The Professionalism of Online Teaching in Arab Universities: Validation of Faculty Readiness

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ABSTRACT: The study aimed to examine the readiness of faculty members in Arab universities for blended learning environments through an investigation of the attributes, skills, and knowledge in three roles of professional online teachers. Online teaching professionalism has been described as a set of required competencies, and behaviours for the effectiveness of educational online sessions. The authors have argued some requirements of teachers' roles as an instructional planner, an assessor, and as a mentor. A purposive sample of 24 experts from diverse disciplines contributed to the reference panel in a Delphi study through three rounds. Qualitative content analysis and some descriptive statistics e.g., the median and frequency distribution, have been used to reach a consensus among the panel of experts. A matrix of 30 requirements was shortlisted by experts in different roles. The panelists provided insight into the top 10 requirements for each role to measure the professionalism of faculty before, during, and after the online sessions. The readiness for online teaching was concluded by six main domains namely evaluating students' achievements and limitations, problem-solving skills, information technology and computer skills, monitoring and motivating techniques, communication, and class management skills. The study results can be used to plan faculty development programs based on performance gaps of faculty members at three levels: individual, departmental, and program or college. Moreover, the listed faculty attributes help higher education institutions to evaluate the perceptible skills and personal characteristics of faculty in enhancing the efficacy of online teaching in different academic disciplines.

Keywords: Teaching professionalism, Online learning, Faculty readiness, Faculty competences

1. Introduction

The educational system around the globe has been disrupted to varying degrees due to Covid-19 prevailing. The United Nations Educational, Scientific and Cultural Organization, "UNESCO," has counted that more than 1.5 billion students in 165 countries have been forced to drop out of schools and universities. The pandemic forced academic bodies around the world to discover new patterns of learning and education. In response to this threat, new ideas towards online learning strategies are emerging, being tested, and evaluated, albeit with a lot of effort and challenges for teachers and parents (UNESCO, 2020).

Considering this, we conducted 42 semi-structured interviews with faculty members from different disciplines in some Arab universities, with the aim of seeking their opinions regarding distance learning experience during Covid-19 lockdown. The most important finding was that the university staff developed their own teaching strategy for online classes. In fact, it differs from one individual to another, and from one university to another according to the circumstances and the available capabilities. Most of the instructors started preparing their educational materials electronically, without following certain standards, and 90% of them asserted the necessity to cover most aspects of the curriculum, after teaching online lectures, curriculum materials being uploaded to the learning management system (LMS). Furthermore, some Open Educational Recourses (OER) were used by 25% of instructors and posted to the LMS portal for those who missed the classes due to some inevitable circumstances. The interviewees agreed that the instructor plays a major role in implementing online learning strategies, as he acts as a guide for students, a catalyst for them, and an instructional designer to use the technology through which learning takes place, and provide effective and constructive feedback, following up on the level of students and providing the necessary recommendations on time.

Thus, the professionalism of online teaching has become a relevant topic of discussion among educators and academics for continuing work in education and teaching in 2020. As the prevalence of blended learning and online courses in higher education institutions increases, so does the need for research on faculty competencies and skills in those online environments. Rapanta et al. (2020) argued that universities, to be competitive during and after the Covid-19 crisis, have to adopt some indications of faculty preparedness, in terms of their

professionalism, which is necessary for online teaching as an essential function of such professional preparedness. As such, research on the educational requirements, and the challenges of teaching in a diverse environment, is the current hot topic of the day with fundamental changes in some universities. Some researchers concluded that teachers want to explore ways to create a more engaging and effective environment for themselves and their students.

Teaching professionalism has been identified in many previous studies as a key element that permeates two standards of faculty competencies namely personal, and professional competencies. More specifically, teaching professionalism involves curriculum design, delivery, and oversight (Shelly & Scolaro, 2016). Hence, closer scrutiny of these competencies will provide a depth understanding of what faculty of online classes should have to reflect on their philosophy of teaching, make it crystal clear to students, and implement it steadily and explicitly. Indeed, many of the educational theories, such as social constructivism, connectivism, situated learning and communities of practice, have been exploring by educational theorists to investigate where and how can be used to enhance online learning (Ni She et al., 2019). The findings of exploring factors influencing faculty revealed three primary approaches to teaching online, namely content acquisition, collaborative learning, and knowledge building, which are relevant to some factors e.g., faculty age, their academic background, and online teaching dedication (Badia et al., 2017).

Given the above, higher education institutions need to examine the experiences that online educators face in a virtual setting, such as strengths, challenges, perceived level of professionalism, and perspectives on the future online teaching (Sims, 2017). Moreover, provide faculty the professional development which can develop their abilities to support the application of diverse and appropriate learning theories. Hence, supporting conceptual change should be a central constituent of professional development activities if more effective use of educational technology is to be achieved (Englund et al., 2017). This can be useful in terms of helping to recognize the methodological criteria which to a great extent guarantee the effectiveness of training in two perspectives: meeting faculty training needs and, consequently, improving teacher practices in university virtual environments (Alvarez et al., 2009). Higher education institutions need to frequently evaluate the challenges that faculty face in the design and delivery of courses through virtual learning environments, and to prioritize efforts to remediate them (Kibaru, 2018; Mishra et al.,2020).

Ideally, Delphi technique has been functional in higher education to evaluate and establish a communication structure aimed at constructing a comprehensive critical examination and discussion of instructional design principles, challenges in establishing adaptive learning, campus environment, and institutional research by using the constructs or canons of credibility and confirmability (Mirata et al., 2020; Green, 2014). Several Delphi studies have been used, in different academic disciplines, to recognize and develop the professional attributes. Rowe et al. (2013) used this technique to distinguish how technology could be integrated with teaching strategies to develop medical proficient practitioners. With the intention of teachers' competencies, it has been used to identify, develop, and validate competences framework of teaching in different subjects namely English, physical education, mathematics, science, and counselor educators (Alaa et al., 2019; Afandi et al., 2019; Muñiz-Rodríguez et al., 2017; Swank & Houseknecht, 2019; Wyant et al., 2020). Accordingly, the current study adopted this technique to find out a consensus among some experts in several fields about the required competencies of professional faculty in Arab universities.

2. Background

The urgency of accelerating the digital transformation of education requires a paradigm shift in how we understand education and learning. Faced with the pandemic caused by Covid-19, online education is presented as a necessary response and, in order to successfully enter it, we compile the keys to this modality according to our experience as an educational institution of online teaching. Many challenges have been represented that may saddle faculty in higher education institutions. They need to keep pace with the innovative paradigms of higher education, new approaches to teaching and learning, and how the online tools can be used to support the instruction activities (Siemens & Matheos, 2010; Albrahim, 2020). Universities should invest in teacher professional development of their faculty, now more than ever, for them to be updated on effective pedagogical methods with or without the use of online technologies (Rapanta et al., 2020). Robinson (2017) pointed out, in his research on examining the quality measurement standards by online instructors, that a disparity between the expectations of the creation, development, and application of online courses that are not typically expected of onsite courses.

From its birth in the last decades to the present day, online courses and education platforms have been an open option for millions of students around the world; However, the situation of the pandemic we are going through as a society, which brought at least half of the students and professionals of education all over the planet home in a matter of four months, has once again raised the digitization of education not as one more option, but as a necessity both for educational institutions, companies and students (Yousef & Sumner, 2020). Further, it must be recognized that the socio-economic and socio-educational realities are not the same in all cultures. Therefore, each institution must design, as far as possible, online teaching models according to the socio-educational and socio-economic indicators of the community (Kem-mekah Kadzue, 2020). Faculty need also to keep themselves updated with the dynamic nature of online learning and emerging learning technologies and mode of teaching and learning in virtual environments (Kibaru, 2018). As such, it is important for faculty to perceive and use technology as an integral part of a student-centered approach to teaching if enhanced learning outcomes are to be achieved (Englund et al., 2017; Kreber & Kanula, 2013).

The existing literature base contains several studies on measuring the quality of teaching and learning courses by adopting some standards of course design, curriculum, and assessment tools. Of the studies reviewed that focused specifically on professional development through online teaching, Frankel (2015) addressed high-quality professional development and mentoring activity for online is essential to educational systems, it needs to be supplemented by intuitive feedback that leads to a planned set of professional learning activities to help faculty improve their practice. An earlier study investigated the value of contextualization, incremental innovation, and mentoring of online convenors. it concluded that teaching online or blended types of learning needs to be rapid, cost-effective, and lead directly to practical outcomes (Gregory & Salmon, 2013). The findings of another recent research, that investigated the design of online learning activities by using certain features, concluded the need for adjusting assessment to the new learning needs, and the sequence of three types of faculty presence namely social, cognitive, and facilitator (Rapanta et al., 2020).

In their report, Ni She et al. (2019) emphasized three key elements for effective teaching online namely presence, facilitation, and supporting students. These elements have mapped 18 associated core competencies of online educators in seven main roles managerial, pedagogical, social, technical, assessor, facilitator, and content expert. Closely related to investigating the Arab higher education institutions, a recent study concluded six main skills that faculty members need to efficiently teach in online learning environments which have to be determined in order to help design professional development programs for online instructors (Albrahim, 2020). Further, another study referred that online classrooms may seem inherently anti-social, leaving many faculty members wondering how to best approach discussion between students, and how to use collaboration for more work-intensive tasks. Moreover, faculty members must also develop alternate strategies to make sure students are progressing in the course (Abell et al., 2016).

Williams (2003) concluded thirteen distinct roles are needed to implement distance education programs in higher education (e.g., administrative manager, technology expert, librarian, evaluation specialist, and leader/change agent), the author highlighted the importance of interpersonal-related and communication-related skills between university teachers and their students in this type of educational environment. Five main roles, which could be identified with regards to the tasks carried out by university teachers in online environments, were reported by Alvarez et al. (2009) namely designer or planning, social, cognitive, technological, and managerial roles.

Some previous studies have argued the required competencies or skills for some specific programs and courses. O'Doherty et al. (2019) argued the internet skills of faculty in medical fields during the implementation of online and distance learning methodologies. they concluded some requirements of specific creative skills, information navigation, and social media training, in order to address many of the challenges faced in an expanding digital world. An investigation of teaching with technology in a Master programme of Pharmacy at a Swedish university indicated clear differences between novice and experienced teachers. the novice teachers demonstrated greater and more rapid change in practices of teaching with technology than experienced colleagues. the experienced teachers tended to exhibit little to no change in conceptions (Englund et al., 2017). A recent study explored the perceived roles and competencies of e-tutors in the economic and management sciences college, the findings concluded that faculty perceived a challenge to engage learners in online settings, and it highlighted the importance of the social or pastoral roles of the faculty on the successful online interactions with students (De Metz & Bezuidenhout, 2018).

Indeed, online teaching is not the same as face-to-face classes, they are different formats, and processes that have different logics and structures. The core challenge is that the face-to-face educator believes that doing virtual education is simply transferring the same concepts, structures, and class organization from the face-to-face space to virtual space, and this is not the case. It is a new design, logic, and structure (Ni She et al., 2019; Kibaru,

2018; Trammell & LaForge, 2017). In exploring the issues, needs, and outcomes of government organizations in developing countries seeking to implement information technology into teaching and learning practices, Passey et al. (2016) concluded it should be recognized that patterns of support, for those working in these countries, have not been achieved at any identifiable widespread level. In the case of many Arab universities, faculty were forced to teach online, and many faculties lack some of the requirements and competencies to teach professionally online. Albrahim (2020) concluded, in his investigation on Arab higher education institutions, that Arab faculty members might feel uncomfortable and not familiar with online teaching courses due to the multiple roles and responsibilities of teaching online. In this context, while online learning may lend itself to independent student learning, some students need hands-on, interactive tasks to engage and challenge them (Abell et al., 2016). They struggle also with many obstacles relevant to the technical infrastructure. Therefore, one of the main challenges is to achieve an efficient course design, making the most of the tools that this modality allows, adequately planning the contents, evaluation activities, and student dedication times, as well as the continuous support and monitoring of the Teacher. Taking into consideration the number of students in most Arab universities, course design and instructional effectiveness are some of the most significant challenges facing faculty tasked with managing large online courses (Trammell & LaForge, 2017). Hence, it will increase extra challenges particularly with the common learning styles of Arab students. Ultimately, faculty need some personal and professional attributes, skills, and knowledge which can be the core competencies for them in supporting and developing their professional roles.

3. Method

3.1. Study design

The Delphi technique is an iterative process for analyzing the opinions of many experts based on the outcomes of several questionnaire rounds (Saffie & Rasmani, 2016). For predictable content analysis, this study used a Delphi technique in a series of rounds or sequential questionnaires that were hosted by QuestionPro, intermixed by structured feedback after each round as depicted in Figure 1.
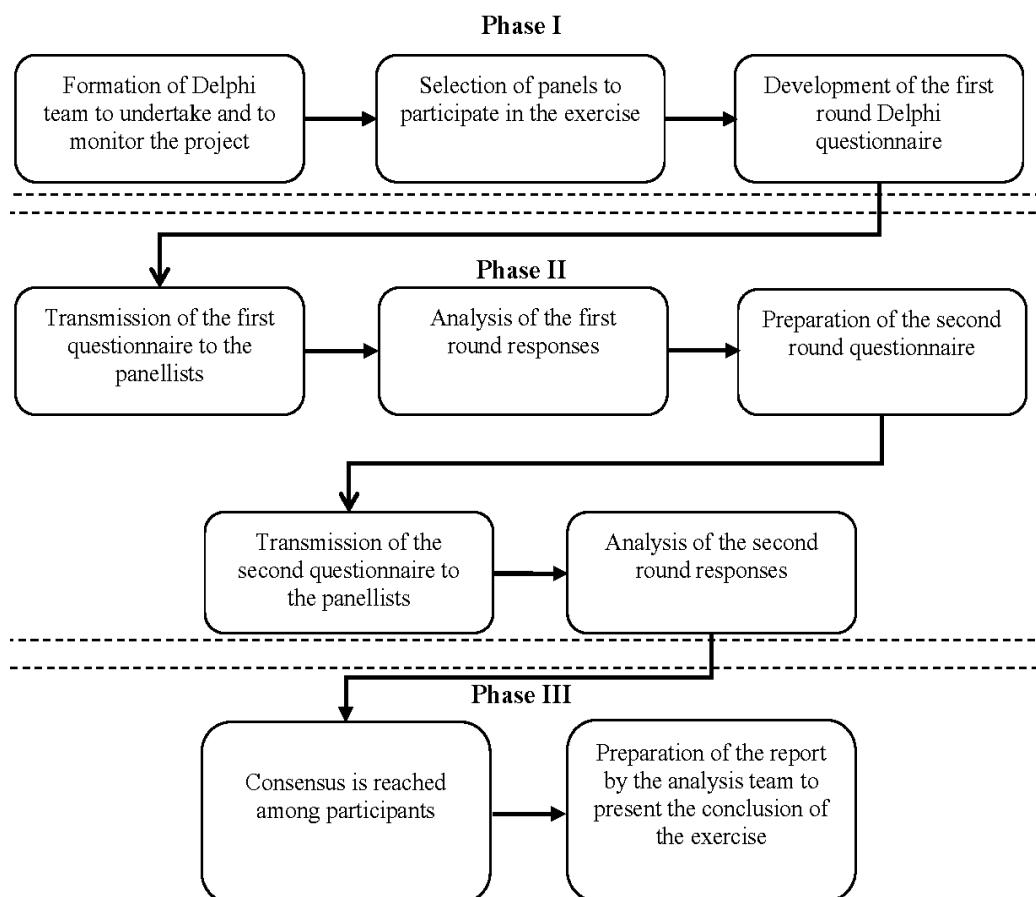

Figure 1. Delphi technique in a series of rounds (Saffie & Rasmani, 2016)

The data collection began with a short introduction to the study included a brief description of three levels of required competencies for the professionalism of online teaching namely, knowledge, skills, and attributes. Theoretically, the Delphi technique could highlight the areas of divergence of opinions, so the combined opinions of experts are of richer quality than the limited view of an individual (Nworie, 2011). Consequently, the current study used this technique to evoke experts' perspectives on how faculty can be professional online teachers through their attributes, challenges, and training needs. Considering this, three rounds were planned to align with the components of the Delphi technique by answering the following questions:

- What are the competencies for the professionalism of online teaching? (Round 1)
- What are the expected roles of faculty for online teaching? (Round 2)
- What are the knowledge, skills, and attributes for each role? (Round 3)

Data collected establishes consensus among experts in an iterative aspect, the stimulus of each round was decided based on anonymous responses of the previous round. The storyboard of three rounds can be summarized as the following:

- **Round 1**: Establishing a list of expected knowledge, skills, and attributes that experts consider necessary for professional online teaching. Three open-ended questions were given to panelists regarding: What are the knowledge, skills, and attributes that faculty members need to be professional for online learning? This round intended to gather all possible requirements of online teaching professionalism through different roles before, during, after sessions.
- **Round 2:** The second phase was designed based on the synthesis of ideas that developed from Round 1. The experts had the opportunity to classify the listed knowledge, skills, and attributes from Round 1 into three main roles namely as a planner, assessor, and mentor. The created list for each role, by quantitative analysis of responses, was carried forward to be more inspected and investigated in the final round.
- **Round 3**: In this stage, the panelists were given an occasion to reconsider their answers by ranking the top 10 items, in order of the importance of each role, to create a matrix of 10 required knowledge, skills, and attributes of each role.

3.2. Participants

A total number of 29 experts in different disciplines were asked to participate in the first round. Table 1 shows the response rate of each round and the range of their disciplines and academic experience of teaching in higher education institutions. There was no direct communication between experts on the study subject and none of them was aware of the list of participants.

Table 1. Characteristics of the panelist participated in the study rounds

Response rate and characteristic	No. of respondents (%)
Response rate	
Round 1	24/29 (82.7%)
Round 2	21/24 (87.5%)
Round 3	21/21 (100 %)
Years of academic experience (Overall $N = 24$)	
≤ 10	34.4%
> 10	65.6%
Academic disciplines (Overall $N = 24$)	
Huminites and Educational sciences	41.5%
Basic Sciences	25%
Computer Sciences	21 %
Medical Sciences	12.5 %

3.3. Data analysis

The study used different data analysis tools for each round. In the first round, to list the requirements of effective online teaching, a qualitative content analysis of answers was carried out independently by each author. Each author analyzed the responses in order to list the potential knowledge, skills, and attributes according to the panelists. A third reviewer was also consulted to eradicate any bias of authors in analyzing the responses. The

statistical analyses were used in the second round. The median and frequency distribution values, by using the fifth Likert scale, were calculated to inspect the level of agreement on items for each role of faculty during online teaching namely as a planner, an assessor, and a mentor. The final round aimed to rank the top 10 required competencies for each role. The points for each item were allocated by the total of all experts as follows: 10 points for the first order, 9 points for the second order, continuing to the last order by 1 point, and the value of 0 was given if an item did not occur in the top 10. This method to achieve consensus among experts was used by many researchers (Moynihan et al., 2015; Milat et al., 2013).

4. Findings

Round 1: The experts reported 59 requirements for professional online teaching. A list of 18 knowledge, 22 skills, and 19 attributes was classified as considered necessary items for the efficiency of faculty members in online learning environments. The reported list of knowledge included the staff ability to recognize the core outcomes of sessions, the available applications or platforms for assessment tasks, the quick solutions and IT support services, and the extra resources for students. Moreover, outline the mechanisms of formative evaluation, engaging and motivating environment for students, team building, and statistical analysis of the platforms. At the level of skills, 22 skills were listed to reflect the professional practices of online teaching.

Round 2: Constructing on the insights from the first round, 21 experts participated in the second round to create the required knowledge, skills, attributes for online teaching professionalism to measure the role of faculty as a planner, assessor, and mentor. Table 2 shows the median of each item and frequency distribution of knowledge, skills, attributes for each role. Seven items achieved a median of <5 and a frequency distribution of <50% and were dismissed in the third round. Consequently, the analysis of this stage formed 13 knowledge, 12 skills, and 14 attributes issued to participants in the third round.

Table 2. List of reported knowledge, skills, and attributes from Round 2

Items [*]	Median	Frequency	CD
As Planner			
Effectively use crisis management techniques.	9.2	95.2%	**A**
Identify the advantages and disadvantages of electronic platforms/ applications.	9.2	90.5%	**K**
Use communication skills effectively by different channels/medium.	8.9	90.5%	**S**
Managing time effectively during the sessions.	8.6	90.5%	**S**
Develop the personal ability to use modeling in educational situations.	8.6	90.5%	**A**
Use the appropriate applications or programs for subjects and educational goals.	9	85.7%	**A**
Effectively use flipped classroom techniques to plan course sessions.	8.3	81%	**A**
Design a plan for each lesson by using different strategies / electronic tools.	7.7	81%	**S**
Effectively use the tone of voice during the session.	7	81%	**S**
Identify the appropriate applications consistent with the limitations speed of the available internet connection /network.	6.4	71.4%	**K**
Effectively use, in case of the technical problems, the alternatives to learning activities.	6.1	66.6%	**A**
Establish an activity bank of lessons by using various electronic tools.	5.5	61.9%	**S**
Recognize the quick solutions/instructions for technical problems.	5.7	57.1%	**K**
Recognize the core outcomes at the level of course and sessions.	5.3	52.4%	**K**
Use attractive videos and pictures during the session. [**]	4.4	42.9%	**S**
Being team-oriented in teaching style. [**]	3.8	42.9%	**A**
As Assessor			
Identify effective tools to create a more engaging and motivating environment for students.	9.1	95.2%	K
Use different monitoring techniques to measure students' contributions during sessions.	9.7	95.2%	S
Outline the mechanisms of formative evaluation which can be used during online sessions.	8.6	90.5%	K
Use effective techniques, during sessions, to measure students' attention.	8.6	90.5%	S
Demonstrate effective tools to motivate his inactive students during the sessions.	8.6	90.5%	S
Provide constructive and continuous feedback on students' interactions during the session.	8.8	90.5%	A
Use effective reflections on students' performances and achievements.	8.6	85.7%	A

Identify students' limitations of using the available applications/tools for evaluation and assessment.	7.4	76.2%	K
Effectively use flipped classroom techniques to measure students' performance	7.4	76.2%	A
Outline the appropriate tools to assess each outcome/objective.	6.7	66.6%	K
Use the tools of alternative assessment for different learning outcomes.	6.6	66.6%	S
Use creative alternatives to increase students' performance/achievement.	5.6	57.1%	A
Effectively use activities to measure the students' achievement of outcomes.	5.1	52.4%	A
Recognize the available applications for evaluating students' achievement. (**)	4.8	47.6%	K
Establish a question bank to measure lessons learning outcomes during the sessions. (**)	4.6	47.6%	S
Recognize the available statistical analysis of the platforms/ applications. (**)	3.7	42.9%	K
As Mentor			
Create a constructive environment in which motivate students to participate effectively.	9.1	95.2%	A
Encourage the students to share their needs and academic obstacles.	9.1	90.5%	S
Apply effective tools of class management.	8.7	90.5%	S
Lead effectivity team-work discussions	8.9	90.5%	A
Identify students learning styles and preferences.	8.4	85.7%	K
Recognize the available IT support services for students	9.1	85.7%	K
Show academic commitment towards learners needs	8.8	85.7%	A
Identify the extra resources needed / available for students.	7.2	76.2%	K
Demonstrate effective strategies for problem-solving in instructional tasks.	7.9	76.2%	S
Identify the academic history of students and their previous achievements.	7.1	66.6%	K
Identify team building techniques/tools.	5.3	52.4%	K
Use students' feedback to develop an action plan for the effectiveness of teaching.	5.4	52.4%	A
Seeing students/other points of view. (**)	3.8	38.1%	S
Show a positive relationship with students. (**)	4.1	38.1%	A

Note. (*) Items have been ordered by frequency distribution per each role. (**) Was Eliminated from Round 3. CD = Category Domain; K= Knowledge; S= Skills; A= Attributes.

- **Round 3:** In the final round, 21 experts were asked to rank the revised list of knowledge, skills, attributes from Round 2. A matrix of 30 requirements, as shown in Table 3 below, is outlined of the top required knowledge, skills, attributes for faculty as a planner, assessor, and mentor in online teaching.

Table 3. Matrix of 30 requirements for online teaching professionalism

	Planner	Assessor	Mentor
Knowledge	• Identify the advantages and disadvantages of electronic platforms/ applications. • Identify the appropriate applications consistent with the limitations speed of the available internet connection /network. • Recognize the core outcomes at the level of course and sessions.	• Identify effective tools to create a more engaging and motivating environment for students. • Outline the mechanisms of formative evaluation which can be used during online sessions. • Identify students' limitations of using the available applications/tools for evaluation and assessment.	• Identify students learning styles and preferences. • Identify the extra resources needed / available for students. • Recognize the available IT support services for students. • Identify the academic history of students and their previous achievements.

Skills	• Use communication skills effectively by different channels/medium. • Managing time effectively during the sessions. • Design a plan for each lesson by using different strategies / electronic tools. • Effectively use the tone of voice during the session.	• Use different monitoring techniques to measure students' contributions during sessions. • Use effective techniques, during sessions, to measure students' attention. • Demonstrate effective tools to motivate his inactive students during the sessions.	• Encourage the students to share their needs and academic obstacles. • Apply effective tools of class management. • Demonstrate effective strategies for problem-solving, completion of educational tasks.
Attributes	• Effectively use crisis management techniques. • Use the appropriate applications or programs for subjects and educational goals. • Effectively use flipped classroom techniques to plan course sessions.	• Provide constructive and continuous feedback on students' interactions during the session. • Use effective reflections on students' performances and achievements. • Effectively use flipped classroom techniques to measure students' performance. • Effectively use activities to measure the students' achievement of outcomes.	• Create a constructive environment in which motivate students to participate effectively. • Lead effectivity team-work discussions. • Show academic commitment to learners' needs.

5. Discussion

The consensus among experts reflects three levels of required competencies for the staff to be a professional teacher. The listed knowledge and skills, as reported in the first round, included the minimum level of dealing with the expected technical problems, and the advantages and disadvantages of electronic applications. Moreover, their ability to use effective communication skills, managing time, monitoring and motivating techniques, class management, and problem-solving skills. The experts also reported some of the skills relevant to establish a question bank, alternative assessment tools, activity bank, and lesson plan by using different electronic tools. For the professional attributes, the panelist reported some attributes to measure the ability of staff to provide constructive feedback, effective reflections on students' performance, and an attractive online environment. Some techniques were listed relevant to use modeling in educational situations, flipped classroom techniques, team-oriented of teaching style, and crisis management skills.

The revised list referred to some of the required knowledge, skills, and attributes for the professionalism of online teaching in each role of the educational processes. As a planner, the results listed the essential ability to use crisis management techniques, create an effective environment of learning by recognizing the advantages and disadvantages of the available tools, and choose the appropriate applications based on the limitations speed of the available internet connection. Moreover, identify students' learning styles and their preferences in order to use the effective tools and mechanisms for motivating students, and recognize the formative evaluation tools and flipped classroom techniques that can be used during sessions. For the role as an assessor, the panelist reported that the faculty should find the effective tools of engaging, motivating, measuring students' attention, and monitoring their progress. Additionally, provide their reflections on students' performances during the session and use effectively the tools of alternative assessment for different learning outcomes. As mentors, the findings exposed the relative importance of the faculty role in encouraging the students to share their needs and academic obstacles, applying the effective tools of class management and problem-solving, and showing the academic commitment towards learners' needs.

The requirements of professional online teaching were concluded by 30 practices in three expected roles of faculty. The findings pointed out that professional online teaching comprises a level of knowledge to recognize the properties of the available electronic platforms or applications consistent with its advantages or disadvantages, and the limitations of using the internet. Furthermore, faculty should be aware of some characteristics of their students e.g., their learning styles and preferences, academic history, and previous achievements. The experts reported also required knowledge of the mechanisms of formative evaluation, the available IT support services, and the extra resources which can be used to measure the core outcomes of the course. Several skills have been reported for determining the ability of faculty to use effective communication

skills, monitoring and motivation techniques, class management, problem-solving skills, and time management skills.

A list of 10 important features was cataloged as attributes of professional online faculty to measure their competencies of using crisis management techniques, using flipped classroom, providing constructive feedback and motivating environment, choosing the appropriate applications, reflecting on students' performances and achievements, leading team-work discussions. By considering the discipline-specific competencies and investigating the listed competencies according to the academic disciplines of experts, it is clear to find a consensus among experts in the field of humanities and education sciences about competencies related to class management skills and how teachers can motivate their students in the conditions of online classes. For basic sciences experts, they focused on monitoring techniques and effectively planning of sessions' activities. Rationally, the problem-solving skills and using the appropriate applications on educational activities were adopted by the experts in computer sciences field who determined teacher digital competencies (TDC) to recognize the progressively complex knowledge, skills, and attributes of teachers to deal with students' needs of learning ethically, safely, and productively in a varied digital environment. The reported TDC aligned with Falloon's conclusions, in his framework of the successful teachers' transition from digital literacy to digital competence, that highlighted the importance of several competencies in classroom roles of teachers through modeling and deliberate planning to educate their students in building the ability to leverage advantage from digital resources by sustainable ways (Falloon, 2020).

These findings are partly mirrored with the conclusions found in a previous study by Lee and Hirumi (2004) which presented sixteen outputs for performing six main skills namely interaction, management organization/ instructional design, technology, content knowledge, and teamwork skills. The study findings also somewhat consistent with previous studies which concluded some categories of skills and competencies required for teaching online courses in higher education e.g., pedagogical skills, content skills, monitor students' progress, design skills, responsiveness, technological skills, encourage active learning, management and institutional skills, and social-communication skills (Albrahim, 2020; Ni She et al., 2019; Alvarez et al., 2009). Besides, the reported attributes in the existing study align with the conclusion of Rose's study that effective online teachers need to avoid a didactic approach, which is lecture-based, and provide a seamless structure by using actively engage students, establishing a learning-oriented social presence online (Rose, 2018). Bigatel et al. (2012) also reported some of the listed skills and knowledge of the present study in their identification of competencies for online teachers as "connectors" between the learner and his or her learning system by labeling active learning to construct explanations, solutions, hands-on practice, student-generated content.

Eventually, online teaching competencies are satisfactorily documented across the literature where certain teachers' skills and attributes have been researched, but the existing study distinguishes between three different levels of professional competencies. Moreover, the study investigated how the required competency can be changed based on three main roles or responsibilities of professional online teachers. In addition, the study strengthens the idea that online learning activities can be used to enhance teaching and knowledge sharing between teachers and students. There are two types of effect which result when students utilize these learning activities. Firstly, teachers can involve students in the instructional process using relevant activities and discussions from any convenient place at any time. Secondly, it promotes additional learning experiences where students can interact, collaborate, and take ownership of their learning. Where students can share ideas, experiences, perspectives, and opinions that support self-self-directed and collaborative content sharing.

6. Conclusion

The study aimed to determine the capability and suitability of faculty members at universities to be a professional online teacher. The range of requirements, that were assumed most important by experts, reflects that online teaching professionalism is not a simple set of conduct, behavior, or attitude. It encompasses several different attributes that define the professional skills and a minimum requirement of knowledge. The final list of requirements, that were deemed to have achieved consensus as to its importance, shows the readiness for online teaching by six main domains namely evaluating students' achievements and limitations, problem-solving skills, IT, and computer skills, monitoring and motivating techniques, communication skills, and class management skills.

The suggested matrix can be used to measure the professionalism of online teaching in three main roles of faculty namely as a planner of learning activities or scenarios, as an assessor of students' achievements and progress, and as a mentor of coaching and motivating activities. The results can be used as a part of professional

development programs to provide faculty with the skills to meet the standards of online teaching professionally. The findings also recognized faculty attributes through strengthening perceptible skills and recognizing less palpable personal characteristics, which can perhaps contribute more meaningfully to enhancing the efficacy of online teaching.

The scope of this study was limited in terms of the study sample and culture. The study sample did not include all disciplines, but it was limited to some specialties in different disciplines i.e., humanities and educational sciences, basic sciences, computer sciences, and medical sciences. Moreover, this research was conducted in the Arab culture and the identifications made by the authors could be perceived differently in other cultures. In terms of the study design, the authors used Delphi technique, accordingly, future studies may consider other techniques to compare the findings. Different levels of competencies and roles can be also investigated as open points. Consequently, the required competencies might change under different conditions e.g., students' background, heterogeneous groups, ICT knowledge or skills, and appropriate social media. Thus, the upcoming studies can provide more nuanced and direct evidence of whether faculty adopted changes in perspectives, principles, and intentions for developing in their performs were realized in online teaching.

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