21st Century Professional Skill Training Programs for Faculty Members—A Comparative Study between Virginia Tec University, American University & King Saud University

Asma Al-Majed¹, Fatima Al-Kathiri¹, Sara Al-Ajmi¹ & Suad Al-Hamlan¹

Correspondence: Fatima Al-Kathiri, Department of Curriculum and Instruction, College of Education, King Saud University, Riyadh, Kingdom of Saudi Arabia. E-mail: fatimakathiri@gmail.com

Received: July 2, 2017 Accepted: July 13, 2017 Online Published: August 13, 2017

Abstract

The 21st century faculty member is expected to teach, engage the learner, absorb new discoveries and rely on different knowledge in the execution of duties. This calls for up-to-date skills for instruction, assessment, and identification of opportunities by faculty members to promote learning. This paper investigates the prospects of promoting training programs for faculty members in Saudi universities by presenting a comparison of qualitative data between the efforts of two major American universities, the American University and Virginia Tec University, and the efforts of King Saud University. This comparison tries to display how these universities endeavor to meet the current teaching and learning needs. The results are not surprising; the two American universities are coming up with skills training programs that are deemed to be appropriate, including: conferences and workshops, faculty member orientations, consulting, instructional support, online training, discussion forums, family-led discussions, junior faculty training, and summer training programs. They appear to have successfully instituted the 21st century focused skills training programs. Consequently, faculty members from these universities are able to provide students with the knowledge needed to navigate the current challenges. In contrast, King Saud University may have not instituted the programs effectively. Unfortunately, it has not prioritized 21st century professional skill training programs that would make faculty members fit well in the changed learning environments. However, there is a chance for fully implementing new programs that suit the current challenges and needs for faculty members in Saudi universities. Therefore, the paper provides some recommendations for trainers as well as program developers on the light of these results.

Keywords: 21st century, professional skill training programs, faculty members, Virginia Tec University, American University & King Saud University

1. Introduction

The 21st century faculty is expected to not only teach, but to also engage learners, absorb new discoveries from students, other experts, as well as sources of knowledge. Therefore, there ought to be a continuous feedback on instruction through the assessment of learning, incentive as well as opportunities for faculty members to invest on their abilities to help create and sustain a learning focused culture. However, this can happen only in an academic environment that values learning over teaching, and where the value is institutionalized in the workload, evaluation processes, as well as other professional expectations of faculty. Universities ought to carry out the restructuring of their faculty workload policies to put emphasis on learning which is regarded as the valued outcome of a university, and upon which assessment is based. The other aspect is a faculty member's duty is scholarship which encompasses aspects of publishing, seeking external funding, presenting to professional peers and the public, and applied work. The American education, over the years, has continually improved to remain the engine of both the economy and democracy.

Just as technologies have significantly influenced 21st century teaching, new knowledge is also credited for possibilities of what can be taught, and this combination of technologies with new knowledge has contributed to unlimited opportunities in the 21st century curricular offerings. Faculty members can teach more because they know more, and in some situations technology has made it easy to deliver information. Career-relevant education

¹ Department of Curriculum and Instruction, College of Education, King Saud University, Riyadh, Kingdom of Saudi Arabia

that provides critical, enlightened thinkers as well as lifelong learners requires the exposure to training options that meet individual faculty members' unique needs.

Providing 21st century professional skill training programs for faculty members requires strong leadership. Program leadership helps in setting the tone for teaching, specifically; the leader must lead the way in determining how the educators need to be prepared to produce the required student outcomes. Similarly, the leader plays a significant role in identifying the programs changes that should be made and the right time to make the changes. The interdisciplinary and interdependent nature of educator preparation within higher learning institutions means that implementing a vision such as the 21st century professional training program can only be successful if the transformation is conducted throughout the university.

Program design is also critical in the 21st century educator preparation. There is the consensus that an effective educator skills training program must consider coherence, interdisciplinary approach, extensive experience, inquiry approach, and performance based-assessment that is based on professional standards. It is important to consider if the approach chosen is helping to incorporate skills into the proposed program. The other important thing that needs to be considered is whether the program leverages current technologies and frameworks that stress information and communication technology use which has become a core component of faculties.

It should be noted that instructional models form a critical component of any educator skills preparation and training programs. This is why the need to integrate innovative and research-based teaching strategies, modern learning technologies, as well as real world contexts and resources should not be underestimated. The instructional model a faculty member chooses to use must be one that meets his or her teaching or research goals. Importantly, a faculty member, particularly those that are newly recruited can interact with other members from the same faculty or with similar expertise to learn about the best approaches of instruction to use.

Furthermore, the critical role of assessment in education has been very evident in the past few decades. However, there has been the question on whether most of the current assessment methods as designed can measure student ability. The argument is that assessments used currently focus more on measuring a student's ability to memorize discrete facts using multiple-choice tests which do not measure a student's ability to participate in complex or problem-solving tasks. With these inadequacies, educator preparation programs have a significant role to play in developing leaders who understand and can influence assessment, particularly around 21st century skills and knowledge. Assessment strategies can be better evaluated through combined effort of faculty members during workshops, conferences and instructional support.

The learning environment is also critical for an educator's preparation. Determining the enabling structures, policies, as well as strategies that support 21st century knowledge and skills acquisition among faculty members is a critical step towards creating the kind of environment that would promote learning. It is possible to work collaboratively with other members to establish a learning environment. Notably, a learning environment extends beyond the confines of a physical classroom. There are technology-based tools that have redefined the boundaries for teaching and learning, therefore, tutors and learners can interact with one another without meeting physically. However, faculties must have the skills and knowledge to fit the requirements of virtual classes.

Emphasis on active learning is revealed in various innovations; for instance, clickers have become commonplace while peer-led team and supplemental instructions are currently used in engaging students through cooperative learning. It is no doubt, therefore, that Virginia Polytechnic and State University and the American University have come up with different professional skill training programs to make faculty members competitive and able to cope with the changes that have been witnessed in America's 21st century higher education.

It is important to note that in the 21st Century America, numerous changes have taken place including: educational institutions, student populations as well as faculty roles. The traditional methods of teaching such as lectures and tests are quickly becoming obsolete, particularly because people are encouraged to think critically and creatively (Hainline, Gaines, Feather, Padilla, & Terry, 2012). In fact, new forms of pedagogy, self-guided instructions, active learning and group work are changing the teaching approaches, shifting away from traditional lectures to passive audiences. As a consequence, educators are beginning to appreciate that different teaching styles fit different learning environments. Student-faculty interaction is not the same anymore. The instructor is no longer the learned on stage in lecture-halls and classrooms, but an individual who play many roles when interacting with students, including teacher, advisor and mentor (Hainline et al., 2012).

Dynamic teaching cannot take place without a dynamic teacher. Therefore, an effective teacher is known through his or her qualitative teaching. Indeed, teaching does not merely promote literacy through impartation of certain amount of knowledge; rather, a teacher is considered the model or ideal to be followed by the learners.

Improving classroom quality or teaching process is not new, but have in the past few years received increased attention due to external pressures, including: society, family and technological changes.

Training for teachers does not end after qualifying; however, trainings continue and are lifelong processes. Trainings offer faculties the chance to develop and update their knowledge, whether on a particular subject, or an area. According to Ansari and Malik (2013), a teacher is a life-long learner because teaching itself is a lifelong process. Teachers are themselves learning throughout their teaching career. Notably, good teachers always seek activities that help them in their professional development. Besides, trainings break daily routine and provide an opportunity for sharing personal experiences. Moreover, training is important for a faculty's curriculum vitae that he or she can show an interest in maintaining subject knowledge and extending skills. Continuous professional development through trainings introduces new methodologies and instructional technologies.

Notably, staff development programs have various integrated parts, including: general sessions, small groups, committee endeavors, and individual study. Continuous development needs to include elements facilitate new faculty member transition from induction phase to the continuous development phase. Undoubtedly, novices need to replace dependence on mentor assistance with increasing self-reliance and problem solving skills. For transition to occur there has to be opportunities for reflection and collaboration.

Professional development does not imply attending a one day training course. Instead, professional development is characterized by many opportunities for professional learning on a daily basis. Some of the opportunities include action research, video discussions, observation of colleagues at workplace, reading professional journals, engaging in online discussions, mentoring, developing resources with colleagues, as well as other technology mediated platforms. According to a study by Kayani et al. (2011), the importance of training faculty in educational process is unquestionable. The authors further noted that organizing training in the form of seminars, workshops, lectures, and conferences in higher education is necessary to expose faculty members to the modern trends and enhance managerial and administrative skills. Besides, Carpenter and Haley (2014) also note that the use of technology is concerned with best practices for program design and to prepare faculty to understand the concepts that are related to technology, develop technological literacy, use of technology as a pedagogical tool, and as a force that shapes content development.

1.1 Statement of the Problem

Even though 21st century professional skill training programs are very critical for faculty members, most institutions of higher learning have not prioritized programs that would make faculty members fit well in the changed learning environments. This has warranted a study to highlight some of the current programs and how certain universities instituted them in their faculties.

2. Method

In its approach, the study took a qualitative approach. It involved training needs identification and analysis through close reading of text, taking down notes and making interpretations. This methodology involves sequential text interpretation and developing story lines considering the different texts, and conclusions are reached through discursive validation. Furthermore, in qualitative research, there is coding which allows assigning of words or phrases that summarizes visual data. The study also majorly relied on the information obtained from the websites of the various universities.

The researcher focused on the various posts by faculty members and university employees from the two chosen American Universities either presently or those who had made the posts while working there at one point in time. The posts by these groups were vital in this study because the existing training programs directly affect them. Besides, it is the faculty members who are aware of what they believe should be improved to execute duties effectively. Importantly, the faculty members whose posts were considered and analyzed were both the newly recruited as well as those that had been at the universities for many years. Gathering data from the posts of different faculty groups was crucial because the skills programs required by a newly recruited faculty member may not be the same for the established members.

The researchers were keen to get posts on the views of the faculty members regarding training needs such as teaching, research, personal and information technology skills. Besides, some of the posts helped identify faculty members' skills on how deal with people with special needs. The use of the universities' websites was considered because the researchers could easily get the views of many people at the same time without necessarily having to travel to see them physically. Since investigator did not have to be at the faculty members' places of work or offices, the costs were greatly minimized. For instance, a lot of time was saved for other research-related activities. After the collection of data, the investigator analyzed the information obtained and

identified the major themes that the various groups had identified. The various themes that were identified from the posts are discussed in the next section.

3. Results & Dicussion

The results are discussed by comparing the major themes regarding 21st century professional skill training programs for faculty members in Virginia Tec University, American University & King Saud University. These themes include:

3.1 Conferences and Workshops at the Beginning of the Academic Year

Faculty member conferences and workshops are critical for knowledge creation. Research, teaching and service cannot take place in isolation; instead, every field of knowledge can be enhanced through interactions between academics with the same career orientation through workshops and conferences. Coming together to talk about what has been learned creates a tremendous potential for leaps in understanding and knowledge. Virginia Polytechnic and State University organizes various workshops and conferences at the start of the semesters. The conferences bring together members of different faculties where they discuss pertinent issues regarding scholarship and research topics relevant for their practice.

Similarly, the American University, Washington has an annual Ann Ferren Conference on Teaching, Research, and Learning, which is held at the beginning of the semester. The 2016 conference, for instance, was held on January 8, 2016 (American University, Washington D.C., 2016b). Actually, the conferences bring together the faculty, the staff and the students. The students learn about the ways to create research resources, data publishing and visualization, the ways to use library resources, building writer communities in classrooms and meaningful engagement between the students and the tutors in classrooms. Moreover, the conference focuses on film making, using web for teaching and research, the role of learning styles for inclusive teaching, promotion of well-being and effective learning and students' perspectives on online learning. However, other conferences are socializing new students into academia, supporting student engagement and risk-taking in classroom (American University, Washington D.C., 2016b).

The lecture sessions during the conferences have been critically vital because the teaching staff have learnt the ways to assess and respond to academic misconduct, the teaching approaches that are encouraged by online teaching, and the ways to help students link their classroom experiences to skills that are valued in the workplace (American University, Washington D.C., 2016b). Furthermore, the conferences have been used to inform the lecturers about a number of the following aspects like how to reinvent student experiences for success and create inclusive classrooms for extroverts. With regards to introverts, and ambiverts, they now understand how to promote discussion, participation, and enthusiasm in class by implementing information literacy. Others areas have been how to create a balance between class and work; how to develop creative assignments, promote teamwork and diversity by dealing with millennial students and develop students professionally (American University, Washington D.C., 2016b).

Other important areas that are covered during the workshops include the dynamic media, the tools and tricks for visualizing concepts and data, polling and survey tools and media training. Still others are face-to-face teaching in a digital world, increasing research and expertise by exploiting media, reaching students in and beyond classes, and the resources for qualitative research. Besides, the effective grading strategies, which measure the research impact, create effective syllabus that supports undergraduate research creativity, geospatial research and promotion of mindfulness, well-being, effective learning and the culture of academic integrity. Moreover, teaching, when the campus is closed, organizing classroom tools from Google, the presentation skills, and working efficiently with Stata 14, while conducting research, represent other important aspects of the types of workshops that need to be highlighted (American University, Washington D.C., 2016a).

Unlike American University and Virginia Polytechnic and State University, King Saud University does not have any conferences and workshops at the beginning of the semesters. Instead, the university has a new student guidebook, which offers the information the students require, as they begin their campus life (King Saud University, 2010). In fact, the guide book contains information on academic guidance, admission and registration, E-admissions and registration, absences and warnings, study postponement and suspension, examinations and grading, extracurricular activities and student care programs, vocational training, and reference service. However, the one-on-one interaction sessions that characterize workshops and conferences are not available (King Saud University, 2010).

3.2 General Workshops

General conferences are important for faculties because they can be source of variety of information. Similarly, general workshops can be avenues for learning important tips and ideas on time management, teaching large classes, research skills and practice. Virginia Tec University has a professional education for the university members of teaching and research faculty. For instance, recently the university hosted a conference on teaching large classes. Actually, the conference, which was held for the second time this year, is organized by the university's Center for Instructional Development and Educational Research with the focus on better teaching and learning practices for the faculties that teach large classes (Virginia Polytechnic and State University, 2016). While participating in the conferences, the educators are equipped with the techniques needed for fostering deep learning with students inside the classes of different size. The conference also focused on research, practice, and conversation.

The American University has the generalized workshops, which are offered by the Counseling Center. Actually, the center offers the workshop programs to the community with the following possible topics: adjustment to college life, anger management, anxiety, communication skills, culture shock, diversity awareness, stress management, introduction to counseling services and time management. Other topics of focus are overcoming procrastination, relaxation and mindfulness training, work-life balance, and self-care (American University, Washington D.C., 2016a). The workshops can be tailored to a group or a classroom, particularly, if any topic is of a great interest. The director of outreach and consultation is to be contacted in such instances with at least a three-week notice before an event (American University, Washington D.C., 2016a).

3.3 Customized Workshops

Customized workshops are important in addressing an academic unit's specific teaching and learning needs. Customized workshops can be useful for field-specific and research-based interactions between members of various departments on the topics that interest them. Other topics that can be discussed when holding customized workshops may include: problem-based learning, use of innovative technology, and incorporating multicultural content in curriculum. Recently, Virginia Polytechnic and State University has hosted the conferences, which focused on project management certification, modeling and control design of DC/DC converters; deploying, managing, and securing windows 10. It also focuses on multi-scale metabolic modeling and engineering workshop; waste water treatment; professional development in local government; clinical pathology workshop; fluoridation of drinking water, and international symposium on driving research (Virginia Polytechnic and State University, 2016). In addition, the Center for Neutrino Physics in the Physics Department (CNP) at Virginia Tec University is preparing to hold upcoming conferences, workshops, and events in the coming months. For instance, in October, there will be a series of workshops on the physics and mathematics of F-theory, while the conference on String Phenomenology will be held in July of 2017 (Virginia Polytechnic and State University, 2016).

Similarly, the American University has specialized workshops on graduate enhancement. For instance, there have been a number of useful workshops in the recent past, particularly; the workshop on tech tools for keeping readings, notes, research, projects and papers tidy and organized, workshop on Doctoral Research Scholarship. The latter discussed the ways how to submit a high-quality proposal that can receive funding, and the workshop on networking for graduate students.

King Saud University does not provide much information regarding specialized workshops. However, the information posted on their website indicates that a workshop on IELTS academic module was held in 2014 (King Saud University, n.d.). The workshop for the staff was only conducted for one day that focused on IELTS academic test, sample tests, band scores, self-study techniques and registration centers (King Saud University, n.d.).

3.4 Orientation

Orientation provides critical information, resources, as well as support for new faculty entering an institution of higher learning such university. From the posts analyzed, it was obvious that during orientation, new faculty members were guided through tips on how to navigate university system, promotion and tenure, how to tap resources to support teaching and research, and act as key introductions to university sources and contacts. Those who made the posts had observed that Orientations could continue throughout the year with luncheon discussions or networking events which are designed to promote successful start to a rewarding career. What is important is that Virginia Polytechnic and State University has a new faculty orientation program for new research faculty members. The program provides important information regarding the administrative and academic functions. It is offered under the Office of Research and Innovation Human Resources.

However, the data collected from the American University, it was found that the university has a New Term Faculty Orientation. In this program, a one-week orientation program is conducted before the beginning of classes that serves as an introduction to the new tenure-line faculty and new term faculty at the university (American University, Washington D.C., 2016a). In fact, the orientation acts as the first part of a year-long American University program for new fulltime faculty instructors. Actually, the university website provides valuable information on orientation regardless of whether it is a new tenure line, a new term or an adjunct. In fact, Adjunct Faculty Orientations for new adjunct faculty are usually held at the start of the fall and spring semesters. Unfortunately, there is no information regarding the orientation or training programs for the faculty and staff from King Saud University.

3.5 Consulting

Consulting by faculty members comprise the use of scholarly expertise to benefit outside scholarly community either voluntarily or for some kind of compensation. Different universities have different policies regarding faculty consulting, with others limiting the proportion of time spent on consulting and putting in place laws that prevent conflict of interest. The research revealed that Virginia Tec University has policies and procedures on consulting. The university promotes consulting work for external entities as a strategy for professional development of faculty members. Consulting also encompasses communication and outreach channels that are not available otherwise (Virginia Polytechnic Institute and State University, 2016). Moreover, the realistic participation in consulting is inspired. As stipulated in the university's policy, the external consulting is related to individual area of expertise. The university allows the faculty members to enter consulting arrangements, while still working at the university, if such a worker appreciates a number of rules. That is if he/she contributes to the professional development; does not interfere into the assigned duties; does not employ the university resources or facilities; the written approval is obtained in advance from the head of department.

In fact, it came out clearly that the American University has both internal and external training programs. Internal training programs represent free services, which are offered to the university's faculty and staff. For instance, there is the Statistical Consulting Center, where staff and faculty get training on sample determination and randomization, design of survey and experiments, and the choice of proper statistical methods for studies. Moreover, the training focuses on importing data into the desired statistical software packages, interpretation of statistical results, power analysis, software support such as SPSS, SAS, and STATA among others, and assisting with statistics section into the manuscript (American University, Washington D.C., 2016b).

Actually, there is no any published information that shows that the university provides consulting training programs to the faculty and staff. However, there are faculty members, who offer external consulting services. In fact, such services can only be offered if they are in line with the university's policy.

3.6 Instructional Support

Instructional support initiatives provide avenues for encouraging teaching initiatives as well as ensuring that auxiliary support for completion of pedagogical objectives. Those who made the posts in the website noted that during instructional support, faculty members can raise issues concerning facilities and services that support teaching, assisting in the development and review of policies regarding use of libraries, and use of computer hardware and software. The Center for Instructional Development and Education Research (CIDER) takes the leading role, when it comes to the provision of instructional programs for the faculty members. For instance, the center organizes such professional development events as workshops and seminars. In fact, the Professional and Instructional Development Events are meant for the faculty to access seminars, conferences, workshops, and other opportunities, which are designed to promote the development of skills, knowledge, and attitudes related to teaching, assessment and evaluation, inclusion, diversity, engagement as well as development (Virginia Polytechnic Institute and State University, 2009).

Besides, there are faculty study groups and instructional grants for the faculty members. Faculty Study Groups (FSG) follows collective, sustained inquiry into specific issues and questions for the groups regarding teaching and learning. The acquired knowledge is shared through a written or presented scholarship. Through a meaningful collective inquiry, the study groups are able to promote a shared environment, which encourages pedagogical exploration, experimentation, and learning development (Virginia Polytechnic Institute and State University, 2009). FSGs represent an excellent opportunity for the members of different faculties to participate in interdisciplinary investigation or inquiry.

It was also clear that the Center for Excellence in Undergraduate Teaching (TCEUT) provides the faculty members with different instructional consulting services on an individual basis, which promote excellence in teaching and learning. Actually, such services are so individualized that they fit the characteristics, instructional

environment, content attributes, and the course purpose of a faculty member. Moreover, the instructional services offered by CIDER include the following: video recording, observations, and one-on-one consulting development (Virginia Polytechnic Institute and State University, 2009).

Similarly, it was evident from the posts that the American University offers instructional design services through its e-learning library. In fact, the library team has both a phone number and a drop box for technical support to the faculty on the university platform (American University, Washington D.C., 2016b). Besides, the team supports the faculty to design and implement effective learning techniques, carry out an assessment regarding the course development, create a multimedia platform items for courses, and assist the faculty members in the implementation of instructional technologies conducted through events, workshops and a one-on-one engagement (American University, Washington D.C., 2016b).

However, there is no information available regarding the instructional training programs offered to the faculty members at King Saud University. Therefore, it would not be accurate to declare that the university does not provide instructional services to its faculty members.

3.7 On-Line Training

Online training allows faculty members to use videos, instructional materials as well as relevant activities for learning management. The different online training options make learning more interactive and inclusive. From the study, it came out that Virginia Tec University has a program known as Networked Learning Initiatives (NLI) for its faculty members. The program provides avenues and support for exploring and incorporating new technologies into teaching and research undertakings. In fact, the program encompasses the larger Technology-enhanced Learning and Online Strategies (TLOS) unit of its information technology department. The main objective of the NLI is to provide an avenue for collaborative work with the faculty in transforming the ways how teaching and learning is aligned at the university and to weigh faculty expertise, especially, when discovering and implementing new practices in the content areas. Furthermore, the university provides online development prospects for the professional development and the tuition assistance programs that enable the faculty members to remain challenged on a constant basis.

The Institute of Distance and Distributed Learning offers support to the increasing distance and distributed learning activities that Virginia Tech has. Actually, the university has managed to extend its campus in a manner that allows it to offer teaching services anywhere and anytime (Institute for Distance and Distributed Learning, n. d.). What is important, there are multiple methods that faculty members can utilize in their instructional delivery and student interaction to encourage an engaging and high-quality learning. For instance, most of the university faculty members have been trained how to deliver distance learning through the archived videos, videoconferencing, satellite channels, and desktop computer audio-graphics (Institute for Distance and Distributed Learning, n. d.).

The Online Learning Group (OLG) provides training courses to the faculty members or individual members, who are interested in teaching using online or hybrid courses. The OLG, which is working in collaboration with the Teaching and Learning Group (TLRG), also provides training to the faculty members on new digital tools or platforms including social media that are applicable in distance learning and one-on-one classrooms (American University, Washington D.C., 2016b). In fact, it was made clear that the faculty members can teach online or hybrid classes at the university only if they have successfully completed the online teaching, research and learning program. However, the specialized programs, for instance, law, the PMBA and the degrees offered in collaboration with vendors may require separate trainings (American University, Washington D.C., 2016b).

Similarly to the American University and Virginia Tec University, King Saud University also offers online training programs. The information posted on the university's website shows that there was an e-learning training for the faculty members in 2013 (King Saud University, 2013). During the training, the members of the faculty were introduced to the e-learning instructions and information technology systems. Actually, those who had made the posts noted that the E-learning and Distance Learning Deanship organized the training with the focus on virtual classrooms, systems management, and the strategies on digital content development. Moreover, the study areas were considered to be vital because of their ability to improve educational environment at King Saud University (King Saud University, 2013). The university supports the initiative by its faculty members to register for e-learning because of the realization that excellent performance and achievement can only be attained if the members stay up-to-date with the technological development. Furthermore, the faculty participation in e-learning is encouraged at the university because the application of online skills makes the learning process enjoyable for the students (King Saud University, 2013).

3.8 Discussion Forum, Blogs, and Wiki

Discussion forums can be used for discussing issues related to teaching, learning and mentoring. Most forums are restricted and are visible only to members. Therefore, before a faculty member comments, he or she must sign up. It was also evident from the posts that forum settings support discussions through the creation of discussion threads. Of note, the American University has training forums, blogs and wiki for its faculty members. The channels, which are under the CTRL, have been useful, particularly, in the take-away topics including the following: preparing to teach, teaching strategies, assessing student learning, and tech tools. The channels are updated continually to ensure that the members get only up-to-date information (Center for Teaching, Research, and Learning American University, 2014b).

Virginia Tec University has a discussion forum for its faculty members. Some of the recent discussions that have taken place include the following; preparing students, new models of funding, a consortium of learners, and the proposed scenarios (Virginia Polytechnic Institute and State University, 2015). In addition, Virginia Tech Research is a blog, which is created in the form of a magazine, where the research, scholarship and creative works of the faculty members are presented. The study revealed that King Saud University also promotes the discussion forum, blogs, and wiki (Ling, 2013). For instance, Reima Al-Jarf, who has worked as a professor for more than 25 years in the university, is a notable example. In fact, she has used discussion forums, podcasts and blogs (Ling, 2013).

3.9 Faculty-Led Discussion Meeting

Discussion meetings led by faculty are useful in exploring important topics that are specific to particular faculties. In such meetings, small-group conversations are encouraged to facilitate discussions. The small-groups are led by faculty colleagues and members may be encouraged to steer discussions in ways they deem suitable. At Virginia Tec University, the discussion meetings led by the faculties focus on holiday schedules, exam schedules, faculty-staff planning calendar, the professional development, the technology-enhanced learning, networked learning strategies, and the professional development in the field of teaching and learning (Virginia Polytechnic and State University, 2016). It was also evident that the university recognizes the faculty excellence by offering various awards. Some of the recent awards focused on academic advising, international outreach and excellence, teaching excellence, extension excellence, research excellence, president's award, career achievement, and technology assisted award (Virginia Polytechnic institute and State University, 2016).

Every year, American University acknowledges the excellent achievement of the staff through University Awards. In fact, those who posted revealed that that the next university faculty awards will be presented in April of 2017; the list is provided already. The awards recognize the contribution of the faculty members to teaching, research and service (American University, Washington D.C., 2016b). In addition, the faculty members hold regular discussions at the university that enhances the experiences of the faculty members. Moreover, King Saud University organizes the discussion programs for the faculty members to enhance the members' stay at the university and to create a common understanding. Actually, the common viewpoint is particularly important in the matters that require taking a common stand.

3.10 Junior Faculties Training (JFT)

JFT is promoted as a strategy for supporting post-doctoral faculty who are on their way to becoming independent investigators or teachers. JFTs can be promoted through seminars and training workshops around pre-selected topics. Interdisciplinary and cross-cultural approaches are important in such programs, and participants should be encouraged to work collaboratively. American University approaches the junior faculty training from various perspectives. The trainings are meant to provide the juniors with practical experience to their professional development and the classroom techniques. It was revealed that different seminars are convened by the university for the juniors on a more frequent basis than once every semester. Moreover, the university provides the junior members with the learning resources, the teaching methodologies, course management, and shared lunches, where the ideas regarding the best practices are often shared.

On the other hand, Virginia Tec University has the junior faculty training initiatives for the professional development through the networked learning strategies, promotion and tenure, and professional development. Similarly, there are programs for the junior faculties on grant writing, research administration, and training opportunities. Moreover, King Saud provides training and learning opportunities for its junior faculty. For instance, the junior staff represents the grand round in the college of medicine. In fact, this is considered to be an important step towards the preparation for examination by the pathology board (King Saud University, 2016).

3.11 Program Summer Training

In the American University, summer training programs give faculties the opportunities to work with others in real environments. Such trainings are meant to expose faculties to different practices in their fields of specialization. Faculty members gain more practical knowledge and substantially increase their work experience and improve interpersonal skills. Both King Saud University and Virginia Tec University have no information on summer training for the faculties. However, American University has summer workshops for the faculties. Actually, the programs are offered by the School of Professional and Extended Studies.

In the 21st century, universities and colleges have to consider faculty development programs such as mentoring, delivery through on-and off-campus strategies, promotion of anyplace and anytime programming that support in-time needs. Just like students, faculty members are learners with needs and constraints. Therefore, support programs need to be valuable, current, relevant, and engaging. Moreover, the programs have to demonstrate best practices that encourage participatory and facilitated learning. Importantly, faculty skills development and training programs must address the various roles of the faculty member as a teacher, mentor, facilitator, advisor, and researcher. However, it must be noted that implementing and supporting successful faculty training programs are both an opportunity and challenge, particularly with budget cuts in universities and colleges. Therefore, it is important for institutions to continue seeking new dynamic ways of supporting teaching and learning innovation. It is evident from this study that Virginia Polytechnic and State University and the American University have put in place various measures to promote 21st century professional skill training programs for faculty members.

Notably, the two universities have adequate information regarding the various skills training programs that they offer. It is no doubt that the programs provide faculty members with the necessary skills that they need to execute their duties in this era. Faculty members in these universities are able to provide relevant education, thereby, making the institutions very competitive globally in terms of knowledge dissemination. In contrast, King Saud University may not have much information currently regarding the skills training programs. However, there is a chance for the university to channel its resources in creating interactive and innovative programs, which would enable it to rank better among universities with established platforms such as Virginia Polytechnic and State University and the American University. Platforms such as conferences, workshops, consulting, and instructional support are critical for King Saud University's faculty skill development. The programs must be sustainable to create a long lasting impact among faculty members.

- 21st century faculty members have unique professional development as well as support needs, particularly in teaching and learning. Supporting and leveraging the talents of faculty needs, especially given that many of whom are early technology adopters or innovators, therefore, the following recommendations may need to be considered:
 - 1) Assumptions about the needs of faculty members should be avoided. Instead, there is need to develop annual faculty surveys in order to compile demographics as well as to identify trends in faculty development needs. The surveys would assist in partnering individuals in mentorship programs.
 - 2) It is important to familiarize with and establish varied menu of instructional technology tools for faculty at King Saud University. For instance, it would be appropriate to put in place social networking tools and mobile technologies for faculty. These technologies should include tools that are specific to the different disciplines, particularly where new faculties have been recently exposed.
 - 3) It would be appropriate to incorporate assessment into faculty development programs and to align them with instructional strategic initiatives. Expected outcomes should be plainly defined and measured. Apparently, the results of an assessment can drive ongoing refinement of faculty development programs as well as creation of new programs.
 - 4) The various heads of various faculties at King Saud University need to work closely together with the faculty members to identify skills gaps. Identifying the gaps will help to come up with professional training programs which best suit faculty members. Even though the professional training programs appear to be similar in most of the universities, their mode of application may differ based on existing resources and training needs.

References

- American University, Washington D.C. (2016a). *Thank you for attending the teaching, research & technology workshops on August 17, 18, 23, and 24, 2016.* Retrieved from http://www.american.edu/ctrl/teachingandtech.cfm
- American University, Washington D.C. (2016b). *Thank you for attending the 27th annual Ann Ferren conference on teaching, research, and learning.* Retrieved from http://www.american.edu/ctrl/conferencesessions.cfm
- Ansari, U., & Malik, S. K. (2013). Image of an effective teacher in 21st century classroom. *Journal of Educational and Instructional Studies in the World*, 3(4), 61-68.
- Carpenter, A., & Haley, A. (2014). *Transforming to 21st century educator prepration program: A report of the 2023 teacher preparation task force*. Retrieved from https://www.cmich.edu/colleges/ehs/unit/tpt2023/Documents/TPT%20REPORT%20FINAL%20REPORTp df
- Center for Teaching, Research, and Learning American University, Washington, DC. (2014). *Ten take-aways*. Retrieved from http://edspace.american.edu/ctrl/
- Hainline, L., Gaines, M., Feather, C. L., Padilla, E., & Terry, E. (2012). Changing students, faculty, and institutions in the twenty-first century. Retrieved from https://www.aacu.org/publications-research/periodicals/changing-students-faculty-and-institutions-twenty-first-century
- Institute for Distance and Distributed Learning. (n. d.). Virginia Polytechnic Institute and State University:

 Distance education program, Blacksburg, VA 24061. Retrieved from http://www.distancelearningprofiles.com/Virginia-Tech.html
- Kayani, M. M., Morris, D., Azhar, M., & Kayani, A. (2011). Analysis of professional competency enhancement programs NAHE on the performance of college teachers. *International Journal of Business and Social Science*, 2(18), 169-175.
- King Saud University. (2010). *New student guide book*. Retrieved from http://cams.ksu.edu.sa/sites/cams.ksu.edu.sa/files/attach/studentManual 1.pdf
- King Saud University. (2013). *KSU finishes e-learning training for faculty members*. Retrieved from https://news.ksu.edu.sa/en/node/103166
- King Saud University. (2016). *Clinical pathology residency program*. Retrieved from https://medicine.ksu.edu.sa/en/node/2375
- King Saud University. (n. d.). Workshops. Retrieved from http://fac.ksu.edu.sa/malbugami/page/70447
- Ling, L. H. (2013). Innovative methods and technologies for electronic discourse analysis. In *Pennsylvania: IGI Global*.
- Virginia Polytechnic and State University. (2016). *Virginia Tech to host conference on teaching large classes*. Retrieved from https://vtnews.vt.edu/articles/2016/06/provost-largeclassconference.html
- Virginia Polytechnic Institute and State University. (2009). *Center for Instructional Development and Education Research*. Retrieved from http://www.cider.vt.edu/development/index.html
- Virginia Polytechnic Institute and State University. (2015). *Ideas and comments: Discussion*. Retrieved from http://www.beyondboundaries.vt.edu/discussion.html

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).