



THE ROLE OF ONLINE LEARNING ON TEACHING SPECIAL EDUCATION COURSES DURING THE COVID-19 PANDEMIC BASED ON FACULTY MEMBERS' PERSPECTIVES AT PRINCESS NOURAH BINT ABDULRAHMAN UNIVERSITY

Nada Abdulaziz Alrajhi¹ and Safyah Saleh Aldayel^{2*}

¹ Special Education Department, College of Education, Princess Nourah bint Abdulrahman University, SAUDI ARABIA

² Educational Technology Department, College of Education, Princess Nourah bint Abdulrahman University, SAUDI ARABIA

*Corresponding author: ssaldayel@pnu.edu.sa

Abstract:

This research aims to explore the role of online learning on teaching Special Education courses during the COVID-19 pandemic based on faculty members' perspectives at Princess Nourah University. The researchers in this research used a qualitative method to explore faculty members' perceptions of their online teaching experiences during the COVID-19 pandemic. The participants in this research included 10 faculty members in the Special Education Department within the School of Education at Princess Nourah University in Saudi Arabia. They were selected as an intentional sample of those who were studying courses online during the COVID-19 pandemic period and had also volunteered to respond to interview questions. Data were gathered using an in-depth interview protocol, resulting in the collection of faculty members' detailed reflections. As the purpose of the research was to investigate the role of online learning on the teaching of Special Education courses during the COVID-19 pandemic, thematic analysis was applied for the analysis of the interviews. The findings of the research lead to suggestions for practical ways to improve the teaching of Special Education online courses. The research conducted semi-structured interviews with ten faculty members from the Special Education Department at the College of Education. The research findings show positive results with regard to online learning and teaching special education via the use of Blackboard, a learning management system that students can access online. However, the current research also showed that there are obstacles to the teaching of practical subjects and that these could be caused by Saudi social customs. The research has implications for teachers of special education and how they prepare their programs in Saudi universities. Researchers presented recommendations and suggestions for future researches.

Keywords: Special Education, Special Education Programmes, Online Learning, E-Learning.



المستخلص:

يهدف هذا البحث إلى استكشاف دور التعلم عبر الإنترنت في تدريس دورات التربية الخاصة أثناء جائحة COVID-19 بناءً على وجهات نظر أعضاء هيئة التدريس في جامعة الأميرة نورة واتبعت الباحثتان في هذه الدراسة طريقة منهج البحث النوعي لاكتشاف تصورات أعضاء هيئة التدريس لتجاربهم التعليمية عبر الإنترنت أثناء جائحة COVID-19 وشمل المشاركون في هذه الدراسة 10 أعضاء هيئة تدريس في قسم التربية الخاصة في كلية التربية بجامعة الأميرة نورة في المملكة العربية السعودية تم اختيارهم كعينة قصدية من الذين كانوا يدرسون دورات التربية الخاصة عبر الإنترنت خلال فترة جائحة COVID-19 وتطوعوا أيضاً للرد على أسئلة المقابلة وتم جمع البيانات باستخدام بروتوكول مقابلة متعمق، مما أدى إلى جمع الأفكار التفصيلية لأعضاء هيئة التدريس ونظراً لأن الغرض من الدراسة كان التحقق في تأثير التعلم عبر الإنترنت على تدريس دورات التربية الخاصة أثناء جائحة COVID-19، فقد تم تطبيق التحليل الموضوعي لتحليل المقابلات لأن نتائج الدراسة تؤدي إلى اقتراحات للطرق العملية لتحسين تدريس دورات التربية الخاصة عبر الإنترنت وأجريت في هذه الدراسة مقابلات شبة منظمة مع عشرة أعضاء هيئة تدريس من قسم التربية الخاصة بكلية التربية. وأظهرت نتائج البحث إلى أن هناك نتائج إيجابية فيما يتعلق بالتعلم عبر الإنترنت وتدريس التربية الخاصة عبر استخدام Blackboard، وهو نظام إدارة التعلم الذي يمكن الطلاب الوصول إليه عبر الإنترنت وأوضح البحث أن هناك عقبات أمام تدريس المواد العملية ويمكن أن تكون ناجمة عن العادات الاجتماعية السعودية وأن الدراسة لها انعكاسات على معلمي التربية الخاصة وكيفية إعدادهم لبرامجهم في الجامعات السعودية. وقدمت الباحثتان توصيات ومقترحات بحوث مستقبلية.

الكلمات المفتاحية: التربية الخاصة، برامج التربية الخاصة، التعلم عبر الإنترنت، التعلم الإلكتروني.

Introduction

The coronavirus (COVID-19) pandemic is an unparalleled crisis. It has affected all aspects of life, including education at all levels (Ayittey, Ayittey, Chiwero, Kamasah, & Dzuovor, 2020). Social distancing and self-isolation policies have become the “new normal” and it is therefore not possible for teachers or students to physically attend lessons or assess learning in the traditional fashion. The pandemic has unsettled our teaching and learning routines and has instigated major changes to these routines; in record timing, alternative teaching and assessment strategies (Longhurst et al., 2020) have been implemented by educational institutions all over the world with a major emphasis on online learning, deemed to be an effective alternative to the physical classroom (Arghode, Brieger, & Wang 2018; Aloklu, 2018; Chen, Dobinson, & Kent, 2019).

Learning Management Systems (LMSs) are online learning platforms that, according to Jackson and Fearon (2014), are utilised to simply support teaching in the classroom. During the COVID-19 pandemic, which began in the later months of 2019, there has been a clear



shift with regard to attitudes towards online learning; it has gone from being an optional technological “extra” to becoming a necessary and key component of many students’ learning practices on a worldwide scale. This change has also been apparent for students in the Special Education Department within the School of Education at Princess Nourah University in Saudi Arabia.

The Bachelor of Special Education programme aims to prepare students to become highly qualified teachers by studying eight “levels,” focusing on four general and theory-based courses at the first, second, third and fourth levels. At the fifth level, students are offered the opportunity to specialise in either Learning Disabilities or Autism Spectrum Disorder, both of which require the students to complete specialised courses including practicum courses. These specialised courses incorporate the final three levels of the course.

The Saudi Education Ministry’s clear instructions to transfer all education to an online forum brought about immediate and almost overnight necessary change; this threw effective LMS usage into the spotlight for all Saudi education institutions. Considering the significant effect the pandemic has had on the way that Higher Education faculty members teach, in addition to the lack of research into online learning linked with Special Education in a Saudi context, it is of vital importance that insight is gained into the impact of online teaching and assessing on faculty members who are tasked with training future teachers of students with disabilities, which will be the focus of this research.

Research problem :

Pandemic has caused an unprecedented worldwide crisis. Every aspect of our lives has been affected, including all levels of education. Normal teaching and learning practices have been disrupted and major changes have been necessary, as teachers and students are unable to be physically present in educational institutions or to learn in the same ways that they are used to. It is important to understand faculty members’ perceptions about teaching methods and their views on how to improve and promote online learning in the teaching of Special Education. They may also be able to make suggestions on how to overcome the teaching challenges and obstacles presented by online learning. Therefore, the problem of this research represented in this question: what is the role of online learning on teaching Special Education courses during the COVID-19 pandemic based on faculty members’ perspectives at Princess Nourah University in Saudi Arabia?

Research questions :

- 1- Are there apposite outcomes for online learning and special education teaching using Blackboard, the online learning management system that students can access?
- 2- Are there obstacles to teach practical subjects, and they may be caused by Saudi social customs?



research importance :

The importance of this research appears in the theoretical scientific addition to the field of research that dealt with the effects of the Corona pandemic on all areas of life, especially education. The results of the research are expected to contribute to the development of e-learning and overcoming the obstacles facing teachers who follow modern education systems under abnormal conditions

Research objectives:

The main research objective of this research is to explore the role of online learning on teaching Special Education courses during the COVID-19 pandemic based on faculty members' perspectives at Princess Nourah University. We achieved this main research objective by completing the following specific sub- objectives:

- 1-To gain an insight into faculty members' perspectives and experiences regarding online learning as an appropriate method to teach Special Education courses.
- 2-To gain an insight into faculty members' perceptions of online learning and its contribution to the development of self-learning skills in their students

Research terms:

COVID-19 :

is the name given by the World Health Organization to the virus that causes severe acute respiratory syndrome (Corona), which has been declared a global pandemic by the World Health Organization. The disease affects people differently, with most cases showing mild symptoms, specially in children and young adults. (who, 2019)

online learning:

It is a method of education using modern communication mechanisms and means of computers, networks and various means, in addition to search mechanisms, electronic libraries, websites and Internet portals, whether remotely or in the classrooms. (yousif,O,y2020)

Literature Review

Online learning allows students to learn flexibly in terms of where and when they need or choose to learn and by extension, it affords faculty members the same possibilities in terms of how they educate these students. This flexibility allows students to have more control over the completion of assignments, not only by allowing them to choose the timeframe that suits them the best prior to the deadline set by the teacher, but also by allowing them to complete their learning in a much more independent way at home (Joosten & Cusatis, 2020), compared to how they would usually learn in an auditory fashion in lectures. The facilitation of a more independent method of learning for students is paramount, and the responsibility for this lies



predominantly with teachers. There have consequently been many platforms and a great deal of software created to aid teachers in this newfound role, including Blackboard (Alokluk, 2018; Chen et al., 2019; Brady & O'Reilly, 2020), an LMS employed by Princess Nourah University.

Just as teaching in the classroom or lecture theatre has developed over time thanks to increased research and improved resources, online learning has also come a long way from its beginnings in 1995. "Online learning" was a term coined to refer to what would occur as a result of using WebCT, the first LMS (Learning Management System), which later became Blackboard. In this time period, "online learning" simply meant uploading texts and pdfs to an online forum (Bates, 2014). Over time, the term has evolved to include blended learning, e-learning and any form of online education.

Regardless of online learning's many definitions, studies by Singh and Thurman (2019) and Chen et al. (2019) point out, in support of Jackson and Fearon (2014), that online learning should enhance interactions between students and teachers, both in terms of asynchronous interactions e.g. assessments and the provision of online course resources, and synchronous interactions e.g. conference tools, discussion boards, newsgroups and email. At Princess Nourah University, Blackboard provides all of the above-listed options. Chen et al. (2019) found that faculty members felt that these aspects of Blackboard were motivational for their students as they aided timely responses to questions, increased levels of interaction and created strong teaching and learning communities. It was however noted by the researchers that technical issues, a lack of real interaction and delayed reactions in live sessions caused difficulties for the faculty members and their students. In the afore-mentioned studies, online learning is examined in the context of a blended learning experience, in which traditional classroom or lecture theatre work still plays a significant role. By removing traditional teaching methods in the current research, it is expected that the successes and areas that require improvement in online teaching may be perceived more quickly by faculty members since both the positives and negatives of the experience will be more obvious.

Despite the progress detailed in the realms of research into online learning, mainly from a student perspective, Brady and O'Reilly (2020) discovered most recently that academics still use LMSs predominantly for uploading course materials, as was the case in 1995, showing little progression in online teaching. It was noted in their research that some academics used LMSs for managing assessments; however, communication and monitoring features were neglected, despite the fact that they were readily available as part of LMSs. Crucially, Brady and O'Reilly (2020) note that, despite the changes that have occurred in online learning, academics still approach their teaching in much the same "traditional" way, e.g. by maintaining a particular teaching habit such as replacing a paper handout with an online document. Saudi-based researchers Al Meajel and Sharadgah (2018) concur with these findings and purport that this approach should be improved to decrease students' stress levels.



Interestingly, the academics in Liu, Liu, Lin, Kuo, and Hwang, (2016) study did not view online learning via an LMS as a way to save time. This denoted a potential lack of training on how to use the LMS effectively, despite students' generally excellent advancement in LMS usage and therefore also in self-learning habits.

Saudi-based researcher Moawad (2020) accepts that adopting new technology in teaching could positively affect the achievement of students and educational institutions; yet the situation with online learning in Saudi Arabia seems to mimic the findings of Brady and O'Reilly's paper (2020). A number of studies that were published before the COVID-19 pandemic concluded that university faculty members in Saudi Arabia struggle with posting and producing instructional materials, recording lectures and uploading multimedia presentations (El Zawaidy, 2014; Bousbahi & Alrazgan, 2015; Al Meajel & Sharadgah, 2018; Aldosemani, Shepherd, & Bolliger, 2019). Moreover, it is suggested that technology is not always used as it should be in Special Education because of a lack of teacher infrastructure and educational material, and case study families' lack of access to technology (Cagiltay et al., 2019).

In concurrence with the above studies' findings, Alzahrani and Brigham (2017) point out the importance of integrating technology into a course. When teachers employ LMSs in a wider way, such as with the use of discussion boards, Saudi university students may benefit greatly in terms of their higher-level and critical thinking skills (Afify, 2019). Such benefits of effective LMS use in teacher training are widely reported across the world; a study undertaken in the United States of America by Scott and Temple (2017) focuses on Special Education teacher training and they conclude that students' engagement and preparation positively increased throughout an online course that was specifically mapped out for their trainee teachers. This highlights the importance of a well thought-through course, where teaching online is seen as being able to positively impact the students in question rather than simply being a "replacement" for the usual teaching methods.

Furthermore, the online course must have relevant content and the work must be achievable (Ottley, Coogle, Pigman, Sturgeon, & Helfrich, 2019). When students are expected to continue as "normal" while learning online, understanding the course content and assessment often constitutes a source of stress for students and therefore also for their teachers (Moawad, 2020; Chen et al., 2019).

As has previously been stated, the Special Education course at Princess Nourah University is reliant on practicum in the final level of the course; however, adapting the course to an online forum was vital because of COVID-19. As Alquraini and Rao (2018). state, it is of vital importance that pre-service teachers are given the opportunity to learn factual knowledge and then apply it in a practical setting. Interactive technologies such as discussion boards and video conferencing may allow for case studies to be "digitalized". The researchers concur with Ottley et al. (2019) that carefully designed field experiences or practical work ensure



better knowledge and skill development, thereby impacting on the career progression of the pre-service teacher.

Ottley et al. (2019) state that university-based educators could use technology-enhanced coaching to provide feedback and guidance to Special Education course students remotely during the students' clinical practice, which involves work that is usually completed onsite. The afore-mentioned researchers also claim that the literature available has demonstrated that university educators can engage well with clinical coaching methods that involve emails and video recordings.

Recorded videos offer a mechanism for analysis and discussion by the students and university-based faculty members, positively benefitting the students' achievements. Certainly, the benefits of technology usage make it possible for faculty members to interpret videos with oral and textual feedback that is timestamped with the video. Therefore, students can analyse the performance-based feedback and watch themselves during the instructional exchange that the feedback describes (Ottley et al., 2019). The use of video conferencing in the training of Special Education pre-service teachers was viewed as a success by researchers Alnemary, Wallace, Symon, and Barry (2015), who trained four Special Education teachers in Saudi Arabia via videoconferencing. The training included role-playing, video modelling and reading materials. The Special Education teachers were willing to participate in future training through videoconferencing after their experience. However, only one case study participant with Autism Spectrum Disorder participated in just the last phase of the study and there was no indication that the session was video-recorded. This might be attributed to the nature of Saudi society, which for several reasons often disregards people with disabilities. This may be due to a lack of awareness of disabilities in communities and/or a feeling of shame (Al-Jadid, 2014; Madi, Mandy, & Aranda, 2019; Alwhaibi, Zaidi, Al-zeiby, & Alhusaini, 2020). Furthermore, the culture in Saudi Arabia is surrounded by Islam, although levels of education, economic status and environmental aspects are also accountable for shaping the culture (Al-Jadid 2014; Madi et al., 2019; Alwhaibi et al., 2020). In addition, the Saudi culture has strict rules about confidentiality of information and the use of media recordings such as videotapes, especially when it involves people with disabilities.

Despite the above successes, Moawad (2020) examined the fears and uncertainties that students at the College of Education in King Saud University are experiencing during the time of the pandemic. The findings confirmed that the highest source of stress among students is their uncertainty over the end-of-semester exams and assessments. Faculty members at the College of Education in King Saud University also reported difficulties with motivating students and assessing their understanding. This may be attributed to faculty members' lack of online media usage for teaching and evaluating students before COVID-19. The academics seemed to lack trust in new online courses since they were satisfied with the outcomes of traditional teaching methods and the university did not yet have a whole-institution stance on e-Learning and Distance Education (Aljaber, 2018; Moawad, 2020).



During the pandemic, in Saudi Arabia, a quick and unexpected change was required to teaching and learning routines, skipping the blended learning approach entirely and going from full classroom instruction to full online instruction in a matter of days. It is therefore entirely understandable that there would be “teething issues”, demonstrated in this research and others. The current research endeavours to investigate successes as well as areas for improvement for faculty members educating future Special Education teachers.

Research Methodology:

Research Methods

The researchers in this research used a qualitative method to explore faculty members’ perceptions of their online teaching experiences during the COVID-19 pandemic. Data were gathered using an in-depth interview protocol, resulting in the collection of faculty members’ detailed reflections. As the purpose of the research was to investigate the role of online learning on the teaching of Special Education courses during the COVID-19 pandemic, thematic analysis was applied for the analysis of the interviews. The findings of the research lead to suggestions for practical ways to improve the teaching of Special Education online courses.

Participants

The participants in this research included 10 faculty members in the Special Education Department within the School of Education at Princess Nourah University in Saudi Arabia. They were selected if they had been teaching Special Education courses online during the COVID-19 period and had also volunteered to respond to interview questions.

Research tools:

This section of the analysis includes the qualitative data collected from the semi-structured interviews.

The themes were developed from the questions. The codes were labelled with MAXQDA12 software and a word or phrase actually used by the participants. This preserved the faculty members’ words in describing their experiences of and attitudes towards online learning for teaching Special Education courses during COVID-19. The main themes labelled were as follow:

- 1-Theoretical courses
- 2-Practical courses
- 3-Learning outcomes
- 4-Faculty members’ views of e-learning
- 5-Skill development

The next section will describe each area and which themes were identified under each topic.



Research Procedures:

In an effort to ensure confidentiality and anonymity during the faculty members' interviews, and therefore to encourage freedom of speech in the participants, each faculty member who participated in this research was allotted a code. This code consisted of a number and letters denoting the subject of the interview. For example, the first participant was given the acronym OS 01; (01) is the faculty member's number, "OS" symbolises the area of the interview referring to "Online" and "Special Education". The participants' responses were labelled using these standard codes to ensure anonymity.

Analysis and Discussion

Theoretical subjects

This theme is key to identifying the perceptions of members of their experience of teaching Special Education courses during the COVID-19 pandemic. Most faculty members responded that the online learning method of teaching Special Education courses was appropriate for teaching theoretical courses.

For example, member OS06 stated, "I believe that distance learning is suitable for the curricula of the Special Education course and specifically for theoretical subjects".

Another member OS02 shared a similar view, as she said that, "Most of the Special Education

curricula depend on theory and on traditional teaching methods such as lecturing, and no harm will occur if the teaching occurs via distance teaching or via face-to-face teaching".

The outcomes of this research support the result reported by Scott and Temple (2017), who designed and delivered an online Special Education course and found positive results for students' engagement and preparation throughout the course, as was reported by both the students and teachers involved.

Practical Courses

Faculty members indicated that the online learning method caused some obstacles and challenges for teaching practical parts of the Special Education course.

Member OS03 pointed out that, "The field training curricula cannot be achieved in the desired form or output if their teaching is executed via distance learning".

Also, member OS02 stated, "Distance learning has its greatest negative effect on the practical curricula relating to field visits as the requirements of the field curricula require the student to actively and practically participate in case studies".

Moreover, member OS06, pointed out that,

"Distance learning during the coronavirus crisis has had an effect on the curricula of the practical subjects as students cannot achieve their learning outcomes. This includes the completion of a case study and some practical activities have stopped because schools and centres for people with disabilities were closed. These subjects require direct application and therefore this problem was solved by studying hypothetical cases using



videos online”.

This result might be attributed to the nature of the Special Education Department at Princess Nourah University, which requires that students have to do their practicum onsite. This is contrary to Ottley et al. (2019), who state that university educators can engage well with clinical coaching methods that involve emails and video recordings.

Learning Outcomes

Learning outcomes are defined as “the methods to evaluate the students’ understanding in light of the goals of a lesson or a subject (Leeuwenkamp, Brinke, & Kester, 2019). Some members criticised the online learning method and its effect on the required assessments of practical subjects. As member OS06 stated,

“Distance learning greatly affects the evaluation methods of the field training curricula as it will negatively impact on the qualifications of female students since their skills will be underdeveloped, resulting in potential issues when they look for jobs. There were some modifications to the teaching plans that could be made to solve this including modifications to evaluative criteria to ensure that they could be carried out online”.

In addition, member OS05, pointed out that,

“The distance learning method directly affected the methods and techniques of curricula evaluation as well as the scientific subjects, which include field training curricula which incorporate an education session of a child with autism. This was replaced by a hypothetical education session using Zoom. This does reduce the experience required of students in evaluating such case studies”.

Similarly, member OS02 indicated that, “We faced some difficulties in the evaluation method of the scientific subjects and we had some difficulties in striking a balance between the outcomes and the practical success criteria during the current circumstances of COVID-19”.

This finding corresponds with a study by Moawad (2020), who stated that adopting new technology while teaching could affect the achievements of students and educational institutions. Faculty members at King Saud University faced the same difficulties in assessing their students’ understanding as the faculty members in this research.

Faculty members’ views on e-learning

This theme is key to identifying the perceptions of faculty members with regard to online teaching for Special Education courses during the COVID-19 pandemic. The sub-themes identified were: career progression, self-learning, peer discussion, culture and social customs.

Career Progression

One member responded that teaching online in the time of the coronavirus had improved their teaching experiences. For example, member OS01 claimed, “I learnt a lot from distance



learning during the pandemic and it developed my teaching methods. It made my approach more varied than the traditional teaching skills I use, which I will be able to work on in the case of an emergency that requires a further halt to face-to-face study”.

Similarly, member OS06 indicated that, “Distance learning has developed my teaching skills and also developed the way in which educational lectures or academic meetings are carried out”.

OS05 shared a similar view, as she said that:

“It developed my skills. This experience has increasingly aroused my curiosity in attending training courses and workshops about the use of “Blackboard”. Design was specifically covered as a topic to ensure we were better acquainted with the methods and tools of transferring the traditional educational activities to an online forum in the current circumstances”.

This result indicates that using technology in Special Education can be effective not only in improving faculty members’ teaching experience, but also in enhancing Special Education teachers’ skills, as shown in Alnemary et al., (2015) study.

Self-learning and teacher-student interaction

Faculty members responded that online learning had influenced self-learning in students, in contrast with traditional teaching and learning methods. Furthermore, the members explained that online learning provided students with cognitive strategies that allowed them to think critically, make decisions and solve problems.

For example, member OS04 indicated,

“I see that online learning or e-learning has provided the students with the chance to acquaint themselves with their own learning strategies and made them more independent e.g. by searching for different sources more effectively. This is because the lectures are usually supported by studies, scientific papers and educational videos in addition to the lecture content and this provides the students with the chance to have a conversation, think critically, and ask questions on the discussion board at any time, which resulted in developing their critical thinking skills and deep learning”.

Also, some members explained that online learning had a positive effect on their interactions with their students. For example, member OS09 stated,

“I observed some of my students, who rarely ask questions in the classroom because they are shy to speak up and do not like to engage in a big group conversation, and how they started to interact with me and discuss the lecture subject more critically. They even shared some related materials with me and the class, which really enriched their knowledge, thinking and skills”.

These results are consistent with the outcomes of Afify (2019), who specified that discussion forums constitute an important resource for promoting dialogue among students, contributing to the enhancement of their critical thinking. This in turn provides greater opportunities for all students to discuss and exchange opinions, and to process knowledge and reflect on



information. These findings are also comparable to those of Singh and Thurman (2019) and Jackson and Fearon (2014), who indicated that online learning should enhance interactions between students and teachers, both in terms of asynchronous interactions such as assessments and the provision of online course resources, and synchronous interactions such as conference tools, discussion boards, newsgroups and email.

Peer discussion

The results show that online learning offers a discussion forum which helps students to engage with others in their reflection on learning. It also allows students to practise easily and thus contributes to peer learning. As member OS03 pointed out,

“One of the advantages of online teaching is that it provides the students who did not effectively participate before the pandemic with the chance to participate. We found that their electronic participation greatly increased online. The electronic discussions on “Blackboard” were evidence of this. This forged an opportunity for peer learning in which colleagues could discuss options and ask scientific questions”.

This result supported Liu et al. (2016), who believe that students are increasingly taking on the obligation of more self-learning, including goal setting, choosing personal learning strategies, monitoring their learning in stages, reviewing their motivations and learning behaviour and reflecting on their own practices.

Culture or Social Customs

The term ‘social customs’ refers to behaviours and standards that are shared and expected of a particular culture. For this reason, some people from different cultures act and behave differently depending on their social customs. Hence, social customs could affect all aspects of life, including education and views.

Some members pointed out that some parents have different perceptions about the nature of their children’s disabilities and feel that society has not been fully educated on how to deal with such disabilities. For example, member OS03 stated that,

“We faced some difficulties during the COVID-19 crisis in the field training courses and in the case study courses such as “the autism practicum” as they require face-to-face interaction with children who have Autism Spectrum Disorder, but I believe that we can solve these obstacles and make use of these online techniques with parents’ cooperation by recording videos of their children and sending them to the specialist in order to help with intervention strategies and enable parents to deal with children’s reactions. This would be a helpful step forward but social beliefs and cultural norms may mean that they refuse to make videos of their children because they feel ashamed or embarrassed to have a child with disabilities in their family”.



Also, some members suggested solutions to problems with online learning linked to social customs: "...we want to raise the awareness of the parents of the children with disabilities by making videos of the children through the use of social communication networks".

The results of this research draw attention to the need to use video-recording and training through videoconferencing in Saudi Arabia. As mentioned in a number of studies above (Al-Jadid 2014; Madi et al., 2019; Alwhaibi et al., 2020), the Saudi culture plays an important role that negatively affects the teaching of Special Education. This calls for more research and study on the attitudes of parents of children with disabilities towards video-recording for educational purposes (Alnmary et al., 2015). In addition, Ottley et al. (2019) believe that video-recording and videoconferencing strongly enhance students' learning outcomes. Moreover, Ottley et al. (2019) highlight that using technology would enhance clinical coaching for Special Education faculty members training and provide faculty members with feedback and guidance. The current research's results draw professionals' attention to the importance of investigation into how to implement such a technology in Saudi Arabia.

Future use of LMS

All faculty members had a positive point of view of online learning as a tool to teach Special Education courses and they would consider using it again in the future. For example, member OS05 said:

"This experience will impact on teaching in the future. We need to understand how to benefit from this technology. We can also make use of this technology in terms of electronic tests and how they are evaluated. This is in contrast to the traditional test method where the female students attend an exam hall".

The current research's results are similar to those reported by Alzahrani and Brigham (2017), who also confirm the importance of an approach incorporating technology when teaching a Special Education course. In addition, university faculty members in Saudi Arabia need to pay more attention to how to use and improve their teaching style effectively, particularly with regard to the use of online learning and technology in general. Moawad (2020) explains that some faculty members at King Saud University had never used such technology before the coronavirus for teaching and evaluating students, even though they had enrolled on courses and trained on utilising online teaching effectively. This could be attributed to the fact that by the time the pandemic had taken hold, the faculty members involved in the research may not have had a chance to put their training into practice or to increase their own confidence in using it.

Skill Development

All members responded that online learning helped them to improve their technology skills with regard to Blackboard. These skill improvements were listed as being in the realms of e-exam design, the virtual classroom, discussion forums and the use of the video



communication software 'Zoom'. Similarly, member OS06 indicated that:

“The distance learning experience has developed some technical skills by using Blackboard with all of its electronic tools such as virtual classes, preparing the electronic tests using it and the discussion seminar and the use of Zoom, the video conference program”.

Another member mentioned that online learning during the pandemic helped them to enhance some skills such as time management. For example, member OS01, in concurrence with OS05, stated that:

“The distance learning experience has developed several skills, most important of which is crises management and how to manage and work at the time of such crises e.g. how to complete educational tasks and adapt the success criteria in a way that matches the situation in addition to managing cooperative learning and time management as well as technological skills”.

Member OS04 confirmed this point, explaining that, “From the distance learning experience I gained, during the coronavirus, several skills in how to deal with the e-learning management system “Blackboard”, how to manage my priorities and plan and organize at any time”.

The current research's results seem to indicate the opposite of those reported by the following researchers: Aldosemani et al., (2019), Bousbahi and Alrazgan (2015), El Zawaidy (2014). This finding proved the effectiveness of the reactive approach that the College of Education at Princess Nourah University has taken to deal with an unexpected pandemic. The College of Education at Princess Nourah University offered their faculty members and students a range of support around the clock. There were numerous online training courses, instant support and technology consultants to contact for support.

Conclusion and future work

Faculty members had a positive view of their experience of online learning on the whole and they found proactive ways to deal with issues such as the students' inability to complete the practical case study element of the course. The members of the Special Education Department seemed to favour video creation and conferencing as a way to solve this problem. They also recognised online learning's potential as a way forward to improve their teaching and felt they had developed their own skills as well as their students' self-regulation skills. In the context of other studies in the same cultural context, the results are very similar; it is recognised that technology needs to be better integrated into teaching at university level when teaching returns to “normal,” by developing the blended learning approach. The confidence of faculty members in using LMSs such as Blackboard has been increased, thanks to the time spent on active skill practice during the pandemic and this on-the-job training must be a continued expectation in the future to ensure that motivation, inspiration and confidence continue to increase among the faculty members, in turn positively impacting on the



experiences of their students.

In future research, it would be interesting to compare the feelings of other faculty members in different departments of the university to truly compare the use of online learning and to identify where the Special Education Department stands in terms of their online course content. In this way the university would be able to share “best practice.” In order to do this, it is necessary to investigate a larger group of participants than the ten in this research; however, this research has provided the premise for a larger research and indicates that online learning has aided these faculty members in the continuation of a vital course for their students, as well as developing their own skills.

Acknowledgments

This research was funded by the Deanship of Scientific Research at Princess Nourah bint Abdulrahman University through the Fast-track Research Funding program.

References

- Afify, M. K. (2019). The Influence of Group Size in the Asynchronous Online Discussions on the Development of Critical Thinking Skills, and on Improving Students' Performance in Online Discussion Forum. *International Journal of Emerging Technologies in Learning*, 14(5), 132–152. <https://doi-org.sdl.idm.oclc.org/10.3991/ijet.v14i05.9351>
- Aldosemani, T., Shepherd, C. E., & Bolliger, D. U. (2019). Perceptions of Instructors Teaching in Saudi Blended Learning Environments. *TechTrends: Linking Research & Practice to Improve Learning*, 63(3), 341–352. <https://doi-org.sdl.idm.oclc.org/10.1007/s11528-018-0342-1>
- Al-Jadid, M.S. (2014). Disability Trends in Saudi Arabia: Prevalence and Causes. *American Journal of Physical Medicine & Rehabilitation*, 93, S47–S49.
- Aljaber, A. (2018). E-learning policy in Saudi Arabia: Challenges and Successes. *Research in Comparative and International Education*, 13(1), 176–194. <https://doi-org.sdl.idm.oclc.org/10.1177/1745499918764147>
- Al Meajel, T. M., & Sharadgah, T. A. (2018). Barriers to using the blackboard system in teaching and learning: Faculty perceptions. *Technology, Knowledge and Learning*, 23(2), 351-366.
- Alnemary, F., Wallace, M.D., Symon, J.B., & Barry, L.M. (2015). Using International Videoconferencing To Provide Staff Training On Functional Behavioral Assessment. *Behavioral Interventions*, 30, 73-86.
- Alokuk, J. A. (2018). The Effectiveness of Blackboard System, Uses and Limitations in Information Management. *Intelligent Information Management*, 10(06), 133.
- Alquraini, T.A., & Rao, S.M. (2018). A Study Examining the Extent of Including Competencies of Inclusive Education in the Preparation of Special Education Teachers in



- Saudi Universities. *International Journal of Disability, Development and Education*, 65, 108 - 122.
- Arghode, V., Brieger, E.W., & Wang, J. (2018). Engaging instructional design and instructor role in online learning environment. *European Journal of Training and Development*, 42, 366-380
- Alwhaibi, R.M., Zaidi, U., Al-zeiby, I., & Alhusaini, A.A. (2020). Quality of Life and Socioeconomic Status: A Comparative Study among Mothers of Children with and without Disabilities in Saudi Arabia. *Child Care in Practice*, 26, 62 - 80.
- Ayittey, F.K., Ayittey, M.K., Chiwero, N.B., Kamasah, J.S., & Dzuovor, C. (2020). Economic Impacts of Wuhan 2019? nCoV on China and the world. *Journal of Medical Virology*, 92, 473 - 475.
- Alzahrani, A. N., & Brigham, F. J. (2017). Evaluation of Special Education Preparation Programs in the Field of Autism Spectrum in Saudi Arabia. *International Journal of Special Education*, 32(4), 746–766.
- Bates, T. (2014). A Short History of Educational Technology. Retrieved from <https://tonybates.wpengine.com/2014/12/10/a-short-history-of-educational-technology/>
- Brady, M., & O'Reilly, N. (2020). Learning Management Systems and Their Impact on Academic Work. *Technology, Pedagogy and Education*, 29, 251 - 268.
- Cagiltay, K., Cakir, H., Karasu, N., Karasu, N., Islim, O. F., & Cicek, F. (2019). Use of Educational Technology in Special Education: Perceptions of Teachers. *Participatory Educational Research*, 6(2), 189–205.
- Chen, J.C., Dobinson, T., & Kent, S. (2019). Lecturers' Perceptions and Experiences of Blackboard Collaborate as A Distance Learning and Teaching Tool Via Open Universities Australia (OUA).
- El Zawaidy, H. A. Z. H. (2014). Using Blackboard in Online Learning at Saudi Universities: Faculty Member's Perceptions and Existing Obstacles. *International Interdisciplinary Journal of Education*, 7, 145. <https://doi-org.sdl.idm.oclc.org/10.12816/0006902>
- Fatiha Bousbahi, & Muna Saleh Alrazgan. (2015). Investigating IT Faculty Resistance to Learning Management System Adoption Using Latent Variables in an Acceptance Technology Model. *The Scientific World Journal*, 2015. <https://doi-org.sdl.idm.oclc.org/10.1155/2015/375651>
- Gerritsen-van Leeuwenkamp, K. J., Joosten-ten Brinke, D., & Kester, L. (2019). Students' perceptions of assessment quality related to their learning approaches and learning outcomes. *Studies in Educational Evaluation*, 63, 72-82.
- Jackson, S., & Fearon, C. (2014). Exploring the role and influence of expectations in achieving VLE benefit success. *British Journal of Educational Technology*, 45(2), 245-259.
- Joosten, T., & Cusatis, R.N. (2020). Online Learning Readiness. *American Journal of Distance Education*, 1-14.
- Liu, G. Z., Liu, T. C., Lin, C. C., Kuo, Y. L., & Hwang, G. J. (2016). Identifying Learning Features and Models for Context-Aware Ubiquitous Learning with Phenomenological



- Research Method. *International Journal of Mobile Learning and Organisation*, 10(4), 238–262.
- Longhurst, G. J., Stone, D. M., Duloherly, K., Scully, D., Campbell, T., & Smith, C. F. (2020). Strength, Weakness, Opportunity, Threat (SWOT) Analysis of the Adaptations to Anatomical Education in the United Kingdom and Republic of Ireland in Response to the Covid-19 Pandemic. *Anatomical sciences education*, 13(3), 301-311.
- Madi, S.M., Mandy, A., & Aranda, K. (2019). The Perception of Disability Among Mothers Living with a Child with Cerebral Palsy in Saudi Arabia. *Global Qualitative Nursing Research*, 6.
- Moawad, R.A. (2020). Online Learning during the COVID- 19 Pandemic and Academic Stress in University Students. *Revista Romaneasca pentru Educatie Multidimensionala*, 12, 100-107.
- Ottley, J. R., Coogle, C. G., Pigman, J. R., Sturgeon, D., & Helfrich, S. (2019). Online Clinical Teacher Preparation Programs in Special Education: Perspectives and Critical Components. *Journal of Special Education Technology*, 34(4), 239–252.
- Scott, L.A., & Temple, P. (2017). A Conceptual Framework for Building UDL in a Special Education Distance Education Course. *Journal of Educators Online*, 14.
- Singh, V., & Thurman, A.C. (2019). How Many Ways Can We Define Online Learning? A Systematic Literature Review of Definitions of Online Learning (1988-2018). *American Journal of Distance Education*, 33, 289 - 306.
- WHO(2019) available at : <https://www.who.int/ar/emergencies/diseases/novel-coronavirus-2019/advice-for-public>
- Yousif .Y.O(2020) Students' attitudes towards e-learning under the Corona pandemic. *Al-Hikma Journal for Media and Communication Studies* 8(2)34- 66