USAGE OF BLACKBOARD LEARN FOR TEACHING AND LEARNING IN THE HISTORICALLY DISADVANTAGED INSTITUTION: CHALLENGES AND PROSPECTS

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ABSTRACT

The utilisation of online platform Blackboard Learn for Teaching and Learning (T & L) has become an essential and obligatory component of Higher Education Institutions (HEIs). This study research aims to examine the difficulties and potential of its implementation at a Historically Disadvantaged Institution (HDI) like University of Limpopo (UL), with a focus on the Bachelor of Arts (BA) programme in *Criminology* and Psychology (*Crim* & Psych) as guided by University of Limpopo Faculty of Humanities Multimodal Teaching and Learning Plan (UL FHMTLP). This qualitative study employed an empirical research design, selecting Twelve (12) permanent Academics/Lecturers from the Department of Criminology and Criminal Justice at UL for interview purposes. The verbatim responses from the interviews were analysed to identify the key themes and sub-themes of the study using the inductive Thematic Content Analysis (TCA) method.

This study revealed that there is a lack of utilisation of Blackboard Learn at UL, as well as ineffective adaptation of current strategies and UL FHMTLP implementations. Many Lecturers still depend on contact T & L and the use of Blackboard Learn to connect the operations of this programme is currently unsuccessful. Recommendations consist of regular training and refreshment courses on the application of this technology, such as the Learning Management System (LMS) provided by the Information and Communications Technology [ICT]-electronic-(e)-Learning Unit. This could potentially facilitate collaborations between Natural Sciences (Technology – Blackboard Learn) and Human Sciences (Crim & Psych) to generate new knowledge, while also clearly providing the advantages of technology utilisation for T & L at UL. This kind of innovation could accommodate "economical, educational, technical, and social transformations" to address the mentioned challenges and opportunities, while making contributions to the field of professorship, with a focus on the South African Future Professors Programme (FPP) Phase 2 Cohort 1 2022–2023, utilising Blackboard Learn for T & L in a HDI to outline the existing challenges and possibilities.

Keywords: Bachelor of Arts: Criminology and Psychology programme, Blackboard Learn, challenges, economic, educational, Historically Disadvantaged Institution, professorship, prospects, social, South Africa, technology, transformation, University of Limpopo

INTRODUCTION

This study delves into the utilisation of Blackboard Learn in the HDI for T & L, with a particular focus on the challenges and prospects. It is worth noting that there is a scarcity of studies in the realm of Social Sciences research, specifically examining the application of Blackboard Learn technology by Criminology and Criminal Justice Lecturers. A pedagogical technique known as "traditional learning" is another approach to T & L, wherein a Lecturer assumes the role of a facilitator or instructor managing the flow of information within a classroom setting. Additionally, there is a method referred to as "blended learning," which combines both faceto-face and online instruction (Garrison and Kanuka 2004). The aim of online T & L is to facilitate academic activities remotely through virtual and hybrid network technologies, thereby creating electronic avenues. Synchronous or asynchronous communication platforms, accessible through various devices like mobile phones and laptops connected to the internet, are used in online T & L (Singh and Thurman 2019). This study focuses on the perspectives of Permanent Staff members from the Department of Criminology and Criminal Justice Lecturers at UL regarding the implementation of Blackboard Learn for T & L in the HDI. The aim is to specifically investigate the existing challenges and prospects surrounding this technological tool, considering that it may be a completely novel concept for some Lecturers and students at UL (Selelo and Manamela 2022).

Significantly, online pedagogies have been shown to offer significant benefits in terms of improving students' grades and enabling them to continue their academic programmes despite the impact of the Coronavirus disease-2019 (Covid-19) outbreak (Gonzalez et al. 2020). The implementation of online learning as an alternative method for the T & L often led to improved student performance compared to previous years (Gonzalez et al. 2020). Moreover, online T & L enhance students' independence and self-determination, as well as the effectiveness of lecturers' pedagogy (Gonzalez et al. 2020). In response to the implications of Covid-19, both the South African Government (SAG) and universities have advocated a blended learning approach, combining in-person instruction with virtual education, as the primary focus of T & L in the post-Covid-19 era (Odeku 2021).

To address the Strengths, Weaknesses, Opportunities, and Threats (SWOT) of using Blackboard Learn for T & L at UL, guided by the UL FHMTLP. The UL FHMTLP attempted to ensure safety and security of Criminology and Criminal Justice Lecturers and students while also maintaining the quality of programmes and the health of Lecturers/staff and students (UL 2020; *Blackboard Learn Guide* 2020). The Faculty of Humanities also aimed to provide fair opportunities for students to complete the academic year, considering the challenges and prospects posed by the pandemic. Most students living in villages or rural areas with limited

internet access were taken into consideration (UL 2020). Therefore, the Heads of Departments (HoDs) were required to ensure that all students in these departments had access to learning materials using folders and subfolders. These materials included module outlines, learning activities, and assessments. Various methods of reaching these students, including those with disabilities, were communicated and made inclusive (UL 2020).

The support provided to staff and students (including those with disabilities) in terms of devices and resources necessary for online learning during and after the pandemic was also mentioned. Lecturers were asked to meet with students online at least twice weekly and provide continuous feedback. Alternative assessment methods were encouraged based on validated T & L outcomes, with moderation. The UL FHMTLP aimed to successfully conclude the academic year (UL 2020). In the UL context, the use of Blackboard Learn for T & L required adjustment to new forms of offerings and environments, such as virtual T & L facilitated through the institutional LSM Blackboard, supported by emails, WhatsApp, and other social media platforms. The Department of Criminology and Criminal Justice implemented the use of Blackboard Learn differently, without standardisation (Blackboard Learn Guide 2022). Prior to the lockdown, Blackboard Learn was used for quizzes, posting notes, and announcements. During the lockdown, the UL ICT section emphasised the use of "Blackboard Ultra Collaborate" to enhance the quality of online T & L (Blackboard Learn Guide 2023). This virtual classroom could accommodate up to 250 students at once and provided recordings for those unable to attend. Ninety-four academics under the Faculty of Humanities were trained based on the UL FHMTLP in preparation for emergency online T & L (Blackboard Learn Guide 2022).

When rewording and rephrasing the original text, the focus is on the potential costs of saving the academic years from 2019 to the present (2024). These costs are related to social justice, student retention and success, quality emergency remote T & L, students' and lecturers' learning experiences, and emergency remote assessments (Both formative and summative). The term "emergency remote T & L approach" refers to the transfer of contact and face-to-face delivery to digital and remote platforms under emergency conditions, as defined by the Council of Higher Education (2020). It is important to note that the Blackboard Learn for T & L approach at UL is not the same as intentionally planned and designed online learning based on specific pedagogies suitable for online environments. "Remoteness" in teaching is not an appropriate pedagogy, even in emergency circumstances, and academics should strive to create as much presence as possible for their students, including criminology and criminal justice students and lecturers (*Blackboard Learn Guide* 2023).

While UL interventions such as Blackboard Learn and other technological platforms

address some of the challenges mentioned in this section, there is still much work to be done. Therefore, while attempting to introduce proper usage of Blackboard Learn for T & L in the HDI, various challenges and prospects were observed, especially due to the fundamental and rapid changes imposed by the Covid-19 pandemic on HEIs (Tarrant 2022). Over the years, the participation of academics from South Africa in public and private HEIs has increased. However, the outbreak of Covid-19 has undoubtedly presented various T & L challenges for South African HEIs (Motseki, Maluleke, and Barkhuizen 2021). These challenges include technophobia as new technologies like virtual meetings via Zoom or Microsoft Teams have become the new norms for conducting activities that were previously done in person. The pandemic has also accelerated the shift to online T & L. However, there has been a lag in the adoption of digitisation, leading to significant challenges during the implementation phase of the necessary shift to remote and multimodal T & L approaches (Tarrant 2022).

Lecturers faced difficulties when using online systems like Blackboard Learn for T & L practices, according to Mokoena-de Beer and Moloko (2022). They had to spend time both teaching and familiarising themselves with the LMS, making it challenging for them to effectively conduct online teaching within a short period. The lack of proficiency in using online educational programmes and applications may have hindered their ability to deliver online instruction (Mokoena-de Beer and Moloko 2022). Although Lecturers received training on the LMS, the sudden and unplanned transition process provided limited preparation opportunities (Mokoena-de Beer and Moloko 2022). Due to their insufficient knowledge of the LMS, Lecturers found it difficult to utilise tools that could enhance online instruction, leading to a decrease in the quality of educational programmes (Seetal, Gunness and Teeroovengadum 2021). The preparations for facilitating online instruction were challenging (Kummitha et al. 2021). Teachers who were unprepared to teach online noted that it negatively impacted the quality of instruction (Boateng 2020).

The lack of technological skills among teachers and the need to adapt to online teaching without proper training contributed to a decline in the quality of instruction (Yang et al. 2020). Despite the digital divide, some countries implemented measures to replace traditional classroom instruction with online T & L activities (Yang et al. 2020). However, Lecturers believe that remote areas still lack the necessary resources to support online instruction (Yang et al. 2020). This digital divide exists in both remote and urban areas where HEIs are located (Kummitha et al. 2020). One of the challenges in online education is the continuous assessment and evaluation process. Both Lecturers and students expressed uncertainty about managing projects, assignments, and ongoing evaluations (Sahu, Mishra, and Lal 2020). There was a need for faculty members to adapt and implement new assessment methods aligned with online T &

L (Sahu et al. 2020; Timmis et al. 2016).

Circumstances like the challenges brought about by the Covid-19 pandemic emphasise the crucial need for sufficient infrastructure and resources and proper training for faculty members to efficiently conduct online teaching and effectively handle student inquiries. Importantly, it is crucial to ensure that every lecturer and student, including those residing in remote areas, have access to online resources and acquire the necessary skills for remote learning (Sahu et al. 2020; Timmis et al. 2016). The integration of technological devices like laptops and phones has made the Blackboard Learn for T & L both fashionable and effective (Lalduhawma, Thangmawia, and Hussain 2022). WhatsApp was a widely used means of instant messaging and receiving updates about virtual T & L methods (Lalduhawma et al. 2022). Prior technical training and workshops were crucial for Lecturers before conducting online classes. However, many findings revealed that Lecturers' lack of preparedness for online learning had a negative impact on online exams (Lalduhawma et al. 2022).

It is recommended that breaks during Blackboard Learn sessions be provided to enhance students' productivity (Lalduhawma et al. 2022). Students generally preferred online sessions to be limited to a maximum of 30 minutes. The technical competence of Lecturers and students, as well as the lack of feedback from Lecturers, played a significant role in the ineffectiveness of Blackboard Learn for T & L (Lalduhawma 2022). However, online T & L offers the advantage of flexibility, allowing students to study independently from any location at any time (Sadeghi 2019). Compared to face-to-face learning, Blackboard Learn for T & L provides various networking platforms for interaction (Purwanto 2020). Active learning, where students actively participate in creating course materials, is an element that enhances readiness and efficiency in virtual education, which traditional T & L methods lack (Mukhtar et al. 2020).

On the other hand, technical challenges can have a negative impact on the effectiveness and readiness of virtual teaching, such as the need for adequate technical access, expertise, digital devices, and reliable internet quality (Purwanto 2020). Additionally, there are specific technical issues that hinder the success of online T & L. Communication obstacles arise, including limitations related to communication patterns in virtual learning environments and the delayed response in asynchronous formats compared to direct face-to-face interaction. In a digital environment, the nonverbal aspects of communication are less noticeable or responsive (Arkorful and Abaidoo 2015).

For a smooth transition to Blackboard Learn T & L, it is necessary to ensure that the LMS is user-friendly, educators are proficient in using the LMS, and there is readily available support for troubleshooting (Hayat et al. 2021). It is important to dedicate more time to preparing and delivering online T & L activities compared to face-to-face T & L (Mokoena-de Beer and

Moloko 2022). This is supported by the fact that a significant amount of time is spent on fixing errors that occur due to unfamiliarity with Blackboard Learn as the LMS (Mokoena-de Beer and Moloko 2022). Therefore, it was crucial for HDIs to ensure that lecturers were familiar with the LMS before implementing Blackboard for T & L, including at UL. As a result, many South African institutions prioritised the use of the LMS and, after providing training, saw an increase in student attendance rates (Pillay and Madzimure 2023). The "Blackboard Learn" is considered an open and flexible online tool for online T & L and community building focused on student academic achievements (Boshielo 2014). It is also a course management system that combines online and in-person instruction through hybrid courses (Livingstone 2012). Furthermore, it is an online tool that allows lecturers to efficiently conduct online instructions, accommodate students' needs, and provide feedback on formative assessments (Bradford et al. 2007). In the context of UL, this technological tool is known as an online learning platform and LMS with customisable open styles and scalable designs that integrate with student information systems and verification procedures.

The Blackboard Learn is a versatile and user-friendly application that caters to online teaching, learning, community building, and knowledge sharing. It prioritises student achievements by offering mobile updates on courses, assignments, tests, discussions, and grades. Instructors play a crucial role in administering the platform, overseeing course contents, grading assignments, engaging with students, and conducting Collaborate sessions. This technology facilitates real-time interactions between lecturers and students, allowing them to stay on track and manage their time effectively. Additionally, it accommodates extended periods of communication, enabling students to engage in reflective discussions. Blackboard Learn can operate fully online, hybrid, blended, and web-enhanced. In an ever-changing educational landscape, it is essential to have an inclusive, flexible, and insightful LMS to cater to the diverse needs of learners. Blackboard Learn successfully engages students both inside and outside the classroom, providing life-changing educational experiences. Its role in South African HEIs during the Covid-19 pandemic has highlighted its significance in ensuring accessible and integrated T & L practices, particularly in the context of the Fourth Industrial Revolution (4IR). According to the "Economist", during the peak of global lockdowns in April 2020, approximately 1.4 billion students across 190 countries were unable to attend school (Tarrant 2022). Therefore, the South African HEIs have to rethink strategy post Covid-19 in using technology to enhance technology integrated T & L practices within the realm of the 4IR (Rossouw and Goldman 2023).

The use of Blackboard Learn for T & L in a less-resourced environment, like the HDIs in South Africa, has not received much attention from criminology and criminal justice academics,

researchers, and scholars. Despite its potential benefits, this technology also poses challenges such as technophobia, limited device availability, readiness for online assessments, internet connectivity, data costs, and a preference for face-to-face classes. The objective of this study is to explore how effective Blackboard Learn is in an HDI and discuss the existing challenges and prospects of using this technology for T & L. There is an ongoing debate about the use of Blackboard Learn in South African HDIs, as it remains a contentious issue among academics, students, and society. By addressing the challenges and prospects, using Blackboard Learn for T & L in an HDI can be facilitated, serving as an innovative solution to complex challenges faced by South African HDIs in the context of the 4IR. This can contribute to a better understanding of the significance of technology in T & L, while highlighting the challenges and future prospects. The inclusion of distinguished and ground-breaking technological tools like Blackboard Learn should be considered in future T & L methods. To prepare promising midcareer academics to become the next generation of South African professors across disciplines, it is important to understand the use of Blackboard Learn for T & L in an HDI, by addressing the challenges and prospects and developing qualities of academic excellence and leadership in university scholarship. This will contribute to the development of future South African professors who embrace collaborative technology usage (Blackboard Learn) for effective T & L practices.

REVIEW OF RELEVANT LITERATURE

This section introduces the body of literature to aid in examining the relevance of Blackboard Learn for T & L approaches in universities. The focus of the study was on the UL, which provided valuable insights for Criminology and Criminal Justice Lecturers. The discussion delves into the chosen traditional methods and the shift towards e-learning, along with the associated challenges and the need for online platforms like Blackboard Learn in T & L methodologies.

Selected conventional teaching and learning methods.

Overall, it is important to acknowledge that there are alternative approaches to T & L, such as "traditional learning methods," which refer to a pedagogical technique employed in a classroom setting where an Instructor/Lecturer acts as a facilitator and manages the flow of information. Another approach to T & L is known as "blended learning," which involves combining inperson classroom instruction with online instruction (Garrison and Kanuka 2004). The conventional pedagogy (Contact-learning) describes a cultural practice of instruction where students are less inclined to actively participate in their own learning, and the education is

centred around the lecturer (Chang et al. 2021). Online education enables students to actively engage in their education, which has proven to be beneficial for them. In response to the implications of Covid-19, South African universities have introduced blended learning as the primary method for T & L in the post-Covid-19 era (Odeku 2021). As discussed in the later section of this study, "active and collaborative/cooperative teaching methods" have been selected as the preferred approach to T & L at the disadvantaged university in South Africa:

- Active learning: This particular style, known as T & L, can be described as learning environments that facilitate students' engagement in various activities such as talking, listening, reading, writing, and reflecting. These activities are centred around problem-solving exercises, informal small groups, simulations, case studies, role-playing, and other interactive tasks that require students to apply their own learning experiences. The lecturers of the UL Department of Criminology and Criminal Justice, following the chosen university philosophy on T & L, consistently challenge undergraduate and postgraduate students by delivering comprehensive lectures, tutorials, and encouraging class discussions and creative projects. They cater to a diverse student body and incorporate different perspectives into their courses. (Meyers and Jones 1993).
- Cooperative and collaborative learning: The term "cooperative learning" is used to describe a systematic pedagogical strategy that promotes collaboration among small groups of Criminology and Criminal Justice students to achieve specific goals. Although this concept is often used interchangeably with cooperative learning, it is considered a separate strategy that includes a broader range of group interactions. These interactions encompass the development of learning communities, stimulating student discussions, and encouraging the use of technology (Bruffee 1993).
- Reflective learning: The emphasised point of this T & L approach is that learning arises from the experiences of Criminology and Criminal Justice Lecturers and can be continually updated by reflecting on and considering those experiences. This involves introspection to help students make sense of their learning experiences. This proves beneficial for graduates in terms of employment opportunities, as their skills and knowledge are prioritised by critically evaluating their different T & L approaches, identifying areas for further learning, and becoming independent learners (The University of Kent 2012).

The necessity of online [Blackboard Learn] for teaching and learning approaches

Technology, collaboration and its interrelatedness seem to be critical and most profound for the

South African HEIs (Rossouw and Goldman 2023). The rapid developments in technology have made Open Distance Learning [ODL] much easier (McBrien, Cheng and Jones 2009). "Most of the terms (i.e. Multimodal engaged learning, Online learning, open learning, web-based learning, computer-mediated learning, blended learning) commonly presents abilities to use a computer connected to a network, offering possibilities to learn from anywhere, anytime, in any rhythm, and with any means" (Cojocariu et al. 2014).

The online T & L approach can be termed as a tool, which is student-centred, innovative and flexible. It can be defined as "learning experiences in synchronous or asynchronous environments using different devices (Mobile phones and laptops, amongst others) with internet access. In these environments, students can be anywhere (Independent) to learn and interact with instructors and other students" (Singh and Thurman 2019). Amidst this deadly Covid-19 virus spread such online platforms are needed where a) Video conferencing with at least 240 to 250 students is possible, b) Discussions with students can be done to keep classes organic, c) Internet connections are good, d) Lectures are accessible in mobile phones also and not just laptops, e) Possibility of watching already recorded lectures, and; (f) Instant feedback from students can be achieved and assignments can be taken (Basilaia et al. 2020).

The chosen existing "Six (06) key technologies and practices" pertain to the following: 1) Artificial Intelligence (AI), 2) Combination and hybrid course models, 3) Educational data analytics, 4) Micro-credentialing, 5) Accessible educational resources, and 6) High-quality online learning (Chetty 2022). Consequently, UL, similar to HDI, offers online T & L using the Blackboard Learn platform to facilitate academic activities remotely through internet-based platforms, digital technologies, and hybrid networks (Chang et al. 2021). Additionally, "online T & L practices" can be described as the "teaching and learning process involving real-time or delayed communication utilising various devices (i.e. Mobile phones, laptops) connected to the internet" (Singh and Thurman 2019). Notably, multimodal teaching and learning is a relatively novel concept for some lecturers and students at South African universities (Selelo and Manamela 2022). However, online pedagogies have been found to offer significant advantages, such as enhanced performance and the ability to continue academic programmes during crises like the Covid-19 pandemic (Gonzalez et al. 2020). Consequently, students' performance has notably improved compared to previous years when online technologies were not utilised as an alternative method of T & L (Gonzalez et al. 2020).

Subsequently, the necessity of online [Blackboard Learn] for T & L in a HDI, like UL, should be adopted in accordance to the following "benefits of technology-enhanced learning" (Chetty 2022).

- *Increased access*: For those that have access to internet (More affluent families).
- **Quality of learning:** Driver to improve the quality of learning through self-learning.
- **Costs and benefits:** Low costs, more affordable, large student numbers new business opportunities.
- **Social transformative potential:** Creating a new middle-class.

The effectiveness of applying the mentioned benefits should embrace technological changes, as indicated in Table 1 (Chetty 2022):

Table 1: Trends driving technology change

| Societal changes | Anticipated interventions | | | |
|------------------|-------------------------------------------------------|--|--|--|
| Social | Remote work/learning | | | |
| | Widening of the digital divide | | | |
| | Mental health issues | | | |
| | Widespread adoption of hybrid learning models | | | |
| | Increased Use of Learning Technologies | | | |
| | Online Faculty development (Professional development) | | | |
| | Decreasing higher education funding | | | |
| Economic | Demand for new/ different workforce skills | | | |
| | Uncertainty in economic models | | | |
| | Climate change | | | |
| Environmental | Reduction in work travel | | | |
| | Sustainable development | | | |
| | Increase in online globalisation | | | |
| Political | Rise of Nationalism | | | |
| | Public funding for higher education | | | |

Source: Adapted from Chetty (2022)

THEORETICAL FRAMEWORK

Connectivism Learning Theory

The Connectivism Learning Theory (CLT) was founded in 2004 by the Two (02) Theorists, George Siemens and Stephen Downes in the year 2004 (Siemens 2004; Downes 2007). However, George Siemens specifically focused on the social aspects of connectivism (Siemens 2004), while Stephen Downes shared that the CLT is centred around non-human objects (Appliances) and technology-based learning (Downes 2005). Therefore, the researcher consolidated both Siemens' and Downes' perspectives on CLT to explores the Lecturers' perceptions on the usage of Blackboard Learn for T & L in the HDI, focusing on challenges and prospects. The CLT is a relatively new learning theory that proposes that students and educators should integrate thoughts, theories, and background information in a useful manner, Downes (2006). It recognises that technology plays a significant role in learning, as well as the fact that people can choose to learn in a variety of ways because of their constant connectivity.

The connectivism also promotes group cooperation and discourse, and facilitates differing

viewpoints and perspectives during decision-making, problem-solving, and information interpretation (Siemens 2004). The social media, online networks, blogs, database information and Internet connectivity are all examples of connectivism, which promotes learning outside of an individual's personal space (Downes 2019). The connectivism is an emergence-based theory that can be applicable to online and distance education modes. In this study, the researcher explored the Lecturers' perceptions of online T & L and emphasised the use of technologies, as required for effective online T & L. The researcher also considered social aspects such as the challenges encountered by Lecturers when providing online T & L during Covid-19 (Downes 2006).

Technology plays a significant role in the implementation of CLT, including the use of Blackboard Learn for T & L in HEIs such as universities. This study focuses on the challenges and opportunities presented by CLT and explores how digital learning platforms like online courses, webinars, social networks, and blogs enhance effective T & L. According to Kop and Hill (2008), CLT posits that knowledge is formed through the connection of various pieces of information, and this process continues as individuals create and maintain these connections. In the context of online T & L, students and educators act as interconnected nodes, connecting with each other and with educational resources like books, websites, and people. HEIs have employed various strategies and tactics, including the use of online communication tools and technological devices, to ensure the continued dissemination of knowledge during the Covid-19 pandemic (Dziubaniuk, Ivanova-Gongne and Nyholm 2023; Al-Mutairi 2021).

This study specifically focuses on the usage of Blackboard Learn for T & L in HEIs and examines the challenges and prospects associated with its implementation. By adopting the perspective of connectivism, which views knowledge as a network created through interactions between learners and educators, this study seeks to gain a deeper understanding of the usage of Blackboard Learn in HEIs. The ongoing communication between instructors and students during the pandemic has created an environment where decisions that facilitate learning can be made. Online T & L platforms enable collaboration among students and offer diverse perspectives that aid in decision-making, problem-solving, and information comprehension in online education (Owusu-Acheaw and Larson 2015). The social communication facilitated by these platforms contributes to the formation of knowledge, and interactions between lecturers and students, as well as among students themselves, establish networks of connectedness (Naidoo and Moonasamy 2022).

RESEARCH DESIGN AND METHODOLOGY

This study used the phenomenological research design (Creswell 2014; Du Plooy-Cilliers,

Davis, and Bezuidenhout 2014; Flick 2014; 2015; Mills and Birks 2014) as a strategic framework for action, bridging the study's objective and the research strategy implementation (Terre Blanche et al. 2006). The study aimed to explore and interpret the meaning of effective usage of Blackboard Learn for T & L in the HDIs, highlighting the challenges and prospects faced by selected participants (Liamputtong 2013). The research design was chosen to gain a comprehensive understanding of the situation, phenomena, academic community, and individuals involved. By utilizing qualitative methods aligned with the natural scientific method, the study focused on the perceptions, interpretations, and beliefs of lecturers regarding their immediate social settings (Matlala 2012).

This solely relied on the experiences and conceptualisations of Lecturers to generate novel knowledge about Blackboard Learn usage in the HDI, specifically examining challenges and prospects. A purposive sample of 12 permanent staff members (Lecturers) from the Department of Criminology and Criminal Justice participated in semi-structured Key Informant Interviews (KIIs), with data collection conducted through electronic mail-[e]-mails.

This study utilised a qualitative research approach to gain insight into the thoughts, attitudes, behaviour, value systems, feelings, concerns, and motivations of the participants regarding the research topic. Qualitative studies start with assumptions, a worldview, and possibly a theoretical lens, focusing on understanding the meaning that individuals or groups attribute to a social or human problem. The study emphasised the use of a qualitative research approach, conducted in a natural setting with human subjects, and employed inductive data analysis to establish study themes (Creswell 2007). The researchers applied an empirical lens, utilising fieldwork to conduct semi-structured KIIs. The purpose was to explore participants' experiences and knowledge related to the use of Blackboard Learn for T & L in the HDI (UL), focusing on challenges and prospects (Mouton 2009). Interviews served as a primary source of knowledge during the empirical research (Maxfield and Babbie 1995). The researcher suggests that the study findings can be applicable beyond the specific context of the current study to other similar situations.

The data analysis process utilised the inductive TCA method, where the collected data was analysed through six phases: 1) Familiarizing with the data, 2) Generating codes, 3) Identifying themes, 4) Reviewing study themes, 5) Defining themes, and 6) Writing the report. This approach allowed for a comprehensive analysis of the participants' lived experiences on the subject (Braun and Clarke 2014; Alhojailan 2012; Creswell 2014). Additionally, the selected participants were asked the following two questions. Motivations for framing them is given in italics, aided with verbatim expressions recorded:

- What are the common usage of selected conventional T & L methods under the Department of Criminology and Criminal Justice of UL, South Africa?
- What is the necessity of online [Blackboard Learn] for T & L approaches at the Department of Criminology and Criminal Justice of UL, South Africa?

To ensure the trustworthiness of conducting this study, the researcher conducted the KIIs to further link their responses to the consulted literature studies to provide *credibility* of the collected data holistically. The clearly indicated how transferability was achieved in this study by describing the methodologically process followed to other researchers to replicate, such as the employed research design and methodology, data sampling, data collection and analysis methods. The extent the theoretical knowledge obtained in this study could be transferred to similar contexts was also indicated. Adding to the transferability element, the dependability was accomplished by explaining the choice of the adopted research design and methodology to determine whether the procedures and processes followed are acceptable. This was ensured by creating coherent linkages between the collected data and reported study findings to corroborate the identified study themes and inferences. To ensure conformability of this study, the researcher kept detailed records of all the consulted literature studies. For validating the study's findings and interpretations, it was necessary to demonstrate that they were not based on mere imagination but rather connected directly to the data that was collected. To eliminate biases, motivations, and perspectives that could influence the study's findings, the researcher relied on literature reviews and empirical data as guiding principles (Bryman 2013; Creswell 2009; Kumar 2014).

Importantly, to adhere to the "ethical considerations", this study was ethically constructed and approved by the Turfloop Research Ethics Committee (TREC) of UL under the Department of Research Administration and Development (DRAD), consisting of "TREC/48/2023: PG - Amended" project number, the UL TREC is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031. Furthermore, the Informed Consent Form, with relevant principles (i.e. Indicating the purpose of this study, followed procedures for data collections, risks and discomfort, associated benefits, participant's rights, confidentiality, data storage and dissemination of findings, questions and concerns) of ethical considerations signed by all participants.

STUDY FINDINGS

The following section presents the identified themes and sub-themes of the study, along with selected participants and direct quotes from their responses obtained through the KIIs. The

interviews in this study were referenced using a numerical sequence from P1–P12, as shown in Table 2 and 3 representing the 12 selected Lecturers, attached to the Department of Criminology and Criminal Justice of UL. The study findings are based on empirical qualitative data collected using the semi-structured KIIs, using the e-mails, which is presented here to establish the credibility of the collected data and its connection to relevant literature on the subject. The credibility of the study was verified by the selected participants, who provided their perceptions, experiences, feelings, and beliefs as lecturers in the Department of Criminology and Criminal Justice at UL. The researcher ensured that the opinions and feelings of the participants were accurately reflected through extensive engagement and observations within the department.

The interviews were conducted to explore participants' perceptions and experiences and to determine the credibility of the collected data in relation to the literature studies consulted. This was done to assess whether the literature and interviews truly captured the essence of the research claims made in the introduction, literature review, and theoretical framework (CLT) sections. The researcher corroborated the study findings and interpretations with the collected empirical data and reviewed literature, establishing a clear link between them. The researcher remained unbiased and guided solely by the consulted literature studies and empirical fieldwork to uncover the two study themes.

Table 2: Theme one: Common usage of selected conventional Teaching and Learning methods

| Sub-themes | Interviewed participants | Verbatim expressions |
|-------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Traditional T & L methods (Active, Cooperative, collaborative and reflective) | P7 | " The use of traditional learning methods, heavily relying on contact lectures remains significant for T & L, referring to South African historical context pertaining to the Department of Criminology and Criminal Justice Lecturers and students. For the students in particular, they do not reach university levels at the same age group, they are not always granted similar T & L opportunities; cognisance of their socioeconomic disparities" |
| Contact learning / lecturing | P2 | "Importantly, the Criminology and Criminal Justice Lecturers have distinct cognitive learning approaches, focusing on contact lecturing. this vacuum should be reconsidered soon Notably, the historically disadvantaged university like UL always struggle with funding, resources and embracing change Thus, fully embracing 4IR multimodal engaged T & L approach can be mountainous" |
| Covid-19 implications | P6 | "The lessons drawn are that the use of the Blackboard Learn for T & L approach in the Department of Criminology and Criminal Justice of UL is relevant and necessary for the betterment of their student populations. However, the Covid-19 pandemic taught us that there is a high need for implementations of this approach, as the T & L activities came to a standstill during this period. Therefore, this should serve as great lesson learned. Therefore, this advised approach should be carried-out in this department, as it has proven to be effective even in an unpredictable pandemic. This approach can create inclusive learning environment to possibly unlock full potential of Criminology and Criminal Justice of UL students and Lecturers" |

Source: Researcher illustration (2024)

This educational approach shares the presence of conventional learning methods and widespread dependence, which undermines the "blended learning, combining face-to-face lectures with online [Blackboard Learn] T & L," (Garrison and Kanuka 2004). It is also noted that "face-to-face learning/lecturing" is teacher-centred. In contrast, online T & L allows students to actively participate in their learning processes while stressing the importance of integrating blended learning (Chang et al. 2021). However, due to the implications of Covid-19, online T & L has become the primary focus of offering various programmes, with the post-Covid-19 era necessitating the integration of online and traditional learning methods (Active, cooperative, collaborative, and reflective learning methods) (Odeku 2021). The selected traditional learning methods encompass the following: "Active learning" is frequently employed to address academic problems by providing students with opportunities to engage in discussions, listen, read, write, and contemplate existing knowledge, guided by course content (Meyers and Jones 1993).

Moreover, "cooperative and collaborative learning" foster group of students' interactions through development of learning communities, formulation of discussion forums and technological applications, by ensuring collegiality to achieve collective specific goals (Bruffee 1993). The concept of "reflective learning" emphasises the idea that the experiences of Lecturers impact the T & L activities. The learning materials are regularly updated and refreshed using either manual notes or technology such as Blackboard Learn. This enables Lecturers and students to make sense of their learning experiences while identifying areas for personal growth. Students can enhance their skills and knowledge by developing independent critical thinking skills and evaluating both traditional and contemporary T & L methods (The University of Kent 2012)

The study findings validate that embracing technological advancements in education, such as the 4IR and online learning platforms like Blackboard Learn, along with a combination of traditional teaching methods, can greatly enhance the current state of education. It is crucial for both lecturers and students to be well-informed, educated, and independent in their roles and responsibilities while also considering the importance of traditional teaching methods, technology, in-person learning, and the impact of Covid-19. The study also emphasises the need to provide equal opportunities for students from diverse backgrounds and to incorporate Work Integrated Learning (WIL) into the curriculum for practical experience and inclusive T & L approaches that integrate technology.

Table 3: Theme two: The necessity of online [Blackboard Learn] for Teaching and Learning approaches

| Sub-themes | Interviewed participants | Verbatim expressions |
|-------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applications of Blackboard Learn | P1 | "The Blackboard Learn, as a T & L approach involves using different teaching techniques, such as the 'visual auditory, reading, listening, writing and kinesthetic, amongst others) to impact knowledge into Criminology and Criminal Justice students. The essence of this approach is meant to improve T & L quality by matching contents delivery, using best modes available, accommodating them and their respective backgrounds This approach is suitable for Criminology and Criminal Justice students from this university, as these students' little opportunities for high-quality educational systems; adequate educational facilities lack Consequently, capacities to grasp academic information passed to them is not sound as those students form affluent universities, this also have to do with foundational levels (Primary schools). Thus, for them to compete satisfactorily with other established students; multimodal T & L approach can a great tool to improve Intelligence Quotient (IQ)" |
| Relevance of Blackboard Learn | P8 | "The Blackboard Learn T & L approach provides for a conducive learning environment for Criminology and Criminal Justice students, resulting in amplifying their engagements. This approach does not require them to abide to certain standard(s) of T & L approach, but provides a wide range of options for them to select their preference of T & L options. This approach allows induction of innovation 'quizzes,' 'Question and Answers (Q & As) sessions' and 'formative tests' while encouraging students to undergo WIL at the local 'South African Police Service (SAPS), Courts and Correctional Services' this can accommodate those who 'learns' best by 'practicing'" |
| Witnessed challenges of introducing Blackboard Learn at HDI, like UL | P10 | "The Blackboard for T & L approach in this university, as offered by the Criminology and Criminal Justice of UL can be both beneficial for students and Lecturers. This department practiced conventional (Contact) T & L for the longest period. However, the introduction of this approach, as already active in other affluent universities, will always be a barrier to this university based on economic constraints, like demographics, infrastructure/ resources and lack of proper technological equipment" |
| Lessons offered by the Blackboard Learn | Р3 | "To reiterate to the importance of adopting the Blackboard Learn for efficient T & L approach lies on meeting the individualised needs of each UL Criminology and Criminal Justice students to ensure that they reach maximum learning and performance capacities. It must also be acknowledged that due disadvantages experienced by these students; the language usage, educational, cultural and learning patterns, they may be present while offering this approach. The individualised learning needs is not often fully understood for grasping related concepts or required knowledge. Therefore, this approach can simply identify students at risks, to positively provide their respective needs" |
| | P12 | "The Lecturers affiliated to the Department of Criminology and Criminal Justice of UL can best infer lessons from the current affairs (Textbooks and other study materials) matters regarding Criminology and Criminal Justice lessons affecting South African rural communities, by sharing latest relevant information, based on conventional and 4IR period. Students can convenient understand given concepts, using conventional and technologies methods, using the 'smartphones, and laptops' to access online information, including library resources/institutional repository" |
| | P11 | "During the offered lessons, the responsible Lecturers can use various methods, including slides, and drawings; while also employing interactive discussions with students [Criminology and Criminal Justice of UL], based on the projected slides. In addition, these Lecturers can also encourage these students to participate during the T & L process, as learning occurs best through students' engagement, contributing towards knowledge building" |

Source: Researcher illustration (2024)

The identified study themes and sub-themes indicate that rapid technological advancements have a positive impact on the accessibility of online distance learning (McBrien et al. 2009). The utilisation of network-connected computers [Blackboard Learn] for T & L purpose opens possibilities for remote, as well as interactions between educators and students (Cojocariu et al. 2014). The adoption of online T & L methods (Specifically Blackboard Learn) through various devices is student-centred, innovative, and flexible in nature (Singh and Thurman 2019). Despite the challenges posed by the Covid-19 pandemic, online platforms continue to be relevant, offering features such as video conferencing, discussions, internet connectivity, mobile and laptop accessibility to lectures, listening to recorded lectures, and receiving instant feedback from students (Basilaia et al. 2020).

This study has established the existence of six key technologies and practices: AI, blended and hybrid course models, learning analytics, micro-credentialing, open educational resources, and quality online learning (Chetty 2022). In practice, the UL utilises Blackboard for T & L, offering sufficient academic activities remotely through internet platforms, digital technologies, and hybrid networks (Chang et al. 2021). Additionally, this study reveals that the combination of traditional learning methods and technology in T & L, known as multimodal methods, is a new phenomenon for some lecturers and students in South African universities (Selelo and Manamela 2022). However, the notable advantages of this approach as an alternative method, such as improved high performance and the ability to continue academic programmes during the Covid-19 pandemic, are highly commendable (Gonzalez et al. 2020).

This study also argued that the adoption of online learning platforms such as Blackboard Learn is essential for T & L in a high digital intensity (HDI) environment like the UL. This is supported by the various advantages of technology-enhanced learning, including increased accessibility, improved learning quality, cost-effectiveness, and its potential for social transformation. These benefits should be connected to the ongoing technological changes, as depicted in Table 1, which are influenced by social, economic, environmental, and political factors (Chetty 2022). Moreover, the study emphasises the relevance, challenges, and lessons offered by Blackboard Learn, highlighting its suitability for the Department of Criminology and Criminal Justice at UL. Not only does this technology provide valuable resources, but it can also alleviate financial burdens associated with non-academic initiatives. Furthermore, it equips students for the education field's shift towards the 4IR, thereby contributing to the creation of better-prepared graduates.

The use of Blackboard Learn as a tool for departmental intervention brings both positive and challenging lessons in terms of application. The nature of T & L approaches has shifted from traditional to contemporary integrations, replacing traditional "talk and chalk" lectures

with engaging multimedia experiences. This shift strongly supports a multimodal approach, as many lessons offered are digitalised, including Blackboard Learn. In recent years (2024), T & L approaches should incorporate more engaging methods such as videos, animations, and infographics while still utilising traditional learning methods and technologies like Blackboard Learn. This integration should be done while considering personal motivations for adoption and recognising the positive impact of Blackboard usage on T & L approaches, personal development, improved understanding, and enhanced skills. Internal and external encouragement, as well as student support, should be embraced to enhance multimodal T & L approaches, incorporating multiple focal points and addressing the challenges posed by Covid-19. This will contribute positively to the value of multimodal approaches at various study levels and improve students' learning and performance.

In the theoretical framework section, it is stated that the CLT was founded by George Siemens and Stephen Downes in 2004 (Siemens 2004; Downes 2005). Connectivism and the use of non-human objects to support technological-based learning are the social aspects that were also introduced by these theorists (Siemens 2004; Downes 2005). The integration of their perspectives was beneficial in exploring the perceptions of lecturers on the use of Blackboard Learn for T & L in the HDI (UL), focusing on both the challenges and prospects. Connectivism platforms have been found to enhance information and knowledge sharing (Downes 2006). In the HDI like UL, technology plays a critical role in T & L, as it enables a variety of methods to be employed due to constant connectivity. This promotes group cooperation and sharing of relevant discourse, which can facilitate different and supporting viewpoints during decisionmaking, problem-solving, and information interpretation (Siemens 2004). Connectivism is exemplified using social media, online networks, blogs, database information, and Internet connectivity, which promote learning beyond an individual's personal space (Downes 2019). Therefore, it is important for researchers to take into account the social aspects related to the challenges faced by lecturers in providing online T & L during the Covid-19 pandemic (Downes 2006).

Technology plays a significant role in the implementation of CLT, where Blackboard Learn is used for T & L in HDI like UL, while also highlighting potential challenges. Digital learning platforms, such as online courses, webinars, social networks, and blogs, allow students and educators to teach and learn effectively (Kop and Hill 2008). The CLT is based on the idea that people's knowledge is formed by connecting different information nodes. As a result of the Covid-19 pandemic, HEIs, including HDIs, have implemented various T & L strategies and tactics to continue disseminating knowledge (Dziubaniuk et al. 2023). These techniques included using online communication tools and technological devices to support online learning

and quick access to relevant information for academics (Al-Mutairi 2021). Therefore, this study applied the CLT to examine Lecturers' perceptions of using Blackboard Learn for T & L in HDI, focusing on challenges and prospects. This study benefited from the concept of connectivism, which views knowledge as a network in which learners and educators create connections between pieces of information while interacting with various technologies, such as using online T & L during Covid-19 (Dziubaniuk et al. 2023). The interactions between lecturers and students, as well as students among themselves, provide a network of connectedness (Naidoo and Moonasamy 2022).

CONCLUSIONS AND RECOMMENDATIONS

This study *concludes* and *recommends* that the Lecturers, including students attached to the UL Departments of Criminology and Criminal Justice should practice extra care, based on faced many challenges, while considering existing positives to offer assistance, all this should be promoted and adopted as prerequisites through proper consultations. The university management should prioritise and maintain the network connections, and they should be supported by the "ICT e-Learning Support Services" to provide necessary resources and strategies.

To enhance the multimodal engaged T & L approach plan of 2020, the department should effectively adopt new innovative, coordinated strategies and coping strategies through the CLT. This will help implement and organise both traditional and digital learning processes as valuable lessons. Additionally, measures should be taken to assist students and lecturers who cannot physically be on campus due to the Covid-19 situation. It would also be beneficial for the Criminology and Criminal Justice Department's lecturers and students to fully comprehend the effective utilisation of Blackboard Learn for T & L methods at a HDI like UL with a high digital inclusion:

- Clearly understanding what different technologies for T & L entails, while guided by the Blackboard Learn as a blueprint and its relevance in the 4IR and the applications of digital fluency in HEIs and HDI, such as UL. This should be done by embracing changing higher education landscape.
- Demonstrating importance of technological revolutions in African/South African context, while identifying historical trajectory of technology, as employed within the university community and the Department of Criminology and Criminal Justice.
- The challenges and prospects of Blackboard Learn connectivism should be embraced,

disseminated and shared with the Lecturers under the concerned department.

- Reflecting on current and future trends of technology at HDI, like UL, by allowing Lecturers and students to develop effective "Standard Compliant" Blackboard Learn for T & L in the HDI, such as UL contents, while evaluating available processes of facilitations and students support systems in an online environment (Blackboard Learn in this regard).
- Offering criticisms on existing theoretical frameworks, like the "CLT" based on this study for specific designing of educational interfaces and the Blackboard usage for T & L in the HDI, such as UL.
- Appraising innovative practices, involving the Blackboard Learn for efficient T & L in the HDI, like UL to design, develop and implement adequate educational technology in practice.

Technology plays a significant role in implementing a CLT, where Blackboard Learn is utilised for T & L in HDI like UL while also highlighting potential challenges. Digital learning platforms, such as online courses, webinars, social networks, and blogs, enable effective T & L for students and educators (Kop and Hill 2008). The CLT is founded on the concept that individuals' knowledge is formed by connecting different nodes of information. Due to the Covid-19 pandemic, HEIs, including HDIs, have implemented various strategies and tactics to continue disseminating knowledge (Dziubaniuk et al. 2023). These techniques involve the use of online communication tools and technological devices to support online learning and facilitate quick access to relevant information for academics (Al-Mutairi 2021).

Consequently, this study applies the CLT to investigate Lecturers' perceptions regarding the use of Blackboard Learn for T & L in HDI, with a focus on challenges and prospects. This study draws upon the concept of connectivism, which regards knowledge as a network in which learners and educators establish connections between pieces of information while interacting with various technologies, such as online T & L during Covid-19 (Dziubaniuk et al. 2023). The interactions between lecturers and students, as well as among students themselves, create a network of interconnectedness (Naidoo and Moonasamy 2022).

FUTURE RESEARCH STUDIES

This study focused on investigating the utilisation of Blackboard Learn for T & L purposes in the HDI (UL), with an emphasis on the challenges and possibilities. To ensure enough data saturation, a deliberate selection of 12 Lecturers was made. Future research could expand the scope by exploring the perspectives of both students and instructors on the use of this

technology, incorporating larger sample sizes for more comprehensive insights. One possible approach to achieve this is to adopt a mixed methods methodology. It is important to note that this study was limited to the Department of Criminology and Criminal Justice.

Subsequently, future research studies could consider other academic departments at UL. Comparing experiences, perspectives, and strategies used at UL with other HDIs may uncover alternative measures that UL and other institutions can implement to enhance the usage of Blackboard for T & L practices. Additionally, further investigations into unethical behaviours during online assessments can shed light on their underlying causes and provide innovative solutions to maintain the integrity of both formative and summative assessments, as well as T & L activities. Such studies would bring valuable insights to the academic community. Assessing the challenges and ensuring quality assurance in the utilisation of Blackboard Learn for T & L, specifically in the Department of Criminology and Criminal Justice, is another potential area of investigation for future research at UL.

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