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APPLYING CONVERSATIONAL FRAMEWORK TO REFLECT ON CONTENT DELIVERY AMID COVID-19 AT A DEVELOPING RURAL UNIVERSITY IN SOUTH AFRICA

Chisango Grasia¹ & Marongwe Newlin²
Walter Sisulu University, SOUTH AFRICA

¹Butterworth Campus, Department of Management Sciences

²Komani Campus, Department of School Improvement Programmes
Corresponding author: gchisango@wsu.ac.za

ABSTRACT

The outbreak of the COVID-19 pandemic came as a wake-up call that alarmed the whole globe. There was a global rush of universities to move courses online because universities wanted to ensure that learning and teaching continued. The purpose of this study was to share experiences on how two university teachers used Conversational Framework as a conceptual framework to reflect on how they used Information and Communication Technology to support learning and teaching amid the COVID-19 pandemic, at a developing university in Eastern Cape Province, South Africa. Data were collected from their formal and informal conversations over a period of 20 months. The findings revealed how the CF model was used to develop us as teachers in terms of making critical reflections and reflexivity that improved our use of ICT in teaching. ICT was used for communication, designing of learning and teaching activities, collaboration, and exchange of knowledge among students.

Keywords: Content delivery, conversational framework, COVID-19 pandemic, educational design, information and communication technology, university teachers.

INTRODUCTION

In this study, Laurillard's 2012 Conversational Framework (CF) is used as a conceptual lens to reflect on how two university teachers used technology to deliver content and support communicative cycles amid Covid-19 at a developing rural university. This is in line with the ideas postulated by Dison (2016) and Olsson and Roxa (2012) that as university teachers there should be moments of reflecting on one's teaching practices. The framework is used to analyse how two Humanities university teachers used information and communication technology (ICT) to deliver content, assists students and encourage learning during the Covid-19 pandemic. The Conversational Framework (CF) was developed by Diana Laurillard to support teachers in their teaching and learning design with ICT (Laurillard, 2002, 2012). Learning is meaning making; thus, the CF recognises the interdependence of individual and social processes in learning (Holmberg, 2016). Learning design should thus reflect this by creating a conducive environment that enhances



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communication and the exchange of knowledge representations between students, teachers, and peers (Laurillard, 2012).

The conversational framework Conceptual level Teacher Peer Teacher Learner Peer communication communication concepts concepts concepts cycle cycle Teacher Modulate Modulate Modulate practice Generate Generate Generate cycle Peer Teacher's Teacher Learner Peer modelling practice/modelling modelling practice practice cycle cycle environment

Figure. 1 The conversational framework (Laurillard 2012)

Laurillard's framework places the student at the centre as indicated in Figure 1. The teacher's role is to facilitate learning in the cycle. Moll (2021) also argues that students should be placed at the heart of learning and be a facilitator as proposed by Laurillard's model in Figure 1 above. The teacher facilitates learning by motivating "the internal cycles generating and modulating the learner's concepts and practice..." (Laurillard, 2012, p. 86). There are five communicative cycles that a student can interact with others at the conceptual and the practice levels. Laurillard states that students make meaning processes at the conceptual level that are supported by communicating about what is to be learned. For instance, a teacher explaining orally, and the student asks a question or generates an articulation of his or her own conceptualisation. The teacher answers the question and gives feedback on the articulations. Laurillard terms this as the teacher communicative cycle (TCC). Peer communication cycle (PCC) is when students articulate their concepts among themselves, for instance, discussing how to interpret a text.

A student's understanding of what is to be learned can be supported at the practice level (Laurillard, 2012, p. 89). Information and communication technology can be used to design a teacher's practice/modelling environment (TPME). Students can engage with activities with their peers and teacher, in learning activities. ICT use allows external interactions with other actors. In the TPME, the individual student and peers apply concepts on the external environment, therefore, their practice represent students' understanding of concepts.

The teacher gives feedback to the representations in the teacher practice cycle (TPC). The TPC can assist students connect a representation at the practice level with the concepts that is to be learned (Holmberg, 2016). The student's internal learning cycle is thus supported at the TPC. Furthermore, at the TPC level, the teacher gets feedback on his or her own teaching, thus deducing



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if students learnt what they were supposed to learn. Laurillard terms an ICT-supported educational design that provides students with feedback on their practices, as the teacher modelling cycle (TMC) (Holmberg, 2016). Including an educational game that gives students automated feedback is an example of this.

In learning design that enhances peer modelling cycle (PMC), students are permitted and motivated to share and access peer representations in the TPME. Other students could use these knowledge representations in the PMC for modelling anytime and anywhere. They could also be referred to at the conceptual level as part of the TCC or PCC. This CF was complemented by use of another conceptual framework known as reflective practice. According to Bassa, Fenwicka and Sidebothama (2017), reflective practice is a very important element of personal and professional development, which involves critical reflection that is regarded as the foundation of being an accountable and autonomous practitioner. The reflective practice helped us to develop a self-awareness and an ability to reflect on personal values and beliefs and how they impacted on online teaching/practices amid the COVID-19 pandemic (Bassa., et al 2017).

The above discussed CF framework helped us, the two university teachers to design and deliver online content and support communicative cycles amid the Covid-19 pandemic using ICT. Furthermore, it helped us to analyse and discuss our reflections.

Research approach and design

The study adopted a qualitative personal narrative inquiry approach which allows the study of one's own (and others') personal/professional experience as story (Moen, 2006). In the same line, Gudmundsdottir (2001), views narrative research as the study of how human beings experience the world, and narrative researchers are said to gather and write narratives of experience. The approach allowed us to question what we were doing, how and why. The approach was an eye-opener to us because it made us to realise that knowing was interlinked with the knower. In this study, two research designs were used to enhance the quality of the findings and guard against our biases. The two designs complemented each other which were CF and Practice/improvement research design. The CF is used as a theoretical framework to reflect and scrutinise university teachers' learning and teaching design with ICT. The CF was applied to support the design at a developing rural university and the practice/improvement research design was used for the same purpose. The two university teachers reflect on their designs, with a critical eye.

Context and participants

The two university teachers who are the authors of this paper were the only primary participants of this study. The two authors scrutinised their own designs that they used amid the Covid 19 pandemic. Both authors teach English as a First Additional language (EFAL), Micro-teaching, Curriculum Studies in English, and Communication skills in English to pre-service teachers at a developing university in rural South Africa. For the purposes of this study, we only focused on EFAL and Micro-teaching. Poor internet connectivity is sometimes a challenge in the province where this university is situated. We both taught fully online during the hard lockdown in 2020 and used the blended mode in some instances, in 2021. We collected scientific data for about 20



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months, starting in April 2020. We both have been teaching at the same university for over five years. We have positive attitudes towards the use of ICT in learning and teaching and can adapt technology to teach. Furthermore, we are continuously learning and practising using various technological tools, and we are good at technology. We constantly shared ideas on how to deliver content and assess students online, and the most suitable tools to use. We further shared how receptive our students were to technology. We feel that our ICT skills gradually improved since April 2020 to the time that this reflection was made. We decided to authenticate our designs using the CF.

Data collection and data analysis

The two sources of data were conversations between us, the authors, and we shared our educational designs. Our conversations were centred on learning objectives, student activities, choosing tools with the most affordances, and the pedagogies that we used to teach our students. This happened on a week basis in 2020, however, in 2021, we held such conversations once per fortnight, on our learning management system, permitting recording of our conversations. We sometimes shared out computer screens to show our digital environments and how we could use certain tools to teach our students. We also diarised all our experiences and sometimes took screenshots of our practices as evidence of our practices amid the covid-19 pandemic. The five communicative CF cycles were used to thematically reflect on our educational designs. The recorded conversations were also used to present our findings that run simultaneously with the discussion. The recorded conversations were transcribed and categorised into themes in conjunction with themes that emanated from our diaries and screenshots that were taken. We bracketed our biases and discarded them for we did not want our self to affect the rigorous process that gives birth to credible and quality results.

Reflections

The teacher communication cycle (TCC)

It is worth noting to indicate that the outbreak of the COVID-19 pandemic made us to communicate more to our students unlike before. The pandemic made us to explore other channels of communication that were available to us like the e-learning platform communication tool and announcement but were very reluctant to use them. Based on our reflections of how we attempted to ensure that student learning was continuing, it is evident that we both frequently used ICT to support TCC. We used, for example, pictures, videos, diagrams, and text from the internet to provide students with concrete and contemporary examples of English. We shared these examples on our learning management system, Blackboard. WhatsApp was also used to reach students who were geographically located in deep rural areas where internet connectivity was poor. This was in line with the comment that was made by the deputy minister of higher education, Buti Manamela, that no student was to be left out as if they were the cause of the COVID-19 pandemic (quoted in Njilo, 2020, para. 4). So, it was our way of trying to reach out to all students despite their geographical location hence use of WhatsApp and it worked very well for us. The use of a variety of information from the internet is important to captivate the attention of students and keep them motivated. Learning styles were also catered for using various types of information sources. We designed PowerPoints to present and explain the content of our lessons. In some cases, we retrieved PowerPoint presentations from the internet and shared them with our students. Thus, the internet



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enabled us to use externally constructed artefacts. We frequently used authentic videos and text, for instance, on second language acquisition theories and pronunciation. Our intention was to allow students create their own conceptualisations. The videos and texts that we used were directly related to specific lesson objectives and learning and teaching activities, including the assessments that we administered. This was in line with arguments advanced by Biggs (1999) that there was need for university teachers to use constructive alignment. This helped our students to perform better than before on the activities and assessments we gave them. However, we failed to give detailed information to a pocket of students who were in deep rural areas where network was a problem. However, on the bigger picture, we thus guided students to observe and understand what we wanted them to learn. The videos, texts, pictures, and diagrams were accompanied by student-centred learning activities. Students asked us questions and provided us with feedback, after engaging with, for example, videos and pictures. Students usually asked questions via our WhatsApp chat groups. Our lessons on the LMS were all recorded for future reference.

The teacher practice cycle (TPC)

In this study, we both frequently used ICT to support TPC. Students submitted assignments in the LMS, some uploaded the assignments and others did intext submission on the LMS. Feedback was made available to individual students on the LMS functionality. Feedback was in written form. Sometimes we used WhatsApp to send either written or/and both audio overall feedback to students. Sometimes students voice recorded themselves on the WhatsApp platform and send to us, their teachers, for feedback, for instance when teaching pronunciation. We were able to replay the audio recordings and give constructive feedback to each student. We also took advantage of the LMS and asked students to orally present on the LMS and the presentations were also recorded. We recorded students' presentations, including micro-teaching, so that we could replay the recording and make assessments more accurate. Assessing students during the live sessions was a daunting task and was more likely to be unfair to students. This worked very well especially with students who had access to internet, and they were so excited to be recorded and posted on our LMS. It boosted their confidence and motivated them to get connected for our lectures. When reflecting now, for us, (not downplaying or being insensitive to the trauma, chaos and lose that our students and people experienced because of the COVID-19 pandemic), it was a new dawn for us. It made us to shift from the traditional methods that we were so comfortable with, and we tapped into the zone that our students enjoyed and welcomed. We realised that (as per the conversations recorded in our diaries) that all along we had been denying our students the privilege of learning using ICT.

The teacher modelling cycle (TMC)

The TMC is an ICT-supported educational design that provides students with feedback on their practices. In this study, we used ICT to support the TMC. We designed assessments, for instance, on short-answer questions, which included automated feedback per question. Essay type of questions were also accompanied by automated feedback, feedback was given per range of marks. Educational games on speech organs were also incorporated in the TMC and that motivated students to learn. Students used the spelling and grammar checks on Word processing software.



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SafeAssign was used to check plagiarism and enhance originality of students' assignments. Plagiarism checks also promoted students to be critical thinkers.

The peer communication cycle (PCC)

In this study, we both used ICT to support the PCC to a large extent. Discussion forums were used to write reflections by students. For instance, they reflected on micro-teaching lessons that they presented to their peers. We put students into groups on the LMS and encouraged them to read each other's reflections and comment. Students also discussed topics on the forum, such as language policy in South African schools. These forums were meant to improve students' cognitive development and the development of different learning types, such as acquisition and discussion. The WhatsApp platform was used by students to suggest specific topics that they could teach during their micro-teaching. Students discussed and agreed on topics of interest and scheduled themselves. Students also discussed assignments and concepts taught in class, on WhatsApp and on the LMS through their mobile phones and laptops. That improved their conceptualisation of topics taught or were yet to be taught. Students were encouraged to take turns and start discussion topics on the forum, for instance, themes in literature genres. This proved to be effective since meaningful arguments were made on the platform, enhancing understanding of genres and development of higher order thinking skills, such as empathy. We closely monitored students' participation on discussion forums, some students were passive. We then decided to allocate a formative assessment mark per discussion and that forced most students to actively participate.

The peer modelling cycle (PMC)

In the PMC, students are encouraged to collaborate and/or learn from each other, by sharing representations of their practices in the TPME. The PMC permits students to model their practices on those of their peers. For instance, writing a lesson plan, which has all the components, such as objectives, assumed knowledge, learning and teaching actives, resources, and evaluation. The main purpose of the English course is to equip pre-service teachers with skills required to teach English First Additional Language (EFAL). Students had access to peer concepts through the PCC for modelling purposes. Group presentations were included, for example, students discussed various themes found in a novel, in groups. They used, for instance, the Google document and the group discussion forum. This was followed by live group presentations (formative assessment) on the LMS. Jam boards, wikis and storyboards are other tools that we could have also used in our designs. These tools also enable students to create and share representations for modelling. We could have used external moderators to authentic collaborative work and assignments. Our institutional LMS permits us to add an external moderator, but we never used that tool.

DISCUSSION

The teachers' use of ICT tools to support learning and teaching

The study made use of another conceptual framework known as reflective practice to help us discuss our reflections and complementing CF. This made us to critically look at how we used some tools (Bassa, Fenwick & Sidebothama, 2017) for perpetuating student learning and enhancing the quality of learning and teaching. Our reflections show that though we might not



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have used all tools, we frequently used ICT to support all the cycles in Laurillard's CF. We used ICT to support TCC, for instance, the LMS and WhatsApp were used as communication platforms and to support information sharing between students and the teachers. Various forms of content were shared by the teachers using these platforms. ICT were also used to support TPC and TMC. Students submitted assessments, presented and voice-recorded themselves, feedback was given to students through the LMS and WhatsApp. PCC and PMC were also supported using ICT. ICT was used to enhance student centred learning and teaching as argued by Biggs and Tang (2011) that students should be placed at the heart of learning and learning should be student centred. For instance, discussion forums and group presentations on the LMS boosted the learning and brought variety which student enjoyed doing.

Some institutions of higher learning started blended learning and teaching prior the outbreak of Covid-19, our own institution included, and that prepared us to teach online when the world was on shutdown. For instance, most university teachers at Zagazig University in Egypt, agreed on the ease of use of e-learning during the pandemic due to the blended learning programme before the outbreak of Covid-19 (Zalat Hamed & Bolbol 2021). Our institution invested a lot of money and time training us how to teach using the LMS prior to the outbreak of Covid-19. To add on to that, with the help of our campus eLearning specialist, coupled with our own content and pedagogical knowledge, our technological knowledge, we managed to select tools that enhanced meaning making at each communicative cycle. We could have however used other tools that permit students to share knowledge with other students situated in various geographical locations. Tools such as drop box and social media could have been used to exchange and discuss concepts for collaborative meaning making purposes across the globe. Online collaboration tools and social media are more "convenient and more interactive than university websites and allowing for collaborative discussions" on topics in EFAL (Chatterjee & Chakraborty 2021). This could have allowed students to view concepts with different lenses and this could have enhanced understanding of concepts. We however, limited ourselves to mainly the institutional LMS and WhatsApp.

CONCLUSION

The CF was used by two university teachers to reflect on their use of ICT in learning and teaching during the Covid-19 pandemic. The discussion revealed that we used ICT to support all the communicative cycles for meaning making. Our shortfalls were that we limited ourselves and students to the LMS and WhatsApp yet there are other tools that can be accessed for free. Such tools could have been used to foster collaboration among students across geographical regions. Support from the university, for instance, free data and laptops, enhanced the use of ICT. However, it should be noted that student learning continued amidst the COVID-19 pandemic when we were under strict lockdown restrictions propelled by the outbreak of the pandemic. Our navigation of the LMS improved drastically in a meaningful way which promoted student learning.



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REFERENCES

- 1. Biggs, J. (1999). Constructive alignment in university teaching. *HERDSA Review of Higher Education*, 1, 5-22. www.herdsa.org.au
- 2. Biggs, J., & Tang, C. (2011). *Teaching for Quality Learning at University: What the Student Does.* McGraw-Hill Education.
- 3. Chatterjee, I., & Chakraborty, P. (2021). Use of Information Communication Technology by Medical Educators Amid COVID-19 Pandemic and Beyond. *Journal of Educational Technology Systems*, 49(3), 310-324. https://doi.org/10.1177/0047239520966996
- 4. Dison, L. (2016). Scrutinising the role of reflection in a postgraduate diploma in higher education. *South African Journal of Higher Education* 30 (6), 39-55. https://doi.org/10.20853/30-6-718.
- 5. Gudmundsdottir, S. (2001). Narrative research on school practice. In V. Richardson (Ed.), *Fourth handbook for research on teaching* (pp. 226-240). New York MacMillan.
- 6. Holmberg, J. (2016). Applying a conceptual design framework to study teachers' use of educational technology. *Educational Information Technology*, (22),2333-2349. DOI 10.1007/s10639-016-9536-3
- 7. Laurillard, D. (2002). *Rethinking University teaching: A conversational framework for the effective use of learning technologies* (2nd ed.). Routledge Falmer.
- 8. Laurillard, D. (2012). *Teaching as a design science: building pedagogical patterns for learning and technology*. Routledge Falmer.
- 9. Moen, T. (2006). Reflections on the narrative research approach. *International Journal of Qualitative Methodology*, 5(4), 5.
- 10. Moll, I. (2021). Computers in the classroom: what informs what we teach the teachers? The Pedagogic Integration of ICTS in Initial Teacher Education. Macmillan, South Africa.
- 11. Njilo, N. (2020). All students must get fair chance to finish academic year: Buti Manamela. *Sunday Times*, 03 June. https://www.timeslive.co.za/politics/2020-06-03-all-students-must-get-fair-chance-to-finish-academic-year-buti-manamela/
- 12. Olsson, T., & Roxa, T. (2012). *Pedagogical Competence–a Model Promoting Conceptual Change in Higher Education*. In Brown, N., Jones S. M. and Adam, A. (Eds.) Research and Development in Higher Education: Connections in Higher Education, 35 (pp 213 223). Hobart, Australia, 2 5 July 2012.
- 13. Zalat, M., M, Hamed, M., S & Bolbol, S. A. (2021) The experiences, challenges, and acceptance of e-learning as a tool for teaching during the COVID-19 pandemic among university medical staff. *PLOS ONE*, 16(3), 0248758. https://doi.org/10.1371/journal.pone.0248758