

## A case of an assessment module in Distance Education at the University of Pretoria

Maryke Mihai

Department of Science, Mathematics and Technology, University of Pretoria, South Africa.

---

### **Abstract**

*The purpose of the study was to investigate the teaching and learning experiences of students and tutors in an assessment Distance Education module. The study looked at the students' and tutors' experiences of the pedagogy (like the contact sessions) the technology used (the Blackbaoard LMS) and the content and assessment of the module. The methodology followed was a descriptive qualitative case study, using semi-structured interviews and online questionnaires. Responses were obtained from the academic supporter, three tutors and 22 students. The learning management system, Blackboard, is easy to use and user-friendly. Students make use of the discussion board to communicate with each other and lecturers. They also find the contact sessions organised on Blackboard Collaborate useful and use the recordings of the sessions if they cannot attend virtually. They experience the assessment module as very relevant to their teaching practice and believe the content to be well planned.*

**Keywords:** *Assessment; Blackboard; content; Distance Education; pedagogy; technology.*

---

## **1. Introduction**

For a number of years, the University of Pretoria has been offering a variety of distance education programmes. Currently, the Unit for Distance Education (DE) in the Faculty of Education specialises in the Bed Hons in Computer Integrated Education, Learning Support, Education Management, Law and Policy, and the undergraduate Advanced Diploma in School Leadership and Management (SLM) and Advanced Diploma in Visual Impairment Studies. The API733 (an assessment module) is part of the graduate qualifications of all these specialisations. The role players in all modules are the DE administration, the academic supporter, tutors, lecturers and the students.

## **2. Background**

All the content is digital and uploaded on the Blackboard Learning Management system using a common template for all modules. There is no dispatch of printed material to students. Content is derived from varied resources instead of one textbook. Large classes are split into groups of 50 students or less and a tutor is appointed to oversee teaching and learning activities. Formerly face-to-face contact sessions were used in about six different venues across the country. Contact sessions play an important role in the pedagogy at UDE. During contact sessions, the academic staff gives lectures, facilitate activities and offer study support. Issues that came up during the marking process are discussed. Students have an opportunity to interact with the lectures and their fellow students. Since the start of Covid-19 these contact sessions have been online, facilitated in Blackboard Collaborate. There are two mandatory orientation sessions for tutors twice a year and at least three contact sessions for students before assignments. Each module also conducts in-between contact sessions as needed. Discussion boards are used for academic discussions. All assessments are conducted online and no students physically sit any written exams.

## **3. Rationale of the research**

The purpose of this study was to thoroughly investigate the teaching and learning experiences of all role players in a distance education assessment module at the University of Pretoria. The reason for this was mainly to determine if the use of technology, pedagogy and content of this module can be improved.

## **4. Research question**

What are the teaching and learning experiences of the different role players in the API733 module in the DE programme of the University of Pretoria?

## 5. Theoretical framework: Technological Pedagogical and Content Knowledge framework (TPACK)

The TPACK model is based on Shulman's (1986) explanation of Pedagogical Content Knowledge (PCK). Shulman's model explains how educators' PCK work together to produce effective learning and teaching (Shulman, 1986). TPACK extended these two main elements to create three main elements for effective teaching and learning: content, pedagogy and technology (Graham, 2011; Koehler & Mishra, 2009).

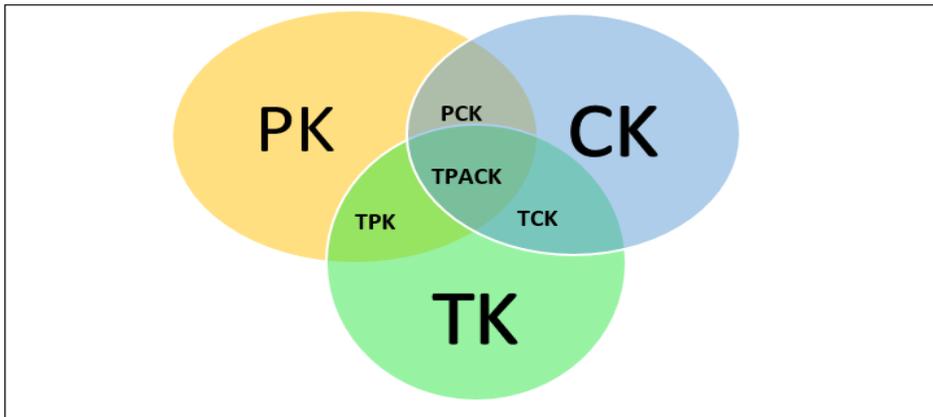


Figure 1. The TPACK model (Mishra & Koehler, 2006).

This study will use an adaptation and extension of the TPACK framework by concentrating on:

- The content of a distance education (DE) assessment module
- The role players in this module, namely the lecturer, academic supporter, tutors and students;
- The pedagogy used by the lecturer, academic supporter and tutors in the assessment module;
- The technology used by the tutors and students, namely the affordances of Blackboard.

## 6. Methodology

### 6.1. Methodological paradigm

Qualitative research involves collecting and analysing how “humans arrange themselves in their settings” and “how inhabitants of these settings make sense of their surroundings” (Maree, 2020). During the proposed study, a qualitative methodology was used to acquire new knowledge. The study undertook a qualitative approach because it dealt with words and

meanings to understand the participant's ideas, beliefs, opinions and experiences. The data was analysed to gain insights into the students, tutors and academic supporter's views of an assessment module. The benefit of the ideas and experiences is the potential improvement of the content, pedagogy and use of technology in a DE assessment module.

### **6.2. Research design**

Case study research is a method that allows the in-depth analysis of a complex phenomenon in a real-life situation or problem (Coimbra & Martins, 2013). A descriptive case study was conducted during this investigation. Descriptive case studies often attempt to describe a particular situation or case that happened in real-life in a lot of detail. It usually includes a description of the people or groups that are involved in a given situation, as well as additional facts of the situation/case at hand that enables readers to understand the problem and the causes better (Adolphus, 2020).

### **6.3. Sampling**

Maree (2020) defines convenience sampling as a method used by researchers to select samples for research data because they are quickly and conveniently available, but it does not necessarily result in a representative sample. The sampling for this study was convenient, because all the participants are available on Blackboard; signed up for a specific module of the lecturer in question. Maree (2020) describes purposive sampling as a method used to select samples with a specific objective in mind. All participants had something to do with a specific online assessment module, namely the academic supporter, tutors and the students registered for the module. A semi-structured interview was held with the academic supporter and three tutors. Twenty-two students filled in a Google Form survey.

### **6.4. Data collection strategies**

Kabir (2016) describes data collection as the systematic process of gathering information from relevant sources to answer research questions, test hypotheses and achieve the research project's objectives. There are various methods for data collection. In this research study I used semi-structured interviews and a Google Forms survey.

Nieuwenhuis (2020) defines semi-structured interviews as a line of open-ended, probing questions that the researcher develops before the interview. He explains that the researcher asks a list of open-ended questions and further probes and clarifies without getting side-tracked by trivial aspects. I also used a survey that is defined as a research tool that collects "information from a sample of individuals through their responses to a question" (Check, 2011). This is due to wanting to use a wide range of responses to a specific question to reach a conclusion. The self-created survey also allowed me to get the experiences and answers for these questions without needing to interview every participant in my research. The research

collection tool that I used was Google Forms, which allowed me to provide the survey online, therefore allowing me to provide the forms without the need to give physical copies of the surveys and it allowed me to see the responses online.

### **6.5. Data analysis**

According to Maree (2020), content analysis is the most commonly accepted data analysis strategy for descriptive qualitative studies. A broad definition of content analysis is any systematic method used to interpret specified aspects of messages objectively. It is a valuable technique that allows the researcher to discover and describe people, places, actions, places, context and events.

Thematic analysis is a data analysis method for identifying, scrutinising, organising and reporting themes (patterns) ‘emerging’ in the data (Braun & Clarke, 2006). Braun and Clarke (2006) argue that thematic analysis is a valuable method for analysing the perspectives of different research participants, identifying similarities and differences, and generating insights that the researcher did not anticipate.

## **7. Results and findings**

### **7.1. About Blackboard**

The University of Pretoria Blackboard version is called ClickUp. Lecturers have a variety of course documents to provide to students. Such documents include the syllabus, handouts, projects and assignments. By providing these documents in a central location, students learn quickly to go to Blackboard to get everything they need. Most tutors and students find the Blackboard LMS easy to use and user friendly. It can be difficult to navigate for new students, especially those who are not tech savvy. The utilization of the LMS depends solely on the efficiency of the user. It is much simpler to use with sufficient and efficient training.

Blackboard has many features that help academics to stay organized and help students engage with content. Tools such as announcements help to communicate with students quickly, whilst the grade center provides grades in electronic format. Students prefer to see grades immediately. This electronic access reduces the number of enquiries - phone calls and emails - from students wanting to know a grade on a specific assignment or their overall grade in the course. The discussion board helps students to engage with content and becomes a community of practice. The integration of Turnitin into the LMS helps lecturers and students guard against plagiarism. Blackboard Collaborate is the tool that is used to conduct online classes and meetings. It is easy to use and content can be shared via pdfs and PowerPoints. Participants can assume different roles, like participant, guest or moderator. Even groups over 250 can be accommodated on the platform.

Some suggestions for improvement from students are that the university should come up with strategies to increase student participation, for example a merit / reward system in the form of marks. ClickUp pages could be presented as an online study guide. It is irritating to download documents and store them offline. There should be links to hypertext on ClickUp pages. There should be a main page for each module with sub-pages listed in the left margin for each unit and text inside those sub-pages, instead of links to pdfs, Word docs, etcetera. There should be a downloadable pdf of documents at the top of the page for those who want to work offline. Some students also complain that messages that you start on the Discussion board are discarded if you go out of ClickUp. Provision should be made for Drafts.

### ***7.2. Pedagogy and contact sessions***

Students have a lecturer, academic supporter and tutor that run the module. The academic supporter is mainly in charge to conduct the contact sessions. In API733 contact sessions are done in the beginning of the module and before every assignment. In between students can use the discussion board or emails that are answered as soon as possible. According to students, instruction and training on the setting of assessment can be improved. Students have to do more discussions that count for marks. They must be able to defend their position. Owing to Covid-19 there are limitations that cannot be overruled, like network challenges and limited data.

According to tutors and students physical contact sessions were great. It allowed for more students to participate and seek understanding before handing in assessments. Currently, fewer students participate because of the digital approach being used. Contact sessions should be compulsory to attend and done on a monthly basis. In the past it was mostly based on content. Students prefer that videos should be used. It is good that contact sessions are recorded. Contact sessions should be conducted at an earlier date in advance of the assignment date. Many students experience network challenges. Some students prefer to communicate with tutors through emails.

### ***7.3. API733 module***

Certain opinions feel that this module is one of the most imperative modules in the education fraternity. According to tutors and students it should be offered across specialisations. It offers students a critical insight and understanding of assessment and how to properly conduct it. Every educator needs this knowledge. Development of activities using Bloom's taxonomy, learning about principles and purposes of assessment are appreciated. One student said: "It is very relevant to my teaching practice. With the little development I received as a young teacher, I learnt a lot about assessment that is applicable to my work. It improved me as a teacher".

This module can be improved through sparking meaningful discussions and encouraging students to ask open-ended questions. Content on blended learning can be added. It can be added on how to deal with assessment of learners with barriers, and how to revise content before a learner is assessed. Many students do not know how to create online assessments. Marks should be added for discussions and research related activities. The module can focus more on setting quality assessments. There is too much focus on digital educational games without providing support to actually use these in class. More than 80% of schools do not have computer systems for learners and games are not incorporated in daily classwork. Monitoring and moderation is not covered as well as systemic assessment.

## 8. Conclusion

In this study the technology, pedagogy and content of an assessment module in Distance Education at the University of Pretoria were investigated. The main findings are that the Blackboard LMS is easy to use and useful. The pedagogy is mainly handled through contact sessions, discussions and putting up content on the LMS. The content of the module is seen as very important in the arsenal of teachers. The suggestions of the students as discussed above will be used to improve the module.

## References

- Adolphus, M. (2021). *How to undertake case study research*. Emerald Publishing. <https://www.emeraldgrouppublishing.com/how-to/research-methods/undertake-case-study-research>
- Braun, V. & Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Check, J. (2011). Research methods in education. *Sage publications*, 159-185.
- Coimbra, M., & Martins, A. (2013). Case Studying Educational Research: A Way of Looking at Reality. *American Journal of Educational Research*, 1(9), 391-395.
- Graham, C. R. (2011). Theoretical considerations for understanding technological pedagogical content knowledge (TPACK). *Computers & Education*, 57(3), 1953-1960. <https://doi.org/https://doi.org/10.1016/j.compedu.2011.04.010>
- Kabir, S. (2016). *Methods of Data Collection*. Retrieved from: <https://www.researchgate.net/publication/325846997>
- Koehler, M., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? *Contemporary issues in technology and teacher education*, 9(1), 60-70.
- Maree, K., 2020. *First steps in research*. 3rd ed. Van Schaik Publishers.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers college record*, 108(6), 1017-1054.

- Nieuwenhuis, J. (2020). Qualitative research designs and data-gathering techniques. In J. Creswell, L. Ebersöhn, R. Ferreira, N. Ivankova, J. Jansen & J. Nieuwenhuis et al., *First steps in research* (3rd ed., pp. 108-112). Van Schaik Publisher.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational researcher*, 15(2), 4-14. <https://doi.org/https://doi.org/10.3102/0013189x015002004>