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ABSTRACT

Several studies suggest that graduates lack the critical thinking skills required for problem-solving and effective financial decision-making in the hospitality industry. Since higher education may not be able to meet all the demands and needs of the hospitality industry; such institutions struggle to provide students with the necessary critical thinking skills. Authentic assessment is one possible strategy, which is recognized, to develop critical thinking skills amongst hospitality graduates. Hence, the purpose of this research is to explore to what extent authentic assessment enables critical thinking skills amongst first-year students in hospitality financial management. This article employed a qualitative case study research design within an interpretative lens. Twenty-four, first-year, hospitality financial management students, were purposively engaged in online reflections and semi-structured interviews. The findings of the study presented three themes that resonate with the critical thinking frameworks.

Introduction

Recent studies confirm that hospitality graduates fail to display critical thinking efficacies to solve problems and make effective financial decisions within the hospitality industry (Jiang & Alexakis, 2017; Lashley, 2018). On the other hand, the key to higher education outcomes is to develop deep and higher-order thinking skills of students (Scriven & Paul, 2004). Moreover, a lacuna exists between the expectations of hospitality employers and the thinking skills graduates actually offer. Higher education may not be able to meet all the demands and needs of the hospitality industry since such institutes struggle to provide students with the necessary critical thinking skills (Sotiriadou et al., 2020). The development and design of the hospitality and tourism curriculum are largely determined by the needs of the industry and expect that all hospitality graduates will accumulate the relevant skill sets that will serve their vocational needs (Belhassen & Caton, 2011). Concomitantly, Phan (2010) contends that critical thinking is considered an essential theoretical orientation to motivate and guide the pedagogical processes and how students learn.

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Essentially, academics need to foster hospitality students with critical thinking skills or dispositions for them to meet the fast-paced vocational and professional complexities in a hospitality environment. In recent years, the hospitality industry has been confronted by fierce competition; undergone radical transformation through societal and global demands that necessitate the engagement of high-impact practices. (Alexakis & Jiang, 2019). Hence hospitality graduates need to demonstrate twenty-first-century skills that will enable them to adjust to the growing complexities and dynamics of the industry (Stone et al., 2017). Academics are encouraged to offer explicit instruction in critical thinking to enable students to adapt to new contexts, including collaborative learning strategies and constructivist approaches that are central to the learning process. A constructivist approach to learning demonstrates higher cognitive levels and epistemic gains through the student's active engagement (Farrell, 2020).

An effective strategy to develop critical thinking skills amongst hospitality graduates is the promotion of authentic assessments. Furthermore, the design of assessments that promote critical thinking warrants open-ended tasks, real-world or "authentic" problem contexts, and includes ill-structured problems (Ashford-Rowe et al., 2014). Authentic assessment is considered more applicative and meaningful as it leads to deep learning and demonstrates students' knowledge, skill and competence. Hence the purpose of this paper will explore the extent to which an authentic assessment strategy enables critical thinking skills amongst first-year students in hospitality financial management. hospitality financial management is a major subject in the Hospitality Management Diploma program. The following section aims to address the main research questions by describing the nature as well as examining the interplay between critical thinking and authentic assessment.

Literature review

Critical thinking

Critical thinking is inclusive of both cognitive skills and dispositions. Dispositions can be described as having certain attitudes or habits of mind including, a wide perspective and fair-mindedness, a sense of curiosity, the ability to be flexible, a propensity to seek reason, a desire to be well informed, respect and acceptance of diverse viewpoints (Facione et al., 1995). For this study, critical thinking dispositions will be interchangeably addressed as critical thinking.

The plethora of philosophically oriented definitions of critical thinking presented in Table 1 offers a broad spectrum of the chronological development in defining and understanding the nature of critical thinking and dispositions.

An overlap of the definitions, in Table 1, according to Facione et al. (1995), highlighted seven dispositions necessary for critical thinking, namely truth-seeking, open-mindedness, analyticity, systematicity, self-confidence, inquisitiveness, and cognitive maturity. Aspects of these seven dispositions will be taken into consideration in this present study.

However, whilst many scholars agree that critical thinking skills and dispositions may be challenging to teach and learn (Goodsett, 2020); a meta-analysis conducted, established that critical thinking skills can, essentially, be taught (Abrami et al., 2015; Ennis, 2018). The results of the study found that it is possible to develop critical thinking skills and dispositions in students "at all educational levels and across all disciplinary areas

Table 1. Definitions of critical thinking and dispositions.

Author	Nature of Critical Thinking
Dewey (1997, p. 118)	"Active persistent and careful consideration of a belief or supposed form of knowledge in light of the grounds that support it, and the further conclusions to which it tends."
Glaser (1942, p. 409)	"The methods of logical inquiry and reasoning."
Flavell (1979, p. 906)	"Thinking about thinking."
Ennis (1985, p. 45)	"Reflective and reasonable thinking that is focused on deciding what to believe or do."
Lipman (1987, p. 39)	"Skillful, responsible thinking that facilitates good judgment because it 1) relies upon criteria, 2) is self-correcting, and 3) is sensitive to context."
Facione (1990, p. 3) Paul and Binker (1990, p. 7) Bailin et al. (1999, p. 287) Paul and Elder (2001:2)	"Purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgment is based."
Ivie (2001, p. 10) Scriven and Paul (2004, p. 74)	"Think about your thinking while you are thinking, in order to make your thinking better, more clear, more accurate, or more defensible; (it is thinking) for self-improvement through standards that assess thinking."
Stanovich and Stanovich (2010, p. 227)	"Judging in a reflective way what to do or what to believe."
	"The art of analyzing and evaluating thinking with a view to improving it."
	"Establish clear and logical connections between beginning premises, relevant facts, and warranted conclusions."
	"The mode of thinking in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them."
	"A propensity to override suboptimal responses from the autonomous mind."

Table 1 represents several definitions of critical thinking, coined by different advocates of critical thinking.

using a number of effective strategies" (Abrami et al., 2015, pp. 301–302). Conversely, the various conceptions of critical thinking generally ignore moral integrity as part of the concept; for example, Ennis (1996) laments at a curriculum that fails to acknowledge the affective domain of caring and respect for people would be perceived as lacking and fragmented. Moreover, Ennis (2011) presents the definition as dualistic in nature; firstly, to employ logic and reason to judge the thoughts, actions, and ideas of people, and secondly, having judgment over one's thoughts and actions by extensively applying metacognitive and self-reflection skills (Yuan et al., 2020). To this end, judging oneself and others requires, having an open perspective, and the ability to solve problems and make effective decisions. In essence, skills are representative of the cognitive dimension of thinking; whilst critical thinking dispositions are characterized by the affective element of one's thinking, shaped by the way one reacts to their contextual circumstances and daily living. Equally, dispositional qualities become valuable for solving existing daily problems (Yuan et al., 2020). Proponents of critical thinking (Facione et al., 1995; Irani et al.,) argue that critical thinking skills and disposition qualities should be considered mutually inclusive. However, Facione (2000) cautions, that dispositions are not static and likely to change over time. Furthermore, Facione et al. (1995) exemplify these dispositions within an array of subskills. These subskills demonstrate that critical thinking dispositions include: the efficacy to clearly state a problem, work with a sense of logic and order in intricate complexities and have the persistence and resilience to challenge adverse situations, have a sense of curiosity and an open and wide perspective when faced with many options and differences; being able to override prejudices, stereotypes or biases; demonstrate reflective abilities and take corrective action when necessary and to have the assurance of one's abilities (Facione, 1990).

Numerous studies confirm that students who demonstrate high dispositions, essentially develop better-thinking skills (Giancarlo & Facione, 2001; Paul & Elder, 2001). On the contrary, students demonstrating lower or weaker dispositions may struggle with tasks and activities that require problem-solving and decision-making. In essence, embedding critical thinking skills and dispositions allow increased opportunities for students to think objectively and openly, arrive at reasonable and logical conclusions, improve deep thinking and address problems rationally with reliable solutions. Facione (2015) recommends that to attain the ideal in enabling astute critical thinkers, students will have to simultaneously develop critical thinking skills, whilst nurturing their dispositions. Stedman and Andenoro (2007) found that nurturing students' critical thinking disposition further improves students' emotional intelligence since emotions can be considered fundamental to the critical thinking process (McKee et al., 2012). According to Saremi and Bahdori (2015), emotional intelligence (EI) is a trigger for aspects of critical thinking skills that may include creativity, self-awareness and empathy. Proponents of EI (Elder, 1997; Goleman, 1998) advocate that critical thinking strengthens the link between intelligence and emotions, enabling an improved quality of emotional intelligence. Whilst emotions and thoughts are highly reliant on each other, they cannot be considered in isolation.

Apart from the cognitive and affective dimensions of critical thinking, a further aspect of critical thinking is also inclusive of students being able to take responsibility for their own goals and tasks with confidence and direction. Henceforth, Zimmerman and Schunk (2001) describes self-regulated students as those who are intrinsically motivated and able to transfer their mental efficacies into necessary skills for learning. Likewise, several critical thinking strategies need to be identified to develop critical-thinking skills and dispositions so that students can become self-motivated, objective, reasonable, reliable and reflective in their thinking, especially when it comes to problem-solving (Ennis, 2011; Facione, 2011). Given the above scenario, within a higher education context, a number of proponents of critical thinking recommend that curriculum developers and academics promote learning activities and assessments that are authentic and engaging to stimulate critical thinking. Henceforth, exposing students to relevant real-world problems or topics can stimulate engaged learning, inquiring minds and deep learning (Ashford-Rowe et al., 2014; Bezanilla et al., 2019; Yuan et al., 2020). The next section provides a brief discussion on the nature of authentic assessment within a hospitality curriculum.

Authentic assessment within hospitality finance education

In an authentic learning context, assessment tasks are described as open-ended, "ill-defined problems"; complex activities that may include collaboration and reflection (Deale et al., 2010; Herrington et al., 2003). Furthermore, authentic assessment is key to real-world problems, allows for open-ended inquiry and stimulates deep thinking skills, creativity and stimulates autonomous learning (Rule, 2006). Authentic assessment practices create opportunities for students of diverse backgrounds to apply theoretical knowledge through practical applications by employing their cognitive and higher-order thinking skills (Fook & Sidhu, 2010). Other studies (Gulikers et al., 2004) confirm that authentic assessments are types of assessments in which students are able to demonstrate their competence, or a combination of knowledge, skills and behaviors that should be applied in a vocational setting. Equally, authentic assessments, according to McArthur

(2022) not only improve the vocational skills of students but also engender critical thinking skills through the application of knowledge. Furthermore, various scholars of authentic assessment contend that authentic assessment provides for problem-solving and decision-making which in turn develops cognitive and metacognitive abilities and other 21st-century competencies Farrell, 2020; Koh, 2017; Newmann et al., 2007; Villarroel et al., 2018). Hence, the key purpose of authentic assessment is to allow students to engage in a range of authentic activities or tasks to develop and apply their knowledge and develop higher-order thinking.

Contrarily, traditional assessments fail to promote deep learning, which requires the construction of knowledge, reflection and collaborative work, and limits the achievement of critical thinking skills (Endedijk & Vermunt, 2013). Indeed, traditional assessments may have their merits in assessing and evaluating students' listening skills but academics who encourage pen- and paper-based types of assessments such as true-false, matching or multiple-choice questions can be blamed for stifling students' creativity and reflexive learning (Endedijk & Vermunt, 2013; Koh, 2017; Wiggins, 1989). In addition, several scholarly findings reveal that tasks assessed within contrived environments, mainly measure recall or retrieval of facts and knowledge reproduction and limit students from engaging in complex thinking and problem-solving tasks, which encourage superficial learning. The next section presents a further discussion of authentic assessment within hospitality education.

While authentic learning assessment focuses on real-world problems, nurtures critical thinking, and encourages autonomous learning (Rule, 2006; Zahra, 2012), it likewise calls for a shift in the student's role from a passive, surface learner to an active inquirer. Similarly, studies support that the lecturer is no longer viewed as a disseminator of knowledge, the "sage on the stage" but a facilitator and mentor (Renzulli et al., 2003). Supporting the aforementioned necessitates learning that is more constructive and engaging (Herrington et al., 2003) in which the design of assessment tasks is representative of being "educative" and not complicated, but at the same time, it teaches students about the complexities of the real world.

Hospitality higher education is confronted with the challenge of translating theoretical knowledge into a practical application (Ruhanen, 2006; Smith et al., 2015). The authentic assessment identifies innovative learning strategies that motivate students to demonstrate parallel competencies, or combinations of knowledge, skills, values and attitudes required in the hospitality work environment (James & Casidy, 2018;(Smith et al., 2015). Authentic learning requires students not only to recognize the theory of hospitality financial management principles but also, to distinguish its purpose and value in the hospitality setting. Hence, the aforementioned requires hospitality students to construct their own understanding and ability to apply theoretical knowledge in different, real-life contexts.

A number of scholarly findings laud the academic and vocational merits of employing authentic assessment in hospitality education (Nyanjom et al., 2020; Smith et al., 2015; Villarroel et al., 2018; Wu et al., 2015). Previously, Lashley (1999, p. 181) argued that many hospitality students lacked the inclination towards theoretical or reflective thinking but when exposed to a real-world, practical or "authentic" hospitality context they demonstrated reflection and deeper thinking. Similarly, Smith et al. (2015) found that students who were enrolled in an undergraduate hospitality and tourism module and exposed to authentic learning practices revealed an improvement in their learning outcomes. Likewise,

an earlier study by La Lopa (2005) concluded that students in a tourism feasibility project presented a deeper understanding of their projects and were able to create a marketing campaign for a real situation. A study led by Zahra (2012) in which students were required to relate and contextualize concepts raised in lectures to real-world examples in a hospitality industry context, established that authentic assessment is designed to stimulate reflective thinking, meaningful student engagement, and autonomous learning.

Relationship between authentic assessment and critical thinking

An authentic assessment aims to mimic tasks and activities that are generally required in the world of work and studies confirm that such a design has an encouraging impact on student motivation, reflective learning, self-directed learning and metacognitive abilities, thereby increasing students' chances of acquiring disciplinary identity (Villarroel et al., 2020). However, for hospitality students to acquire disciplinary identity; they have to acquire more than knowledge and practical skills of the discipline (Guzzomi et al., 2017). This will mean that students will have to further develop key competencies such as critical thinking, problem-solving, decision-making, collaboration and innovation (Greenhill, 2010). Authentic assessment is one way to connect what is assessed in the university and what graduates are required to perform in vocational settings (Neely & Tucker, 2012). Moreover, apart from the development of higher-order cognitive skills (Ashford-Rowe et al., 2014); authentic assessment has the propensity to improve students' motivation, confidence and self-regulated learning (Smith et al., 2012). According to Zimmerman (1990), students who adopt a self-regulated approach to learning activities, respond with self-confidence, a fair amount of diligence and resourcefulness. Noguera et al. (2015) established that students who display greater self-regulation fundamentally have better control and management of their learning, are able to use their time management skills most effectively to solve problems and overall manage more resourcefully. Equally, hospitality students who display attributes of independence and self-management can take charge of their own learning.

Most authentic learning strategies are mainly viewed through the lens of constructivist and active learning (Park & Choi, 2014). In such cases, facilitators will enrich the learning experience by linking theory with practice, so that students are able to take ownership of their own learning, (Morosan et al., 2017). A constructivist approach allows for deeper problem-solving and critical-thinking skills required for a futuristic real world (Zane, 2009). Higher education institutions, on the other hand, value critical thinking or higher-order thinking skills as key to learning outcomes. (Ghanizadeh, 2017). Given the aforesaid, the development of critical thinking is ranked as a top priority within the higher education agenda.

Hospitality financial management at Durban University of Technology, South Africa

This case study, premised on an interpretive and qualitative lens, is intended to present a rich contextual understanding of students' learning and engagement experiences in the authentic assessment project, and a nuanced perspective of how and what critical thinking skills and dispositions were developed during students' engagement with the project. Students from the hospitality financial management group were invited to

partake in the study during the second semester of their first year of study. This case study gave meaning to the exploration of real-life complex and contemporary issues in a socially bounded system over time (Creswell, 2014).

Data collection and analysis

Adopting a purposive sample, 24 students, expressed their willingness and acceptance to partake in the study over a period of 16 weeks. Furthermore, this study, within a qualitative orientation drew on two sources of data. Triangulation of multiple data sources improves the credibility of the study (Korstjens & Moser, 2018). The first criterion for data collection was affording the research participants the opportunity to document their authentic assessment learning experiences and thoughts in an online reflective journal. Consequently, students optimized the online and reflective platform to reinforce their cognitive and affective strengths. Significantly, it is important to encourage students to reflect on their learning, as this, potentially, can enhance insights, heighten cognitive awareness, and inspire critical thinking (Ghanizadeh, 2017). The participants were inducted on how to access and maintain an online reflective journal. Furthermore, participants were informed that the purpose and merits of the online record of reflections were an enriching avenue for self-progression and consolidation of knowledge. Students' recordings of the online reflective entries presented their daily learning of hospitality financial management whilst participating in the authentic assessment tasks. For example, they provided responses to questions such as "what did I learn most or least today?" and, "whilst interacting with the project, what enabled or inhibited my learning?" Students were also provided with feedback on daily online journal entries. Secondly, a follow-up semi-structured interview was conducted in response to the participant's online reflections. The employment of individual semi-structured interviews served as an effective data collection source since it explored the thoughts, emotions and beliefs of the participants (DeJonckheere & Vaughn, 2019) in response to their engagement with the authentic assessment. All the individual interviews were recorded, and notes were made as the participants engaged with interview questions for the purpose of this study.

Transcripts of the recorded interviews were consolidated with the participants' online journal reflections. Thematic analysis was used to identify common patterns to elicit common themes from the transcripts of the recorded interviews as well as the data from the online reflective journal entries. The approach to thematic analysis was guided by the six-step framework adopted by Braun and Clarke (2006). Maguire and Delahunt (2017) argue that the six-step framework presents a transparent and usable framework for thematic analysis.

Authentic assessment project

The authentic assessment project interchangeably referred to as the project was conducted over a period of six to eight-8 weeks. Participants were arranged in groups of five or six members and had to keep an online reflective account of each stage of the project. The project was arranged into a number of different tasks that had to be completed within a specific time frame. Group meetings were held every week, which allowed participants to discuss and explore various options to address the project tasks/goals, suggest alternatives and solutions by evaluating each member's contributions and then

Table 2. The authentic assessment project.

Designated task/activity	Description of learning outcome
Task 1 – Research Activity	Groups were in discussion on what meal they will prepare in keeping with a particular theme
Task 2 – Costing the Product	Groups were in discussion on what meal they will prepare in keeping with a particular theme
Task 3 – Capital Requirements	Identifying ways to raise capital
Task 4 – Purchasing and Record-keeping	Price considerations in the process of buying ingredients – recording and archiving source documents for audit trail
Task 5 – Marketing and Promoting the Item	Marketing and advertising – product awareness
Task 6 – Sale of Product	Marketing and advertising – product awareness
Task 7 – Financial Statements Preparation	Preparing a basic profit and loss statement
Task 8- Preparing A Portfolio of Evidence	Final reflections

Table 2 represents the goals and subtasks of the authentic assessment project

arrive at the best possible conclusion. The collaborative nature of the assessment allowed group members to identify and discuss what tasks need to be accomplished, during group meetings conducted. A brief description of the project is depicted in Table 2.

During the online discussions and individual interviews, participants were asked to reflect on their learning and engaging experiences with the authentic assessment project. Excerpts of the transcripts and recordings were consolidated and three main themes that resonate with the scholarly findings and literature of critical thinking and dispositions within the context of this study were identified.

Enabling self-efficacy and confidence

According to the participants, it was discovered that working collaboratively as a team resulted in a meaningful learning experience since and they were able to overcome most of their many learning hurdles. It appears that students latched on one another's cognitive strengths; providing an opportunity for them to reflect on each other's learning style and approach.

> "As we did the activities in the group, our team members helped each other, making us understand our faults and wrongs and to redo the assessment activities until we got it right . . . . I appreciated working in groups, cos, it made me understand better . . . . I wanted to learn and know more . . . and see things easier than before and was no longer stuck in one place! The group's members helped me to understand better and now I could do things on my own only through their help . . . . While group work was great help, I could now fend for myself and understand my own problems" (Participant 1).

> ". . . First, I was not happy to work in groups; I like doing my own thing and work better alone. but when Mam said we have [to] share all our ideas – I was amazed so many clever and cool ideas was shared in the group. appreciated by my group's help and contributions" (Participant 2).

The above depiction is indicative of the fact that participants engaging and collaborating in smaller groups brought about positive changes to their learning since they were better acquainted with the expectations and requirements of the assessment outcomes. This collaborative, closer, face-to-face learning platform enabled students to raise learning

concerns and to critically reflect on all the learning challenges and hindrances that they encountered during the various enactment stages of the assessment. Likewise, the findings of some studies, show that the facilitation of small-group, teamwork activities and discussions more readily stimulate student engagement, deeper learning, and critical thinking skills when compared to large-class discussions (Hamann et al., 2010). Whilst feedback is an element of authentic learning (Herrington et al., 2009), participants were allowed to reflect on learning concerns and improve areas that required immediate attention. Apart from gaining mastery of skills and abilities in team participation, studies also show that teamwork activities enabled critical and collaborative thinking (Plotnikova & Strukov, 2019). For example, one participant added:

> "... The project helped me to see their [group members'] mistakes and mine, by interacting with each other all the time in each activity of the project tasks" (Participant 3).

Other instances reveal that students' engagements with their peers fed into dialogical learning, propelling confidence, curiosity and learning satisfaction amongst participants in group activities. Consequently, the processes of negotiating and constructing knowledge as a collaborative team effort in honing their socio-cognitive skills are consistent with the findings of recent studies (Hsu, 2021).

Even though most hospitality students acknowledge the merits of being a team player in the hotel industry, findings from studies by Goh and Lee (2018) and Koc (2019) conclude that students, experienced social anxiety and stress when working in teams, especially when the team experienced group conflict. However, according to the existing study, whilst students did express some form of emotional stress and fear to work in groups, the design of the authentic activities allowed them to "rethink" and reflect on the benefits they reaped whilst working together as team members.

Whereas one student humbly mentioned that she acquired leadership skills due to the group's faith in her. Acknowledging her limited faith in her efficacies; this participant, was initially reluctant to assume a leadership role.

> "I was told that I am going to lead the group, first I did not accept, but the members all had faith in me, ... I started doing things I never thought I could do – I surprised myself and my group mates and I proved them to be right ... and we [were] so organized, and I never let them down" (Participant 4).

The encouragement she received as she engaged with the authentic activities allowed her to critically examine and evaluate her strengths and weaknesses, thereby highlighting their unique capabilities and efficacies. Indeed, many studies describe hospitality students mainly as kinesthetic learners; most consider "learning by doing" to be more meaningful (Yan & Cheung, 2012). Consequently, "learning by doing" and the authentic nature of real-world task activities allowed students to gain in praxis and this is often perceived by students to be a more meaningful and committed form of learning in comparison to the traditional method of learning (Chen & Shen, 2012). Orienting students, on activities, in this instance, enhanced students learning confidence, shaped their disciplinary identities and fostered deep meaningful learning. Pajares (2008) supports the fact that using *authentic* mastery experiences, understood as a source of self-efficacy belief, enhances skill development. Similarly, a students' mastery experience will enhance his/her self-concept, because of his/her authentic capabilities. Likewise, students focused on mastery experiences are most likely to practice more critical

thinking and processing strategies, as well as become more resourceful. The findings also respond to industry leaders' concerns about students' inability to think critically and engage in teamwork (Roy & Macchiette, 2005); hospitality educators encourage the use of pedagogical strategies that can engage students in higher-order learning and to work effectively as team members (Pang et al., 2010).

Developing emotional intelligence

Students voiced the tensions and struggles that emerged during their engagement in the authentic assessment tasks. For example, one student admitted that when he was told that his daily authentic learning experiences needed to be recorded on the online journal; his initial reaction was one of reluctance and embarrassment because he felt that this was *a girl thing* and could be ridiculed.

> "Eish -recording on a journal is mainly for girls and I used to do it very secretly. So, my male friends won't laugh at me" (Participant 5).

According to this depiction, holding such negative gender stereotypes may negatively interfere with his academic goals. However, as he began the process of recording the online entries and receiving feedback, he started appreciating the benefits of this reflective tool, and the stereotype held by him soon began to diminish.

Furthermore, disruption of authentic learning in this particular student's belief and background confirms a transformation in his learning. Since learning orientations reflect their individuality as deliberately depending on their personal strengths, deep desires, persistence, and assertive effort to strategies to self-manage their learning successfully.

> "First time I did not like taking orders from the ladies in my group, in our culture, women are supposed to listen to males and make them the leaders. But later on, realized they had good ideas to share and helped our group perform better in the project . . . " (Participant 6).

According to this scenario, a student's cultural background and upbringing have a profound effect on how they view the world and how they internalize learning in this context. Holding preconceived gender bias and power relations due to deep-rooted cultural affirmations may create tensions and resistance to learning when students are faced with learning in a diverse environment (Carlana, 2019). However, the tenets of the authentic assessment were able to reduce such affirmations when students began reflecting and appreciating the benefits of working as a team and accepting diverse cultural and gender views. According to the students' reflections, some of them experienced a transformation in their way of thinking and learning; more especially when such type of learning challenges or questions their established assumptions of reference. Mezirow (2003) advocates that reflective learning shapes transformative learning such that previous bias, tensions and identities that were usually confined in a "cognitive system" realigns to reformed ways of thinking. Alternatively, Illeris (2014) argues that transformation is an adjustment to one's identity that will positively enable one to accept and adjust to change. In this instance, authentic assessment has the propensity to lead to transformed learning, since it displaces students' old habits of mind, which may have interfered with their progress in thinking and learning. In another instance, an online reflective account of one of the participants indicated:

"... I am now starting to see things so different[ly] from school and home and what we were taught back at home, I first did not like others interfering in my project work, but they sometimes showed my mistakes especially when my accounts did not balance. I now appreciate their ideas and views ... " (Participant 7).

The above findings further depict the disposition of students' cognitive maturity and emotional intelligence skills. Cognitive maturity refers to being open-minded and showing empathy for others' views and opinions and the willingness to accept biases and predispositions. To this end, the tenets of authentic assessment enable students to reflect on their own emotions, enabling the affective dimensions of their thinking to improve on the decisions and deductions they make.

Some studies found that hospitality employees who exhibit higher dispositions of emotional intelligence (EI) demonstrate more resilience and coping skills in respect of stress and burnout juxtaposed to staff with lower dispositions of emotional intelligence (Koc & Boz, 2020; Wiens, 2016). Hence, staff who demonstrate levels of EI are better equipped to manage and solve problems that are usually encountered by hospitality establishments. Since the hospitality industry is often considered multicultural and diverse in nature, having a recognized EI skill set enables hospitality graduates to self-regulate their emotions as well as manage the emotions of others; which is pertinent for adaptation to the goals of the industry. (Butler et al., 2014). In fact, Koc and Boz (2020) established that students who displayed higher levels of EI have a greater sense of empathy and the efficacy to manage the diverse social relationships faced in the hospitality context.

Reflective learning

For most participants, it was observed that learning and working as a team resulted in sharing and co-constructing knowledge. The students expressed their appreciation for the various collaborative tools offered as part of the authentic assessment design.

"I started listening AND learnt how to take what others say and give them a chance to participate as previously I was not prepared to listen to others ... I finally learnt the hard way but ... I benefited from this. I got to pay more attention in class activities as well by listening to questions and answers of others started improving my learning, big time!" (Participant 8).

The collaborative tools were represented as scaffolds to improve students' learning and engagement in HFM. This is likely to create a fertile learning environment for academic success and encourage students to think differently as they are exposed to and accepting of diverse ideas and experiences.

"[At the] beginning, I thought I will not complete so many tasks in the project due cos so little time left. But ... the group showed my silly mistakes and faults, I came to realise ... I require time management skills, so I now learnt from others to adjust in a better way. When I wrote the next test and final exams. I remembered what my team members said and to practice the right way" (Participant 9).

Notably, students mentioned that whilst engaging with authentic assessment, they started acknowledging the successful engagement practices of other group members, for example, being able to utilize time management more effectively as well as adjust how they actually learnt. These students, having recognized their shortcomings in learning, started applying more effective listening and time management skills that enabled them

to revise their learning methods and promote a critical enquiry to how they engaged cognitively. Therefore, they are likely to develop a richer and deeper understanding of assessment practice, thereby enhancing critical thinking maturity since shared knowledge was viewed as a catalyst in "learning to learn".

Discussion and conclusion

This case study illustrated to what extent authentic assessment enabled critical thinking skills amongst first-year students in hospitality financial management, and identified three themes emerging from the implementation of an authentic assessment pedagogy. Consequently, the three themes overlap and resonate with scholarly findings of other disciplines but are limited to the context of hospitality education context. It was found that well-designed assessment tasks will present opportunities for knowledge construction and honing critical thinking dispositions in Hospitality financial management. According to this study, students were able to engage more meaningfully through active collaboration and collegial peer interaction through the interrogation of authentic assessment practices. Besides improving knowledge construction and entrenching a deeper approach to learning, through authentic assessment, hospitality students are able to demonstrate critical thinking dispositions such as emotional intelligence, reflection, transformed learning and problem-solving skills, evident in this study. Concurrently, having such skills, enable hospitality students to make connections with the real-life contexts demanded of them after they graduate and enter the profession. Similarly, proponents of authentic assessment advocate that authentic assessment provides fertile grounds for enabling higher-order thinking skills through the development of critical and strategic thinking skills (Ashford-Rowe et al., 2014; Doyle & Brown, 2000; Lombardi, 2007; Villarroel et al., 2020). Moreover, it further creates opportunities for academic engagement (Kearney et al., 2016) and self-regulation learning. To this end, to encourage critical thinking skills, academics may have to reconsider the transition from conventional assessment to authentic assessment. Ultimately, the redesign of assessments that reflect real-world problems can augment the development of the skills that hospitality graduates need today (Medland, 2016).

In this study, developing critical thinking dispositions amongst hospitality students, offer two practical implications. Firstly, from an academic perspective, there is a dire urgency for hospitality accounting curriculum designers, facilitators and faculty to foster critical thinking dispositions in teaching, learning and assessment. Secondly, the design of hospitality accounting assessment activities should be able to sharpen the affective elements of critical thinking and not just the cognitive dimensions of critical thinking skills; this is most apt in an intensively demanding and service orientated industry (Koc & Boz, 2020). In theory, this study established that the design of an authentic assessment, through collaborative efforts, allows for hospitality students to become reflective thinkers, demonstrate emotional intelligence as well as challenge stereotype thinking and beliefs. Equally, this transformation validates critical thinking dispositions amongst hospitality students.

The value emerging from this study demonstrates how an authentic assessment strategy has the propensity to develop the critical thinking skills of undergraduate hospitality students. Concomitantly, this further implies stakeholders of hospitality

financial education should rethink how they assess students and transcend from a surface and traditional mode of pedagogy to a deep reflective mode of learning to understand and make sense of the world students live in.

However, two limitations emerged from this study. Firstly, the study being a case study drew data from a sample of only twenty-four participants in the first year of the hospitality financial management group. As a result, the findings of this study are not statistically generalizable beyond the scope of this case study. Secondly, the conflicting role of the researcher in a position of a power relationship with the participants (that is the relationship between lecturer and student) may compromise the quality of responses from the participants and possibly give rise to potential response bias. However, participants were encouraged and cautioned to respond as objectively as possible.

There is an urgency for Hospitality financial management research to identify further assessment strategies that promote critical thinking skills amongst hospitality students that will strongly augment graduate attributes. Furthermore, a recommendation for future research is to recognize and address the challenges confronting Hospitality financial management academics and course leaders in the design and implementation of authentic assessment in the hospitality curriculum.

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