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Emergency Student Practicum During the Pandemic at Saudi Universities

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Abstract: This study investigates how emergency practicum was carried out during the COVID-19 Pandemic in the past two years (Spring 2020 to Sprin 2022) in Saudi Arabia. Results of surveys with a sample of instructors from Languages, Translation, Literature, Linguistics, Education and Computer Science Departments at a sample of universities in Saudi Arabia showed that most universities shifted to online (virtual) practicum such as online micro-teaching, online simulated teaching, remote hands-on teaching using the Saudi Ministry of Education's Platform "Madrasati" that is used for Grades k-12; reduced hours and days of face-to-face teaching practicum and training; a Teacher Mentoring Program for EFL majors and a Cooperative Training Program for linguistics and translation students. Translation students also had the option to translate 14,000 words remotely (at home), discuss and receive feedback online instead of field training in translation. In computer science, the students could complete their face-to-face practicum in small groups during the summer to maintain social distancing or attend 135 hours of online training courses in a variety of computer fields. Recommendations for further emergency practicum solutions are given such as student-created videos and podcasts, delivering lessons via a variety of live-streaming software such as Elluminate, Periscope and Facebook Watch Party, joining professional teachers and translators' forums and pages on social media, developing Apps, robots, and conducting some learning analytics of students' data in distance learning contexts in Saudi Arabian schools and universities; offering courses that prepare students for remote (online) jobs during the Pandemic and beyond.

Keywords: emergency practicum; computer science; education, languages and translation; Saudi universities; COVID-19 Pandemic.

I. INTRODUCTION

Many college students around the world are required to complete a practicum or training in partial fulfilment of their degree requirements. The practicum is a valuable learning tool that gives the students an opportunity to demonstrate their knowledge and skills in real world settings. It aims to prepare graduating students for their future careers. In a practicum[1], the students may first observe and connect their field practices with the theories and methods they have studied, or they are currently studying. They may observe and note how professionals perform their job duties as in observing a teacher in the classroom. They might perform some tasks under the supervision of staff or an instructor, or they might be required to shadow some employees who explain their duties and work processes. They visit a workplace for two-to-four-hour sessions, two or three times a week. Practicum students may take notes or write a report about their experiences which they submit to their mentor instructor. The students may work on their practicum per se or simultaneously enrol in courses that reflect job duties, expectations, and requirements.

Before the outbreak of the COVID-19 Pandemic in March 2020, practicum was held face to face. But after the outbreak of the Pandemic there was a sudden shift to remote teaching and learning. Practicum supervisors, department heads and college administrators had to find alternatives to face to face practicum [1], [2]. Such practicum alternatives varied from college to college, university to

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[1] What is the Difference Between an Internship and a Practicum? | College Counselor Services

university and one area of specialization to another especially because such practicums are practical courses where students apply their knowledge to real life work situation as opposed to theoretical, academic courses. Since there was a sudden shift from face-to-face teaching to online teaching and learning including practicum courses, training, and other graduation requirements, one would wonder what kind of practicum/training options were given to students, what difficulties they encountered in performing their emergency practicum and their attitudes towards the emergency practicum modes.

A review of the literature has shown some prior studies that investigated college practicum during the Covid-19 Pandemic in different disciplines such as physical education, counselling, English language teaching, teacher education, social work and early childhood, in numerous countries such as Portugal, Greece, Turkey, Columbia and others. The first group of studies explored the difficulties that students faced in the physical education practicum during the COVID-19 Pandemic [3]; preservice teachers' difficulties in re-assembling physical education and feelings of precarity, fear and insecurity [4]; experiences of student teachers in an early childhood education practicum [5]; touchless classes and absent bodies in teaching physical education in times of COVID-19 [6]. In addition, student social workers completing the practicum process observed significant disruption to traditional social work education, although both students and field supervisors increased the use of video conferencing and telephone practice [7]. English Language Teaching Education students and Their Instructors had technical problems, problems in applying courses, lack of social interaction, assessment and evaluation, workload, health problems and low motivation [8]. In Trinidad and Tobago, early childhood, primary education programs, and the in-service post-graduate diploma in secondary education were struggling to adjust to online teaching, the anxiety of coping with a dangerous Pandemic, and worrying about program completion [9]. The OECD (Organisation for Economic Co-operation and Development) indicated that the digital learning environments do not work for practice-oriented learning such as vocational education and training as they do for academic learning [10].

A second group of studies reported some alternatives and some changes made to face-to-face practicum courses. [11] compared teaching practicum practices during the Covid-19 Pandemic in the USA, Canada, England, Greece, Portugal, Australia, Turkey, Hong Kong, Malaysia, South Africa, and Zimbabwe. They found that those countries have rearranged the teaching practicum process by removing or stretching the teaching practicum requirement during the Covid-19 Pandemic. Others carried out online teaching practicum in K-12 schools, with peer learning, or using Virtual Reality (VR) technology, and one country re-opened the schools after a short closure.

In Egypt, EFL student teachers at the Faculty of Education at Menoufia University used online transformational learning, i.e., transforming actual teaching practicum into online practicum. Prospective EFL Egyptian teachers indicated that online transformational learning was effective in enhancing their pedagogical skills [12].

In Greece, the teacher education program used online practicum in teaching, with fellow student-teacher acting as students. The online practicum proved to be effective, and student-teachers developed skills useful for their future teaching. Student-teachers also got acquainted with new technologies in education to a great extent. They developed skills that are useful for their future teaching, like adaptability, flexibility, and handling students' interaction in online settings [13].

Pre-service undergraduate student-teachers enrolled in a literacy course used virtual practicum. [14] found that virtual tutoring made pre-service teachers feel prepared to work with students in grades 3-6 in one-to-one, small group, and whole-class settings. They also felt prepared to locate texts for these grades. Tutees were more excited about reading in virtual tutoring and learnt more in virtual tutoring than the did in regular school experience.

[15] used a simulated classroom to support the Initial Teacher Education programs to meet the practicum requirements. Results revealed that technology-based simulated environments can supplement and support the Initial Teacher Education practicum experience, particularly during the Covid-19 Pandemic.

Similarly, [16] engaged student-teachers in vicarious experiences through the Kolb's experiential learning cycle via a collaborative virtual application to create meaningful learning. The participants found the intervention authentic, constructive, active, collaborative, and intentional. It led to improvements in practicum students' domain-specific knowledge and skills. It also supported them during remote practicum and positively contributed to their development.

In social work, students completing the practicum process used video conferencing and telephone practice [7].

In New York City, the university partnered with a community organization that supported immigrant families and their disabled children to provide them with individualized instruction and to provide preservice special education teachers with practicum field experiences. Family partnerships with special education preservice teachers in remote practicum during the COVID-19 school closures was effective [17].

[18] presented a special initiative of digital freelancing that offered virtual workplaces and livelihoods to work-based learning students who came from economically weaker parts of the society during the COVID-19 pandemic.

Regarding the Saudi context, the literature review showed a dearth of studies that explored the changes and adaptations made to the practicum during the Pandemic in languages, translation, linguistics, and literature departments, and in colleges of education and computer science. Therefore, the current study aims to find out the kinds of solutions and adjustments instructors, departments and/or colleges at Saudi universities have made in the practicum that senior students majoring in languages, translation, linguistics, literature, education, and computer science needed to complete as a degree requirement during the first two years of the Pandemic (Spring 2020, to Spring 2022) due to school closure, social distancing, and remote learning and teaching. Specifically, the study will find out how the teaching practicum, training courses and graduation projects were carried out during the Pandemic. The study will not report instructors and students' views of the difficulties they encountered while performing the practicum and other graduation requirements during the Pandemic.

The current study will help stakeholders at Saudi universities gain insight into the modes of emergency practicum and training during the Covid-19 Pandemic era. It will show them how to enhance students' practicum experience and the different ways for converting traditional practicum to modes that are suitable for distance learning (DL). It will help them upgrade teaching and learning in the DL environment. It aims to promote their understanding of practicum practices and how to update, modify the pedagogy, technology, and create an engaged community of learners to ensure that the practicum meets contemporary practices.

II.   METHODOLOGY

2.1   Subjects

Subjects of the current study consisted of 80 instructors from English Language Centers, Departments of Languages, Translation, English Literature, Linguistics, Education and Computer Science at 7 state universities and 1 private university in Saudi Arabia: Princess Noura University, King Saudi University, King Abdul-Aziz University, Umm Al-Qura University, Imam Abdul-Rahman Bin Faisal University, Taif University, Qassim University and Prince Sultan University, a private university. 55% of the instructors were form Departments of Languages, Translation, English Literature and Linguistics, 25% were from Education Colleges; and 20% were from Colleges of Computer Science. 90% of the instructors in the sample were female. 52% had a Ph.D. degree; 38% had an MA, and 10% were TAs with a B.A. degree. Instructors were working at different departments at Colleges of Education and Computer Science, i.e., different sub-specialties.

2.2   Data Collection

All instructors in the sample responded to a questionnaire with open-ended questions that asked them about the following: (i) how the teaching practicum courses, training requirements and graduation projects have been carried out in the DL environment during the Pandemic in the past 2 years (Spring 2020 to Spring 2022); (ii) whether any new training courses have been offered to equip graduating students with new interpersonal, communication and digital skills that they need for the Pandemic and Post-pandemic labor markets.

2.3 Data Analysis

Instructors' responses to the questionnaires were compiled, sorted out according to the department (general area of specialty) and then quantified. Instructors' responses are reported qualitatively. Instructors' responses were not classified according to the instructors' gender, educational level, or university.

III. RESULTS

Instructors in the sample reported that before the Pandemic, senior students at Colleges of Education or English Departments used to complete a teaching practicum in which student-teachers had to go to elementary, junior, or senior high schools, observe teachers and practice teaching the students in the classroom (face-to-face). But during the Pandemic, when all courses were delivered online, several changes and adjustments were made as follows:

1) At most departments, the practicum shifted to online practicum or online microteaching, i.e., peer teaching where a student performs as a teacher and her classmates acting as students. Microteaching sessions involve one student teacher, the class instructor (or school supervisor), and a small group of peers. These sessions allow student teachers to practice and polish their teaching techniques in a simulated environment before putting them into practice with the students. Student teachers conduct a short lesson (usually 5 to 20 minutes in length) and then receive feedback from their peers and supervisor.

2) Student-teachers practiced hands-on remote teaching using the Saudi Ministry of Education's Platform called *Madrasati* for few hours, several times a week. Student-teachers teach whole class sessions of certain courses for certain grade levels. They borrow the cooperating schoolteacher's username and password to access the courses delivered on *Madrasati*.

3) Few instructors use online simulated training which is a kind of role playing where the student performs the role of a teacher or any other role without any preliminary training or rehearsal. Examples of simulation in teaching are solo-acting, mimic, development of expression, development of all aspects of emotional organization, and bodily expression. Student teachers might also simulate dealing with a problem that teachers encounter in the classroom, teaching a certain skill using a specific teaching technique, applying a particular theory of learning, teaching with a specific technology, communicating and giving feedback to the students, or solving an online teaching problem.

4) Before the Pandemic, senior students at the English department were required to take a Teaching Practicum course for a whole semester where they practiced teaching English face-to-face. During the Pandemic the students attended their Teaching Practicum face-to-face as it was before the Pandemic, but twice a week only.

5) At King Abdul-Aziz University, they had a Teacher Mentoring Program before the Pandemic, in which new instructors and graduates received training in applying the principles of teaching, how to interact with students, how to design tests and homework-assignments, and how to use Blackboard in language teaching. During the Pandemic, the program is still operating, but the training period has been reduced to one month only instead of a whole semester (4 months).

6) At the private university, they had a face-to-face Cooperative Training Program (Coop) for students majoring in linguistics and translation before the Pandemic. But during the Pandemic, this Coop is still required although training opportunities for senior students are very limited. Working face-to-face or remotely (during the Pandemic) depends on where the student is doing her training.

7) Students majoring in translation have to complete a translation project as a graduation requirement. Before the Pandemic, graduating seniors had a choice to translate a book or to go for field training in translation. Some translation students used to go for training to King Abdullah Bureau for Translation and Arabization, the Deanship of Research, the Ministry of Municipal and Rural Affairs, the Ministry of foreign Affairs, some marketing firms, some hospitals, and others. But during the Pandemic, the students were asked to translate 14,000 words at home (i.e., remotely) instead of going to the office and working on their translation face to face.

8) At computer science departments, computer instructors reported that during the Pandemic, some places that offered training for computer science students, such as Makkah Municipality, allowed the students to complete their practicum face to face, in small groups, during the summer, in order to maintain social distancing. The students also have the option to attend 135 hours of online training courses in IT and technological skills.

Furthermore, all instructors in the sample indicated that no special courses have been offered to graduating seniors to introduce them to remote jobs in their major area of study and equip them with the digital, interpersonal and communication skills they need for remote working during the Pandemic and beyond.

IV.   DISCUSSION

Findings of the present study have shown numerous changes and adjustments made in the practicum and graduation projects for graduating seniors majoring in languages, translation, literature, linguistics, education, and computer science in Saudi Arabia during the Pandemic. The utilization of online (virtual) practicum reported by some of the instructors in the current studies is similar to that reported by prior researchers in other countries such as [11], [12], [13], [14]. Other forms of emergency practicum reported by instructors in the current study are similar to those reported by single studies in the literature such as technology-based simulated environments [15] and sustaining work-based learning [18]. However, vicarious experiences [16], video conferencing and telephone practice [7], and family partnerships with special education preservice teachers in remote practicum during the Pandemic [17] were not reported by the sample of instructors in the present study.

It seems that the limited forms of practicum modes in the present study are due to lack of orientation and familiarity with the distance learning environment and how instructors can re-adjust it to the virtual practicum [1], [2].

V.   CONCLUSION AND RECOMMENDATIONS

The outbreak of the Covid-19 Pandemic in early 2020 has forced many schools and universities around the world to shift from face-to-face to remote teaching and learning using a variety of platforms such as Zoom, Microsoft Teams, Google Meet, WebEx, and Blackboard without prior notice and without prior training in online instruction. The Pandemic has also posed an urgent need to redesign college curricula in general, and practicum and training courses, in particular [19] [20].

In addition to the changes and adjustments mentioned by the instructor sample, the present study recommends the following:

1) In departments that require a teaching practicum, students can be trained in how to integrating electronic information sources on the internet in the teaching-learning process; how to design a variety of online activities that engage students in the different courses; how to communicate with students; and how to provide students with feedback, [21], [22], [23], [24], [1].

2) Graduating seniors can also practice delivering lectures and lessons to students in grades K to 12 live using livestreaming tools on social media such as the Facebook Watch Party and

Facebook Live and Twitter's Periscope, and web-conferencing tools such as Elluminate [25], [26], [27]).

3) Graduating senior students can join teachers' professional development pages on social media such as Facebook and teachers' online discussion forums [28], [29], [30]).

4) For their graduation project, students majoring in linguistics and literature may create videos and podcasts about and Those majoring in education may create videos about a teaching issue and create instructional videos for students in grades K-12 [31], [32]).

5) Translation students can participate and collaborate in online translator training using online discussion forum, or social media such as Twitter. They may join online community and workplace for language professionals, professional development for translators and freelance sites, and access outsourcers on Proz.com [33], [34].

6) For their practicum and graduation projects in computer science and IT, students may help in solving faculty and students' internet connectivity problems and access and train them in using the different DL platforms, especially Madrasati. They may collect data about students while using LMS's, DL platforms such as Zoom, Microsoft Teams, Google Meet, social media, or other online tools. They may create certain apps related to the Pandemic. They may track students' clicks, time on task, navigation patterns, information flow, social interaction, and concept development through discussions and make these data available for analysis. They can conduct some learning analytics[2], i.e., collecting, analyzing, measuring, and reporting data about students in DL contexts in Saudi Arabian schools and universities, in order to understand and optimize learning, and improve the DL environment. They can design robots to be used in airports, hospitals, restaurant, coffee shops, factories, and other locations to help passengers at airports, help doctors and nurses in treating patients, help serve food and drinks at restaurants and coffee shops, and help workers in the factories. In data mining courses, students may collect and analyze Pandemic statistics from around the world [20].

7) Special courses should be offered to graduating senior students of all majors to prepare them for the Pandemic and Post-Pandemic labor market. They need to receive training in professional skills such as preparing a job portfolio, preparing their CV, answering online career planning surveys, familiarizing students with recruitment and job advertisement websites, how to get ready for an online job interview, training students in effective online communication skills and digital skills needed for the pandemic and post-pandemic labor market [19].

Finally, this study recommends that future researchers investigate assessment of remote teaching practicum and field training, which can be conducted from different angles: self-assessment, quizzes, exams, rating scales, and/or checklists. The suitability or preferences of the forms of emergency practicum from the students and instructors' perspectives can be assessed as well. Such new areas of research are needed to explore the effectiveness of different aspects of emergency DL to help the students achieve the desired learning outcomes and program and course goals.

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