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# South African Tourism students' learning preferences during COVID-19 at universities of technology

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Between 2020 and 2021, the COVID-19 pandemic forced governments, around the globe, to implement innovative initiatives to avoid a complete collapse of significant sectors. Emergency remote teaching (ERT) operational frameworks were developed through the Council for Higher Education (CHE) to guide higher education (HE) institutions' operational procedures. Considering that students at Universities of Technology (UoTs) are used to face-to-face teaching, ERT may have been aversely experienced. Thus, for this study, the review of Tourism Management students' learning preferences during ERT across three South African UoTs were ascertained. Through means of a sequential-explanatory research design, students were asked to complete a survey and, afterwards, those students who showed interest were interviewed in focus groups. Tourism Management UoT students did not see ERT in a positive light as access to HE was a major challenge for them during lockdown periods, indicating a lack of sufficient resources to properly participate in learning activities, and crucially, a lack of access to support mechanisms during ERT.

**Contribution:** This study offers student perspectives of remote learning experiences. This data could assist in offering a balance between ERT initiatives and learner-guided frameworks for HE. This knowledge could be critical in limiting the gap in access and success for hybrid or blended tourism programmes post-COVID-19.

**Keywords:** COVID-19; higher education; remote learning; tourism management; students' perceptions.

## Introduction

Educational innovations whereby multi-modal teaching and learning initiatives were introduced (Barton & Ryan 2014:410), have over the decades migrated towards engagement driving (Gilakjani, Lai & Hairul 2013:1362) to leverage students' learning for the 21st century (Laohajaratsang 2017:138). Notwithstanding the latter, in a South African Higher Education (HE) dispensation, the preferred teaching and learning modality is that of face-to-face learning (Cleveland-Innes & Wilton 2018:15). As a result of the COVID-19 pandemic, face-to-face learning could no longer take place, and there arose an urgent need to salvage the national academic agenda through guidelines, as imposed by the Council on Higher Education (CHE) (2020:6–9). Internationally, the COVID-19 pandemic saw academic programmes grind to a halt, while academic operations were forced to take up an online presence (Van Zyl, Venter & Bruwer 2021:67; WHO 2020). The most feasible approach was for South African HE institutions to adopt an Emergency Remote Teaching (ERT) approach while 're-developing' existing subjects. As pointed out by Coetzee et al. (2021):

> [A]lthough the 4IR, in and by itself, is a driving force behind the disruption facing universities, the rate at which it is set to occur has been expedited due to the Covid-19 pandemic. (p. 2)

Debates pre-pandemic around blended and hybrid learning centred on the effectiveness of the models and the potential to accommodate different learning styles (Bryan & Volchenkova 2016:28), affording an opportunity for meaningful learning (Robinson et al. 2015:285–286; The Community of Inquiry [COI] n.d.; Vaughan 2010:178), and where students felt they had been afforded a safe space to participate (Rix 2011:426). Technology has allowed students the ability to access education beyond the confines of the classroom and fixed time-tabled periods of a school or a university day (West 2013:6–7). Moursund (2005:7) outlined the uses of information and communication technology (ICT) in education as a tool to assist with improving the quality of teaching and learning, as well as assessment thereof, and accountability systems: the basis of platforms critical to advancing teaching and learning. The secondary research by Van Zyl et al.

(2021:69) argued that although the pandemic influenced extensive adoption of 4IR in UoTs during COVID-19, there was no evidence of improved efficacy of HE institutions. In the review of Tourism Management students' learning preferences during remote learning, any gap during the provision of teaching practices and support mechanisms by UoTs is investigated. In tourism qualifications, teaching styles follow a fit-for-purpose design. As a result of the orientation of the services industry, instructional and learning design of the theoretical and vocational elements in the curriculum is critical to enhance meaningful learning.

This article therefore aims to review the experiences and perspectives of students' remote learning journeys, to determine lessons or guiding principles for blended and hybrid learning design.

## Impacts of COVID-19 on higher education

On 15 March 2020, the South African government announced a National State of Disaster, which saw the first lockdown of the country, in line with other countries across the world (Staunton et al. 2020:2–3). The lockdowns restricted movement and assembly, which meant learning, at all levels, abruptly stopped. At a time when teaching and learning was completely face-to-face, the COVID-19 pandemic fast-tracked the steady strides being made towards the inclusion of technology in teaching and learning, pivoting to purely online learning or remote learning. This created challenges for students and staff on issues of access (Mhlanga 2021:16–18).

The negative aspect was that the divide in technology readiness meant that countries that did not have widespread required infrastructure, like some areas in South Africa, continued to be left behind, and students and learners who did not have access to technology were deprived from valuable education for months, and in certain instances for years, as some authors anticipated at the time (Mpungose 2020:5–6; Naidoo & Cartwright 2020:12). Post the hardships of the impact of the pandemic lockdowns and forced remote learning, HE institutions had to take stock and critically evaluate not only resources as a tool to improving academic performance but to also investigate what impact on learning preferences could mean for the academic performance of students (DHET, SA 2020; Ligami 2022; Mail & Guardian 2022).

As the world struggles to 'return to normal', there is now a shift in thinking towards a 'new normal' with how educational systems will function going forward. Basic research on learned experiences needs to be built into all planning to ensure the gap between intended outcomes and the lived experiences of students in HE are fully understood. The critical issue is that blended and hybrid learning models cannot be successfully implemented on their own in the South African context. A comprehensive study of HE students in South Africa conducted by Netanda, Mamabolo and Themane (2019:403–405) ranked

forms of preferred university support for students; the top three forms of support being directed to financial, academic, and emotional support. These strategies require certain supportive mechanisms for university students, in a bid to respond to students' needs for academic success (Naidoo & Cartwright 2020:12; Ogbuanya & Efuwape 2018; Swartz, Gachago & Belford 2018:51; Tan 2017:157:8; Tseng & Walsh 2016:11).

## Approaches to blended and hybrid learning in tourism classes

Blended learning is identified as a migration from traditional face-to-face learning (Cleveland-Innes & Wilton 2018:15) or a 'continuum between pure face-to-face and fully online settings' (Watson 2008:5). In evaluating the success of blended and hybrid models, institutions are guided by circumstances that could necessitate implementation, availability of resources, and suitability of the blended and hybrid models. There are four main blended learning structures in HE with different approaches, which are relevant to tourism programmes at UoTs (Cleveland-Innes & Wilton 2018:16):

- Blended face-to-face class: Mostly physical classes where activities in the classroom move from class instruction to group activities, individual tutoring, or paper-based-self assessments.
- Blended online class: Online class setting that mixes tuition time with students' individual or group activities to enhance learning activities.
- Flipped classroom: Learning activities are inverted. Students learn concepts outside of the classroom, using online platforms, and return to the classroom to reflect on their learnt experiences.
- Rotational method: Fixed or discretionary movement of learning activities between class instruction and other activities, such as group work or online activities. The rotation is initiated at the teachers' or lecturers' instruction. The rotation can occur in four different formats: a rotation from one station to the next in the same classroom, laboratory rotation, the flipped classroom, and individual rotation.

Universities operate with the majority view of blended and/or hybrid learning being the move from 'traditional or face-to-face or in-person' tuition, towards 'online or technology-enabled teaching' without fully considering the type of mode being used to blend learning activities (Cleveland-Innes & Wilton 2018:11). These terms are used interchangeably in educational research (Graham 2013:334). Blended learning is considered as the model that proposes activities that introduce the use of technology. Models include activities that combine face-to-face instruction and technology-mediated instruction (Saichaie 2020:96) with other blends, inverting learning activities, where students can individually participate, such as watching videos, reading resources, and learning from second-hand experiences and, in turn, bring their experiences to the classroom to reflect on (Saichaie 2020:97).

On the other hand, the hybrid model is described as the complete change of the face-to-face learning environment to purely online learning, within the education context (Anthony, Kamaludin & Romli 2022:532). Where blended learning indicates the augmenting of face-to-face tuition with technology, hybrid-learning leads to the reduction of face-to-face tuition and student activities to purely online activities (Saichaie 2020:97). This approach is varied to the broad work-place definition of hybrid setting, which seeks to explain the bringing together of face-to-face and online environments, in order to maintain an equilibrium between online and offline learning settings. In the learning environment, the term hybrid learning is widely used to imply that learning could migrate from a teacher or lecturer focus to a more student focus, or self-reliant basis where students produce a product, perform a skill, or demonstrate their knowledge in the process of learning (Bosman & Schulze 2018:5).

## Council on Higher Education emergency remote teaching framework

The CHE (2020:4) report has emphasised a recovery approach as a response to COVID-19 impacts. The recovery, termed ERT, included systems and programmes that were put in place to continue the education agenda during strict lockdowns and noted a:

> …temporary shift of instructional delivery to an alternate delivery mode as a response to crises situations. ERT involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses. (p. 4)

As a way to assess the successes and challenges of the interventions that were put in place during the ERT, an understanding of the benefits and challenges experienced by students during remote learning should shed some light on the effectiveness of, as well as impact on, remote learning plans (Twesige et al. 2021:148). A study by the Department of Higher Education and Training (DHET), in South Africa, reviewing the progress of remote learning, indicated challenges students had experienced with remote learning (DHET, SA 2020:50–51). The study pointed to the requirements by HE for purposeful attention to the implementation of support requirements for students, in ensuring that hybrid and blended learning as a consideration for a future HE strategy, should be carefully approached, so that further imbalances in the education system are mitigated. As Coetzee et al. (2021:8–10) advise, HE institutions must consider how students are going to be supported and empowered through adaptions to HE pedagogy in the 21st Century.

Studies in the field of remote or distance learning rely on the COI model (Le Roux & Nagel 2018:5), as well as Vygosky's model (Mosdorf, Kilon & Ignatowska 2010:25), for direction. For a study on learning preferences, the limitations of the models are that although the sense of community of learning is critical for online learning, student preferences do not only rely on this aspect alone. Learning preferences are shaped by students' personal attributes, and teaching and learning practices (McGhie 2012:192–193). Pre-2020, studies that evaluated blended learning focused more on practice and student satisfaction than preferences (Tseng & Walsh 2016:46), as well as successes of blended and/or hybrid learning implemented for courses (Harahap et al. 2019:524). Some studies reported on the novelty of teaching practice, the limitations of assessing student preferences of blended and hybrid models being used in courses, and support mechanisms offered by universities for blended learning (Swartz et al. 2018; Tekane, Pilcher & Potgieter 2020).

A study by Jugmohan (2010:35–39) pointed to a mismatch between tourism students' expectations of their learning experience, curriculum designers regarding suitable tourism students, and tourism employers regarding work-ready graduates. This article also considered factors highlighted by McGhie (2012) that have an impact on the progress of first year students at universities in South Africa, academic factors, social factors, and institutional factors.

There is a need for the body of knowledge on blended and hybrid learning to continually include the student voice, in terms of experiences of the various models and classes, or blends being implemented, in various academic fields. This in an effort to get closer to discovering a model that benefits both learning and teaching (Costa et al. 2019:398; Dlamini, Bayaga & Moyo 2021:35) in the context of developing economies. Most importantly, there is a need to unearth possible unrealised benefits of hybrid models that are disrupting the traditional teaching-learning, and offering better teaching practices to accommodate students who might not have benefited from traditional teaching modes (Celestino & Yamamoto 2020:4).

# Research methods and design

This study followed a sequential-explanatory design as part of a bigger study that conducted a census enquiry of 260 Tourism Management students at three UoTs in South Africa, the Cape Peninsula University of Technology (CPUT), Central University of Technology (CUT), and Tshwane University of Technology (TUT) in South Africa, concluded online, related to investigating student perspectives of their learning preferences and experiences during remote learning. The mixed methodology research was selected to allow for the acquisition of a more complete picture of the results. While the quantitative data identified the student learning preferences and learning experiences during remote learning, the qualitative data provided a deeper analysis and understanding of these aspects (Wilson-Strydom 2012:134). A multiple measurement was adopted from studies by Mkonto (2015) regarding student learning preferences and training DHET (SA 2020), to assess tourism students' academic experiences during hybrid and blended learning. The enquiry would assist to uncover explanations of observed phenomenon (Creswell 2014:16; Wilson-Strydom 2012:134) to academic practice and learning preferences. The questionnaire and interview schedule testing and piloting were conducted with the assistance of the official statistician at CPUT. All data collection

was completed online through selected tourism contact staff at the participating institutions, identified staff at participating UoTs assisted to disseminate the study survey link, and invitations for focus groups to the Tourism Management students. The first phase of data collection was quantitative surveys, collected on the Lime Survey tool, which for purely remote online surveys allowed for the added flexibility for study participants to complete a survey in two settings should they so wish. The second phase of data collection was qualitative focus group interviews, conducted after invitations for voluntary participation were shared with participating institutions. For this second phase, an invitation was sent to participating UoTs, for interested parties to communicate directly with the researcher to participate in the focus group interviews. Student learning style preferences were measured using the VARK learning model developed by Niel Felming in 1998 (AlKhasawneh 2013:1546) and advanced in 2006 for in-classroom face-to-face activities, and Kolbs 1984 learning style inventory (LSI) (Hawk & Shah 2007:2), to assess remote learning activities of students.

The quantitative analysis was conducted with the Statistical Package for the Social Sciences (SPSS) version 28. Chi-square tests were conducted to explore differences between groups of data from the various institutions (Kothari 2004:148; Wilson-Strydom 2012:147). The Atlas.ti 28 analysis tool was used to conduct a thematic analysis of the focus group transcripts. Deductive and inductive coding was applied in the analysis process, as predetermined codes from the drafting of the interview schedules were already designed prior to analysis (Kenaphoom 2021:660), while certain elements of data that emerged from the interviews are also included in the data.

### Ethical considerations

Ethical clearance to conduct this study was obtained from the CPUT research ethics committee (No. 2021_FBMSREC 050).

## Results and discussion

Effective designs of hybrid and blended learning models for tourism programmes were informed by experiences of UoT students' learning during a hybrid learning setting. Study participants were 71.26% female and 28.74% male. Age distribution was $n = 138$ (53%) 21–25, $n = 95$ (37%) 18–20, $n = 21$ (8%) 26–30, and 1% ($n = 3$), respectively, for the under 18 and over 30 years age groups. Most participants were first year students (31%), followed by third year (30%), second year

(18%), extended curriculum programme (ECP) (16%), and fourth year (5%) Tourism Management students. Extended curriculum programme is an added academic student support initiative, designed to split the amount of subjects for first year entry students over a 2 year period. The programme was introduced in HE to improve student throughput.

### Preferred learning styles

To investigate students' preferred learning styles, a Likert scale of opinion questions was included in this section of the survey. The results were compared by gender and indicated no relational influences. The Chi-square value was above 0.05 ($p = > 0.05$), thus indicating no relationship between student learning preferences and gender.

The data indicated a preference for the 'read and write' learning style, with negative feedback of the auditory learning style. Students indicated a preference for making their own notes (49.79% = agree and 30.21% = strongly agree) while 48.09% agreed to the statement that they try and find additional information, and read to understand the subject matter. With regard to study groups, 48.31% of students disagreed that they study with classmates in groups, which is in line with the preference to study alone shown in Table 1.

An optional question with an open-ended choice was also asked to reference the learning style preferences, shown in Table 2, where a total of $n = 209$ responses were captured for this question. Table 2 reveals a preference for a kinaesthetic learning style (94, $n = 45$%), where students prefer to actively answer mock questions to learn concepts (as revealed by Mlambo 2011:82). The learning style is followed closely by the read and write learning style (70, $n = 33.5$%) as students indicated a preference for reading 'content to be learnt', which is in line with the preference for reading data captured, as shown in Table 1. Six 'other' responses (2.9%) indicated in the open-ended questions were an orientation towards a combination of styles, and a preference for a read and write learning preference. Students who preferred the auditory learning style numbered 39 ($n = 18.7$%). No statements directing to a preference for visual learning were captured in the responses.

An assumption can be drawn from the data presented to a preference for the reading and writing learning style by Tourism Management students, with kinaesthetic preferences as well, for a preference to study alone. Compared with other studies (e.g. Mkonto 2015) using the model to assess student

**TABLE 1:** Students' learning style preferences.

| Variable | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Total | Chi-Square |
|---|---|---|---|---|---|---|---|
| I make my own study notes from the textbook and notes given in class ($N = 235$) | 1.7 | 2.98 | 15.32 | 49.79 | 30.21 | 100 | 0.739 |
| I keep my class notes well organised and filed ($N = 236$) | 0.42 | 2.12 | 24.58 | 47.46 | 25.42 | 100 | 0.323 |
| I regularly study in a group with classmates ($N = 236$) | 17.37 | 48.31 | 24.15 | 8.05 | 2.12 | 100 | 0.508 |
| I prefer to study alone ($N = 236$) | 2.54 | 8.05 | 14.41 | 33.47 | 41.53 | 100 | 0.533 |
| I try to find additional information and reading to improve my understanding of my subjects ($N = 235$) | 1.7 | 1.7 | 22.13 | 48.09 | 26.38 | 100 | 0.374 |

learning preferences in SA, the study by Mkonto (2015) of students across faculties indicated a preference for a practical hands-on learning (kinaesthetic) style. A study on secondary school students conducted by Bosman and Schulze (2018:5) pointed to a hands-on active approach to learning, with students preferring to study alone more than in groups. The latter study assessed performances and reported higher performances in learners who opted for the kinaesthetic and read and/or write learning styles.

### Preferences of tourism students regarding the use of academic support services

The articulation rates of UoT students is a DHET imperative, which has allowed for the implementation of innovative programmes to bolster student success at UoTs (Van Zyl 2017:19). The use of tutors in academic programmes was one of the imperatives. A review of the results in Table 3 on the use of academic support services indicates an interesting observation, where most surveyed students did not use available tutors, with 26.81% of students disagreeing with the statement, while 31.91% were neutral on the matter of using tutors. This result is similar to the study by Massingham and Herrington (2006:86). Allowing for this analysis, students agreed that they would benefit from a tutor who spoke their home language, with 37.54% agreeing and 22.13% strongly agreeing with the sentiment. Further interesting results revealed evidence that gender could be a factor when the preference to consult the services of a tutor who speaks a similar home language is concerned, as the chi-square $p$-value was less than 0.05 ($p = 0.038$). Female students were more inclined to use tutor services by persons who spoke their home language as learning in their mother tongue was perceived to be easier. A study by Tekane et al. (2020:8–9) revealed that preference for tutorials was based on the chance for students to '*practice, get assistance and validate*', which is a support mechanism that is well suited to the kinaesthetic learning preference as it is an active learning activity.

**TABLE 2:** Statements of preferred learning styles.

| Variable | Statements | Frequency | % | Valid (%) | Cumulative (%) |
|---|---|---|---|---|---|
| Valid | Reading things over and over until I have memorised them | 70 | 26.8 | 33.5 | 33.5 |
| | Writing things out and doing practice questions | 94 | 36.0 | 45.0 | 78.5 |
| | When I study it helps me to remember if I speak the words out loud | 39 | 14.9 | 18.7 | 97.1 |
| | Other | 6 | 2.3 | 2.9 | 100.0 |
| | Total | 209 | 80.1 | 100.0 | - |
| Missing | System | 52 | 19.9 | - | - |
| **Total** | - | **261** | **100.0** | - | - |

Contradicting responses were, however, recorded in Table 3 where, although students indicated that they would benefit from a tutor who spoke their home language, they disagreed with the statement that they translate their notes into their home language (30.21%) and 24.68% were neutral to the statement. This is an indication that the language of instruction at UoTs in SA is considered appropriate by students.
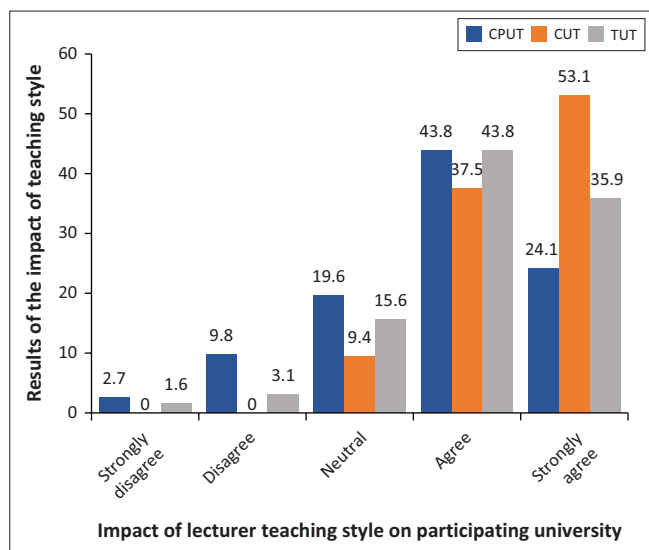
### Teaching practices versus learning styles in relation to hybrid and blended learning

A mismatch between teaching and learning styles is highlighted as a major issue in academia (Akbarzadeh & Fatemipour 2014:141; Bosman & Schulze 2018:5; Felder 1988:674; Widaningrum & Ho 2015:89). A study by Liang (2021:8) presented evidence that teaching style has an impact on learning. The results, presented in Figure 1, could indicate further confirmation of this view, as results per participating university indicated that tourism students agree (CUT = 37.5%; CPUT = 43.8%; TUT = 43.8%) and strongly agree (CPUT = 24.1%; TUT = 35.9%; CUT = 53.1%) that lecturer's teaching styles impacted their learning.

### Preferences related to on-campus class attendance

Based on the indication that teaching practices do impact learning, as depicted in Figure 1, follow-up questions were asked about face-to-face class attendance. The first question (Table 4) focused on preferences for face-to-face class attendance. The issue of a lack of attendance focused on reasons (Chipchase et al. 2017:36), whereas a study by Visser and Van Zyl (2016:343) suggested that *race* could also be a consideration. When the tourism students in this study were asked if they attend 90% of their classes, 80% of a total of $n = 211$ students who answered this question, indicated 'Yes', with only 20% indicating 'No', and this result is in line with a study by Kinlaw, Dunlap and D'Angelo (2012:169) that students do not unjustly decide not to attend classes.

In contrast, the students indicated that there are some lecturers' classes they prefer not to attend, according to 80% of $n = 220$ responses, thus affirming the argument that gaps between student learning preferences and lecturer teaching practices have a negative impact on learning (Deale 2019: 4–5; Wadesango & Machingambi 2011:94). Other discussions on factors impacting class attendance have focused on investigations attempting to combat low attendance of face-to-face classes (Karabulut-Ilgu et al. 2018:404; Kinlaw et al. 2012:170), to arguments that students' learning also evolves to preferences not restricted to university walls (Murphy et al. 2004:865). To determine a broader picture of the reasons students have for missing lectures, the results presented in Table 4 suggest that preference for class attendance on

**TABLE 3:** Students' preferences regarding academic support services.

| Variable | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Total | Chi-square |
|---|---|---|---|---|---|---|---|
| I translate my study notes into my home language ($N = 261$) | 15.33 | 30.21 | 24.68 | 19.57 | 10.21 | 100 | 0.503 |
| I make use of the tutors available ($N = 235$) | 11.92 | 26.81 | 31.91 | 20 | 9.36 | 100 | 0.905 |
| I would benefit from a tutor who speaks my home language ($N = 235$) | 2.55 | 11.06 | 26.81 | 37.45 | 22.13 | 100 | 0.038 |
| I make use of the support services offered by the university learning centre ($N = 235$) | 3.4 | 14.89 | 28.52 | 42.55 | 10.64 | 100 | 0.175 |

CPUT, Cape Peninsula University of Technology; CUT, Central University of Technology; TUT, Tshwane University of Technology.

**FIGURE 1:** Impact of lecturer teaching style on learning.

**TABLE 4:** Students' preferences related to face-to-face class attendance.

| Statements | Yes | | No | |
|---|---|---|---|---|
| | *n* | *%* | *n* | *%* |
| **Face-to-face class attendance** | | | | |
| I attend class 90% = Yes (*N* = 211) | 169 | 0.80 | 42 | 0.20 |
| There are some lecturers' classes I prefer not to attend (*N* = 220) | 177 | 0.80 | 43 | 0.20 |
| **Reasons for missing face-to-face class** | | | | |
| Not applicable, I only attended online class (*N* = 166) | 99 | 0.60 | 67 | 0.40 |
| Illness (*N* = 166) | 77 | 0.46 | 89 | 0.54 |
| Other responsibilities (*N* = 159) | 49 | 0.31 | 110 | 0.69 |
| I do not find class time beneficial (*N* = 159) | 13 | 0.08 | 146 | 0.92 |
| I do not attend classes because I sometimes just don't feel like going to class (*N* = 160) | 17 | 0.11 | 143 | 0.89 |
| I have transport problems (*N* = 164) | 38 | 0.23 | 126 | 0.77 |
| **Action taken when missed a face-to-face class** | | | | |
| I contact the relevant lecturer to see what work I missed (*N* = 161) | 71 | 0.44 | 90 | 0.56 |
| I ask a friend to update me and get notes from them (*N* = 174) | 159 | 0.91 | 15 | 0.09 |
| I just attend the next classes (*N* = 144) | 35 | 0.24 | 109 | 0.76 |

campus cannot be discounted. Feedback to questions on whether face-to-face classes were deemed 'not beneficial', 92% of *n* = 152 students who answered this question indicated 'No'. When asked if their reasons for non-attendance were based on 'just not feeling like going to class', 89% of the respondents (*n* = 159) indicated 'No'. Therefore, the interactive opportunities face-to-face classes offer cannot be discounted (Mshayisa 2022:4).

On assessment of actions students preferred to take when they missed a face-to-face class, evidence suggests more students prefer to work with their peers than to contact their lecturer directly. Of the responses to this question, *n* = 174, 91% asked friends for updates and notes if they missed class, while 76% (*n* = 144) did not follow up with friends but just attended the next class. Of the students who indicated not following up on work carried out if they missed a class, 24% noticed not taking any action and just attending the following session, which suggests that class preparation is critical for the majority of tourism students. Although this is a good indication, fewer students are inclined to ask their lecturer directly for assistance if they missed a class (44%, *n* = 161).

The assessment of results revealed in Table 4 raised interesting observations. Since the start of the COVID-19 pandemic in March 2020, and with the continued adjustment of lockdown levels, as well as the lifting of the National State of Disaster in SA on 05 April 2022 (Department of Health, SA 2022), UoTs have not rushed the decision to revert to full face-to-face campus classes. A total of *n* = 99 participants who chose the option 'not applicable', have only attended online classes since the start of the pandemic in 2020, until the period data were collected for this study (between 29 March and 30 May 2022), and continue to attend remotely (Table 4). As COVID-19 was a huge disrupter around the world, it could be a view that South African HE institutions are already considering adaptions to the design of tuition for the future.

### Preferences related to remote learning

Table 5 presents the results of *n* = 145 students who responded to questions on preferences of online classes, relating to forms of communication, and the type of online class preferred. Formal and informal platforms for learning, considered synchronous and asynchronous (Beldarrain 2006:140; Martin & Bolliger 2018:208), are important aspects of 'remoteness' in creating wider access to the learning environment (DHET, SA 2020:7).

Questions on the online learning preference were adopted from Kolb's learning cycle, which focuses on a quadrant of elements explained as 'divergers' who are good at seeing things from different perspectives, and work well with people; 'assimilators' who prefer inductive reasoning, and prefer to work with information and ideas; 'convergers' have a strong practical orientation, are generally deductive in their thinking, and tend to be unemotional; and 'accommodators' who can solve problems intuitively, they like doing things impulsively (Graham 2013:18; Hawk & Shah 2007:4). The overall assessment of participants was based on ranking questions by highest scores.

The results shown in Table 5 regarding the type of online classes considered best during remote learning present a preference for interaction in class with online sessions that afforded students high participation. This outcome is similar to a study conducted by Mshayisa (2022:10) that indicated collaborative classes improved student confidence. Survey questions were posed using a 5-point Likert scale, with scores ranging from 1 = least preferred to 5 = most preferred. The not applicable option was also included in the scale to accommodate students where some of the options were not applicable to them. The highest-scored question relating to the best online class was the class where the lecturer offered

**TABLE 5:** Learning style preferences related to remote learning (%) ($N = 145$).

| Frequency distributions | N/A | Least preferred | Less preferred | Neutral | Preferred | Most preferred |
|---|---|---|---|---|---|---|
| **Preferred forms of communication preferred during remote learning** | | | | | | |
| Prefer info from LMS | 2.1 | 3.4 | 4.1 | 17.1 | 42.5 | 30.8 |
| Prefer info in class WhatsApp group | 3.4 | 11.6 | 19.9 | 28.8 | 28.1 | 8.2 |
| Prefer contact lecturer on WhatsApp | 6.2 | 15.8 | 15.1 | 25.3 | 26.7 | 11.0 |
| Prefer class WhatsApp | 0.0 | 9.6 | 8.9 | 26.0 | 38.4 | 17.1 |
| Prefer direct lecturer-mail | 3.4 | 6.2 | 12.3 | 28.1 | 30.1 | 19.9 |
| **The best remote class** | | | | | | |
| When lecturer camera is on | 2.1 | 16.6 | 20 | 36.6 | 17.2 | 7.6 |
| When my lecturers give opportunities to participate in online discussions | 0 | 2.1 | 0.7 | 8.3 | 44.1 | 44.8 |
| When I can ask questions | 0 | 0.69 | 4.83 | 41.38 | 53.10 | 0 |
| With PPT presentation | 0.7 | 1.4 | 4.1 | 19.3 | 46.2 | 28.3 |
| **Interaction in online class** | | | | | | |
| I do not like to participate in online discussions | 0.7 | 20.7 | 44.8 | 21.4 | 9.0 | 3.4 |

LMS, Learner management system; N/A, Not applicable.

opportunities for students to participate in the online class and scored the highest (44.8% = most preferred and 44.1% preferred) class. The second highest score was for a class where the lecturer used PowerPoint visuals (46.2% = preferred and 28.3% most preferred), while the class that offered the opportunity to ask questions came in third with a score of 53.1%. Interestingly, the class where the lecturer opted to have their camera on during online lectures was scored neutral (36.6%), and less preferred at 20%, with 16.6% least preferred (Table 5).

The next score summarised in Table 5 was the forms of synchronous and asynchronous communicating tools during remote learning and to assess student preferences. Again, in this assessment, the overall rating was based on ranking questions by the highest scores. The results shown in Table 5 indicate towards a preference for formal, or synchronous forms of communication during remote learning. Preferences for communication to be sent via the learner management system (LMS) scored the highest with 42.5% preferred and 30.8% strongly preferred responses. This was followed by the preference for communication to be performed through the class WhatsApp group (38.4% = preferred and 17.1% = most preferred), with direct e-mails with the lecturer scoring the third highest with 30.1% preferred and 19.9% most preferred responses. Preference for information and contacting the lecturer directly on WhatsApp scored lower with students, which is in line with the Martin and Bolliger's (2018:216) and Saidi et al. (2021:960) studies, indicating that regarding formal tuition, students were inclined to lean towards formal structures of communication such as the LMS and e-mails from the lecturer, than asynchronous platforms, with group coordinating activities more effective on these platforms (Mpungose 2020:930). As Mshayisa (2022:10) also found, the more informal platforms in blended lessons were preferred for group collaborative work than formal instruction and communication. Studies on this aspect mostly report on the design of blended classes (Cleveland-Innes & Wilton 2018:21), fit for purpose (Pechenkina & Aeschliman 2020:34), limitations with access (ReadLab 2022:23), with limited attention to preferences in the learning environment (Aheto & Cronje 2018:97), where this data could be critical.

The next enquiry into student learning preferences relating to remote classes was the question regarding what actions students took when they missed online classes. Issues of practices that UoTs used as standards in academia, such as attendance requirements (Barefoot 2004:11; Lesiko-Sedumo 2010), timetabling for academic programmes, impacts of timetabling on student attendance levels (Larabi-Marie-Sainte et al. 2021:2), and external factors that affected attendance levels when compounded with inflexible timetables, were considered (Kelly 2012:18, 28–29).

The introduction of technology in education has been considered to offer a level of flexibility for students (Gosper et al. 2010:251) that has called to question the need for stringent attendance rules for online classes (O'Callaghan et al. 2017:405). Student remote learning preferences scored high in studies by Gosper et al. (2010:255) and Pechenkina and Aeschliman (2020:33). This preference is in direct contrast with requirements for live remote class attendance. To probe this preference, students were asked to respond to actions they took when online classes were missed. The answer that scored highest on this question leaned towards a preference for working at 'my' own pace (87.8% = CPUT; 61.1% = CUT; 64.4% = TUT– Figure 2). A small number of students preferred to speak to classmates, to find out what was done in class (27.8% = CUT; 17.8% = TUT; 8.5% = CPUT).

## Remote versus face-to-face learning

In a study conducted by Kinlaw et al. (2012:168), assumptions were made that online classes were not as well attended when compared with face-to-face classes. The preferences for online and face-to-face classes were investigated in this study, to determine if tourism students prefer one form over the other. Cross-tabulated data in Table 6 indicate some relationship to the preference for attendance on campus or remote attendance per UoT, as the $p$-value of 0.047, which is less than 0.05 ($p = < 0.05$), was observed. For the question on the preference for attendance on campus, the chi-square test was conducted with a $p = < 0.05$, indicating significance of $X^2$ (10, $n = 115$) = 23.27 ($p = 0.0098$). This result indicated a highly significant association between variables of student preferences to attend class on campus based on the university of study.
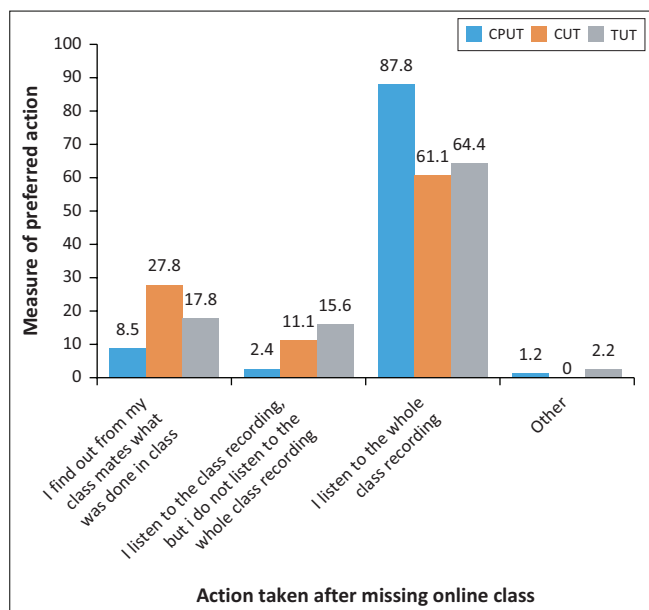
CPUT, Cape Peninsula University of Technology; CUT, Central University of Technology; TUT, Tshwane University of Technology.

**FIGURE 2:** Action taken after missing an online class.

Comparisons of results indicated the following:

- Cape Peninsula University of Technology results indicated a negative sentiment towards a remote class preference, with 36.6% disagreeing and 20.7% strongly disagreeing with the statements. Comparatively, preference for on-campus attendance reveals that 29.3% of students agreed with the preference for on-campus classes, while 20.7% disagreed. The results indicated a slight preference for on-campus classes, compared with online classes.
- Central University of Technology data presented a higher significant preference for online class attendance with 27.8% strongly agreeing, while 22.2% were neutral to a preference for online class preference. Comparatively, data on preference for campus classes returned significantly higher negative responses with 38.9% strongly disagreeing and 22.2% disagreeing responses, although a positive response of 27.8% was recorded. This data indicated a significantly negative preference towards campus classes, with a high preference for online classes by CUT students.
- Tshwane University of Technology results returned a more neutral stance, without a clear preference for online or on-campus classes, compared with the CUT and CPUT responses. Tshwane University of Technology students were neutral, with 30.4% neutral responses, 26.1% disagree and 23.9% agree responses recorded on the online preference question.

For the on-campus classes, responses recorded were 39.1% neutral, with 17.4%, respectively, for agree and disagree. These results could mean a preference for a balanced blend of online and face-to-face classes (Le Roux & Nagel 2018:4) or an undecided position on which options are most preferred (Pechenkina & Aeschliman 2020:32).

**TABLE 6:** Face-to-face class attendance versus online class attendance (%) (*N* = 115).

| Variable | UoT | N/A | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|---|---|---|---|---|---|---|
| Prefer to attend remotely† | CPUT | 0 | 20.7 | 36.6 | 18.3 | 14.6 | 9.80 |
| | CUT | 0 | 16.7 | 16.7 | 22.2 | 16.7 | 27.8 |
| | TUT | 4.3 | 6.5 | 26.1 | 30.4 | 23.9 | 8.7 |
| Prefer to be on campus‡ | CPUT | 1.2 | 14.6 | 20.7 | 15.9 | 29.3 | 18.3 |
| | CUT | 0 | 38.9 | 22.2 | 5.6 | 5.6 | 27.8 |
| | TUT | 0 | 17.4 | 17.4 | 39.1 | 17.4 | 8.7 |
| Prefer to listen to class recording§ | CPUT | 6.1 | 11.0 | 22.0 | 19.5 | 23.2 | 18.3 |
| | CUT | 5.6 | 11.1 | 22.2 | 0 | 0 | 61.1 |
| | TUT | 0 | 2.2 | 10.9 | 32.6 | 26.1 | 28.3 |

N/A, not applicable; UoT, Universities of Technology; CPUT, Cape Peninsula University of Technology; CUT, Central University of Technology; TUT, Tshwane University of Technology.

†, Chi-sqaure = 0.047; ‡, Chi-sqaure = 0.009; §, Chi-sqaure = 0.001.

The results recorded in Table 6 further illustrate students' preferences relating to online class attendance. Universities of Technology two students were the cohort that leaned most towards a preference for remote class format shown in Table 6, and these students were also not necessarily in favour of attending live online classes, but preferred having access to class recordings, as 61.1% of students strongly agreed that they preferred to listen to class recordings. In the following discussion, to be able to draw conclusions, the chi-square test results for this question were less than 0.01 ($p$ = < 0.01), indicating a strong significance of $X^2$ (10, $n$ = 115) = 29.27, $p$ = 0.0011, between the preference for attending online classes and accessing remote class recordings.

## Designing the perfect university experience

One question of the focus group interviews was designed for respondents to curate their best university experience: the question was asked, 'if you could design the perfect university student experience from an academic point of view, what would it look like'? The results, presented in summary format, indicated three factors critical for the consideration of the perfect university experience for students. These revealed factor responses ranged from a blended class approach with some of the blends indicating a preference for face-to-face, consultations or active learning scenarios tuition (factor 1), aid for students with regard to access (factor 2), and a preference for qualification aligned blends (factor 3). Responses from two participating UoTs were received. Following the disruption of the CPUT focus group interviews because of electricity blackouts, responses were further submitted via e-mail. A total of $N$ = 8 participants were coded according to university of participation.

Factor 1: Blended and/or hybrid approach, with a preference for face-to-face tuition: Throughout the interview process respondents had indicated a requirement for classes that offered personal or social connections that face-to-face classes offered. In answering the question about the design of the 'perfect' university experience, respondents further cemented the notion that, although blended and/or hybrid tuition could be considered as a future mode of teaching and learning, there are benefits for students:

'…face-to-face that takes the crown a reason behind me saying that it's because it gives me more academically, socially, you know, practically and everything. So online just gives me, actually just gives me one benefit that I can attend and be able to actually see the recording later, but the benefits of face-to-face for me are so much, I'm very often extroverted person. So I, I believe in seeing people … So I believe actually also in engaging.' (5:81, 252 in TUT Focus group interview)

'I am, I'm a busy person, but I'm busy with nothing … So me sitting on a table and like listening to a lecture, it's kind of like, not for me. So I would be like, okay, put the laptop on speaker and then continue doing whatever I was doing before I attended the class. But when I'm in a contact class, I feel like now we are talking.' (5:84, 259 in TUT Focus group interview)

Factor 2: Aid for students regarding access: Responses from the focus group interviews indicated three areas students viewed as critical areas of assistance.

The first identified type of aid was career guidance, with the respondent indicating that:

'…what that means for universities is that there is an imperative need to provide students with aid and advice concerning what they want out of life. One of the simplest ways to do this is to give them career advice.' (2:15, 36 in Prom_CPUT)

This finding compares with the survey results where students were asked if tourism management was their first-choice qualification, revealing interesting data on how some students' first course choice qualifications included nursing, education, paralegal studies, and policing. Career guidance as an intervention mostly actioned in the former years of schooling could be an indication that a gap exists with regard to the knowledge students possess about career choices, even at the university level.

The other two forms of aid identified were assistance with study materials such as printing and study books, assistance with data for online connectivity, as well as transport for access to campus:

'Give some services free, such as textbooks, printing, photocopying bites, have transport allowances for the needy students that are off campus but all this in a monitored manner for misuse.' (3:14, 17 in Sipo, CPUT)

'I would design a school that have (sic) free transport for everyone and free internet.' (4:13, 1 in Tan, CPUT)

Factor 3: Tourism curriculum design for aligned blends: The design of the COVID-19 response plan for academic institutions revealed a bias towards face-to-face teaching during the lockdowns, preferred to what was considered 'lab' subjects, clearly indicating that there were subjects, which could not be taught remotely because of complex requirements, for example, experimentation or development. As a consideration tourism management curriculum designers could consider subjects not suitable for online learning for the qualification when hybrid and/or blended models are put in place at UoTs:

'… there are just some modules that we can't do online. You know, those modules of calculations, we actually got a chance to do financial accounting. As, a module, we have tourism practice, which includes calculation, costing sheets, your accounting equation tables.' (5:91, 282 in TUT Focus group interview)

Students' learning preferences revealed a more active learning approach, with kinaesthetic learning preferences scoring high for both face-to-face and online live classes, while remote learning practices pointed to a more self-focused, flexible approach, with the converger learning style being predominant. A study by Mkonto (2015:219–220) at a South African UoT indicated similar results of Engineering and Health and Science students who preferred kinaesthetic in the classroom, while responses pointed to a preference for 'diverger' learning as respondents indicated that they conducted research on new content before either attending class or discussing elements they did not understand with peers, similar to findings by Graham (2013:18) and Smith-Labrash (2010:35).

# Conclusion

Emergency remote teaching policies in responding to disruptions to academic activities in HE institutions provided a solid framework in ensuring that teaching and learning for most institutions in SA progressed with a level of success. The challenge that is revealed in the study is that those students who were able to fully participate in online learning were guaranteed success. What was evident from literature and empirical data was that substantial investments were placed at the helm of making the ERT project a success, and yielded benefits as widening access for those students who had limited access to resources. Another critical outcome is that in preparing for ERT, all initiatives were considered from a strategic university level, and not particularly at the teaching and learning level. At the classroom level, interruptions to education provided an opportunity to assess practices that work for students' academic success at a larger scale. Based on the three factors identified, namely, students' preferences for face-to-face tuition, requirements of support for academic success, and the need for tourism aligned hybrid modelling (curriculum design), students did appear to prefer that hybrid and blended learning be a significant consideration to the designing of a perfect university experience. There was an indication that while flexibility of the approach to teaching was preferred, face-to-face classes should play a crucial role in the blends. Respondents also highlighted issues that could hinder access to academic progress, including limitations with transport, internet data, books, and indicated a requirement for continued academic support, such as tutors. The state of readiness for remote learning at the participating institutions, regarding student orientation, academic training, and level of blended and/or hybrid learning in teaching practice could have had an impact on student experiences. The future of hybrid and blended design should be based on a balance of ERT initiatives, as well as a learner-focused framework, in order to limit the gap in access and success in HE.

# Recommendation for future research

A structured design for hybrid and/or blended learning for tourism programmes at UoTs in SA is required in guiding pedagogic practice. Further research on learning preferences in hybrid and blended learning environments is required in the context of SA, to inform most suitable programme delivery designs, in ensuring students' academic success. Future studies could propose a framework of guiding principles for the design of a structured hybrid or blended teaching and learning models, for tourism programmes at UoTs. The evaluation of impacts on students who were technologically challenged to participate in remote learning could be a recommendation for future research. This aspect was outside the scope of this study; however, it could offer insights into issues of access to remote learning.

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## Data availability

Data presented in this study is available on request from the corresponding author.

## Disclaimer

The views expressed in the submitted article are of the authors own and not an official position of the institution or funder. Participant attrition was a major challenge in the study. The mixed approach in this study improved external validity of the results, although the case-based data may pose a challenge to the generalisability of the results to other settings.

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