

The Impact of Emergency Online Learning and Teaching on Mature Part-Time Students

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Abstract: During the COVID-19 pandemic, most institutions of higher education in South Africa, following an international trend, embarked on a mission to save the academic project by resorting to emergency online teaching and learning (EOLTL). The pandemic resulted in mature, part-time, working students being even further marginalised by removing them from university life and the accompanying support services geared to facilitate social, academic and mental well-being. We assumed that the cohort of mature, part-time students (MPTS) would encounter technological and personal challenges that could limit their academic progress. Against this backdrop, the dual aim of this study explored the impact of EOLTL on MPTS during the COVID-19 pandemic; and the redesign or readjustment of the curriculum to accommodate and support this cohort of students. A previous, pre-pandemic study, revealed that this group of students experienced significant challenges with balancing work-and-home life in addition to the stress of studying part-time. Subsequently, a questionnaire was designed and piloted with a group of senior students from this cohort to explore the impact of EOLTL. As an ongoing study, this research will report on the findings from the pilot study and compare them to the results of the data obtained from the pre-pandemic study. A significant finding of the study indicated that the majority of the students from this cohort coped well with EOLTL and indicated a preference for a more hybrid approach for the future and the remainder of their studies. These findings now challenge universities to find ways to adapt, capitalise on and apply the lessons learnt from the COVID-19 pandemic to benefit MPTS. Based on lessons learnt and experiences during the pandemic, this research has the potential to provide insight into how higher education institutions could improve the provision of support, as well as the learning and teaching experiences of this unique student cohort of mature employed students studying part-time (and others), to ensure retention and academic success.

Keywords: COVID-19, engineering education, emergency teaching and learning, marginalised mature part-time working students

1. Introduction

Framed by lifelong learning, upgrading workforce skills, improving education access, transformation and competitiveness in South Africa, higher education qualifications should be available to those who qualify and wish to further their studies. Higher education access includes education opportunities for those beyond “traditional” student profiles largely comprised of 18 to 19-year-old students who recently matriculated (McVitty & Morris, 2012). With widening access, student profiles now include mature part-time students (MPTS) who are mostly in full-time employment.

Higher education represents life-changing opportunities for MPTS, but can also pose significant challenges as they balance academic studies, full-time employment and financial responsibilities, which, in turn, can influence their academic success (McVitty & Morris, 2012; Parker, Summerfeldt, Hogan & Majeskie, 2004). For the benefit of the individual student and the social and economic contribution that a successful MPTS can make, it is imperative for higher education institutions to support these students to ensure their retention and success.

This study was conducted at a comprehensive university in South Africa. The respondents in this study were enrolled for a 3-year diploma (offered over a four-year period) which was offered by a department in the School of Engineering. Previously, MPTS had reported balancing work, studies and family as their biggest challenge toward the successful completion of their diploma. These students were enrolled in a diploma programme that had been offered on a part-time basis for approximately 30 years at a South African university and the programme consisted of semester modules. Since this academic programme is designed for individuals who are employed, lectures are presented as three-hour contact sessions, after hours. The programme is staffed by full-time academic staff and subcontracted experienced, part-time lecturers with relevant work experience (Lourens, Connelly & Plaatjes, 2018).

The average age of this student group was 31.5 years, drawn from a wide spectrum of occupations ranging from machine operators to supervisors and middle management, mostly in the manufacturing industry. In most cases this cohort, having transitioned from high school directly into employment in the industry, found the student role to be a daunting experience since they had not had any recent exposure to the pressures associated with studying, writing tests and examinations at a higher education institution. Due to their full-time employment, compounded by shift-work, it was not always possible for these students to utilise university support and attend developmental workshops that were offered to full-time students during normal university hours. A further challenge facing this group was fatigue as they often worked a full day in factory-related positions where they were physically active. Such work environments could make concentrating for three hours in an evening class challenging (Lourens et al., 2018).

When the country went into lockdown in 2020 due to the COVID-19 pandemic major challenges were created for all citizens, sectors and industries. The challenge for higher education institutions (HEIs) was the successful completion of the academic project when face-to-face classes were no longer possible. Furthermore, there seemed no end to the pandemic and there was great uncertainty regarding a return to the classroom and “life pre-COVID”. Fortunately, the University was quick to respond to the situation and all academics, support staff and students were provided with online resources, training and information. Currently, in 2022, all university students have not yet returned to the classroom and a model of hybrid teaching and learning is being followed until all students and staff are required to return to campus full time.

From the start of the pandemic, most students were quick to respond and adapt to either online or hybrid teaching and learning and some, especially the MPTS, expressed a desire for the status quo, or “new normal” to remain in place. This is contrary to indications from previous studies and student feedback where it was reported that two of the greatest challenges experienced by this student group was balancing home and work life and being a student. In fact, these challenges were expected to be accentuated by the online landscape.

Accordingly, this research aims to foster a deeper understanding of this student group, which had to date been far less explored in comparison to the younger full-time students, and in particular, with reference to their experiences of a new online and hybrid form of teaching and learning. In addition, this research explored the developmental needs of this cohort and provided suggestions for their support. To conclude, the paper discussed the findings and makes recommendations regarding the importance of student retention and success.

Based on experiences and lessons learnt during the pandemic, this research provides potential insights into how HEIs could improve support and the learning and teaching experiences of a unique student cohort, namely the mature, part-time, working students (and others) to ensure retention and academic success. An overview of the challenges faced by marginalised mature part-time students follows this introduction, followed by the research methodology, results and discussion, and thereafter finally the conclusion is presented.

2. Challenges faced by marginalised mature part-time students

Higher education provides a range of opportunities with inherent challenges for students of all ages. Full-time, first-year university students often face a variety of stressors such as living away from home, becoming independent adults, building new relationships and learning appropriate study habits for adjustment to a new academic environment. These factors can greatly affect student retention and academic success (Parker et al., 2004). Often, many of these challenges are compounded for MPTS who have to cope with studying in addition to managing full-time employment and family life successfully. Mature students also hold the opportunity to study in high regard and are more likely to reflect upon their learning and make judgements about what they regard as valuable (Taylor, Walton, Mellor & McCarter, n.d.). In addition, mature students often enter university with something to prove and they make use of their education to create a better future for themselves.

Taylor et al., (n.d.) proposed that practitioners of higher education have generally found it rewarding to teach mature students. These practitioners attribute this to the mature students being able to appreciate the importance of active learning and their willingness to often question what they were being taught. The practitioners also recognised that these students were being equipped with skills that they could transfer to their workplaces and communities. Not surprisingly mature students were often apprehensive about entering higher education because they doubted their abilities to succeed in the face of academic demands. Inevitably doubt

and fear often diminished when they recognised that they were able to participate effectively and realised that their experiences in higher education could transform their thinking and future.

Schuller (2002) confirmed the importance of addressing the challenges faced by this group of students. Schuller (2002) argues that there is a need to recognise that higher education is important to adults over the age of 30 and that opportunities must be created for them to either enter or re-enter the formal education system. Schuller (2002) cites the following four reasons to support his argument:

- The likelihood is greater that more mature students have never had the opportunity to enter higher education or formal studies as younger people currently do. This makes a strong case for the entry of more mature students to higher education on the grounds of intergenerational equity.
- Individuals aged 30 and older often need access to formal education and qualifications to progress in the labour market.
- Higher education often provides the means to involve individuals in important social networks.
- There is a need to change thinking about the capabilities of more mature students and mixing the generations in the university should be part of that process.

McVitty and Morris (2012) suggested that MPTS found the first few days at university particularly daunting, as they had to understand the campus layout and cope with the huge chunks of information shared in addition to their fears of coping with the new academic environment. They also found those mature students who returned to education after a long hiatus tended to take longer to adjust to learning and mastering the requirements of an unfamiliar academic culture. Academic support workshops have been experienced as positive and “life-saving” for many mature students. Additionally, students who have been offered support were less likely to leave. Bowl found that an obstacle to overcome within the university was “learning the rules of academia” (2010:156) in addition to time management, reading and writing assignments.

2.1 Feedback from mature, part-time working students

Prior pre-pandemic feedback from MPTS (Lourens, et al., 2018) highlighted significant challenges that the students perceived as having an impact on their academic success. The greatest perceived challenge listed by this cohort was balancing work and home life. A close contender was stress related to studying part-time as evidenced by one student who stated that, *“working shifts at work which leaves me tired and unable to study”*, and another who mentioned the *“availability of time between work and having a rather young family”*.

Several students listed external issues such as the possibility of being *“hospitalised”*, or *“if work should not pay for my studies”* as possible challenges whilst another indicated that *“I will not let any factor get in my way of completing my studies”*. These responses indicated the high value attached to obtaining a formal qualification and the potential resultant benefits. It was, therefore, important to provide support for this cohort of students who appeared to be highly-motivated while possibly lacking certain academic skills to ensure the successful completion of their studies.

The lack of finances was another important factor. Since academic sponsorship from some of the students’ companies was not guaranteed (*“not getting funding from my company”*), financial issues presented a possible challenge, especially for those responsible for their study fees (*“at the moment its finances”*). Other financially-related issues related to organising transport from work to university, especially in winter when it became darker earlier (*“transport in winter season”*). It would be to the benefit of the students to form teams and networks with their fellow students, not only from an academic support point of view, but also from a practical point of view. Furthermore, creating networks could possibly enhance their career prospects as all the students in this cohort were employed.

Academic readiness and curriculum-related issues were mentioned, including comments such as *“...assuming that every student grasps a concept the first time around”*, *“scared to ask questions in class”*, and *“improved scope for test and exams”*. Future workshops could pay special attention to developing assertive communication in class. A parallel strategy could be raising the awareness of the academic staff to the insecurity often experienced by this student group. A concerted effort must be made to break down communication barriers by both academics and students. Academics must be encouraged to seek feedback, invite questions, and create opportunities for students to consult with them. Owing to many of the lecturers being employed full-time and

lecturing on a part-time basis, one suggestion could be to create notice boards and forums for discussion on the learning management system (Moodle).

Only two students mentioned challenges relating to feeling negative or demotivated. Comments included “*lack of motivation and support*”. One of the benefits of the part-time workshops was that this cohort of students was made aware of and met support staff from the academic support unit and the student counselling centre. This facilitated easier communication as a connection had already been made and students felt more comfortable connecting with the support structures in place at the university.

The majority of students reported that they were motivated by their desire to improve themselves. They recognised the potential rewards of a better life once they achieved their formal qualifications. In light of supporting a humanised pedagogy (Zinn and Rodgers, 2012) and given the depressed economy and worrisome education levels of the Eastern Cape region, it was incumbent on the academic department to provide opportunities for access to higher education coupled with the required assistance to better support not only individual students, but the region as a whole.

The above-mentioned perceived challenges can be summarised as follows:

- challenges balancing work and home life
- stress related to studying part-time
- financial issues
- transportation issues
- academic readiness and curriculum-related issues
- feeling negative or demotivated

3. Methodology

A descriptive study with a quantitative approach was implemented through an online survey using QuestionPro. The objective was to understand the students’ experience of the teaching and learning process using digital platforms during the pandemic. Of interest to the researchers were not only MPTS experiences with regards to EOTL, but also how EOTL experiences would resonate or compare with previous, pre-pandemic MPTS feedback.

The findings of this study are limited to those of the pilot study. Currently, a survey is being conducted among the entire cohort of MPTS. The cohorts who completed the pilot study were the final year MPTS (14 students), who would have commenced their first year of study in 2019. Thus, students would have received regular face-to-face instruction and learning during 2019 and 2020 (until April 2020) as well as extended instruction and learning during 2021 and 2022. In light of this, the small cohort of final-year students was therefore considered a representative sample of the entire population of MPTS. It should be noted that the University where this study is located has not yet returned to full pre-pandemic face-to-face teaching and learning.

4. Results and discussion

This section presents the results and discussion based on the following headings from the online survey: general teaching and learning preferences, teaching and learning aspects, resources, further education and skills, and balance and support.

4.1 General teaching and learning preference

The majority of respondents enjoyed EOTL and felt that it suited their particular learning styles. The majority also indicated that they preferred online or a hybrid approach which is a combination of online and face-to-face class attendance. The questions and responses are tabulated below.

Table 1: Suitability to individual learning style

In general, I find online learning different to face-to-face learning in a way that suits me and my learning style.		
Answer	Count	Percent
Yes	8	72.73%

In general, I find online learning different to face-to-face learning in a way that suits me and my learning style.		
No	3	27.27%
I'm not sure/I don't know	0	0.00%
Total	11	100%

Table 2: Rating of EOLTL

I enjoy the type of learning used during the COVID-19 pandemic.		
Answer	Count	Percent
Yes	8	72.73%
No	2	18.18%
I'm not sure/I don't know	1	9.09%
Total	11	100%

Table 3: Learning approach preference

I prefer the following learning approach		
Answer	Count	Percent
Attending normal classes	3	27.27%
Online learning only	4	36.36%
Attending classes and using online learning	4	36.36%
I'm not sure/I don't know	0	0.00%
Total	11	100%

Table 4: Online rating

I enjoyed working online on my modules		
Answer	Count	Percent
Strongly Agree	4	36.36%
Agree	5	45.45%
Neutral	0	0.00%
Disagree	2	18.18%
Strongly disagree	0	0.00%
Total	11	100%

Reasons for the high positive responses could be attributed to many working shifts and online learning enabled them to listen to the pre-recorded classes when it suited them. In addition, the students saved transportation costs. At the start of the pandemic, the university negotiated several support interventions for students, such as a laptop loan scheme and an allocation of free data for every registered student. Both of these arrangements assisted students greatly in managing and completing their academic studies. Based on these results, it would be recommended that a hybrid approach that functioned within the rules of the registration for the programme, be followed as much as possible.

4.2 Teaching and learning aspects

The majority of students *strongly agreed* or *agreed* that online teaching and learning (OLTL) allowed them to work at their own pace. Students would have been able to listen to the pre-recorded lecturers at any time, on their way to work, during breaks and after shifts. Travel time to campus was eliminated which could conservatively result in saving at least two to three hours travelling to attend a 5:30 pm class on campus that finishes at least 8 pm. Students would also be saving on transportation costs.

Due to the nature of assessing projects and assignments online, lecturers had to provide far more detailed feedback to students. The benefit of recorded feedback meetings allowed students to refer back to comments and suggestions from lecturers. The high positive response (73%) from respondents is an indicator that they felt

that online feedback improved their learning experiences. In addition, all modules were converted from examinable to continuous assessment, consequently, there was usually some form of assessment after each study unit in a module rather than the usual assessment strategy of two tests, one assignment and a final examination.

Table 5: Pace of work

In general, the current type of learning and teaching allows me to work at a pace that is suitable for me.		
Answer	Count	Percent
Strongly Agree	5	45.45%
Agree	4	36.36%
Neutral	1	9.09%
Disagree	0	0.00%
Strongly Disagree	1	9.09%
Total	11	100%

Table 6: Feedback

In general, the online feedback provided by the lecturer improved my learning experience.		
Answer	Count	Percent
Strongly Agree	3	27.27%
Agree	5	45.45%
Neutral	1	9.09%
Disagree	1	9.09%
Strongly Disagree	1	9.09%
Total	11	100%

Table 7: Effectiveness of EOLTL

I know and remember more about each module topic after completing each study unit online		
Answer	Count	Percent
Strongly Agree	4	36.36%
Agree	5	45.45%
Neutral	1	9.09%
Disagree	0	0.00%
Strongly Disagree	1	9.09%
Total	11	100%

Table 8: Knowledge transfer

Doing a module online results in me gaining more knowledge as opposed to if it were to be completed face-to-face		
Answer	Count	Percent
Yes	8	72.73%
No	3	27.27%
Total	11	100%

The majority of the students (63.6%) felt that online classes kept their interest and attention while 54% stated that they were not thinking or doing other things not related to their studies during an online lecture. Common feedback from lecturers however is that online lecturing can be extremely frustrating as one cannot see students' body language, there is no feedback, and students are slow to engage and respond. It could be helpful

to staff and MPTS to continue with as many continuous assessment modules rather than examinable modules. This will allow for more frequent assessments and more interaction.

Table 9: Interest and attention

In general, the online lessons are boring and do not catch my interest and attention		
Answer	Count	Percent
Strongly agree	1	9.09%
Agree	3	27.27%
Neutral	0	0.00%
Disagree	4	36.36%
Strongly disagree	3	27.27%
Total	11	100%

Table 10: Engagement

I often think about and do other things not related to the module when I am busy with an online lecture		
Answer	Count	Percent
Strongly agree	2	18.18%
Agree	0	0.00%
Neutral	3	27.27%
Disagree	6	54.55%
Strongly disagree	0	0.00%
Total	11	100%

4.3 Resources

Lecturers also become versed and competent in setting various types of assessments not previously used and capitalised on the features, such as quizzes, provided by the Moodle platform. Proactively the university provided extensive training and facilitation and support to equip lecturers, and orientated and trained students in the various facets of OLTL. This is evident in the positive responses tabled below indicating that additional resources were made available to students, the training provided and the increase in the number of assessments, in some cases eliminating “high stakes” assessments which did relieve some pressure on students. It would be important to continue with the training provided on the various online platforms. Such training can be undertaken in a face-to-face setting at the beginning of a semester to familiarise the students with their peers and lecturers. It is likely that this approach could possibly ensure a more effective introduction to hybrid teaching and learning.

Table 11: Additional course material

In general, the amount of additional online resources/content (like quizzes and videos) kept me interested in the course material		
Answer	Count	Percent
Strongly Agree	3	27.27%
Agree	6	54.55%
Neutral	0	0.00%
Disagree	2	18.18%
Strongly Disagree	0	0.00%
Total	11	100%

Table 12: Learning management system

In general, the module management system (such as Moodle or MS Teams) has been easy to navigate.		
Answer	Count	Percent
Strongly Agree	3	27.27%
Agree	6	54.55%
Neutral	1	9.09%
Disagree	1	9.09%
Strongly Disagree	0	0.00%
Total	11	100%

Table 13: Multiple resources as an aid

In general, having multiple resources (e.g. lessons and other forms of media) for each concept taught aided my understanding of the module.		
Answer	Count	Percent
Strongly Agree	3	27.27%
Agree	7	63.64%
Neutral	0	0.00%
Disagree	1	9.09%
Strongly Disagree	0	0.00%
Total	11	100%

4.4 Further education and skills

It was encouraging to see that 82% of respondents indicated that they were open to further education because of their online experiences. Previously, this would not have been a consideration to the apparent inaccessibility and unfamiliar nature of studying online. Furthermore, 91% of respondents indicated that they gained new skills which can have a positive impact on their confidence and employability. The department can endeavour to offer more short learning programmes online to further develop this cohort.

Table 14: Openness to further online courses

Based on my experience this semester, I could see myself learning and participating in other online courses (Excluding formal studies. For instance, an external short course such as for personal enrichment)?		
Answer	Count	Percent
Yes	9	81.82%
No	1	9.09%
I'm not sure/I don't know	1	9.09%
Total	11	100%

Table 15: Skills

I learnt many new skills during the duration of online learning.		
Answer	Count	Percent
Strongly Agree	4	36.36%
Agree	6	54.55%
Neutral	1	9.09%
Disagree	0	0.00%
Strongly Disagree	0	0.00%
Total	11	100%

4.5 Work-life balance and support

Apart from providing support in the form of laptops, data and training, the university provided constant support to address any mental health issues. In addition, the Engineering School's academic developer and advisor were available and would contact students to provide support when requested. If a lecturer detected any hint of a student battling or if they expressed any need for academic or personal support, they would be contacted for a consultation or referred for counselling sessions.

Based on the pre-pandemic student feedback, it is evident that one of the main challenges MPTS experienced was achieving a healthy work-life balance. However, in 2002, 73% of students indicated (*strongly agree* and *agree*) that online learning has enabled them to achieve a healthy work-life, and 73% stated that they felt supported as a mature part-time student.

Table 16: Work-life balance

Online learning has enabled me to achieve a healthy work-life balance		
Answer	Count	Percent
Strongly Agree	4	36.36%
Agree	4	36.36%
Neutral	2	18.18%
Disagree	1	9.09%
Strongly Disagree	0	0.00%
Total	11	100%

Table 17: Social support

I feel as though I have enough social support for online learning		
Answer	Count	Percent
Strongly Agree	3	27.27%
Agree	4	36.36%
Neutral	4	36.36%
Disagree	0	0.00%
Strongly Disagree	0	0.00%
Total	11	100%

Table 18: Support as a MPTS

I feel supported as a mature/part-time student		
Answer	Count	Percent
Yes	8	72.73%
No	3	27.27%
Total	11	100%

5. Conclusion

A previous, pre-pandemic study reported that MPTS experienced challenges in balancing work and home life. Being a student, attending classes, travelling to and from university, working full time, and juggling domestic and family responsibilities are daily issues faced by the MPTS. These stressors cause them to experience feeling pressured, stressed and anxious, and it is often compounded by the financial responsibilities either to their families or employers. Given these factors, the pressure of completing their studies successfully weighs heavily on them, often causing them to feel negative or demotivated.

The findings of the pilot study revealed that OLTL held great benefits for the MPTS. The greatest benefit is the flexibility that allowed students to study at a place and time that is convenient to them. This research will now be expanded to include all MPTS enrolled for the diploma to ensure that a representative voice direct more attention to OLTL challenges and inform how the curricula can be adapted to better suit this cohort of students.

Furthermore, the voice of academic staff needs to be included to sharpen attention on module pass rates. This research has harvested the lessons learnt during the pandemic and outlined the strategic interventions that brought about positive changes made to ensure better teaching and learning experiences to ensure student success. These benchmark findings must not be forgotten. However, a question emerges, “Are the PTMS trading the depth of academic knowledge and experience for the sake of convenience and to better balance work, family and being a student?” It is intended that the researchers will address this question in their ongoing research, as part of a larger research project. In order to answer this question, a mixed methodology will be used, which will include interviews and focus groups. In order to ensure retention and academic success of this unique cohort of mature employed students studying part-time, higher education institutions should improve the provision of support, as well as the learning and teaching experiences.

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