



**المحور الخامس: قضايا الجودة في الابتكار والابداع.**  
**Theme V: Quality Issues in Innovation & Creativity.**

**أثرفلف إنجاز المهمة الأدائية التدريسية في تنمية التفكير التأملي  
لدى طالبات برنامج الماجستير بكلية التربية في جامعة الملك سعود**

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## A Pilot Case Study: Assessment of Students' Contributions in Asynchronous Online Discussions from the Students' Perspectives

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**Abstract:** A pilot study has been conducted at King Saud University to investigate the role of assessment in students' learning from asynchronous online discussion. The study adopted a qualitative methodology to gain an understanding of the students' experiences. Data were collected through: online and in-class observations, focus group and in-depth interviews with the students. Two themes have emerged from the findings. Firstly, the implications of the online environment: e.g. it offers equal opportunities, the quality of the discussions, collaborative learning. Secondly, assessment: e.g. assessment criteria, summative assessment and formative feedback from instructor.

**Keywords:** Online learning, online assessment, online discussion



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## Introduction

Online learning has become a foundational delivery component in universities, whether they deliver distance, blended, or face-to-face courses. Discussions among students have been associated with numerous beneficial activities, such as collaboration, idea-sharing and question-asking (Roschelle and Teasley, 1995). Constructivist learning theory states that people naturally learn from working together collaboratively (Murphy, 2004). Active involvement in discussions allows students to learn from each other and so develop their skills.

The potential value of asynchronous online discussion to the learner has been supported by several studies, but there is disagreement about the need to assess students' contributions to these discussions. For example, Wishart & Guy (2009) support assessing student participation in asynchronous online discussions because it recognizes students' commitment to the discussions, and that recognition may motivate students to interact and collaborate more with each other. On the other hand, O'Reilly & Newton (2001) do not see the need for assessing students' contributions, arguing that students have an intrinsic motivation to participate in asynchronous online discussion regardless of assessment. This debate suggests that further research is needed to determine what role assessment plays in the success of asynchronous online discussion.

The literature seems to lack research and studies dealing with asynchronous online discussion in Saudi Arabia, particularly on the assessment of student contributions, possibly due to the comparatively recent integration of online learning into teaching practice. This calls for a study that investigates current assessment practice and examines students' perspectives and views regarding the assessment of online discussion.

### *What is 'Online Discussion' in this Study?*

From the eLearning perspective there are two types of online discussion: synchronous and asynchronous discussion. They are both accessed through Internet technologies.

There are many forms of discussion, such as videoconference, audio discussion, and text-based discussion. Time and place issues are important when defining synchronous and asynchronous discussion.

Synchronous online discussion is a real-time, different places discussion, where the participants are having a discussion at the same time, but are in different places. They are all logged onto or connected to e.g. the same Internet discussion board or virtual conference room. Students access the communication mechanism, post messages and respond to each other at the same time.

Asynchronous online discussion is a different time, different places discussion, where the participants are in different places and access, post and respond at different times. This study is concerned with asynchronous online discussion, which is predominantly text-based discussion (that can include video and audio), restricted to members (students) of an institutional virtual learning environment (in this study, Blackboard). Student postings and

responses in the system's Discussion Board area form a thread following on from their instructors' or other students' initial postings.

### ***Assessment of Online Discussion***

#### **Types of Assessment**

There are two kinds of assessment: assessment for learning and assessment of learning. Assessment of learning or summative assessment is used to determine grades as well as to satisfy local and national (universal) testing requirements (Stiggins & Chappuis, 2005). According to Rovai (2000), summative assessment involves the assigning of grades and is "the process of gathering, describing, or quantifying information about learner performance" (p.142). Summative assessments usually take place at the end of a distinct block of study and are used to verify student knowledge and skills prior to assigning a grade (Shepard et al, 2005).

On the other hand, formative assessment or assessment for learning is conducted during learning to improve teaching and learning while they are still happening, rather than judging or grading the entire program after it has finished (Stiggins & Chappuis, 2005). Teachers assess the student throughout the course of the study, and modify their instruction accordingly to meet the student's needs. Students can also assess themselves or assess each other.

#### **Assessment of Online Learning**

The process of assessment has been established in face-to-face environments and, arguably, "the principles of assessment do not change in an online environment" (Benson, 2003). However, due to the differences between face-to-face and online environments, some challenges may be faced when applying summative and formative assessments online. Swan et al (2006) state that learning and assessment are not two distinct phases in an online course, as both directly influence student learning and they feed into each other.

#### **Assessment of Asynch-ronous Online Discussion**

Research supports the potential for learning opportunities that online discussion offers (Bali & Ramadan, 2007; Marra, Moore, & Klimczak, 2004). However, more research is needed on several specific aspects of assessment and their roles in students' learning from online discussions. For instance, the impact of assessment and whether it constrains students' interactions and participation, as has been suggested by some studies (e.g. O'Reilly and Newton, 2000), warrants further exploration. Other studies have indicated the importance of assessment in achieving the objectives of integrating online discussion into students' learning environment (e.g. Giacumo et al, 2013; Klisc et al, 2009; McKenzie, & Murphy, 2000). This suggests that further investigation about the value of assessment and whether it impacts students' engagement and learning in asynchronous online discussion would also be valuable.

According to Mazzolini and Maddison (2003), the success of asynchronous online discussion is based on the quality of student collaborations and the depth of learning that is developed within the discussions. Several studies suggest that the quality of student discussions can be maintained by assessing student contributions (e.g. Beebe et al, 2010; Hura, 2011; Vonderwell, Xin, & Alderman, 2007). This study will investigate the role of assessment in students' learning from online discussions from the student perspective.

## Methodology

This study is concerned with students' views and experiences about the role of assessment in asynchronous online discussion. The most suitable way to explore and understand them is to utilize those data collection tools associated with qualitative approaches, such as interviews, focus groups and observation. The focus of the study was on getting in-depth information from students about their experiences with online discussion and the assessment of online discussion.

This pilot study employed a single-case design (Creswell, 2007). It investigated the use of online discussion at one of the undergraduate classes at King Saud University (KSU) female campus during the period of October until December of 2013. The topic of the course that agreed to participate in this study was "Integrate technology into the learning environment". There were 12 students and they all agreed to participate in the study. Students were in their second year of college.

The Instructor would post a question in the Discussion Area in the Blackboard system used by the students. The question would concern a case study related to their current lesson. Students were then allowed two weeks to analyze the case and suggest solutions. Interactions in the Online Discussion Area were observed, then students were invited for a focus group and interviews. Six students attended the focus group and interviews.

The sample size in qualitative studies is usually smaller than the sample size in quantitative studies (Fraenkel, 2006). This is because qualitative studies do not seek to produce statistical generalizability or representativeness, rather qualitative research usually seeks to reflect the diversity within a given population.

The focus of the study was on the following questions:

1. How students see online discussion being different from face-to-face discussion. What the implications of the differences are, if any?
2. What is the role of assessment in students learning from online discussions?

The data from observation, focus group and interviews were analyzed using thematic analysis (Creswell, 2007). Interviews and focus group transcripts were translated from Arabic into English. Consents were obtained from students and they were informed that they could withdraw from the study at anytime.

## Results and Discussion

The following two themes emerged from the gathered data.

### A. *Implications of the online environment*

#### **Offers equal opportunities**

Teaching in Saudi universities is still dominated by lecture-based formats. This type of delivery does not allow enough chances for students to practice their discussion skills. Usually when an instructor provides questions for a class discussion, students who participate in the discussion direct their answers to the instructor, and engage in a discussion with the

instructor, not with classmates. Some students stated that they felt more comfortable contributing in online discussions than in face-to-face discussions. That is due to being shy or not developing discussion skills enough in their classes. For example, in the focus group a student said:

*"I don't like to be part of the discussion in the classroom, because I feel shy and I'm not used to talking in front of many people. That has affected my participation scores. However, in online discussions I feel more comfortable and I did participate".*

This finding agrees with Wang and Woo (2007) that online discussions offer equal opportunities for all students. During class time a few students may dominate the discussion, however, in online discussions all students do have the chance to participate. According to Belcher (1999), asynchronous online discussions are of particular benefit to people in certain situations, such as those people who are shy, or who have language difficulties.

### **Quality of the discussion**

Respondents suggested that participating in online discussion allows them to participate at times suitable to them; it also offers them the ability to revise their work, and access several online resources if needed. That has an impact on the quality of their posts and on students' confidence in their posts. For example, one student said that:

*"I feel more confident in my post during the online discussions, because I do have the ability to search and the time to write a good post."*

Another student agreed:

*"Because sometimes during class time I'm not prepared, or I don't have a good background about the subject of the discussion".*

In comparing students' contributions to face-to-face discussions and online discussions, students found to be more prepared in online discussions (Wang and Woo, 2007). That is because they have the ability to access resources if they need to. In face-to-face discussions, if students are not well-prepared, the quality of the discussion is affected.

### **Collaborative learning**

One of the advantages seen by students in the online environment was the ability to read their classmates' posts, unlike other assignments where they submit a paper to their instructor and are unaware of other students' work. One student stated that she learned from reading her classmates' posts. This could also raise expectations and allow students to learn from each other. Another student said that she saw some of the advantages of using online discussions:

*"I do know my level compared with other classmates, unlike for example with written assignments where the instructors take them and grade and give them back. Then I don't know if my work was average, below or above."*

## B. Assessment

### Assessment Criteria

Assessment plays an important part in students' learning. In this study, one of the first questions raised by students during classes was how they would be assessed in the online discussion assignment, and upon which criteria. It was important to them to know what exactly the instructor was looking for in their posts. And in fact they followed exactly the assignment criteria and did not go beyond that. For example, one of the assessment criteria was to comment on at least one classmate's post. 85 percent of students commented only once and did not go further.

### Summative assessment

In the online discussions, the summative assessment involved assigning a grade to describe the quality of the discussion according to the assessment criteria given to the students by their instructor.

*Students expressed the importance of receiving a grade for their work, because it is an appreciation of their time and effort. For example, a student in their interview said that:*

*"I do allow time and make an effort to post and participate in the discussion and I want to receive a grade for that. I do have many other assignments, it makes sense to me to start by doing what I will be assessed for".*

Grades seem to be an essential motivation to do the assignment. As mentioned before, students do have time to revise work and access resources, which impacts the quality of their posts. Therefore, students think that they should be assessed upon the quality of their posts and their writing structure. However, they disagreed about assigning grades for the number of posts, as this would make them pay attention to posting more but with less quality. According to McKenzie and Murphy (2000), if students' contributions are not assessed, students may not contribute or visit the discussion board. It is worth noting that in their study 74 percent of postings were made by only 30 percent of the students (there were 30 enrolled students).

Klisc et al (2009) performed a quantitative study aimed at exploring the impact of assessing online discussion. Seventy-nine instructors answered a questionnaire about the value of assessment. The results significantly indicated a positive impact of assessment on discussion outcomes, including on communication skills, depth of thinking, critical analysis and reflection, and learning through the collaborative construction of knowledge.

The findings of that study disagree with other studies, such as O'Reilly and Newton (2001), who argue that students should not be assessed because they have self (inner) motivations to participate, regardless of assessment. Also, MacKinnon (2000) argues that assessment may constrain student participation.

However, these studies involved graduate students and the results may not be applicable for undergraduate students. Students at the graduate level usually have stronger inner motives to complete all aspects of their studies, and grades are not necessarily as important as they are to undergraduate students.

### **Formative feedback from the instructor**

Formative assessment means receiving feedback from the instructor. Students show disagreement about receiving formative assessment.

Students perceived their participation in the discussion board as producing 'right' or 'wrong' answers. However, it was planned to be a discussion that includes sharing and exchanging opinions. Students wanted to have the 'right' answer from their first post; therefore, if the instructor commented on how they might develop their thoughts, or brought some other point to their attention, they then felt that their answers were not right. Other students needed to have the formative assessment because they felt that the instructor was reading what they had written and that they had fulfilled the requirements.

This reveals students' understandings of the term 'discussion'. In traditional classes, discussions are probably not employed as often as they should be. Students looked at the online discussion assignment as a question that needed to be answered. The answer is right or wrong, and if a discussion develops around the student's first post, she felt that her answer was not good enough and she might consequently lose some points.

### **Conclusion**

Assessment recognizes students' efforts and gives them the motivation to participate in online discussions. However, to optimize integrating online discussions, the skills that can be acquired from practicing online discussions must be identified, and then assessment should, in part, help students to acquire these skills. For example, students in this study showed that participating in online discussion can improve their writing skills and discussion skills. Other studies suggested other skills could likewise be developed, such as critical thinking and collaborative learning (Klisc et al., 2009).

Online discussion offers an opportunity for developing a more student-centered learning environment. However, the practices of the traditional classroom format are still carried out in the online environment. This calls for more understanding on the part of instructors on how to make students the center of learning in the online environment.

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