

# Assessing Online Teaching in Higher Education Amid the COVID-19 Pandemic: A Case Study from Saudi Arabia

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**ABSTRACT:** On March 8, 2020, the Saudi Arabian Ministry of Education forced all universities and schools to shut down due to the COVID-19 pandemic. The Ministry required all universities and schools to initiate online schooling as a replacement for face-to-face teaching methods. This research investigates the sudden change into online learning at two Saudi Arabian universities on the West coast. The study focuses on six instructional strategies that show the current online teaching experience by faculties in the two selected universities. The strategies are as follows: (1) initiating emergency preparation plans, (2) breaking down course contents, (3) indicating the importance of “tone” during online teaching, (4) more roles for teaching assistants, (5) enhancing students’ proactive learning abilities, and (6) effective incorporation of online learning with home self-learning. Finally, six useful principles are provided to improve online teaching’s impact on small- and large-scale online classes in higher education.

**KEYWORDS:** COVID-19, online education, instructional strategies, higher education, Saudi Arabia

## Introduction

The COVID-19 pandemic has required Saudi Arabian universities to shift their traditional face-to-face classes to online classes all at once. This decision was set on March 8, 2020, by the Saudi Arabian Ministry of Education. The Ministry followed the closure decision with the “The COVID-19 Pandemic Protocols” document for universities to follow, where online teaching becomes the only teaching method, students are not allowed on campus, and no staff or faculty gatherings are allowed on campus. Since then, students and faculties have not been able to meet face to face but only via online means, such as Blackboard and Zoom (an online video communications application). This substantial change occurred in a short period of time; thousands of faculty members were required to give their classes in front of a computer monitor, with students watching from home via the Internet. The shift to online teaching was implemented in 61 other countries by March 13 due to the rapid global spread of COVID-19 (Unesco 2020). This research presents some useful guidelines for online teaching and learning in higher education, as implemented in a case study at two Saudi Arabian universities.

Since the early 2000s, Saudi Arabian universities have provided limited online education options as a form of open education network. The number of online courses has increased slowly throughout the years because the information and network technologies infrastructure were not well established. Further, students and faculty members showed relatively little interest in online teaching due to a lack of computer access for some students and the poor computer skills of some faculty members (Alashwal 2019, 2020). The number of online courses before the COVID-19 pandemic compared to the face-to-face course was rather low (Abouelnaga et al. 2019). The sudden outbreak of COVID-19 urged Saudi Arabian universities to offer extensive training on online course tools and skills to students and faculty members and boost online course numbers to ensure normal teaching operation (Hoq 2020). It was a substantial challenge to shift all current courses into online platforms

in a matter of days. Furthermore, preparing and building online courses require accurate lesson design, specialized training, technological tools, and IT team support. However, the sudden outbreak of COVID-19 uncovered the lack of online teaching skills in faculty members and the unpreparedness of departments and colleges for completely online approaches. Students had fewer difficulties with online technologies and platforms, yet they had challenges regarding self-discipline, offline learning environments, and learning behavior (Bao 2020, Alashwal 2019).

In Saudi Arabia, the government gives education a significant amount of attention and care. Many studies have investigated the types and challenges of e-learning in Saudi Arabian universities (Hamdan 2014, Alamri 2011). However, the effectiveness of e-learning has not been sufficiently examined (Rajab 2018). In the early 2000s, Saudi Arabian higher education began to implement some e-learning programs as part of their delivery models (Aljabre 2012). In 2006, the Saudi Arabian Ministry of Education established the National Center for e-learning (NCeL), which had a major role in the integration of technology into higher education (Alebaikan and Troudi 2010). The NCeL also supported research into e-learning and offered expertise for universities and colleges around the kingdom of Saudi Arabia regarding online education (Alturki 2014). Moreover, the Ministry of Education encourages public universities around the country to establish centers or deanships for e-learning and distance education. The purpose of these centers and deanships is to promote online learning by delivering workshops and seminars to faculty members regarding the use of technology and the effectiveness and advantages of e-learning (Alkhalaf et al. 2013). However, not all public universities in Saudi Arabia have adopted online learning as a part of their education, and, in some instances, online learning is limited to specific disciplines (Alturki 2014).

The first case of COVID-19 in Saudi Arabia was diagnosed in February 2020. In March 2020, coronavirus began to spread to a significant degree; hence, the government prohibited students from attending schools and universities. The Ministry of Education then decided to shift traditional education in all schools and universities to a distance-learning format. All education entities changed to distance learning, using their education technology platforms to continue to teach their students at all levels. This sudden shift had previously occurred for a short time period in 2016 in Najran, Saudi Arabia, during the war between the Arab Coalition led by Saudi Arabia and the Hothi rebel groups in Yemen (Rajab 2018).

However, COVID-19 became a pandemic across the country. Previous research has demonstrated that education can be provided despite the presence of a crisis (Nash 2015). Such research relied on the evolvement and development in online education during recent years (Walabe 2020, Alahmari 2017). The interactions of online learning are based on three elements: instructor–student, student–content, and student–student interactions (Smith 2020). However, the sudden development of COVID-19 has necessitated teachers to shift to providing lectures online essentially overnight. Thus, teachers have had to post and upload all course materials into different online learning platforms and applications (Alshehri et al. 2020). This unique, rapidly occurring situation has negatively impacted higher education and the global economy. Major events and conferences have been canceled, and many more were shifted to a virtual mode, such as the G20 summit meeting in Saudi Arabia. Many studies have evaluated the effect of COVID-19 on financial, political, psychological, and sociological behavior in Saudi Arabia (Yezli and Khan 2020, Rajab, Gazal, and Alkattan 2020, AlHumaid, Ali, and Farooq 2020, Ebrahim and Memish 2020). Many more works measured the impact of COVID-19 on education globally (Archambault and Borup 2020, Bozkurt and Sharma 2020, McCartin 2020, Schrading, Pigott, and Thompson 2020).

This research will investigate the difficulties faced by faculty members and students in online education at two Saudi Arabian universities. The study aims to demonstrate how to increase online education's effectiveness and how to implement beneficial instructional strategies to improve student learning attitudes and engagement.

## Methodology

The current work was implemented using a phenomenological qualitative research design. Phenomenology is the study of a phenomenon by examining the reality of individuals who are associated with this phenomenon (Creswell and Poth 2007). To comprehend the experience of faculty members and students with online teaching and learning during COVID-19 in Saudi Arabian higher education, the researcher used phenomenology as the research framework.

Data were collected using semi-structured interview questions that were developed based on the aforementioned instructional strategies in the previous section. Sixteen participants (7 males and 9 females) were interviewed individually via audio and video calling to discuss their experience of shifting to online teaching during the COVID-19 pandemic. Interviews were recorded after obtaining participants' permission in order to generate a report after completing the interview. The reports were then sent to respondents to ensure the accuracy of the information conversed during the interviews and to allow respondents to add any details they may have neglected to mention during interviews.

The data were analyzed by identifying emerging themes from the transcribed interviews. First, the significant statements pertaining to faculty experience with online teaching were highlighted. These statements were then classified into common themes, which were used to understand participants' experiences.

## Results and Discussion

The research results discuss the six instructional strategies that show current online teaching experiences of faculties in the two selected universities. The strategies were as follows: (1) initiating emergency preparation plans, (2) breaking down the course contents, (3) indicating the importance of "tone" during online teaching, (4) more roles for teaching assistants, (5) enhancing students' proactive learning abilities, and (6) effective incorporation of online learning with home self-learning.

### *Initiating emergency preparation plans:*

Initiating the emergency preparation plan should be established by providing sufficient computer servers to host the substantial increase in new online users; this approach will avoid server shutdowns due to the many new users overloading the system. The faculty also recommends establishing a new way to communicate with students and prepare other plans in case the servers fail or shut down.

### *Breaking down the course contents*

Teaching online courses can be made more efficient by delineating course contents into small modules. Face-to-face course contents can be further divided while maintaining the same level of clear knowledge structure as set out in the syllabus. This approach helps online students maintain a steady level of focus and ensure that they do not become distracted. Therefore, the class time may also be decreased, and more time breaks should be provided during lengthy online classes.

### *Indicating the importance of "tone" during online teaching*

In face-to-face classes, body language, hand movements, facial expressions, and instructors' tone are all essential to grasp students' attention, and these factors help in the teaching process. However, when classes are shifted to online modes, the only functional teaching tool is the instructor's "tone", whereas all other factors are restricted. Therefore, instructors should maintain a different tone of speech, articulate the wording, and emphasize salient points to help students capture key lesson concepts.

***More roles for teaching assistants (TAs)***

TAs have fewer teaching roles in face-to-face than online classes. TAs can fill the gaps for faculty members who face technical difficulties and technologies. Communication between faculty members and TAs must be increased before and after online classes. Discussions will help understand each class objective, knowledge, class activities, and assignments; these discussions can be conducted via phone calls, emails, WhatsApp chatting, or other social media applications.

***Enhancing students' proactive learning abilities***

Faculty members in online classes have less control of students than in face-to-face classes. Online students are inclined to become easily distracted during lectures, skip classes, and lose interest in the course. Therefore, instructors must improve the proactive learning abilities in their students, potentially by assigning more varied types of homework, more reading assignments, and site-visit projects.

***Effective incorporation of online learning with home self-learning***

During face-to-face classes, common problems include students' poor pre-class reading preparation, less student participation, and poor discussion. These problems are still observed in online classes. However, the instructor should not become concerned and distracted by such problems in online classes. Instructors should focus on two teaching phases in online courses: offline (self-learning phase) and online. The offline phase is about assigning students to read the lesson material pre-class and submit a brief paragraph that shows their understanding of the main lesson points. The instructor, in return, provides prompt feedback and evaluates students' cognitive level. This strategy helps instructors to adjust the lesson material before online classes based on their evaluation. On the other hand, the online phase occurs during the online class by having open discussions and a dialog with students to evaluate their pre-class reading assignments. This approach helps students develop their knowledge and allows them to experience a deep level of learning.

**Conclusions**

This study has proposed six useful principles to improve online teaching's impact on small- and large-scale online classes in higher education. The first principle is "appropriate relevance", highlighting the importance of matching course content length and difficulty with students' online learning behavior. The second principle is "effective delivery", which involves controlling the teaching pace to a level where most students can grasp the lesson and not lose concentration. The third principle—"sufficient support"—provides students with prompt and effective feedback and personal guidance if necessary. The fourth principle is "high-quality participation", which measures the level and depth of students' participation in order to improve their participation. The fifth principle—"contingency plan preparation"—sets contingency plans to avoid technical problems in online teaching platforms. The final principle is "differentiated teaching", focusing on building students' knowledge and skills to improve their performance and ensure that the course is mastered.

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