Engendering Technology-Assisted Pedagogy for Effective Instructional Strategy in the University of Namibia Language Centre

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How to cite
Hamakali, H. P. S., & Josua, L. M. (2023). Engendering Technology-Assisted Pedagogy for Effective Instructional Strategy in the University of Namibia Language Centre. *Research in Educational Policy and Management*, 5(1), 18-32. https://doi.org/10.46303/repam.2023.3

ABSTRACT
The advent of COVID-19 disrupted existing socio-economic activities and has unveiled digital inequities and injustices. The pandemic led to a forced migration of education activities towards the new normal using technology-assisted pedagogies around the globe, Africa and Namibia is no exception. This paper attempts to report on how the blended-learning strategy for the Academic Writing for Postgraduate Students course was developed in the University of Namibia. The study used the Flipped Approach as a framework which guides self-reflection, active cognitive processing, interaction and peer-teaching. The paper used a combination of empirical as well as theoretical-based research. Firstly, a Google Form questionnaire was used to obtain quantitative data that profiled students. A conveniently sampled respondents participated in the study. Secondly, a reflective practice is applied to highlight the use of a technology-assisted learning strategy that enables effective pedagogic access to Academic Writing for Postgraduate Students at the University of Namibia's Business School. The student-profiling results showed that more students preferred the blended learning mode, which makes them less likely to resist the proposed strategy. It also emerged that all the students have technology devices, which makes it possible to engage in the learning processes that involve the usage of technology. Post-COVID-19, stakeholders in the higher education context should re-imagine the traditional stances in order to transform the way teaching, learning and assessment shall be enabled after the crisis. This calls for educators to re-invigorate, re-imagine, re-think, re-construct and de-construct the way they conduct pedagogic activities.
KEYWORDS
Technology-assisted learning; digital literacy; blended learning; flipped learning; Africa; Namibia.

INTRODUCTION

In this paper, we reflected on technology-assisted pedagogy in the high education setting. Since the advent of the COVID-19 pandemic, technology-assisted teaching, learning and assessment have become an essential component of high education. As a way of improving learning and capitalizing on the availability of modern technology, the University of Namibia's (UNAM) structures have been revised to enable the implementation of online teaching, learning and assessment. Specifically, UNAM preferred the blended learning mode, which uses both face-to-face and online teaching, learning and assessment. However, recently, the global outbreak of the coronavirus has sped up the implementation of online learning because Namibia declared the outbreak a state of emergency on 17 March 2020, and it also required putting measures in place such as social distancing. As a result, face-to-face instruction was suspended and the teaching, learning and assessment depended mainly on online facilitation, via the Modular Object Orientated Dynamic Learning Environment (Moodle) platform. Although some courses were offered on Moodle, the Academic Writing for Postgraduate Students course was only migrated to online mode as a result of the pandemic. The purpose of this paper is to report on how the blended-learning strategy for the Academic Writing for Postgraduate Students course at UNAM was developed. The paper attempt to attain the following objectives:

- To adapt a flipped approach to teaching, learning and assessment of Academic Writing for Postgraduate Studies.
- To profile students to establish if they have a mechanism to do technology-assisted teaching, learning and assessment.
- To devise a technology-integrated strategy for teaching Academic Writing for Postgraduate Studies.

METHODS

The paper employed a combination of empirical as well as theoretical-based research. Firstly, a Google Form questionnaire was used to obtain quantitative data that profiled students. From a population of 72 student enrolled for Academic Writing for Postgraduate Students in UNAM's Business School, a sample of 40 respondents were conveniently selected to participate in the study. The sample is made up of 24 male and 16 female respondents. The respondents were selected because they were easily accessible and indicated a willingness to participate in the study. The responses from the participants were useful in the generation of the student profile in the course, which inform the feasibility of the proposed strategy. It should be noted that the study adheres to the ethical requirements stipulated by the UNAM Research Ethics Policy, Regulations and Guidelines (2019) that "Researchers shall ensure informed consent based on the principle of self-determination, honesty, objectivity, and respect for intellectual property" (p. 11). This is interpreted in this study that participants may only be selected based on their consent to be part of the study. Secondly, a reflective practice is applied to highlight the use of technology-assisted learning strategy that enables effective pedagogical access to Academic

Writing for Postgraduate Students at the University of Namibia's Business School. Reflective practice uses three analytical milieus of criticality, reflexivity, and praxis (Magesa & Josua, 2022; Stierer, 2008). Using the reflective practice helps guide morphing teaching, learning and assessment in a digital era.

According to Stierer (2008), *criticality* provides a critical orientation of the ideas, theories and concepts that enhancers academic writing. Criticality deals with deeply engaging the content rather than just summarising the ideas. It is about going beyond reproduction and simply copying or plagiarizing ideas from a text. The authors draw from a different range of theories through criticality and not just finding fault. We contextually analysed the texts and provide logical academic arguments instead of describing things. This enabled bringing new insight aimed at transforming the status quo. *Reflectivity* enables agents to record and analyze how professional development is taking place. As it can vividly be seen, the use of the first person singular and plural as well as active voice is seen throughout the paper to bring out the authors' argumentative voice. The use of the first persona placed the authors at the centre of the instructional activities, which enables self-understanding as well as self-awareness. This enhances and facilitates professional learning (Stierer, 2008). As academic practitioners, we suggest that these theories should be tactfully negotiated to both students and academics who want to try this method out. *Praxis* is about linking concepts, theories and ideas to the practice (Magesa & Josua, 2022). After the conceptualization of the teaching and learning theory, the theory was tested among the students. This demonstrates moving away from common sense practice towards being a transformed academic practitioner; therefore, the morphing from the edge towards the centre of effective teaching, learning and assessment practice.

LITERATURE REVIEW

Assuming that the threat of the COVID-19 pandemic is eliminated and everything is back to the old normal, UNAM may choose to continue with the blended approach as initially advanced. According to Cleveland-Ines and Walton (2018), "blended learning is the use of traditional classroom teaching methods together with the use of online learning for the same students studying the same content in the same course" (p. 3). Blended learning is in line with the Namibian Information Communication and Technology (ICT) Policy. Accordingly, some of the policy's goals are directed toward improving the efficiency of educational administration and management in the classroom (Ministry of Higher Education, Training and Employment Creation, 2001). The policy is also aimed at broadening access to quality educational services for students. There are different approaches that could be applied in the implementation of blended learning in various university courses. In this paper, we attempt to develop a blended learning strategy for the Academic Writing for Postgraduate Students course, through reflexivity, criticality and praxis (Stierer, 2008).

Our strategy is aligned with the blended block model of blended learning. That is, a sequence of learning activities is structured to integrate both face-to-face and online learning

(Cleveland-Ines & Walton, 2018). This model is integrated with the Flipped Approach, where the students are provided with more opportunities to engage the learning content outside the classroom, and then in the classroom they focus on learning and assessment tasks.

Jonathan Bergmann and Aaron Sams introduced flipped learning in the year of 2007 when their students missed too many classes for basketball games, training, and tournaments. Teachers had to repeat the important lessons for them as they missed crucial content. They figured out a better solution by recording the lectures using screen-casting software during Spring 2007. They recorded instructions and used class time for meaningful activities such as questioning and answering session (Rahman & Hashim, 2020, p. 395).

According to Sakulprasertsri (2017), this is an alternative approach that integrates technology beyond the limits of the classroom. That is, the instructional process is reversed and the learning contents are accessed at home (outside the classroom), while learning activities such as projects, exercises and classroom discussions are completed in the classroom (during the lesson time). The flipped approach is well illustrated by Al-Samarraie et al. (2020) in Figure 1, in comparison to the lecturer-based approach.
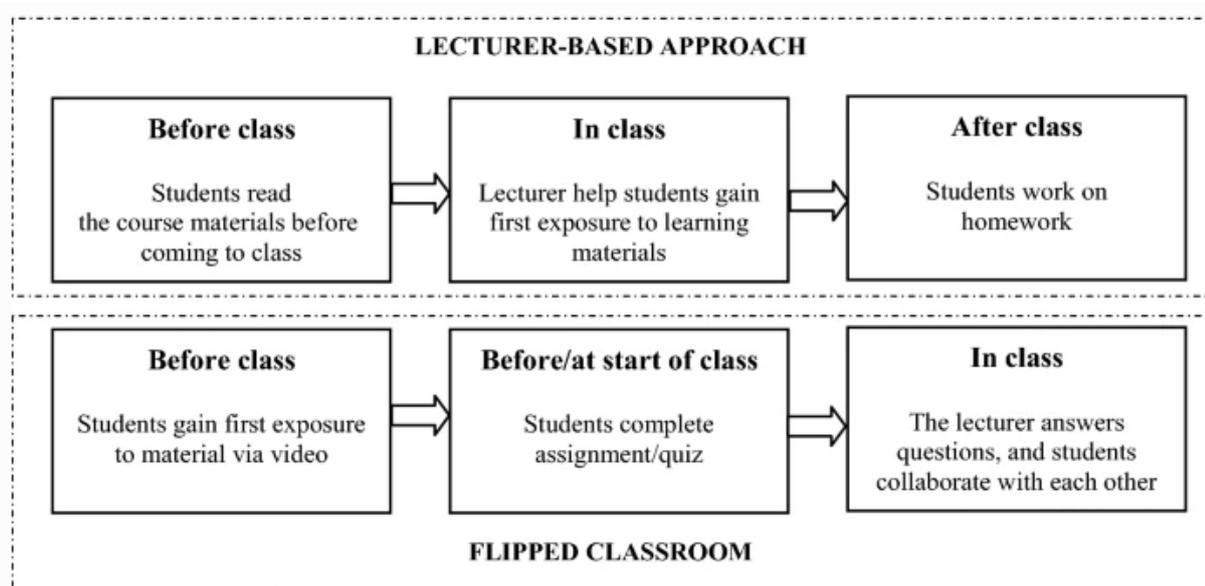

Figure 1. *The lecturer-based approach vs flipped approach* (Al-Samarraie et al., 2020)

Research has shown that the flipped approach has a positive influence on the development of students' critical understanding of the learning materials, and it also enables application of knowledge between contexts (Al-Samarraie et al., 2020). The Flipped Approach has four pillars (see Figure 2 below), namely: a flexible environment; learning culture; intentional content; and professional educators (Bergmann & Sams, 2012; Villegas, 2022).
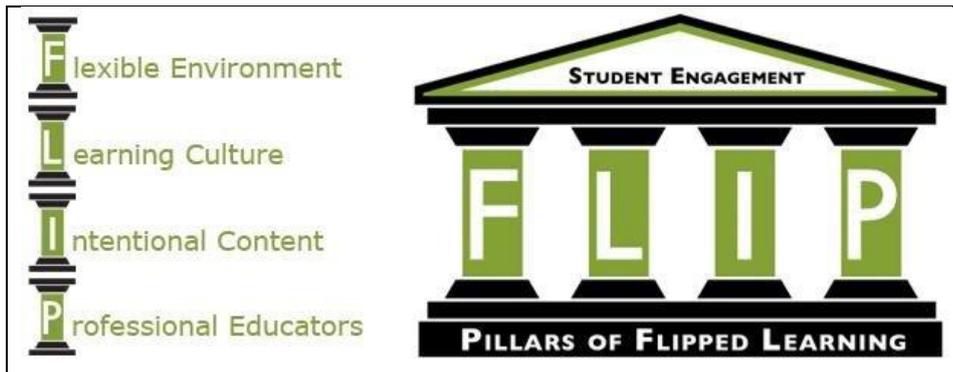
Figure 2. *The pillars of flipped learning* (Rahman & Hashim, 2020)

The pillar of *flexible environment* allows for various learning modes and instructional methods to support the students (Flipped Learning Network [FLN], 2014). This pillar resonates Krashen's (2009, 2014) Affective Filter hypothesis that, students tend to learn better with lowered affective filter. That is when they feel relaxed and less threatened while engaging the content outside the classroom as well as processing the learning experiences in the classroom. The pillar of *learning culture* enables active knowledge construction during student participation and evaluation of their own learning and that of others (FLN, 2014). This pillar is linked to the learner-centred approach. The learner-centred approach and the communicative approach to learning seems to have made it rather impractical for the traditional approach to be sufficient of facilitating learning of the diverse skills, knowledge, learning processes, and combined strategies (Ortega, 2009). The pillar of *intentional content* requires instructional and learning experiences to be aligned to the learning outcomes of the course. That is, lecturer should create relevant contents and learning task for the students (FLN, 2014). The pillar of *professional educators* demands reflectivity among the lecturers, through connecting with each other for the improvement of their instruction. According to the FLN (2014), "while Professional Educators take on less visibly prominent roles in a flipped classroom, they remain the essential ingredient that enables Flipped Learning to occur" (p. 1). This pillar can be linked to Vygotsky's (1962) sociocultural theory which states that meaning is not an individual construction but a social negotiation that depends on supportive interaction and shared use of knowledge.

Although this study focused on the academic writing course, it should be noted that research suggests that the flipped approach is applicable in the classroom regardless of the field of study, and it tends to yield positive result in the 21st century of education (Rahman & Hashim, 2020). Correspondingly, the technology-assisted strategy of teaching and learning has also been commended for the 21st century pedagogies, considering that technology is viewed as a learning tool, and it proved to have become integral part of average students' daily usage (Gopo, 2022). The technology-assisted strategy proposed in this study, based on the learning-centred approach (De Aquino et al., 2016), promotes a shift from teaching to facilitating students' learning, and it enables students to engage and take responsibility of their own learning by being active participants in the learning process. The strategy resonates the sociocultural theory

(Vygotsky, 1962), which postulates that learning can be facilitated through learner-learner negotiation. In this theory, it is believed that meaning is not an individual construction but a social negotiation that depends on supportive interaction and shared use of knowledge. The strategy also aligns to the Bloom's Taxonomy, but in a flipped manner; that is, the high-level learning activities are completed in the classroom unlike in the traditional approaches when these activities are completed outside the classroom (Villegas, 2022). Figure 3 illustrates the differences between the traditional and flipped learning models in relation to the Bloom's Taxonomy.
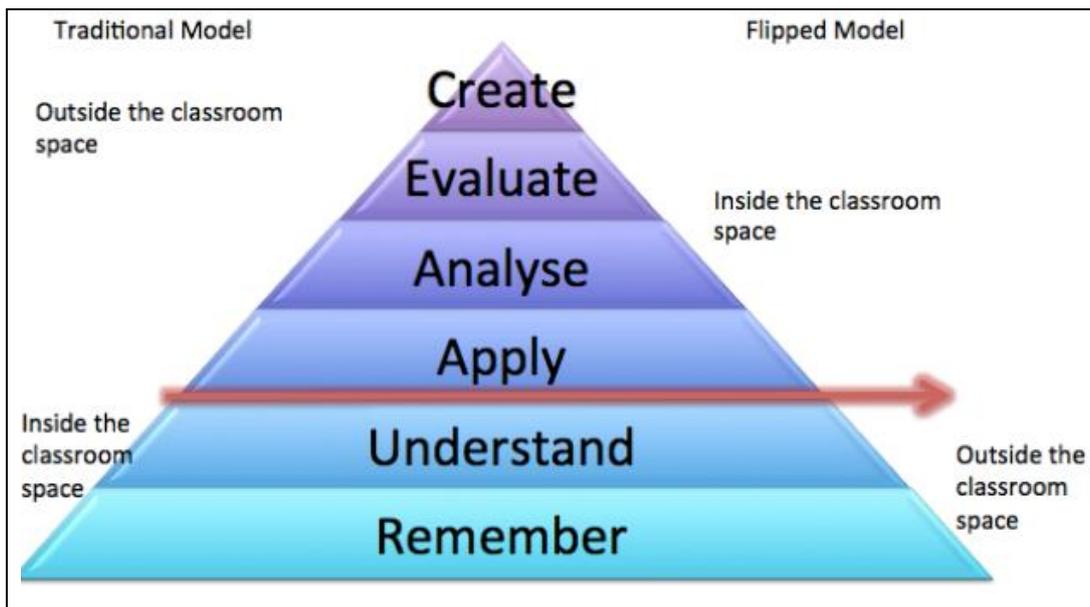

Figure 3. *Bloom's Taxonomy in the traditional classroom and the flipped classroom* (Villegas, 2022)

It is, therefore, understood and expected in this study that developing a technology-assisted strategy that follows the flipped approach has benefits for the student in the Academic Writing for Postgraduate Students course and other related academic literacy courses.

RESULTS

The purpose of the blended learning strategy is to reduce dependency on classroom teaching, learning and assessment. First, Moodle platform was used to deliver some contents online. Lessons were recorded using Panopto, and posted on Moodle. A WhatsApp group was used to remind and update students on the progress of the course; some learning materials were shared on the e-platforms. Discussions of the learning task and content on this platform were encouraged. The lessons were accompanied by clear instructions stating what students should focus on in the lessons. There were also learning tasks to be completed based on the lesson contents and uploaded learning materials such as articles, handouts, books, PowerPoint slides,

and YouTube video links. Forum discussions were created for students to socially interact and discuss about their learning tasks as well as the learning contents.

Overall, the strategy promoted the reduction of the number of face-to-face lessons from 4 to 2 lessons per week. The other lessons were conducted online. Additionally, on days that a lecturer may not be available, Zoom or Big Blue Button applications that enable a group of people to conduct meetings online, in this case lessons, were used. The meetings/lessons could also be recorded so that students can watch/re-watch later, especially those who might have missed the lesson. Considering context, it is important from the outset that the technology profile of a sample of the students at the University of Namibia's Business School should be presented.

Technology Profile of the Students

This technology profile specifically comprised characteristics of students who were enrolled in the Academic writing for Postgraduate course, in the Postgraduate Diploma in Business Management at the University of Namibia. The cohort comprised students within the age range of 20-60 years (see Figure 4).
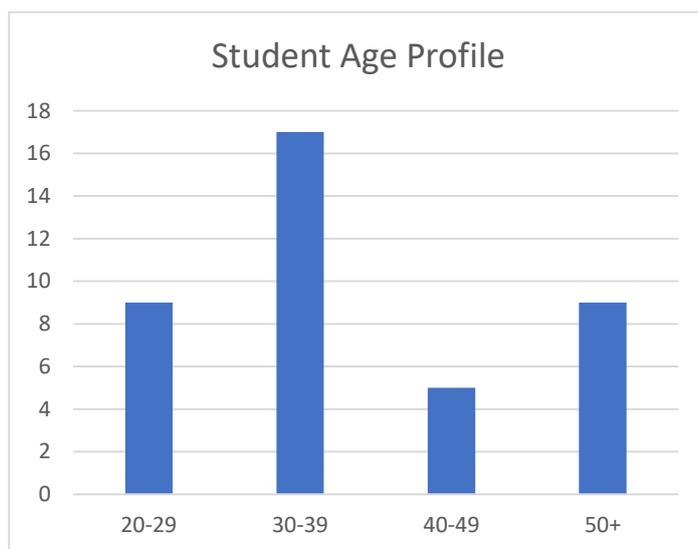

Figure 4. *Student age profile*

The study revealed that 60% respondents were male while 40% were female. Majority of the students were above 30 years; meaning they could be working and studying as well as parenting. These students make use of various technological devices. Majority of them used smartphones, followed by laptops, and the least used is the desktop (see Figure 5).
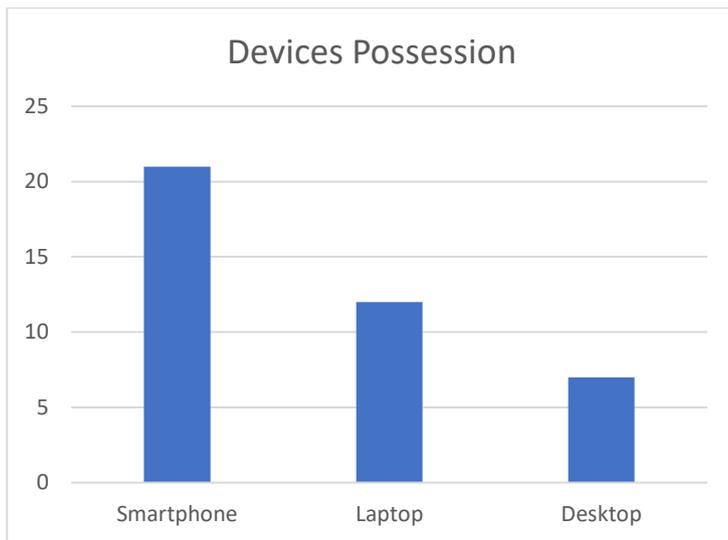
Figure 5. *Possession of devices*

The students' usage of technology also emerged from the analysis in both similar and different manners. It appeared that students tend to contact each other more via text messaging and seldom phone calls. Most of them make use of social media platforms, but they hardly blog. They also hardly stream music and play games. The analysis also showed that the students tend to download content more than upload it on online platforms. Most students indicated preference of blended learning over traditional face-to-face and pure online learning (see Figure 6). They, however, felt that prior training on using Moodle was needed.
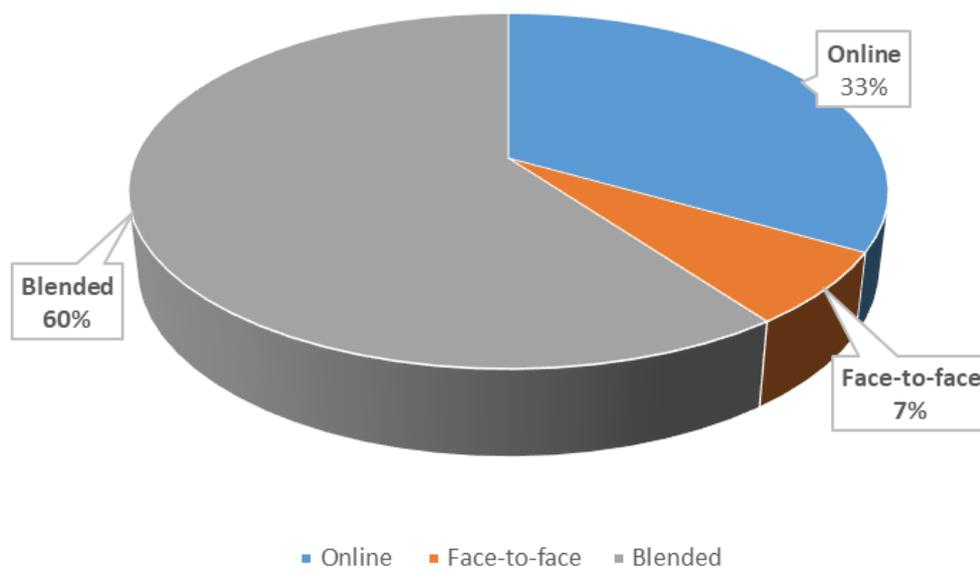

Figure 6. *Students' preferred learning mode*

DISCUSSION

The technology profile is important in the formulation of this technology integration strategy. According to Desai et al. (2016), students' personal, social, psychological technological characteristics can enable lecturers to help students achieve their maximum potential. It can be deduced from the student profiling results above that the students showed a preference for a blended learning mode, which makes it less likely for them to be resistant to the strategy. It also emerged that all the students had technology devices. This makes it possible to engage in the learning processes which involve the usage of technology. They also indicated the usage of technology to carry out various functions such as online banking, text messaging, downloading and uploading content online, and using social media. This could be an indication that the students' level of digital literacy may be appropriate for them to engage in the learning activities using technology.

The Technology Integration Strategy in the Academic Writing for Postgraduate Students Course

The Academic Writing for Postgraduate Students course had been offered via traditional face-to-face mode until the outbreak of COVID-19 which required social distancing and capitalising on online facilitation. Our technology-assisted strategy is based on assumptions that face-to-face learning will be possible; hence, a plan to integrate technology in the course using the blended-learning mode by adapting the Flipped Approach to teaching, learning and assessment. The plan is to create platforms for students to engage the learning contents outside the classroom, and when they come to the classroom, they only engage in learning activities, discussions, and reflections. Some of the learning platforms that could work with this approach are discussion forums. That is, a prompt could be posted on a social Networking Site such as Facebook or Twitter, and student would participate in the discussion on the platform. The lecturer could be part of the discussion as a facilitator, by providing guidance, further links to resources, and more prompts to help the students think critically about the learning content. Students also complete learning tasks (such as discussion forums and online quizzes) which were then to be discussed in class, and feedback was provided. Figure 7 blow illustrates some of the learning activities in the technology strategy that is influenced by the flipped approach.

Using the Flipped Learning Approach to integrate technology in a lecture has benefits for the students. Students can have unlimited access to resources; resources that are provided to them, and those that they will discover by themselves. They also have an opportunity to engage the learning content together with other students, both in and outside the classroom. This is good for the students because, based on the sociocultural theory and the concept of scaffolding, students interact using simplified language to assist each other to attain the intended learning outcomes (Culatta, 2016). According to Van Lier (2000), learner-learner interaction can be effective in that simpler explanations are preferred to students than complex ones. Students can also benefit when the blended learning is applied using the Community of Inquiry framework which creates opportunities for self-reflection, active cognitive processing,

interaction and peer-teaching (Cleveland-Ines & Walton, 2018). The Flipped Approach also enables the students to engage the learning content in the comfort of their homes and offices. Their access to the lecturer is also rather unlimited by time and space.
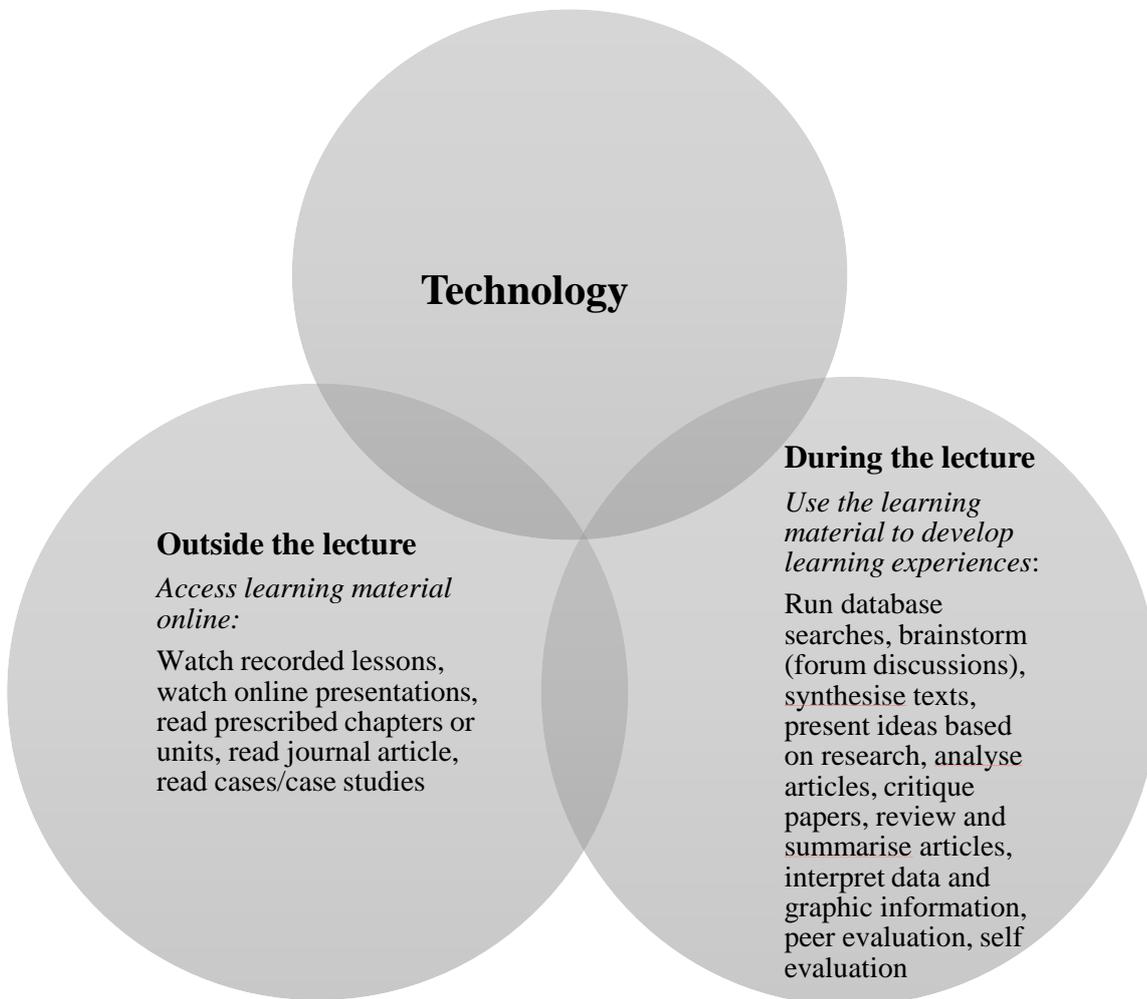
Technology

Outside the lecture

Access learning material online:

Watch recorded lessons, watch online presentations, read prescribed chapters or units, read journal article, read cases/case studies

During the lecture

Use the learning material to develop learning experiences:

Run database searches, brainstorm (forum discussions), synthesise texts, present ideas based on research, analyse articles, critique papers, review and summarise articles, interpret data and graphic information, peer evaluation, self evaluation

Figure 7. *Technology-assisted instructional strategy*

Although the students' benefit should be prioritised, the Flipped Learning strategy also benefits academics. Firstly, it reduces pressure on the limited time available to deliver the content. Now, there is additional platforms for the students to engage the learning content. It also maximises opportunities for formative or diagnostic assessment since students can complete assessment tasks online and engage in discussions. It further lessens the pressure of the lecturer being the only source of knowledge, since students are now connected to various professional educators via different learning platforms. In the learner-centred approach, the lecturer is not the only expert of the learning content, but the learning process is also in the hands of the students, and they are expected to contribute to the construction of knowledge. This tallies with the constructivist view that students possess the ability to construct knowledge, of course under the guidance of lecturers (Canagarajah, 1999; Schunk, 2009; Vygotsky, 1962).

The University of Namibia's Department of Language Development, where the authors were based at the time of this reflection, may benefit from this strategy in a number of ways. The content shared on online platforms can also be used by colleagues in the academic community, especially when they have to explain contents that may present them with difficulty. The socio-culturalists would support this practice because they believe that knowledge is not an individual construction but a social negotiation that depends on supportive interaction and shared use of language (Schunk, 2009; Vygotsky, 1962). The supervisors at the department can also monitor the learning process from the comfort of their offices, since a reasonable portion of the learning content and process is visible and accessible via the online platforms. This is to say, there is greater transparency on what is taught and learned.

Our strategy enables preservation of learning contents. Lessons can also be recorded and availed to the students via online platforms such as WhatsApp, Facebook or Moodle for later-viewing. These contents can be reused (with slight updates) in subsequent semesters, without starting from scratch with creating new contents. In this learning strategy, there is also timely provision of feedback to the students. According to Ferris (2010), feedback can improve the accuracy of students' writing. Through forums, students can respond to a certain prompt, and a lecturer can engage them and provide feedback that will be accessible throughout the semester.

We must, however, note that there might be some possible challenges that are inherent with this strategy. First, some students may not have reliable connectivity. Digital illiteracy may also play an unfavourable role in the implementation of the strategy. "Digital literacy often refers to the necessary skills and knowledge of teachers to learning in the digital knowledge society" (Li & Yu, 2022, p.4). Both teachers and students should have enough digital skills to be able to effectively interact with the content in an instructional environment. Furthermore, Kasımoğlu et al., (2022) elaborate that in the digital environment, the teacher-student communication is important in order to facilitate effective digital literacy and pedagogic access. In some universities or departments, the institutional policy can affect the flexibility of the strategy especially when it tends to be too prescriptive on how their students should be taught. It seems the structure-culture-agency conflict is an enormous constraint for transformation in higher education settings.

The sudden migration to the use of digital technology in the wake of COVID-19 pandemic unveiled digital gaps in African countries. In the Sub-Sahara Africa, the use of the internet to facilitate online education caught educators and students by surprise. A study in Cameroon revealed that poor internet connectivity was one of the pitfalls experienced during the CODIV-19 era (Moluayonge, 2020). Lack of internet connectivity in Ghana derail smooth teaching and learning processes in a higher education setting (Demuyakor, 2021). Students in Namibia were also faced with a number of challenges to accessing online learning platforms due to the lack of enabling devices such as laptops and smartphones; unstable electricity and the high cost of bundles impeded learners from engaging in online learning and teaching activities and lack of reliable internet connectivity during COVID-19 era (Magesa & Josua, 2022).

The challenges stated above may be minimised in one way or the other. For instance, the relevant offices or divisions at the University of Namibia should ensure that students have received their internet dongles. The dongles are portable gadgets that the university provided to students, which enable students to connect to the internet using their smartphones or laptops. Training may be provided to both students and academics prior to the commencement of the course. Using online applications requires some knowledge of the technical language used. In his paper focused on using social networking site, Hamakali (2017) observed that:

> in some situations, it might require certain amount of time for both teachers and learners to learn how to use Web 2.0 technology. For example, even if one is familiar with computers, there might still be a need to learn how to set-up accounts and use Facebook, or any available social networking website (p. 213).

In the case of using Moodle, similar challenges may be faced by students, for instance, navigating the platform. There is a need for proper consultation between the school administration and the academic staff, in order to reduce the conflict that may arise between what the administrators prescribe, and what the lecturer finds appropriate for the course and students.

CONCLUSION AND RECOMMENDATIONS

To conclude, there is no doubt that technological devises have morphed the way teaching, learning and assessment could be transformed to make relevant and responsive in a digital environment. The forced changes in the higher education context due to COVID-19 pandemic should get all stakeholders to re-imagine the traditional stances in order to transform the way teaching, learning and assessment shall be enabled after the crises. This was a wake-up call to agents in higher education context to devise new ways of doing things to emulate lessons learned. Post-COVID-19 era should chart the right path on the use of technology to enhance effective teaching, learning and assessment, which should promote lifelong learning while effectively addressing inclusivity and massification in higher learning institutions. The internet accessibility and connectivity challenges in Sub-Sahara Africa should be placed in the agenda.

In our paper, we recommend that the University of Namibia should ensure that students have received functional internet dongles and data bundles. Lecturers should shift the learning to interactive digital learning platforms to make the learning process interesting and fitting. In order to contribute to the realisation of Sustainable Development Goal 4 of the United Nations, it is recommended that Sub-Sahara Africa should improve digital connectivity and accessibility to higher education institution students. At this juncture, it is important to note that technology and the usage of social media is already an integral part of many students' daily routine. Therefore, shifting the learning to these platforms means that lecturers could make the learning process interesting and fitting. The right path on the use of technology after the COVID-19 era is needed to effectively address the inclusivity and massification in higher learning institutions despite the internet challenges Sub-Sahara Africa is facing.

REFERENCES

Al-Samarraie, H., Shamsuddin, A. & Alzahrani, A. I. (2020). A flipped classroom model in higher education: A review of the evidence across disciplines. *Education Tech Research Dev*, 68, 1017–1051 (2020). https://doi.org/10.1007/s11423-019-09718-8

Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day.* International Society for Technology in Education.

Canagarajah, S. (1999). *Resisting imperialism in language teaching*. Oxford University Press.

Cleveland-Ines, M., & Walton, D. (2018). *Guide to blended learning*. Commonwealth of Learning.

Culatta, R. (2016). *Zone of proximal development*. http://www.innovativelearning.com/educational_psychology/development/zone-ofproximal-development.html

De Aquino, C. T., Robertson, R., Allen, P., & Withey, P. (2016). A learning-centred approach to higher education: Professional success in the 21st century. *Digital Universities: International Best Practices and Applications, 3*(2-3), 59-78.

Demuyakor, J. (2021). COVID-19 Pandemic and higher education: Leveraging on digital technologies and mobile applications for online learning in Ghana. *Shanlax International Journal of Education, 9*(3), 26-38. https://doi.org/10.34293/education.v9i3.3904

Desai, A., Shah, N., & Dhodi, M. (2016). Student profiling to improve teaching and learning: A data mining approach. *International Conference on Data Science and Engineering,* 1-6. https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7823947

Ferris, D. R. (2010). Second language writing research and written corrective feedback in SLA: Intersections and practical applications. *Studies in Second Language Acquisition, 32*(2), 181-201.

Flipped Learning Network. (2014). *The four pillars of F-L-I-P*. https://flippedlearning.org/wp-content/uploads/2016/07/FLIP_handout_FNL_Web.pdf

Gobo, C. (2022). The role of technology in the 21st century education of learners. *The Official Research Journal of Tagum City Division,* 47-58. https://www.researchgate.net/publication/359849731

Hamakali, H. P. S. (2017). Krashen's theory of second language acquisition as a framework for integrating social networking in second language learning. *IJRDO - Journal of Educational Research, 2*(2), 203-216. https://www.ijrdo.org/index.php/er/article/view/116

Kasımoğlu, S., Bahçelerli, N. M., & Çelik, M. U. (2022). Digital literacy during COVID-19 distance education; Evaluation of communication-based problems in line with student opinions. *Frontiers in Psychology, 13*, 809171. https://doi.org/10.3389/fpsyg.2022.809171

Krashen, S. D. (2009). *Principles and practice in second language acquisition*. http://www.sdkrashen.com/content/books/principles_and_practice.pdf

Krashen, S. D. (2014). *Stephen Krashen's theory of second language acquisition.* http://www.sk.com.br/sk-krash.html

Li, M., & Yu, Z. (2022). Teachers' Satisfaction, Role, and Digital Literacy during the COVID-19 Pandemic. *Sustainability, 14*(3), 1121. https://doi.org/10.3390/su14031121

Magesa, E., & Josua, L. (2022). Use of technology to morph teaching and learning in higher education: Post COVID-19 era. *Creative Education, 13*, 846-853. https://doi.org/10.4236/ce.2022.133055

Ministry of Higher Education, Training and Employment Creation. (2001). *ICT policy of education.* Ministry of Higher Education, Training and Employment Creation.

Moluayonge, G. (2020). The use of modern educational technologies in remote learning in higher education during a pandemic: The case of COVID-19 in Cameroon. *Journal of Learning for Development, 7*(3), 479-484.

Ortega, L. (2009). *Understanding second language acquisition.* Hodder Education.

Rahman, S. F. A., & Hashim, H. (2020). The uniqueness of flipped learning approach. *International Journal of Education and Practice, 8*(3), 394-404. https://www.researchgate.net/publication/343187047

Sakulprasertsri, K. (2017). Flipped learning approach: Engaging 21st century learners in English classrooms. *LEARN Journal: Language Education and Acquisition Research Network Journal, 10*(2), 132-143. https://files.eric.ed.gov/fulltext/EJ1229623.pdf

Schunk, D. H. (2009). *Learning theories: An educational perspective*. Pearson Education Limited.

Shikalepo, E. E. (2021). *Basics of educational research: A qualitative perspective*. Microwide Publishing Press.

Stierer, B. (2008). Learning to write about teaching: understanding the writing demands of lecturer development programmes in higher education. In R. Murray (Ed.), *The scholarship of teaching and learning in higher education* (pp. 34 -44). McGraw.

University of Namibia. (2019). Research ethics policy, regulation and guidelines.

Van Lier, L. (2000). From input to affordance: Social-interactive learning from ecological perspective. In J. P. Lantolf, (Ed.), *Sociocultural theory and second language learning* (pp. 245-259). Oxford University Press.

Villegas, P. (2022). Beyond the four pillars of F-L-I-P: Exploring theoretical underpinnings of flipped learning in the context of English for academic purposes. https://languagescholar.leeds.ac.uk/beyond-the-four-pillars-of-f-l-i-p-exploring-theoretical-underpinnings-of-flipped-learning-in-the-context-of-english-for-academic-purposes/

Vygotsky, L. S. (1962). *Thought and language.* MIT Press.