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Online assessments: Exploring perspectives of university students

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Abstract

The United Arab Emirates is committed to integrating technology into higher education. In this study the researchers aim to explore the perspectives of university students on online assessments. An understanding of students' views can help identify obstacles and promotors in embracing online assessments at the undergraduate level. The social constructivist epistemology has been used in this qualitative study to understand students' preferences, apprehensions and acceptance of online assessments. Semi-structured focus group discussions were carried out after recruiting 41 university students, using convenience and snowball sampling methods. Thematic content analysis was applied to the data. This study highlighted that students did not comprehend the need for online assessments. Concerns regarding technological incompetence of students and teachers alongside distrust in the technology infrastructure were stressed. Students felt online assessments were restrictive for the science courses and had resulted in falling grades; probably due to the increasing dependence on multiple choice questions. Students also expressed the importance of constructive, timely and personalized feedback. Students need to be convinced of the usefulness of the transition to online assessment before they agree with it. It is evident through this study that student acceptance would increase with a gradual transition towards online assessments alongside technological training for both students and faculty. Active individualized interaction with instructors is important to students, furthermore preferences and concerns emphasized by students should be addressed to successfully integrate online assessments into higher education.

Keywords Education · Concerns · Online assessments · Preferences · Technology · United Arab Emirates

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1 Background

The United Arab Emirates (UAE) is committed to provide high quality modern education that is comparable to global standards of education. Approximately 25% of the federal budget is allocated to education in UAE. The introduction of the 'Smart Learning' initiative encourages incorporation of technology in teaching and learning across all public schools in UAE (Export.gov 2016). According to the Global Competitiveness report, UAE ranks 9th in provision of internet access across its schools. Higher education has continued to thrive, and currently there are more than 100 universities, colleges and higher education institutes in the UAE compared to only one university in 1977 (Export.gov 2016; Mehkri 2017; Nasir 2017). There is a determination to incorporate technology into higher education as well, and federal universities are moving towards online teaching, learning and assessments (Export.gov 2016).

Educating is not merely imparting knowledge; how students acquire knowledge can be explained through the social constructivist theory. A student alongside being a learner is heavily influenced by sociocultural stimuli, previous knowledge, emotional beliefs, values and attitudes (Ambrose et al. 2010). When students can relate to an activity for learning and are surrounded by a supportive learning environment they gain the motivation that is essential to succeed. Students in UAE place great importance on interpersonal relations and social interactions while learning; moving to online education decreases human interaction which could hinder the transition to incorporate technology in education (Freimuth and Charles 2014). It is imperative that students' views regarding changes in educational techniques be taken into serious consideration to ensure a smooth and successful transition. If students' perceptions remain elusive, technological measures taken to solve problems in education may end up as 'sub optimal' solutions (Laurillard 2008).

2 Literature review

On review of literature benefits seen with transitioning to online assessments include reduction of paper usage and decreased fears over security of transporting test papers. Online tests provide added flexibility in terms of timings and location of test conduction as well as at what time feedback is provided to the students. Randomization of exam questions and the possibility of repeating the test several times add to the advantages of online assessments (Betlej 2013; Spivey and Mcmillan 2014). On the other hand, inability of students to explain their answers due to rigid technological settings increased stress for both teachers and students. Reduced personalized engagement with faculty was another concern associated with online assessments (Betlej 2013). In a study conducted in a university in south eastern United States, data was collected through tracking technology usage and grades of 174 students; some students being taught and assessed primarily through online learning platforms while others assessed through traditional pen and paper tests. No significant difference was seen in terms of performance or effort in students taking online exams. The study indicates that advantages offered through online assessments are of convenience rather than academic superiority. The study lends support to the use of online assessments on the premise that they do not adversely influence student's grades (Spivey and Mcmillan 2014).

In another perspective provided by a principal in an elementary school in Georgia, the experience of transitioning to online assessment has been reflected upon (Ogletree et al. 2014). While literature shows that the mode of assessment should not affect the scores of students, there has been concern about the comparability of identical tests taken in different formats. The level of student preparedness for the mode of test they take along with the quality of test ultimately influences their grades (Gewertz 2013). The school administered three tests within nine months to provide practice to students and teachers. Spare back-up devices were allocated in case of device failures, however slow login and delayed loading of test remained an issue which potentially impacted student engagement and possibly grades. It was seen that the results of the first test were negatively skewed, whereas the grades started stabilizing by the third test. The observation clearly highlighted the need for slow transitioning and ample practice on the online assessment format for inexperienced students and teachers (Ogletree et al. 2014).

A study in Romania explored acceptance of online assessments among medical students using a questionnaire. A total of 240 students from all study years were sampled. Results showed a preference for online assessments rather than oral or pen and paper assessments among these students. However, there was increasing degree of acceptance as students moved into higher year groups, probably as they were more accustomed to the format. This university had been conducting online assessments for seven years which could explain students' confidence in the system (Marius et al. 2016). In another university online assessments were used as formative assessments before in-class tests. It was observed that students who used online formative assessments prior to in-class tests for practice, scored higher than those students who did not. However, these results were inconsistent and did not impact performance in cumulative mid-term and final exams. While a clear academic advantage to formative online assessments was not observed, they did not impair grades either (Brown et al. 2015). A quantitative study considered the use of technology, in the form of clickers for assessments within the discipline of science. While 71% students enjoyed using clickers for formative assessments, only 53% felt comfortable using them for summative assessments. Online summative assessments were associated with anxiety of whether the test had been submitted, or if answers had been changed due to technical errors. Students felt clickers took longer than traditional assessments. As with other technological adoptions, students stressed on the need for more practice with clickers (Kuriakose and Luwes 2016).

Literature is scarce when it comes perceptions of online assessment in the UAE. Awofeso and Bamidele from Hamdan Bin Mohammed Smart University, in UAE, carried out a study on perceptions of students, from a science discipline, on the effectiveness of online instructor feedback. A survey instrument was provided to 74 participants of which 66 completed the survey. It was seen that 73% students indicated satisfaction with the online instructor feedback they had received. The researchers however highlighted that there was a need for open ended questions for students to describe their perspectives in depth to gain a better understanding of their views (Awofeso and Bamidele 2014).

Recognition of learner characteristics is an important aspect of teaching and learning. Students in UAE generally prefer personal interaction and poor relations with teachers has a negative impact on their grades. Poor critical thinking skills compounded

with habits of rote learning makes it difficult to adapt to changes in teaching and learning methods. Despite this, students have high expectations of marks and tend to negotiate marks where possible. These unique traits of Emirati students are important to acknowledge to achieve higher academic goals in the region (Freimuth and Charles 2014; Saafin 2008). There is a need to understand that students' attitudes towards learning are influenced by their sociocultural backgrounds and ultimately impacts their academic achievements.

3 Study objectives

In this study the researchers aim to explore the perspectives of university students on online assessments, with a focus on students who are studying science in UAE.

4 Significance of study

A thorough understanding of students' perspectives can help identify the main obstacles and promotors in embracing online assessments at the undergraduate level. Once students' concerns are identified, faculty and academic institutions can mold the teaching methodology accordingly and make informed decisions on incorporation of online technology for the purpose of assessments. Such information can ease the transition towards online teaching and learning. Given the sociocultural similarity of UAE with its neighboring countries, and sparse qualitative research in the subject area in the region, the findings from this study could also be extended to educational institutions outside of UAE.

5 Methodology

Qualitative research methods aim to seek greater understanding of experiences (Gridley et al. 2009). Focus group (FG) discussions were carried out with science students at a university in UAE. Semi-structured focus group interviews allow for interim analysis and refining questions as themes and views emerge to give a better understanding of student perceptions (Pope et al. 2000).

5.1 Epistemology

This study builds on the social constructivist epistemology, whereby students sitting in the same classroom may construe different experiences. Students construct realities based on prior experiences, understanding, and socio-economic positions. Their motivation for studying and expectations of desired outcomes is deeply influenced by their backgrounds and experiences (Gridley et al. 2009). This study aimed to explore perceptions related to assessment in the discipline of science; science is considered objective, empirical and quantifiable; yet when the reality of student' perceptions to assessment in science is considered there are many different realities that cannot be explained through empiricism (Gridley et al. 2009).

5.2 Research question

This study was conducted to explore views of university students in UAE, belonging to the science majors, regarding the newly introduced online assessment methods. The main research question was, *how do science students in a UAE university perceive online assessments?* The main research question was further subdivided into three questions

1. What are students' preferences and apprehensions regarding online assessments?
2. How does technological competency of all stakeholders play a role in acceptance of online assessments by students?
3. How can the online assessment experience be improved for students?

5.3 Participants and recruitment

Using convenience sampling and snowball sampling methods 41 university students belonging to the Science College were recruited. A recruitment sheet and participant information sheet were passed around to potential participants, who signed the sheet and chose a time slot during which attending a focus group would be most convenient. Inclusion criteria required participants to be female (since the study was conducted in a women's university), over 18 years of age and belonging to the science major. All students under 18 years and from other disciplines were excluded from the study. Following participant screening by the student research assistant, 6 focus group sessions were conducted on campus. Participants were sent emails to remind them to attend the focus group discussion that they had signed up for.

5.4 Research instrument

A semi-structured interview guide was prepared by the researchers to collect data. The initial questions aimed to collect demographic information, ensure participants were familiar with online assessments and to ease participants into the discussion. Several open-ended questions were used to initiate discussions to explore student's perspectives on online assessments, their concerns and suggestions. The questions were followed up with probing questions prompted by the content of the dialogues to elicit in depth perspectives. Examples of some questions asked were, 'How do you feel about online assessments?' How does being in the science major influence your views on online assessments? Can you mention any advantages or downsides of online assessments? Participants were asked to elaborate on their answers and provide possible solutions to problems they had highlighted.

5.5 Data collection and analysis

A total of six focus group sessions were carried out during 2017–2018 academic year. Each focus group session lasted from 40 min to 68 min. The discussions were carried out in English by the primary investigator and the research assistant. The first focus group was considered a pilot session; due to the semi-structured nature of the

discussion, data obtained from the pilot session was included in the analysis. Discussions were recorded using a voice recorder and transcribed verbatim by the primary investigator. The software 'Transcribe' was used to aide transcription. Following coding, common codes were compiled into themes by means of thematic content analysis using NVivo software. Emerging, recurrent and diverse themes were identified and considered along with supporting quotes.

5.6 Ethical considerations

Ethical clearance to conduct the study was obtained from Zayed University Research Ethics committee (ZU17_030_F). Sessions were recorded using a voice recorder with the participants' consent, however video recording was not done to respect religious and cultural beliefs of the participants. While the study is not of a sensitive nature, all efforts were taken to maintain privacy and confidentiality of the participants. Recordings were transcribed by the primary investigator, to protect privacy; names were not used during the study to maintain confidentiality. All transcripts and data have been stored in password protected files. Participants signed an informed consent form indicating their willingness to contribute to the study and permission to publish findings before participating in the focus group.

6 Results

Following analysis of data obtained from the focus group discussions, 4 themes appeared to dominate the dialogues. Key findings have been summarized in Table 1.

6.1 Students. Preferences and apprehensions

Students' apprehension towards online assessments was evident in all focus group discussions. There was a palpable feeling of resistance towards high stakes assessments being in the online format. Part of this apprehension stemmed from not understanding the need for such a change. Some felt the change served no purpose but to enhance appearances since paper-based tests had been successfully employed in the past:

> "To be honest, I feel like it is a superficial view, they want us to look modern..that we are not holding any papers in our hand and we are just having laptops and walking around.." [FG4]

> "I think, before they changed the system it was fine, so why change something when it was fine?" [FG 5]

Students agreed that part of their resistance to online assessments was due to difficulty in breaking past habits. They were accustomed to paper-based tests and felt they were not well equipped to move on to online exams; they had an inherent distrust for technology. They believed that the newer generation may be more accepting to the online assessment since they were more accustomed to technology in their classrooms:

Table 1 Summary of key findings

Students' preferences and apprehensions
• Students did not understand the need for online assessments
• They were comfortable with paper-based assessments
• Online assessments made students nervous
Concerns regarding technology and technological competency
• Students worried about unreliable technology infrastructure
• Students felt they were ill equipped to handle technology used in online assessments
• Teachers were not well trained with online assessment techniques
Issues related to assessment layout, cheating and subject discipline
• Students preferred a variety of question styles rather than only multiple-choice questions
• They would want to be able to go back to check previously answered questions
• Students highlighted the importance of being able to annotate questions and make side notes
• Online assessments were restrictive for some disciplines requiring drawings and calculations
• Randomization of questions and lockdown browser potentially reduced cheating
Issues regarding grading and assessment feedback
• Students felt their grades were falling due to online assessments
• Poor command of the English language made it difficult to answer multiple choice questions
• Most students preferred finding out their grades instantly
• Students stressed importance of individualized feedback on assessments from instructors

"As humans we cannot trust a computer. I can trust myself, but I cannot trust a computer." [FG 2]

"because we have been used to writing on paper since we were in kindergarten, so we are more comfortable that way." [FG 3]

Inexperience with the new format has resulted in online assessments being more stressful for students. Interestingly, the stress was further compounded by seemingly small triggers, like the timer on the exam:

"it's like seeing a bomb going to explode in your face!" [FG 2]

"it makes me nervous..the clock is ticking." [FG 5]

Students were concerned about the health implications of using the computer for long periods of time. They felt it put excessive strain on eyes and triggered headaches:

"it strains your eyes more..it wears out your eyes, even if you decrease the brightness it hurts your eyes..." [FG 6]

It seemed that an essential element influencing acceptance of online assessment was in the way it was introduced to the students. Students highlighted the need for a gradual induction to the process. They felt that measures should have been taken to increase

confidence in their technological skills and infrastructure through training and then introducing online assessment in low stake assessments for a few terms. Eventually, progression to more important exams would feel like a natural transition:

> "They should not have changed something suddenly...they should have tried it and then changed if it works....not on a real exam, … a small assessment." [FG 1]

6.2 Concerns regarding technology and technological competency

High stake assessments at university level require not only a reliable infrastructure but also students and teachers who are capable and confident with using the online technology system. Students felt comfortable with technology in their day to day life. Despite the plethora of digital devices used in during class and for social networking, majority of students felt they were not technologically proficient enough to manage online assessments. The skill required for online assessments were not necessarily gained by general competency with electronic devices:

> "We are used to media and chatting..that is what technology is to us..but online assessments is new for us and we never did it properly" [FG 1]

Almost all students used their electronic devices for social networking. However, their inability to type fast on a keyboard for educational purposes seemed to be an area where most students felt they were at a disadvantage. Students did not feel touch screens, or a stylus/pen would help improve their ability to answer questions any faster:

> "Online exams I feel they need more time..because typing takes more time than writing." [FG2]

Most students agreed that typing answers was cumbersome and they needed more time to type answers than typically required to solve the same questions on pen and paper. Some felt they were unable to concentrate while typing and extra time could only be a partial solution:

> "I disagree..because some people do need more time, they are not comfortable with technology...but as I said it solves only one thing,..there are many things that come along with online assessments." [FG 3]

> "we have to do a lot of things at the same time; typing and focusing....I keep making mistakes." [FG 5]

On the contrary, some students agreed that typing allowed them more flexibility to edit their answers which was not possible through traditional assessment methods. The automated highlighting of spelling mistakes also offered an opportunity for students to improve their submission:

"you can see the spelling mistakes you make..they are underlined with red..and for essay answers another good thing is, once you read it and you feel that this thing should come up..you can edit there." [FG 3]

Students felt that their own competency was not the only concern at hand. The system was not always reliable. The need for last minute software updates, delays due to overloaded systems and unreliable Internet efficiency made online assessment less desirable:

"it happened to me..it lags a lot..but a paper will not lag, a paper will not shut down, but a computer might shut down, or something might happen to it...it is just not secure but a paper is secure." [FG 6]

On discussing possible solutions for this problem, students felt a technician in class for emergencies was not a practical option, as it would not help in allaying stress or make up for time lost while fixing the technological issue. Some students felt that having spare laptops, in class to use in case of laptop malfunctions would be reassuring. Having designated computer laboratories on campus for exams might be a potential solution however many students felt that this would still not resolve issues related to connectivity and overloaded systems.

Another matter of concern was competency of instructors to carry out online assessments. When teachers lacked the technological skills and confidence to conduct online assessments, their inhibitions had a negative influence on students as well. Teachers often restricted assessments to multiple choice questions (MCQs) as they lacked confidence to be original in online assessment techniques. Adequate training for instructors, a technology manual and efficient help at hand were suggestions that could help in easing the transformation:

"I think training is very very important and if the professor is not capable. Some of them they maybe not that used to technology....some of the professors ...they just don't like technology, when they are forced to use it, it may be hard for them and then it is hard for the students as well." [FG 1]

6.3 Issues related to assessment layout, cheating and subject discipline

The transition to online assessments did not just mean a change in platform for assessments, but also cascaded a series of changes in the assessment styles. Students who had been used to answering essay questions, short questions, multiple choice and labeling questions, to name a few, suddenly felt restricted to mostly MCQs for their exams. Most students felt that MCQs did not truly test a student's abilities in the course. There was a preference for a variety of question forms to be incorporated into the assessment:

"I learn that there are different learners, there are visual learners and listening learners. You have to put a variety of questions, so each student feels comfortable to answer different aspects." [FG 3]

"I disagree with that form..because multiple choice..I don't know, I feel long answers and short answers, they test your knowledge more so it is a more learning experience than MCQs." [FG 4]

It was interesting to note that student's in UAE were not against formal summative assessments, they actually believed assessments were integral to learning:

"they (assessments) are important, it helps measure the amount of material the student has learnt; that is the purpose you come. If there are no exams people will not bother to go over the lessons." [FG 5]

It was intriguing to hear how minuscule changes to the assessment settings could go a long way in relieving students' anxiety. Students had a strong preference to be allowed to see the entire exam at the same time, rather than a single question at a time. They felt reassured by the knowledge that they could go back and change their answers if needed:

"I usually start from the last question to the first. I don't like to start from the first and sometimes I change the answers like last minute, so I want to see the whole exam." [FG 6]

Among the limitations students highlighted when it came to online assessment was the inability to make notes on the side. Some students were accustomed to highlighting parts of the question, some marked questions they would like to go back to answer later, while some struggled with language and needed to translate words in Arabic to help them understand the question better:

"sometimes maybe some questions have a word that you don't understand it and we ask about it...where to write it?" [FG 2]

"we have been accustomed to papers for our entire life so each one of us has a different method of taking an exam. Some people like to highlight, some like to write notes..." [FG 4]

Other limitations are associated with the discipline of science. Students opined that online assessments seem to work well with theoretical subjects; however, calculations, equations and drawings were difficult to assess with online formats:

"I feel like if the learning material is theory based it is much more easier to do online assessments but when you have to do calculation and stuff like that it is better to do it on paper." [FG 5]

"calculations bother me...also like with the elements names, one has to be capital, so we have to keep clicking on shift, caps button; it takes longer. We cannot add oxidation states properly." [FG 6]

On the other hand, students acknowledged that there were some highpoints for online assessments. They appreciated seeing diagrams in color and the ability to zoom in to see the details of diagrams. A few pointed out that they liked the question completion checkpoint, which would indicate any question they had accidentally forgotten to answer. Some students felt a sense of pride in being environmentally friendly through reducing the use of paper and printing:

> "I feel happy seeing diagrams in colors." [FG 1]

Several students believed cheating had become easier since the exams became online; others disagreed. Lockdown browser, limits cheating from online resources but students felt it was very easy to see screens of other students. Randomization of questions was a deterrent, but for the very noticeable questions they felt randomization fell short of preventing cheating completely. However, the general opinion was that people who wanted to cheat would find a way regardless of the assessment format:

> "either way students who like to cheat will cheat." [FG 1]

> "A computer is like when you are doing an exam and holding your paper like this (holds it up) to everybody can see it. Like when you are doing online, it is like your computer is open to all the students! Easy for students to cheat." [FG 5]

6.4 Issues regarding grading and assessment feedback

An important barrier to acceptance of online assessments was that students felt their grades were falling due to this transition:

> "not just me or my friends, a lot of people are struggling with this system and their grades for this semester are getting lower than previous semester." [FG 6]

Participants cited several reasons why they believed their grades were suffering. As stated earlier teachers had adopted mainly MCQs for major exams. These questions were graded automatically making them a logical preference for instructors. However, students felt that they lacked skills to identify the correct answers, some felt more than one answer was correct, some had trouble understanding the language used in questions while some felt the instructors needed expertise to create 'good' MCQs. Many of these concerns stemmed from students' inadequate mastery over the English language:

> "Also, for the MCQs, it differs from teachers to teachers. Some teachers can make it so confusing and others can make it so simple and straightforward." [FG 1]

> "I don't do good at MCQs because I get so confused, I don't know which one is the right answer. And I notice that ever since they changed the system, my grades have dropped." [FG 4]

Previously, when students took exams in the traditional format, they had a possibility of receiving partial marks if they had shown working out in calculations. Marks were allocated to the process and evidence of understanding rather than just the answer. With online assessments and automated grading partial grades were no longer a possibility, this was considered another explanation for falling grades:

> "the professor didn't even see our working...so we couldn't get any partial marks. If your answer is wrong for a silly mistake you will probably lose all marks." [FG 2]

There were mixed opinions on instant automated feedback following an exam. Some students felt knowing how they had performed immediately allayed unnecessary anxiety. Students voiced that previously instructors could take weeks to provide grades, which had changed with introduction of online assessments. One student however said, she rushed to submit her test, so she could see her grades as soon as possible, rather than revising her answers:

> "one thing I like is that I can see my marks right away and I don't have to wait, we immediately get them and get it off your head." [FG 3]

> "I just want to say, I feel the anticipation to know my grades, so I submit my exam earlier, so I know my grade." [FG 4]

Instant grades seemed to be generally desired nonetheless students felt they were not getting enough feedback on their assessments. In many cases they could only see their grades but not questions where they had lost out on marks. Others said they were shown the questions, but not what the correct answer should have been. The level of detail in assessment feedback they saw in previous times had reduced with the event of online assessments:

> "But we are only able to see what is wrong, which question is right. Not the right answers." [FG 1]

> "when you see a corrected paper, you get more feedback then on online grading." [FG 4]

Students complained that online grading and feedback had decreased communication with instructors; which they felt was previously more personalized. They highlighted that each student had unique needs and required human understanding and encouragement to be able to succeed:

> "I think there is a relation between a teacher and student, that I feel the teacher can understand you, she knows each student, their abilities. A computer does not understand that. A teacher can give comments from the way you answer, a computer doesn't." [FG 4]

> "putting so much technology that ..diminishing human interaction; slowly we don't have to come, we don't have to see each other..." [FG 5]

7 Discussion

The resistance participants showed towards online assessments can be rationalized in the light of the Theory of Reasoned Action, described by Ajzen and Fishbein (Ajzen and Fishbein 1980), which has been extended to formulate the Technology Acceptance Model (Otieno et al. 2016). The Theory of Reasoned Action explains that behavior is related to attitudes. As people's beliefs change their actions change too; whereas attitudes are influenced by subjective social norms and individual perceptions. The Technology Acceptance Model highlights perceived usefulness and perceived ease of use as predictors of willingness to use technological systems (Otieno et al. 2016).

This study shows students do not understand the usefulness of the transition to online assessments. For students, the norm was traditional assessment methods and they need to be convinced of the worth of the transition to online assessment before they embrace it willingly. The participants clearly did not find the online assessment methods as a means to provide them with ease. On the contrary students felt the change to be cumbersome. They felt ill prepared and distrusted technology with such an important aspect of their education.

Our participants had similar experiences of online assessments as seen in several other studies, where students felt stressed about online assessments due to fears that their questions would not be submitted, they would be unable to type fast enough, difficulty in focusing on content while typing, inability to explain their answers, restrictions on partial grades and that their answers might be changed automatically (Betlej 2013; Kuriakose and Luwes 2016). On the contrary, there are known studies where students have shown a preference for online exams. On a closer look however it is clear that in such studies, the acceptance and eventually preference for the online format has followed a rigorous induction period along with a thorough evaluation of questions used in the exams (Marius et al. 2016).

It is evident through this study and in literature that one of the most essential elements to the acceptance of online assessments is how the transition from traditional assessments is made. Students need a gradual change starting with training on technology, designed to address student needs and concerns. It is imperative that students feel confident in the technological infrastructure and in their abilities to cope with the adjustment (Gewertz 2013). This requires for not only students but teachers to become confident and competent in the new format as well. Faculty development programs need to take into account perceived faculty needs and priorities (Ali et al. 2005). This can be done by integrating use of technology within low stake assessments first and shift to transforming the more crucial assessments to online format once students are at ease with the change.

Students saw some advantages to online assessments, in the form of colored diagrams, being able to edit answers, spell check functionality, zooming in to see exam material more carefully and a checklist to ensure questions had not been missed out. Some trivial changes to the exam format could go a long way in allaying student anxiety. Majority of participants felt intimidated by the timer and expressed the need for more time to type and focus in an online assessment. Educating students on the option to hide the timer and allowing more time, at least during the transition phase, could enhance user acceptance. An effort to ensure students could go back and check their answers, provision of rough paper for them to make notes and consideration to

discipline specific issues would be useful. Encouraging development of software to resolve problems related to calculations and drawings is needed. Alternatively, options to adopt hybrid formats for exams should be weighed, particularly for the science courses where both online and traditional forms are blended to meet the desired learning objectives.

A study in Turkey considered students' perspectives on online assessments to gauge how it had an influence on their motivation (Cakiroglu et al. 2017). As discovered in this study, our participants also felt most comfortable with online assignments and their lowest preference was for online quizzes. A review of student perceptions on evaluation compared students' views on assessments based on essay type questions and MCQs versus alternative assessments such as portfolios and presentations (Struyven et al. 2005). Unlike what was observed with our participants, who actually preferred conventional tests, these studies show that most students consider newer forms of assessment more enabling for long term learning. The participants in this study considered formal conventional assessments as a motivation for them to study throughout the term and favored traditional evaluations. Furthermore, it was also noted that as our participants thought, MCQs were more appropriate for students who had a surface approach to learning. The ability to recognize answers does not necessarily translate into learning that is useful beyond the classroom (Halpern and Hakel 2003; Struyven et al. 2005). Having the answer written in front of students to select from made it less daunting for such students. However our students were unique as they grappled with understanding the English language used in MCQs and struggled nonetheless (Freimuth and Charles 2014). Essay type questions have been seen to encourage a deeper approach to studying (Struyven et al. 2005). For our participants, more comprehensive questions gave them a chance to explain themselves, thus a way to work around their poor English skills. Nevertheless, they still preferred short questions to longer essay questions. Majority of the students showed a preference for a variety of question types in assessments.

This study, like others shows that most students liked knowing their grades instantly through the automated grading in online system (Betlej 2013; Uddin et al. 2016). Yet, simple grades without effective feedback have been known to have a negative effect on students, particularly those with low academic abilities (Craven et al. 1991). With the event of online assessment, learning is becoming more student centered rather than instructionist; teacher centered. The importance of constructive and timely feedback has been highlighted in literature as an essential part of learning (Ambrose et al. 2010; Nicol and MacFarlane-Dick 2006). Evidence points towards the importance of individualizing feedback rather than providing generic feedback to all students (Ambrose et al. 2010). Automated feedback does not negate the importance of personalized instructor feedback, particularly for students in the UAE (Awofeso and Bamidele 2014). With the event of online assessments, participants in our study felt a growing disconnect between instructors and students. As instructors were no longer grading assessments, feedback was either missing, too concise or common to all. Studies have shown how Emirati students in particular, culturally depend on human interaction in all aspects of their lives including education (Freimuth and Charles 2014; Saafin 2008). In this study it is clear that to make online

assessment more acceptable for students, it is imperative that interaction with the instructor remains active and meaningful.

7.1 Strengths and limitations

As this study was a qualitative research, the findings are not generalizable to the population. The use of a convenience sample and relative similarity of participants within each focus group means that the views reflected cannot represent the entire university students' population. The aim is to reflect on the truth as experienced by the participants in the study (Barusch et al. 2011). Prolonged engagement of a homogeneous group of participants during focus group sessions supported by thick descriptions and quotations lends credibility and extends transferability in the study. Transferability is considered parallel to generalizability in qualitative research. The involvement of a student research assistant in the focus group discussions, transcription and coding provided a level of member checking and triangulation to further strengthen the study (Barusch et al. 2011; Pope et al. 2000). The study was limited to only female students due to convenience sampling and in an attempt to maintain homogeneity for in-depth understanding of views. Comparison of perspectives of male students in the science majors, and perceptions among students from different disciplines could have add further value to the study.

8 Conclusion

It is vital that student views regarding changes in educational techniques be taken into serious consideration to ensure a smooth and successful transition towards technological enhancement. Students need to be convinced of the usefulness of the transition to online assessment before they embrace it willingly. It is evident through this study and in literature that one of the most essential elements to the acceptance of online assessments is how the transition from traditional assessments is made. The change should be made gradually starting with training on technology for both students and faculty on low stake assessments. From this study it is clear that to make online assessment more acceptable for students, it is important that the interaction with instructors remain personalized, active and meaningful. Furthermore, preferences and concerns emphasized by students should be addressed to successfully integrate online assessments into higher education in UAE.

Compliance with ethical standards   The authors declare that they have no conflict of interests.

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