VIRTUAL PROFESSIONAL DEVELOPMENT COURSE ON TEACHING VISUALLY IMPAIRED STUDENTS: FOCUS ON INNOVATIVE IDEAS AND TECHNOLOGY

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ABSTRACT

Drawing on archival research analysis of data collected from policy documents of the Centre for Preparatory Studies at Sultan Qaboos University, its professional development needs surveys and materials of the in-house Moodle-based professional development courses, the authors offer a picture of the Centre's virtual professional development courses. Using qualitative data, as well as literature review, they explore the rationale for the virtual professional development course for the English language faculty of the Centre for Preparatory Studies on teaching visually impaired students with specific emphasis on language education and use of innovative ideas and technology and its possible impact on both teachers and learners. To provide a more focused account, the authors' exploration includes administrators' and policy-makers' views and perceptions. Their major finding is a role of a successful virtual professional development course as a synergy of technology, real life pedagogical issues and teaching and learning needs and online activities that encourage a sense of community and enable participants to successfully learn and contribute to the context, either in content or procedure.

Keywords: virtual professional development, Moodle, language teaching and learning, visually impaired students, innovations

INTRODUCTION

In the Omani context, a recent study by Al-Busaidi and Tuzlukova (2018) that examines the English language educators' perceptions of practices for supporting inclusion of undergraduate students with visual impairment emphasizes the potential of innovative ideas and technology in addressing fundamental issues that have an effect on student teaching and learning. The study also reveals that it is time to give rise to pedagogical change in inclusive education in which technology will be seen 'as both a tool and a catalyst for change' (Waddell, 2015, n.p.). Despite the fact that many institutions of higher education in Oman similar to the educational establishments in other educational contexts are privileged to have 'ready access to technology, trained teachers, and a favorable policy environment' (Waddell, 2015, n.p.), teaching and learning of visually impaired students and their technological support still remains a challenge. Al-Busaidi and Tuzlukova (2018) attribute this to teachers' limited knowledge and expertise in the use of innovative ideas and technologies. They believe that language educators should be knowledgeable of innovative ideas and concepts and embrace technology that facilitates supportive classroom environment and effective student teaching and learning (Wyszyńska, 2016). According to Al-Busaidi and Tuzlukova (2018), the role of teacher professional development for prompting pedagogical change and increased effectiveness and effectiveness in teaching and learning of visually impaired students is central. This understanding is in line with research on teacher professional development perceived as 'a process of increasing participation in the practice of teaching'

(Cobb, 1994, as cited in Borko, 2004, p.4) that aims at extending and updating teacher professional knowledge and beliefs in the context of their work (Guskey, 2000; Driel, Beijaard, & Verloop, 2001), and emerges in different types and forms of in-service training opportunities and structured programs.

As described in Cobb (1994), 'learning should be viewed as both a process of active individual construction and a process of enculturation into the … practices of wider society" (p.13). How then teachers' learning, their experience and expertise in teaching visually impaired students can be enhanced in the context of virtual professional development course through Moodle? This is the question that this paper, which discusses the rationale for the virtual professional development course for the faculty of the Centre for Preparatory Studies at Sultan Qaboos University on teaching visually impaired students with specific emphasis on language education and use of innovative ideas and technology, is going to address.

CONTEXT

The Centre for Preparatory Studies prepares students who have been accepted to study at Sultan Qaboos University in a variety of courses in mathematics, information technology and English, and aims to set the foundation for students' academic achievements in foundation, undergraduate and postgraduate programs. It is essential for the Centre for Preparatory Studies at Sultan Qaboos University to meet training and professional development needs of its faculty. The Centre has a comprehensive range of professional development programs and events for teachers; however, according to Professional Skills and Needs Survey (2011) conducted at the Centre, not all faculty can gain all the professional development they would like to have due to lack of time, multiple academic and community commitments and huge work load. To address these challenges and extend professional development opportunities for excellence in 21st century teaching, personal growth and career advancement of the faculty, a series of interactive virtual Moodle-based courses was developed and delivered at the Center, for example, ELT Virtual Professional Development course [https://elearnt.squ.edu.om/course/view.php?id=78]. The goals of using Moodle course management system for virtual professional development and training design and delivery included but were not limited to enhancing and extending the Centre's professional development plans and providing teachers with features, space and tools for peer-to peer professional development and personalized adaptive learning (Al-Khanjari, 2013, p.5). It is believed that such learning originates from teachers' individual choices and professional development needs, supports reflective practice and encourages open sharing of ideas and experience (Tuzlukova & Rozina, 2010). Also, the virtual context can help teachers get more out of their professional development 'through more time to reflect, collaborate and apply their learning, and to gain greater confidence in using the online context for teaching and learning' (ELT virtual professional development, n.d., n.p.). To illustrate, virtual training was offered on such 21st century characteristics and skills, as critical thinking and problem solving in 'How to incorporate critical thinking in teaching and why to do so' [https://elearnt.squ.edu.om/course/view.php?id=33]. Another course virtual professional development course in Moodle was titled 'Focus on problem solving' [https://elearnt.squ.edu.om/course/view.php?id=345]. These courses were designed to help teachers enhance skills, knowledge, and attitudes, and, consequently, have a visible influence on the educational process, eventually leading to students' achievements in mastering 21st century skills and characteristics. Through the use of articles and other course materials teachers were able to develop their knowledge in areas related to 21st century skills teaching and learning, and were able to reflect on the application to own teaching practice. Through the use of the virtual Moodle-based environment that was successfully "adapted" to

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individual personal and professional needs, they were able to bring creativity and innovation to their teaching practice. The developed virtual courses have substantially extended professional development opportunities at the Centre for Preparatory Studies in sense of offering time and space flexibility, synthesis of technologies, virtual group and individual work (Katz & Rice, 2002, p.352) through Moodle. They also facilitated the development of a concept of how virtual professional development can be achieved within the context of language education by the teachers and for the teachers. The goal of developing such concept was to use it to guide the virtual professional development modules and programs that will follow from these courses. Lessons learnt have made it possible to enhance social practices of professional development currently in place, empower teachers in sense of motivation, overcoming psychological barriers, creating the "collective intelligence" (Levy, 1997) and provide opportunities for developing new professional development programs and virtual training for faculty on the topics of professional interests and needs. One of such needs is teaching of special needs students for them to be more inclusive in their English language learning and for the instruction to be tailored in a way to respond to individual students' needs by using innovative approaches in education and technology. This perspective corroborates with current research that indicates the importance of investing in teacher professional development programs "that are integrative, model innovative practice, and promote innovation" (Murraym& Christison, 2012, p.74).

METHOD

The study was designed within the framework of qualitative research to gain insights into the mechanism of the virtual course on teaching visually impaired students' design, its outcomes, content and context development requirements, setting up steps and approaches to successful training in teaching visually impaired students with a focus on innovative ideas and technology. The qualitative research measures were used. The qualitative measures included interviews with two representatives of the Centre's leadership and administration, and one staff member responsible for facilitating visually impaired students' teaching and learning programs. These participants were considered to be key resources due to their involvement in setting professional development programs and facilitating teaching and learning of visually impaired students. According to the participants, their key administrative roles determine their interest in being involved in teacher training initiatives. To exemplify, when asked about a possible participation in online course, all of the participants strongly agreed. For example, one participant explained: '*I would do it first myself and then suggest it for others because I would like to have a firsthand experience of how viable it is, what are the possibilities, how the experience has been. We are not the same, but at the same time if you have the experience, you can sell the idea better for teachers and empathize with them if they actually struggle later, you know, why this is happening. I think it would give me, if I talk about myself, a fair assessment of what a teacher would go through and what the administration thinks about the situation. So, to be able to have that kind of clarity, I think that admin staff, people at the decision-making positions, should go for this training themselves, and I definitely would like to go for one myself*' (Participant 2).

The interviews particularly focused on the participants' understanding of the teaching approaches and theories underpinning inclusive education of the visually impaired students at the Centre for Preparatory Studies. They also explored research subjects' opinions and experiences to better teachers' professional development needs related to teaching and language learning of students with visual impairment as well as the challenges they think teachers are faced with while engaging in the course design and instruction. In particular, the

focus was placed on the aspects of technological challenges and challenges related to integration of innovative ideas in classroom pedagogy. The interviews' responses were transcribed and then summarized. The core themes for potential virtual professional development were identified, extracted, grouped and analyzed along with the relevant comments and findings from the archival research analysis (L'Eplattenier, 2009) that was also involved in the qualitative measures. According to Turiano (2014), 'the increased use of archival data is partly a result of the growing number of international, national and local studies that are archived by research study teams' (p.323). The evidence was sought and extracted from the archival records of the primary source materials archived by the Centre's researchers in the e-learning platform of the university. These records included policy documents of the Centre for Preparatory Studies, its professional development plans and needs surveys and materials of in-house Moodle-based professional development courses. These local records together with related national and international studies were used to determine the presence, meanings and relationships of themes related to inclusive education and visually impaired students' language teaching and learning. The purpose of collecting multiple sets of data was also to ascertain whether additional insights could be provided into the process of virtual professional development course design and delivery.

RESULTS AND DISCUSSION

Results of the study indicate that teacher training and professional development programs play a very important role in educational institutions, and the Centre for Preparatory Studies is not an exception. However, to expand teachers' knowledge in theories and practices in teaching visually impaired students, and further their skills and judgements, it is important to extend professional development opportunities currently in place and provide space for learning and development. Otherwise, as noted by White (1998), their teaching will be reduced to the level of craft (p.5). Also, to ensure significant improvement of teaching and learning practices, especially in the context of inclusive education, professional development programs and activities should involve collaborative learning. This tool, according to Yadav (2011), 'covers almost all the techniques that can be applied for the development of professionalism in English language teaching' (p.126), including virtual professional development. Also, as emphasized by Waddell (2015), 'teachers should be open to introducing technology into the classroom to improve and innovate their teaching practice' (n.p.). They should also be encouraged to enhance their professional competencies by providing opportunities for them to learn about new teaching ideas and practices.

As indicated in research, 'virtual context should be designed to enable the professional development affordances to be achieved' (Tuzlukova & Hall, 2016, p.607). Tuzlukova and Hall (2016) note that 'faculty need a context that enables collaboration, reflection on practice and application to their context, and in a way that is motivating and clearly based on the authentic environment of their professional practice of language teaching. This obviously means that the virtual design is more than a document resource site, but one that promotes reflective collaborative learning in authentic contexts' (p.607). This understanding was shared by the study participants who strongly supported professional development in the virtual environment 'customized for the Centre's needs', as described by one of the participants. Though the needs of the Centre's faculty are 'so varied', as one of the participants put it, and are fully or partially in focus of the in-house professional development programs, for example, Oman International ELT conference [https://conferences.squ.edu.om/elt], there is need for a stimulating and rewarding professional development forum to motivate teachers, engage them in reflection and be

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conducive to continuous reshaping of the knowledge of inclusive education and teaching and learning of special needs students.

In the context of our study, some common opinions and views were expressed during the interviews regarding the challenges teachers face when involved in inclusive education. Data from the interviews suggest that lack of training is one of the major challenges. According to all the participants, they will value a number of themes related to visually impaired teaching and learning for professional development. These are the themes related to teaching philosophies, teacher classroom behavior, psychological and technological support of teachers. However, in their discussions of potential themes, study participants mostly referred to assistive technologies and innovations in special needs students' teaching and learning. These responses were very important when considering the rationale of potential courses, their pedagogical designs, content and discussion topics for them to effectively support teachers' learning and reflective practice of teaching visually impaired students. For example, the identified needs of the Centre's faculty to be addressed are as follows: (a) faculty need more content and pedagogical knowledge about assistive technology and innovative ideas in teaching visually impaired students. Both have been identified in the responses of the subjects in this study as challenges for language educators; (b) faculty have little experience with the inclusive education environment at a time when the university should be exploring making its courses available to a wider student population. The faculty will learn more about how to make the language classroom, the content, the teaching, and the assessments accessible through assistive technology and will have the necessary knowledge about tools that will assist in creating inclusive and accessible classroom. The overall aims of the virtual courses for interactive faculty continued professional development and training in teaching visually impaired students can include such aspects, as (a) development and enhancement of teachers' knowledge and skills in the context of inclusive education; (b) providing access to the most recent knowledge and expertise in teaching visually impaired students in a traditional academic setting that involves assistive technology; (c) incorporation of a broader range of information and integration of the courses' content with the online materials and online interaction; (d) removal of space and time barriers to collaborative work on assignments, readings and other learning tasks; (e) helping faculty reflect on their teaching practice and revise it.

Using courses currently in place for the Centre's faculty professional development as a prototype that includes exercises, relevant media sections, design content presentations and learner's movements through course activities, it is feasible to develop and set up a course with a focus on innovative ideas and technology in a virtual environment on Moodle platform to be used in an interactive manner. The virtual course can engage faculty in activities aimed at defining, conceptualizing and discussing the constructs related to assistive technology for visually impaired students' teaching and learning; recognizing relevant contexts and situations. Articles and questions will be provided as a basis for the discussion. Faculty will also be involved in exploring some ideas and technological tools for them to better understand their features, characteristics and applications and improve their teaching practice. One of the possible virtual courses in Moodle digital learning environment may focus, for example, on technological innovations for shifting practices and perspectives of English language teaching to visually impaired students. This can be an integrated teacher training course that covers several technological devices and techniques, practical tips and solutions alongside exploring challenges and chances of using technology to adapt teaching methods currently in place to be universally accessible, equally usable, more inclusive and tailored to students who have vision problems. The course will focus on assistive technology used to

support the inclusion of visually impaired students in regular language education placements and access to the language course curriculum. While examining assistive technology for students with special needs, Waddell (2015) defines assistive technology 'as an item, piece of equipment or product system that can be used to maintain, increase or improve functional capabilities for any person with a special need' (n.p.). According to Waddell (2015), the incorporation of technology can provide benefits to students with disabilities 'who may be in a better position to interact with the lesson through technology' and can place 'teachers in a better position to customize learning for students with special needs' (n.p.).

The skills expected to be trained in this course involve (a) knowledge of different types of assistive technology to implement solutions to solve various problems in visually impaired students' language learning; (b) identification of the appropriate technology for specific case; (c) distinguishing between different technologies used for language teaching and learning of visually impaired students; (d) familiarization with Non-Visual Desktop Access technology, and (e) detailed use of Non-Visual Desktop Access software. Such perspective is among the most needed themes for the professional development of the Centre's faculty. For this course, materials will be posted on Moodle platform and can be customized to create a holistic learning experience of the course participants and meet their needs. Materials of the course can be accessed anytime, anywhere, and Moodle forum can be used to answer and discuss critical questions related to using assistive technology in teaching language to visually impaired students. The goals set for the course following the prototype courses include (a) raising language teacher awareness in innovative technology for special need student learning; (b) getting teachers familiarized with the available assistive technologies, what they do, where to find relevant features, how to operate them, and how they will benefit the language learning of visually impaired students, and (c) providing hands-on experience in using Non-Visual Desktop Access technology for visually impaired students' effective involvement in the English language classroom. Since 'assistive technology is most successful when both the user and their providers understand the purpose of the technology, are proficient operating its relevant features, and have confidence in their ability to use it' (Assistive technology training, n.d., n.p.), the importance of general teacher awareness in using assistive technology and training is critical. It is believed that by the end of the virtual course, the participants will be able to understand the purpose of the assistive technology and different types of assistive technology; will acquire knowledge in operating Non-Visual Desktop Access technology's relevant features and will have confidence in using Non-Visual Desktop Access technology in teaching visually impaired students.

CONCLUSIONS

The examination of the results of the study aimed to explore the rationale for the virtual professional development course for the faculty of the Centre for Preparatory Studies on teaching visually impaired students proves the need for shared considerations over this professional development tool. It also calls for course design to be a synergy of technology, real life pedagogical issues and teaching and learning needs and online activities. This will encourage a sense of community and enable participants to successfully learn and contribute to the context, either in content or procedure, and help teachers enhance pedagogical content knowledge in using technology for teaching visually impaired students and gain opportunities to reflect critically on their own practice and address the new knowledge and beliefs.

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