths of students accounted for the increased attrition rate.

Table 2. Study summary of student attrition factors in ODeL

Attrition factors in ODeL				
Main themes	Controllable factors		Uncontrollable factors	
Sub-themes	Students' environment	Institution's environment	Other external circumstances	
Categories	- Unpreparedness (pre-entry and in-study) - Students' self-directedness - Students' lack of time management - Lack of technological skill and readiness - Lack of access to technological resources - Students' poor relationship with lecturers - Lack of academic achievement	- Lack of subject library support - Inadequate awareness of support services - Lack of financial support programmes - Lack of emotional support - Inadequate academic support - Lecturers' workload - Self-reflection of lecturers on teaching pedagogies - Lecturers' poor relationships with students - Lack of lecturers' interactions with students	- Lack of access to the required research data from other organisations - Death - Study transfer to other institutions	

Guided by the principles of self-determination theory and the student integration model, the literature, and the findings, the following guidelines are proposed to implement a hybrid learning system to reduce student attrition in an ODeL institution:

Table 3. Guidelines for using the hybrid learning system effectively in ODeL

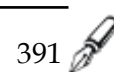
Focus	Support services
Autonomy	- Allow students to set their educational goals.

Focus	Support services
Competence	- Understand that students learn differently; focus on the student's interests, needs, and what they are capable of to enhance learning, and offer personalised learning.
	- Support students with access to all resources that can enhance learning.
	- Give students different pedagogical learning modalities (e.g., set questions and allow students to choose from them).
	- Create flexibility in choosing educational programmes and courses and their order to register and study them.
	- Give students different topics to choose from.
	- Offer a variety of forms to learn (online course or face-to-face, individual or collaborative).
	- Allow students to study from wherever they feel comfortable.
	- Allow students to interact with the students, lecturers and institutions through a range of platforms (e.g.) calls and chats through Microsoft Teams, interactions with lecturers and students in discussion forums.
	- Offer pre-entry (e.g. orientation) and in-study support (e.g. academic support).
	- Focus on enhancing their cognitive ability in learning.
	- Various forms of learning require different sets of competencies (online courses require skills to use technology for learning).
	- Give clear instructions to complete academic tasks.
	- Set questions that will lead to creativity and innovation in answering them (scenario-based questions).
	- Offer feedback within short and reasonable timeframes.
	- Give clear and encouraging feedback.
Relatedness	- Support them on improving skills such as interpersonal and time management skills.
	- Offer guidance on how a balance between work and studies can be struck and maintained.
	- Increase awareness on available support services.
	- Train and constantly remind academics of the importance of constructive feedback.
	- Train lecturers to blend pedagogical approaches effectively.
	- Involve a range of stakeholders (e.g. educators, policymakers, students, academic planners, units designed to offer support services, ICT and librarians).
	- Encourage collaborative learning.
	- Interact with students frequently using platforms such as discussion forums.
	- Initiate, facilitate and encourage interactions among students in discussion forums.
	- Offer counselling and emotional support to students on personal challenges, including divorce and deaths of family members and friends.
Course content	- Design the course materials so that they are structurally organised and easy to learn.
	- Accommodate diversity in the student population and tailor content and strategies to teach them according to their needs and interests.
	- Connect learning outcomes and real life.
	- Establish their prior learning experiences and build and advance their knowledge on it.
	- Ensure that the hybrid design accommodates diversity and multiculturalism in the student population.
	- Content must invite students to apply new skills and skills they already have.
	- Students must know what is expected in advance.
	- Use presentations and project-based learning pedagogy to test student knowledge and skills.
	- Instructions to complete academic tasks must be clear.

Focus	Support services
	- Give constructive feedback within the shortest time possible. Always try to encourage them to do better. - Encourage collaborative learning and frequent interaction among students. - Provide access to resources students need to use for learning. - Ensure that the ICT infrastructure department is composed of professional staff. - Offer training on how to use technologies and assess their readiness.

DISCUSSION

The purpose of this study was twofold. First, to understand how hybrid learning systems are used to increase student engagement and persistence. Second, to understand how to improve hybrid learning to reduce open and distance e-learning attrition. The self-determination and student integration theories were used in amalgamation as lenses to guide the investigation and analyse data. The findings are in line with the doctrine of self-determination theory, which claims that educators' support for basic psychological needs, such as autonomy (i.e., ability to be self-regulated in learning), competence (i.e., ability to develop skills to learn), and relatedness (i.e., a sense of belonging and feeling integrated into the learning environment), are significant for students' optimum performance (Vansteenkiste et al., 2020). The findings support Spady's (1970) and Tinto's (1975) philosophical assumption that student attrition is a result of compound interactions between the institutions and students. The findings blame students' context, institutions' context, and external environments as being spaces within which challenges leading to attrition arise. The findings, however, oppose the principle of the deficit theory that entirely blames students for their failure and argue that they have a deficiency that results in poor academic performance. The deficit theory generally provides a framework to analyse the weaknesses, damage, and limitations inherent in the student's context, and it has been applied in different fields of study, including language (Johnston and Morrison, 2007). The blame on the student context, as divulged by this study, is consistent with preceding research that reported, inter alia, personal challenges affecting student abilities and study workload (Xavier and Meneses, 2021). Nevertheless, it supports the self-determination theory that argues that students' psychological needs, such as autonomy, competency, and relatedness, are essential in motivating students to study. Less motivated students often drop out while highly motivated ones persist until they finish their studies. The uncovered poor relationship between supervisors or lecturers with students relates to the "relatedness" psychological need. Relatedness, a psychological need, is about being integrated into the learning environment and developing a feeling of a sense of belonging. Therefore, it is vital to develop strategies to promote students' feelings of belonging. Adlington, O'Neill, Volpe & Harrington (2024) recommend that learning experiences must promote feelings of success and relationships with others. The participant's response that students have no idea about how the ODeL operates relates to autonomy. In an ODeL environment, students are expected to take ownership of the learning trajectory. However, taking ownership of studies requires certain skills, which involve skills to use online technologies, manage time, and be self-directed. The study has confirmed that the challenges accounting for attrition can either emanate from the institution's environment, the student's environment, or both. In tandem with preceding research (Yusof, Harith, Lokman, Abd Batau, Zain, & Rahmat, 2023), the study confirmed that the students' and the institution's contexts create challenges that eventually cause students to prematurely discontinue learning in ODeL institutions. The lecturers' and students' ability to manage time is key to effective teaching and student success, as well as reducing attrition (Yusof, Harith, Lokman, Abd Batau, Zain, & Rahmat, 2023). This study supports the finding made by many students who dropped out of their classes that they were time-poor or had poor time management skills.



The negative impact of the digital divide on student persistence and success was also identified as one of the key factors leading to a higher attrition rate in the ODeL environment. ODeL is a type of hybrid learning system that was adopted to complement the traditional instructional approach and to expand access to higher education using online technologies (Lumadi, 2021). Therefore, students ought to have online technologies to study in ODeL institutions. Digital poverty among students, with little or no access to learning resources, is a barrier not only to adequate access to higher education but also to social and academic integration into the learning environment. The finding therefore supports both the self-determination model's 'relatedness' tenet and student integration theory, which argue that student integration is vital for an increased student persistence rate and success. The digital divide refers to the gap between those who have access to digital technologies and those who do not due to factors such as income, education, geographic location, or infrastructure (Vitalis, Andover, Ogunbola, Onyejelem & Ridwan, 2025), among others. To address this challenge, and as proposed by one of the lecturers, ODeL institutions should consider supporting students by providing digital resources for learning. Kyei-Akuoko et al. (2025) found that many students considered the blended learning system to be technically accessible, but challenges such as internet connectivity, logging in, and the cost associated with purchasing data impacted perceived user-friendliness and usefulness. To attain increased participation and engagement in online course activities, students must be trained on how to use the resources. Previous studies have shown that access to digital resources is important, but not enough. As also observed by Vitalis et al. (2025), access to e-learning gadgets alone is insufficient because a multitude of complex layers interact with one another to determine access to and active student engagement in learning activities. This does not mean that students will be retained if they still do not have the skills necessary to use them. The acquisition of the necessary skills to use technologies is key to promoting student integration. The student integration model used in this study to investigate challenges leading to attrition and how to make a hybrid learning system effective advocates for the integration of students into the institution's environment. Thus, little or no access to digital resources makes student integration difficult. Digital platforms such as learning management systems used to manage learning activities are important in facilitating student integration, as student-lecturer and student-student interactions are important in collaborative learning and discussion forums.

Designing course content to promote student engagement was also cited as an important form of support that will address the attrition of students at the lower postgraduate level.

CONCLUSION

This study sought to answer two research questions: What are lecturers' experiences of hybrid learning systems in reducing attrition rates in open and e-learning institutions? What are lecturers' perceptions of increasing the effectiveness of hybrid learning systems?

The study revealed that the successful implementation of the hybrid learning system and making it effective in reducing attrition in ODeL institutions is a complex process that requires the active participation of various stakeholders, such as institutional course designers, technologists, lecturers, and students. Some previous studies recommended the involvement of the government to offer support to students. For instance, the government should reduce taxes on internet data packages to maximize the affordability of data so that students can increasingly participate in online courses (Kyei-Akuoko et al., 2025). Thus, promoting active learning in ODeL can be possible if students have access to data to use the internet or if the institution or the government opts to provide it to the students. Thus, the study implies that stakeholders' involvement is essential in successfully implementing an effective hybrid approach to minimize student attrition in an ODeL environment. Moreover, involving all stakeholders will increase the chances of addressing the needs of all parties.

Despite various hybrid learning models implemented to foster a supportive learning environment, the issue of student attrition is also multifaceted and demands various support initiatives and effective implementation of such interventions. While access to digital resources is key to ODeL students in hybrid learning settings, it does not mean that the attrition ratio at the postgraduate level will decrease. Neither does it mean that students' flexibility about time and pace to learn and teacher-student collaborative relations in learning guarantee that attrition will be addressed. Instead, students' ability to exercise autonomy and be motivated can further help to achieve a reduced attrition rate. Therefore, in addition to providing access to digital resources such as data, motivating students to take ownership of their studies and how they should learn can be a good recipe to successfully reduce attrition in the hybrid system. Despite all forms of challenges associated with implementing a hybrid learning model, hybrid learning remains a significant pedagogy to respond to the different students' needs and interests and to engage them in learning. ODeL should plan a hybrid learning model with diversity in the student population in mind. Both face-to-face and online learning modes can complement each other. However, the effectiveness of this model can be determined by a range of support services that students and lecturers may need. Lecturers' acquisition of skills to teach through technologies and their readiness are important for the successful and effective implementation of a hybrid pedagogical approach on ODeL. Addressing psychological needs such as autonomy and relatedness is not sufficient. Instead, students must have the necessary skills to use various technological resources for learning. To attain optimal results, learning must be interactive and engaging, using well-designed study materials and interactive platforms such as discussion forums. These interactions should be between students and lecturers and among students themselves. Thus, integration of students into the learning environment is important in ensuring that they feel a sense of belonging, which may help reduce attrition. Future research can study the effective use of the hybrid learning model to minimize attrition from the students' perspectives.

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