

A Blended Learning Model Used to Prepare Saudi Arabian Doctoral Students to be Knowledge-Based Educational Leaders

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ABSTRACT: To secure a better future in today's globalized world, a knowledge-based society must be a priority for every nation. For a long time, many nations have relied primarily on passive resources—that is, natural and financial resources—for their existence. However, in the era of globalization dominated by knowledge and information technologies, the focus is shifting towards active resources—that is, human resources. Human resources are perceived by nations as a key engine for competitiveness, economic prosperity, national sovereignty, and human dignity. One of the media through which these human resources are developed is education, which involves teaching and learning. To respond to the increased demands for human competencies to function in a knowledge-based society, educators must adapt to the emerging teaching and learning approaches. One of these emerging approaches is the blended learning approach, which has the ability to improve learning and cost-effectiveness, increase access and flexibility, and help institutions stay up-to-date. Therefore, in contrast to a traditional research paper, this paper describes a teaching and learning practice, with the aim of achieving two objectives: 1) to present a brief background of the blended learning approach and its models and 2) to share a specific blended learning model used to prepare Saudi Arabian doctoral students to be knowledge-based educational leaders.

KEYWORDS: blended learning, educational leaders, knowledge-based, Saudi Arabia

Introduction

In the era of globalization, which is dominated by knowledge and information communication technologies, the measure of a nation's wealth is "its capacity to educate, attract and retain citizens who are able to work smarter and learn faster" (Spellings 2006, ix). Recognizing the importance of knowledge and information technologies in this competitive world, many Gulf countries have embarked on visions to develop knowledge-based economies (e.g., Kuwait 2035, Qatar 2020, Saudi Arabia 2030, and United Arab Emirates 2021). At the center of knowledge-based economies are human resources, which are perceived by nations as a key engine for competitiveness, economic prosperity, national sovereignty, and human dignity. One of the media through which human resources are developed is education, which involves teaching and learning.

Understanding the significant role education plays in a knowledge-based society, Saudi Arabia has made education one of the pillars of its vision for 2030. The pillar on education aims to develop a modern curriculum based on rigorous standards; involve parents in the education of their children; train students and facilitate their transition between educational pathways; help students make careful career choices; close the gap between education output and job requirements; improve the international ranking of Saudi universities; and increase students' academic achievement nationally, regionally and internationally (Kingdom of Saudi Arabia 2016, 28-41).

To make this vision for 2030 a reality, the Saudi Ministry of Education has mandated all educational institutions to develop new programs that not only bridge the gap between job requirements and education output but also meet national and international standards. As a result, new programs are being developed within and across national institutions as well as between Saudi and international institutions. To achieve this vision, educational leaders need, in addition to the new programs, an understanding how innovations lead to positive changes (e.g., achieving the desired goals). Unfortunately, the role of educational leaders, developed for the needs of the past, is no longer suitable for the challenges educational institutions face in the 21st century (Pont, Nusche, and Moorman 2008, 9). New 21st-century forms of knowledge (e.g., mastery of contents) and skills (e.g., critical thinking, communication, technology, and collaboration) are essential elements for participation, achievement, and competitiveness in the global community (Greenhill 2010, 3-5).

This is the motivation behind the Taibah University and The George Washington University international partnership, which led the two institutions to develop a blended learning model to prepare Saudi Arabian doctoral students to be knowledge-

based educational leaders. In this paper, the term knowledge-based educational leaders refers to leaders who not only have the knowledge, skills, and characteristics of 21st century leaders but also support, teach, and assess knowledge, skills, and characteristics that enable students to succeed in work and life (Ontario Ministry of Education 2016, 8-23)

Blended learning is one of the emerging teaching and learning approaches that benefit educational leaders not only during course and training programs (initial leadership preparation) but also during the development of relationships and challenge assignments. According to Rabin (2014, 2), successful leaders learn from three experiences over their careers—coursework and training (course-based skills building, virtual classroom events, books, articles); development of relationships (communities of practice, networking, mentoring); and challenge assignments (increases in scope, horizontal moves, new initiatives, turnarounds, mistakes, ethical dilemmas).

For this reason, the blended learning model developed by Taibah University and the George Washington University incorporated all three learning experiences (course and training, development of relationships, and challenge assignments). Thus, this paper aims to achieve two objectives: 1) to present a brief background of the blended learning approach and its emerging models and 2) to share a specific blended learning model used to prepare Saudi Arabian doctoral students to be knowledge-based educational leaders.

Tracing the Root of the Blended (Hybrid/Mixed) Learning Approach

The blended learning approach is a topic of interest in education (K12 and higher education) and other organizations (Halverson, et al. 2017, 2-24, Horn and Staker 2011, 1-14). This approach to teaching and learning seems like a new concept to novices in the field; however, the idea first appeared nearly two centuries ago. Several authors (Horn and Staker 2011, 1-14; Matthews 1999, 54-56; Nasseh 1997, 1; Singh 2003, 51-54,) trace the root of blended learning back to distance education. Nasseh (1997, 1) documented that, in 1833, a Swedish newspaper advertised the opportunity to study composition through the medium of post. Seven years later (1840), Isaac Pitman used the newly established penny post in England to conduct instruction via correspondence (Matthews 1999, 54-56, Nasseh 1997, 1). His teaching and learning approach was adopted three years later with the creation of the phonographic correspondence society.

The above cited authors argue that instruction via correspondence rapidly spread in other countries. For instance, in Germany (1856), two instructors used instruction by correspondence to teach a foreign language in Berlin. In the US, beginning in 1873, a Boston-based society encouraged study at home. In the following 24 years, the Boston-based program attracted more than 10,000 students, mostly women, who received guided readings and regular tests from corresponding teachers. The idea of distance learning rapidly gained ground in the US. The State of New York moved to recognize academic degrees for students who completed courses via correspondence. A daily newspaper in Pennsylvania began offering correspondence courses in 1891; enrollment in the program increased from 225,000 students in 1900 to more than 2 million students in 1920. With the advent of technology, another approach of distance education appeared—electronic communications. This medium of instruction used audio recording to teach blind students. By the early 1920s, at least 176 radio stations were alive in US educational institutions. Other types of technological instruction followed, including: teaching via television (experimentation in the early 1930s and college credit courses in the 1950s); satellite technology and projects (in the 1960s and 1970s); fiber-optic communication systems with live two-way audio and video systems (in the late 1980s and early 1990s); web-based instruction (in the late 1990s); and blended learning (beginning in the early 2000s).

Regarding the latest learning approach (the blended learning model), a variety of definitions have been proposed. Therefore, it is logical to adopt a working definition to guide readers regarding what blended learning means for the purposes of the present paper. In the literature, many definitions of blended learning exist, but they all seem to agree that blended learning (mixed or hybrid) is a combination of two approaches of teaching and learning—face-to-face (traditional) and remote (online) (Acree, et al. 2017, 105, Graham 2013, 335, Kiviniemi 2014, 1, Lautzenheiser and Hochleitner 2014, 3, O' Byrne and Pytash 2015, 137). In this paper, however, we adopt a more explicit definition (Kristensen, Horn and Staker 2013, 2) that reflects the model of blended learning we intend to present in this paper. Thus, blended learning in this paper is defined as:

[A] formal education program in which a student learns at least in part through online with some element of student control over time, place, path, and/or pace and at least in part at a supervised brick-and-mortar location away from home. The modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience (Kristensen, Horn and Staker 2013, 2).

The blended learning approach is becoming popular in education and other fields due to many factors. For instance, Horn and Staker (2011,2) argue that one of the factors accelerating the adoption of the blended learning approach in the US is the approach's ability to help schools reduce costs on personnel, facilities, and textbooks while maintaining or improving academic results. A second factor accelerating the adoption of the blended learning is attributed to the pressure schools face to meet individual student proficiency in core subjects (e.g., the No Child Left Behind (NCLB) Act). School leaders, therefore, cannot afford to ignore a teaching and learning approach that has the potential to improve academic performance, reduce costs, and facilitate lifelong learning through communications and information technologies.

Pressure to show results comes from other sources in addition to NCLB. School data, which are freely available and accessible anywhere at any time (e.g., USnews.com, Greatschools.com, schooldigger.com, niche.com), put schools under pressure to show results, as parents, stakeholders and the wider society have access to these sites to compare students' test scores among schools. Further, private online education providers (e.g., Connections Academy, CAVA, insightschools.net, k12.com) understand that online-only education has limitations like those faced by traditional education; therefore, these private organizations are seeing the blended learning approach (combining face-to-face and remote learning) as means to expand their school markets.

Interest in the blended learning approach is not limited to K-12 education; it is becoming popular in higher education as well (Alammary, Sheard and Carbone 2014, 440, Halverson et al. 2017, 1). Like K-12, some reasons for embracing blended learning in higher education are attributed to the ability of the blended learning approach to improve learning and cost-effectiveness, increase access and flexibility for the institutions and the learners, and help institutions stay up-to-date in this increasingly competitive environment (Halverson et al. 2017, 12-13). The above-cited authors have further documented the benefits of blended learning in higher education with a meta-analysis of 51 empirical studies showing that students who took blended learning courses performed, on average, better than those who took the same courses only online or face-to-face.

Both educational institutions (K-12 and higher education) and other organizations recognize the advantage of blended learning over the face-to-face and remote approaches of teaching and learning. However, the way the blended learning approach is designed and implemented varies within and across institutions. As a result, various models exist to satisfy the needs of learners, instructors, and institutions (Acree, et al. 2017, 107, Schmidt and Ralph 2016, 1, Singh 2003, 52-54). Studies articulate four

commonly used models of blended learning. These models, as summarized below, are known as the rotation model, the flex model, the self-blended model, and the enriched virtual model (Acree, et al. 2017, 107-108, Horn and Staker 2011, 4-5)

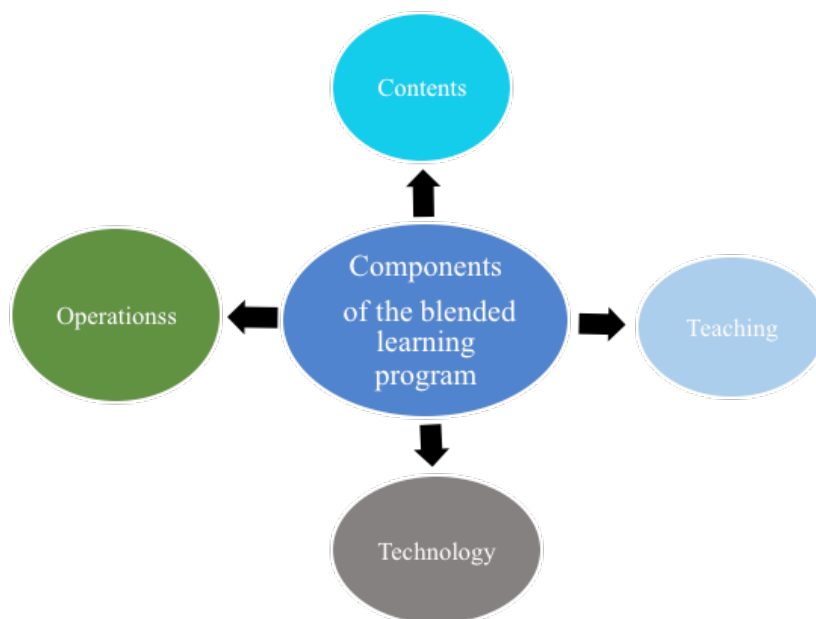
In the rotation model, students rotate on a fixed schedule within a given course or subject to complete learning activities under the guidance of a teacher. In this environment, students (either individually or in groups) rotate between stations that have different learning approaches but all aim to achieve the same learning objective. The teacher, who gives directions, sits at one of the stations. In the flex model, the instruction takes place mainly online in a physical classroom and follows the students' own pace. The teacher's role in the flex model is to provide group instruction and individual assistance as needed. In the self-blended model, students take online classes at home or at school to supplement the traditional courses. The teacher acts as both face-to-face and online teacher, giving students the opportunity to get help with online courses at school. In the enriched-virtual model, the main course delivery is online and is rarely combined with brick-and-mortar visits. In this learning environment, the teacher's role is to remotely provide assistance through online communications (e.g., email, online discussion boards). For additional details on how blended learning programs are implemented in K-12 and higher education, see Garrison and Vaughan (2008), Powell et al. (2015), Staker (2011), The Oxford Group (2013), Watson (2008), and Watson et al. (2013). Following this brief background on blended learning and its models, we present in the next section a specific blended learning model used to prepare Saudi Arabian doctoral students to be knowledge-based educational leaders.

The Taibah Univ. and The George Washington Univ. Blended Learning Model

The blended learning model developed between Taibah University and The George Washington University is used to teach part of a Ph.D. program in Educational Leadership and Administration. This Ph.D. program is an international partnership program developed in collaboration with the Graduate School of Education and Human Development (GSEHD) at The George Washington University (GWU) in the US. The program prepares doctoral students for leadership, teaching, research, and community service responsibilities in K-12 and higher education by providing them with a rigorous preparation in theory, research, and practice to lead their institutions according to national and international standards. The Ph.D. is a full-time, four to five-year, cohort program consisting of 48 credit hours (36 for the coursework and 12 for the dissertation).

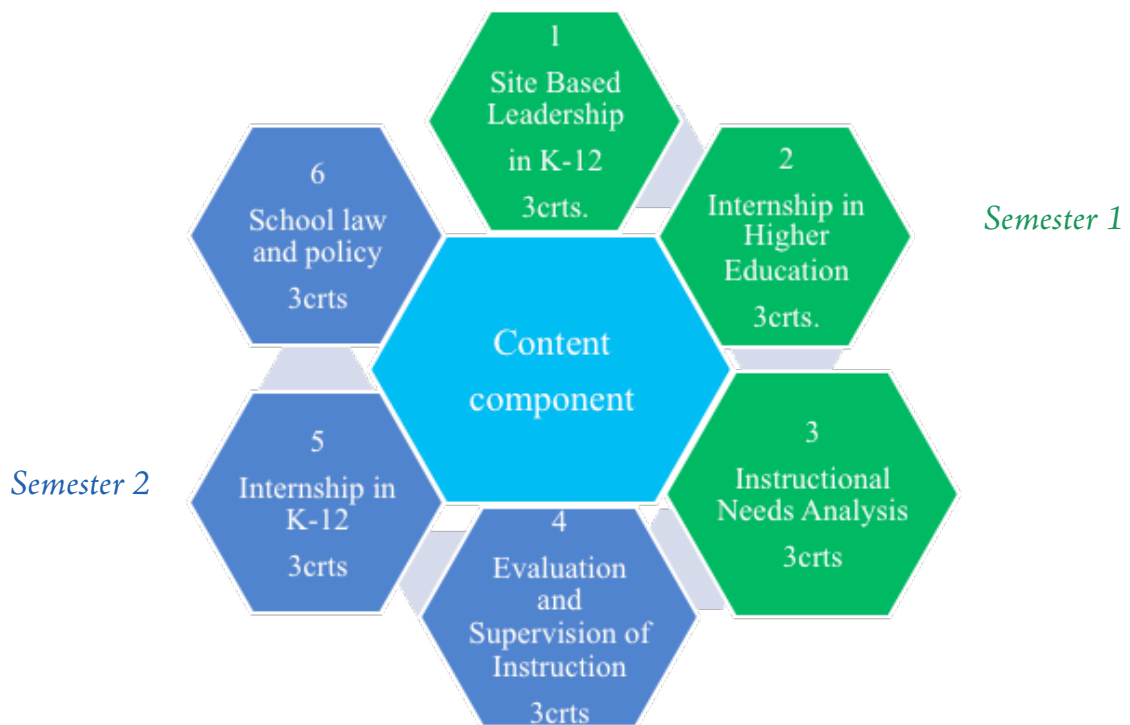
The first part of the program consists of six courses (18 credit hours) taught via a blended learning model by faculty members from the GSEHD at GWU in collaboration with Taibah University (TaibahU) faculty members. Upon completion of the six courses (18 credit hours), successful students receive a Post Master Certificate (PMC) in Educational Leadership and Administration from GWU with earned credit hours transferred to TaibahU. The remaining part of the program consists of six courses (18 credit hours) and the dissertation part (12 credit hours), which are taught and guided by TaibahU faculty members, while the monitoring is conducted by GWU faculty members. Upon completion of the remaining part, successful students are awarded a Ph.D. in Educational Leadership and Administration from TaibahU. The blended learning model was, thus, planned alongside the doctoral program. In the planning, a team of faculty members from both institutions (TaibahU and GWU) used a needs assessment questionnaire to identify TaibahU needs (educational goals), resources, capabilities, and student profiles. In addition to the needs assessment questionnaire, the team reviewed the literature on blended learning (Garrison and Vaughan 2008; Horn and Staker 2011; Kiviniemi 2014; Moore et al. 2017; Pont, Nusche, and Moorman 2008; Powell, et al. 2015; Rabin 2014; Singh 2003; Watson et al. 2013) and conducted two workshops, one at TaibahU in Saudi Arabia and the other at GWU in the US. Based on the gathered data, the team considered four components that are crucial for the success of a blended learning model: the contents, the teaching, the technology, and the operations.

Graph 1: Components of the blended learning program



To address the content component, we developed six courses (including description, objectives, requirements, evaluation, learning outcomes) for a total of 18 credit hours for the blended learning model leading to a Post Master Certificate (PMC). In the course design, we used two academic standards: one followed by TaibahU (the National Commission for Academic Accreditation and Assessment, NCAAA) and the other by GWU (the Educational Leadership Constituent Council, ELCC).

Graph 2: Contents component of the blended learning program



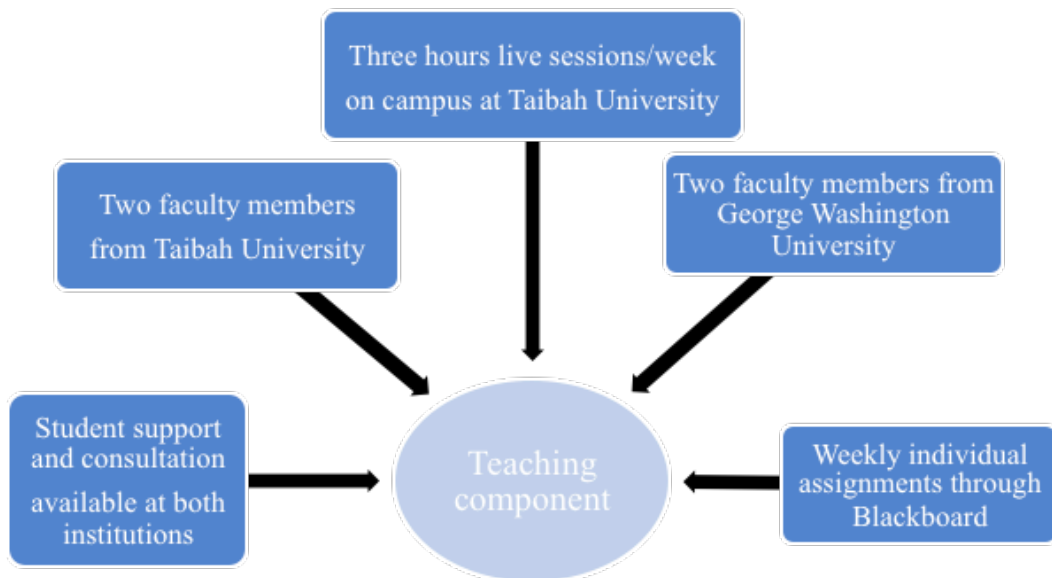
Four courses (1, 3, 4, and 6) aimed to prepare doctoral students in Site-Based Leadership in K-12, Instructional Needs Analysis, Supervision and Evaluation of Instruction, and School Law and Policy. The Site-Based Leadership in K-12 course examined the function, processes, and best practices involved in school principal leadership. It integrated theory with practice through sustained field-based experiences to increase students' capabilities, competencies, and disposition as they transition to a leadership position/career. The Instructional Needs Analysis course introduced students to the instructional design process and to curriculum practice and theory at the national, state, district, and school levels. The Supervision and Evaluation of Instruction course focused on the roles and functions of instructional leaders in the areas of improving teacher quality through evaluation and supervision. The School Law and Policy course focused on law and policies governing education. It helps

educational leaders to find, interpret, understand, and implement education laws, policies, and regulations.

The remaining two courses (2 and 5) of the blended learning model consisted of an Internship Administration in K-12 and an Internship in Higher Education. The internship administration in K-12 course requires students to complete a minimum of 85 hours of activities (observations, participation, writing a personal growth plan) related to leadership work in a school. The Internship Administration in Higher Education course provides students with the opportunity to gain knowledge and experience related to careers in higher education administration in one of the administrative offices in a university. In this course, students must complete a minimum of 80 hours throughout the duration of the course.

To address the teaching component, both institutions (the Taibah University and The George Washington University) assigned the course delivery to qualified faculty members with expertise in content and pedagogical knowledge, technology, and both Western and Middle Eastern education systems.

Graph 3: Teaching component of the blended learning program

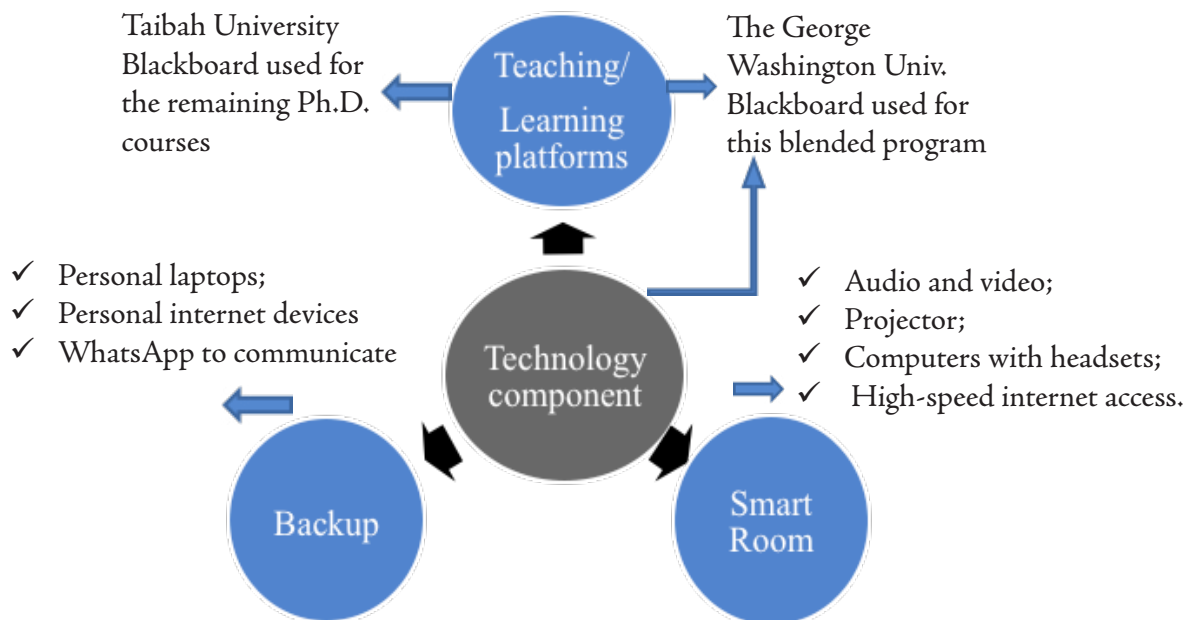


For each course of the PMC, four faculty members (two from TaibahU and two from GWU) collaborate to deliver three hours of live sessions once a week. Students and faculty members from TaibahU meet on campus in a classroom during the live sessions while GWU faculty members in collaboration with TaibahU faculty members deliver

the lectures via blackboard. For the two internship courses, faculty members and students meet once a month for the live sessions; meanwhile, students must submit a weekly progress report, take part on the discussion board through Blackboard, and complete two independent online assignments throughout the duration of the course. At the end of the internship, students submit a portfolio, which includes weekly field reports, a final project, and a PowerPoint of the project to be presented during the last day of the live sessions.

To address the technology component, we first needed to choose a teaching platform to use during course delivery. Both TaibahU and GWU use Blackboard as a teaching platform, but the team agreed to use GWU Blackboard because the Post Master Certificate (PMC) is awarded to TaibahU students by GWU. Added benefits for using the GWU platform include the opportunity for students and faculty members from TaibahU to experience how teaching and learning through blackboard are conducted at GWU. At the end of the blended learning program with GWU, TaibahU faculty members use the TaibahU teaching and learning platform (Blackboard) to deliver the remaining courses of the doctoral program. Thus, by the completion of the entire Ph.D. program, students are expected to be knowledgeable in the use of both teaching and learning platforms.

Graph 4: Technology component of the blended learning program

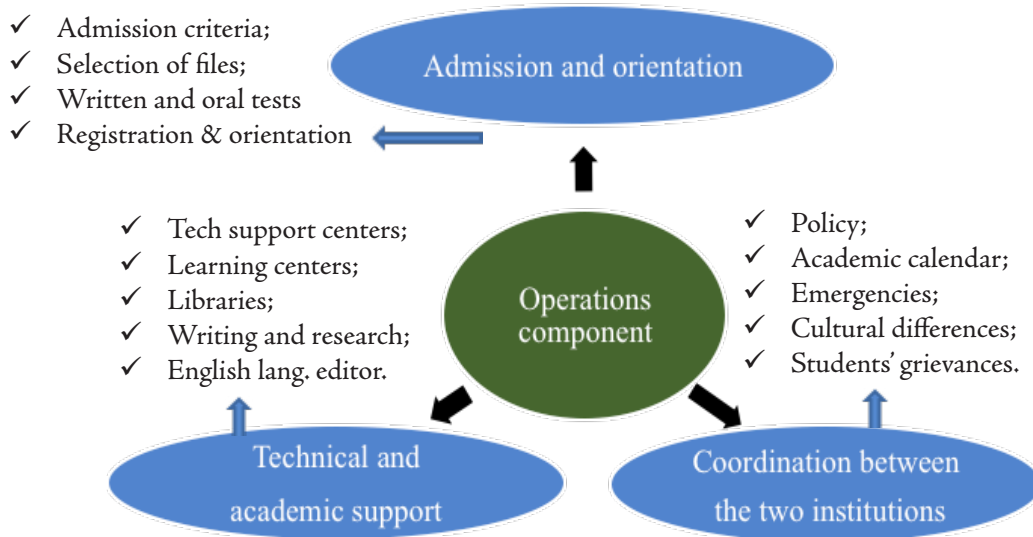


Having decided on the teaching and learning platform, we needed to secure a smart room with internet, audio, and video capabilities for the synchronized live sessions to

assure interoperability between GWU and TaibahU technologies. As a backup to the university's high speed internet and equipment, students, and faculty members from TaibahU are required to bring their laptops and internet devices during live sessions to avoid class interruptions if internet connection becomes an issue. Additionally, faculty members downloaded the "WhatsApp" program as a backup communication medium between members from the two institutions in the event of connection difficulties during live sessions.

To address the operations component of the blended learning, the two institutions addressed student admission and orientation to the program; technical and academic supports; and coordination between GWU and TaibahU on issues such as policy, academic calendar adjustment, emergencies, cultural differences, and students' grievances (if any).

Graph 5: Operations component of the blended learning program



Referring to the admission and orientation to the program, the planners shared admission criteria for aspiring educational leaders used by both institutions (GWU and TaibahU). The reason for using both admission criteria was that students accepted to the TaibahU Ph.D. program would be, first, GWU students for the Post Master Certificate (half of the coursework for the Ph.D.) and then TaibahU students for the remaining coursework and dissertation of the Ph.D. program. Thus, in order for a candidate to be admitted in the program, he or she must meet both admission criteria (those of the College of Education from TaibahU and the Graduate School and Human Development from

GWU). The admission process consists of a written test and an oral test. Dossiers of admitted students at TaibahU are then submitted to GWU, which in turn evaluates the dossiers for compliance with GWU admission criteria.

Faculty members from each institution collaborate with the admission office of their institution to matriculate and register students for the courses. Following the registration, admitted candidates are given an orientation about the program, the teaching and learning approach, and the support services available to them at TaibahU and GWU (libraries, writing and research, tech support centers, etc.). In addition to these support services, an experienced academic writer and native English speaker from GWU volunteered to review students' drafted papers and provide them with feedback, as the language of instruction (English) is a second language for the students. This feedback is mainly on writing standards (APA style, grammar, criteria for graduate papers). Further, the volunteering faculty member agreed to provide four sessions of workshops on academic writing for students to help them improve their academic writing skills.

Regarding the coordination between the two universities, two faculty members from each side serve as a liaison between the educational authorities of their own and the other university. On behalf of the two universities, the four faculty members manage all issues related to policy, academic calendar adjustment, emergencies, cultural differences, and students' grievances. At the end of each semester, the faculty members write a progress report for the educational authorities.

Challenges and Benefits

Challenges: Some of the significant challenges the implementers had to overcome were related to legal, academic, financial, and cultural differences; bureaucratic procedures; and students' initial understanding of blended learning classes in comparison to pure online classes. Also, the implementers faced minor issues related to the language of teaching (English as a second language for the students), academic writing, and technical issues, particularly for the first two weeks of classes. However, we were able to overcome these challenges as the faculty members from both institutions were prepared to face them, knowing that innovation is a challenging task. As we are the first to initiate this new program at Taibah University through an international partnership, we were prepared to face obstacles and setbacks. We attribute the success of the program to involved parties' patience, commitment, resilience, flexibility, and willingness to take risks. Additionally, faculty members of the two institutions

built trust and strong rapport among themselves and maintained constant contact throughout the entire process.

Benefits: The benefits of this program are many. Taibah University students get an opportunity to gain knowledge and experiences from different perspectives, which are essential to function as an educational leader in the knowledge-based era. Students receive a Post Master Certificate from The George Washington University with the possibility of transferring credit to the Taibah University Ph.D. program. Students also gain access to a variety of sources at both institutions, including libraries, writing centers, and technology. Benefits for faculty members include the opportunity for research collaborations, joint international conferences, seminars, workshops, teaching, and cultural experiences. Benefits for the institutions include academic excellence and prestige, financial resources (for The George Washington University), and the development of a new program according to international academic standards (for Taibah University).

Conclusion

To prepare future educational leaders to respond to the increased demands for human competencies, Taibah University and The George Washington University used the blended learning approach to provide Saudi doctoral students with theoretical and practical knowledge, skills, and tools necessary to function as educational leaders in the knowledge-based era. The blended (mixed or hybrid) learning approach, a combination of face-to-face (traditional) and remote (online) learning approach, was adopted due to its ability to improve learning; increase access and flexibility; and help institutions reduce costs on personnel, facilities, and textbooks-- all while maintaining or improving academic results. Educators have a variety of blended learning models (rotational, flex, self-blended, and enriched virtual models) to choose from to satisfy the needs of their learners, instructors, and institutions. Despite their variety, four main components are crucial in any of these models in order to ensure success: content, teaching, technology, and operations. Those interested in adopting blended learning models must expect challenges; however, the benefits for learners, instructors, and the institutions are endless. To minimize challenges and maximize benefits, especially when the blended learning involves an international partnership, one must be patient, flexible, committed, resilient, and willing to take risks in order to gain the associated rewards.

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