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EDUCATION ADMINISTRATORS AS TECHNOLOGY LEADERS IN BLENDED LEARNING

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ABSTRACT

The blended learning model, which has been examined in the literature in recent years as a new orientation in teaching methods and brought to the agenda by organizational changes by accelerating the access to information, brings a perspective to the educational approach of learning without borders by taking K outside the walls. In the blended learning model, in which distance education tools are used together with face-to-face education, it is seen that leadership practices and learning environments are diversified as a result of technology-based use of teaching programs and administrative services. In recent years, there has been a tendency to combine different teaching methods to carry out learning effectively. For this purpose, the blended learning model, which combines both technology and traditional teaching methods by mixing various teaching strategies, has emerged with the spread of e-learning models. In the age of information and communication technologies (ICT), with schools starting to use technology in learning areas, it becomes a necessity for education administrators to take on new roles and responsibilities and leadership in the field of technology. In the field of information technology as a learning leader, the education administrator is expected to aims to encourage teachers to demonstrate practices and continuously improve, to provide meaningful learning opportunities to all teachers, support staff, students and families, to develop students' problem-solving, collaboration, and use of technology skills to support students' construction of knowledge. This study discusses the changes in blended learning and educational organizations in terms of the technology leadership approach. For this purpose, the blended learning model, reasons for its spread and current orientations regarding the vision and duties of education administrators as technology leaders were explained. In this study, suggestions were made for education administrators and experts involved in educational policies.

Keywords: Blended learning, mixed learning, technology leadership, education administrator.

INTRODUCTION

21st-century learners need educational opportunities based on learner and teacher interaction, independent of time and place. Audio, live presentations, application sharing and electronic messages strengthen interaction and collaboration (Beldarrain, 2006). The changes caused by the Covid-19 pandemic, maintaining its impact worldwide, have been experienced in education as much as the fields of social and health. It is aimed to provide student gains with the use of technology in education and the distance education process (Yıldız & Doğan, 2021). It is a fact that technology has become one of the most critical elements in the context of administration and teaching-learning processes in educational institutions, with the use of it in all areas of society (Yıldız, Tüysüz & Öztürk, 2021). In today's world, where technology is needed to be used in all stages of education, education administrators, as technology leaders, act as a bridge between active technology practice and reconciliation of human and information technology components (Hamzah et al., 2010).

The individual seeks resources and environments that will contribute to the learning process on a larger scale by using technology, understanding scientific knowledge, raising awareness and continuing learning in the learning process (Türker, 2021). Blended learning, which is suitable for individual learning, focuses on the achievement of determined goals by using technology in the learning process. In the blended learning process, while students benefit from face-to-face learning environments, they also participate in online learning environments at the same time or at different times in accordance with their individual development (Carrasco & Johnson, 2015, p. 3).

Teachers, who are at the head of education personnel, should have sufficient technological equipment in line with the needs of the education system. School administrators are at the forefront of those who will help teachers grow and develop technologically, and guide them in adapting technology to teaching-learning processes. Accordingly, a school administrator who is a technology leader should closely follow the technological developments for the educational institution and gain the necessary equipment and technological infrastructure (Deniz & Teke, 2020). From this point of view, education administrators, as technology leaders, have duties and responsibilities to enable teachers as students and education personnel to carry out their effective work in blended learning environments. From the construction of the technology infrastructure to the structuring of technology-based face-to-face education environments, education administrators are technology leaders who manage the effectiveness of learning processes. In this study, the conceptual framework of the blended learning model, its widespread effect, the vision and duties of education administrators as technology leaders were tried to be explained within the framework of the literature.

In the other sections of the study, the blended learning model, its widespread effect and the vision and duties of education administrators as technology leaders were discussed within the literature framework.

LITERATURE

In recent years, there has been a tendency to combine different teaching methods to carry out learning effectively. For this purpose, the blended learning model, which combines both technology and traditional teaching methods by mixing various teaching strategies, has emerged with the spread of e-learning models (Sloman, 2003).

With the access to World Wide Web (www) services, distance education studies have also increased. It is seen that studies in this field have been conducted to reveal the strengths and weaknesses of online learning systems (Wang, 2010). Researchers revealing the adverse aspects of online learning developed a new approach, the blended learning model (Walmsley, 2003). The blended learning model consists of the essential components of learning through information, interaction, collaboration and the classroom. Blended learning aims to create a learning environment by properly bringing together various elements such as courses, contents and feedback (Hameed, Badii & Cullen, 2008).

It is seen that blended learning, a frequently used model in higher education, has been discussed with the concepts of blended, mixed and hybrid in the international literature, and it has been examined as a blended and mixed learning method in local sources (Mortera-Gutiérrez, 2006). This research examines the scope of blended learning, its advantages, the features separating it from traditional and online teaching and the roles and responsibilities of education administrators as technology leaders in this process.

The Blended Learning Model

While Picciano (2006) defines it as online and face-to-face teaching, Gülbahar and Madran (2009) express blended learning as a hybrid teaching model combining the potential of classroom teaching techniques and web-based education. Rovai and Jordan (2004), on the other hand, stated that blended learning was the combination of online learning and the classroom environment, including face-to-face communication and the possibilities of online courses. According to Singh and Reed (2001), blended learning is a model that includes the practice of mixed teaching methods (face-to-face and online) according to individual interests and abilities and covers cost values, learning technologies and learning styles. Driscoll (2002) defines blended learning from different aspects. Blended learning is expressed as mixing or combining web-based technologies such as virtual classrooms, individual curriculum, collaborative learning, uninterrupted video, audio and text broadcasting, and presenting pedagogical approaches such as constructivism, behaviourism and cognitivism to provide optimal learning output. Additionally, it is defined as incorporating instructional technologies such as CD-ROMs and web-based instructional movies and combining homework using instructional technologies for an effective learning and study experience (Driscoll, 2002). In the light of these definitions, it can be stated that blended learning provides practical, goal-oriented and enriched learning environments by using various instructional technologies accompanying traditional/face-to-face education in learning processes. Picciano (2005) visualized the location of

the blended learning model that he determined in an area between face-to-face teaching and online teaching in his conceptualization according to the use of technology (Picciano, 2005).

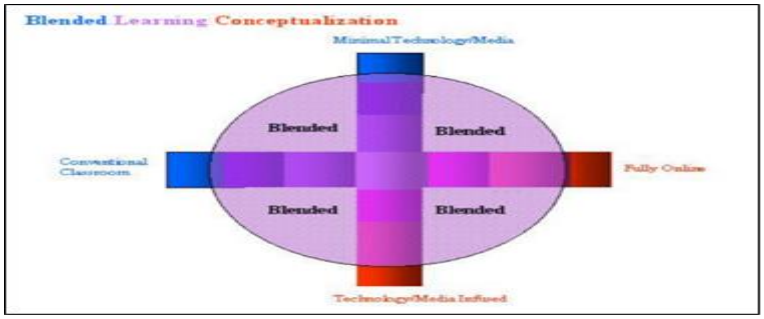

Figure 1. Broad Conceptualization of Blended Learning

As seen in Figure 1, it is inferred that blended learning, which is located in an area between traditional and online teaching, also includes the use of technology equally. In the blended learning model, technology is used with traditional teaching, yet at a lower rate than online teaching.

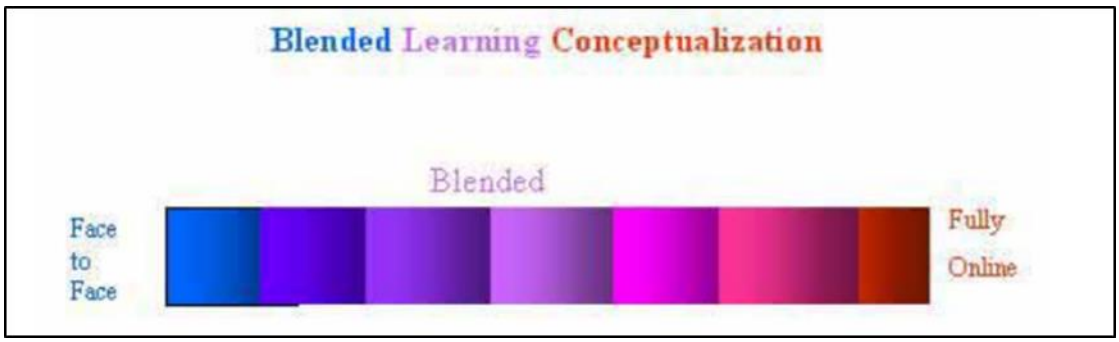

Figure 2. Online-Specific Conceptualization of Blended Learning

As seen in Figure 2, blended learning is located between face-to-face and online teaching. It is seen that the model does not implement only face-to-face or online teaching models but it implements a hybrid model between these two teaching methods.

In the blended learning model, practices for particular goals are included in the learning area. Dağ (2011) explained that the blended learning model could be diversified within the scope of specific objectives as a skill-oriented practice model, an attitude/behaviour-oriented model, and a talent-oriented model. In this regard, in the skill-based practice model, learners benefit from technology-based learning methods to continue their learning as a result of face-to-face education. In other words, it is seen that face-to-face and individual learning are blended in this model. The practice of collaborative learning activities is suggested for the traditional classroom environment, and the attitude/behaviour-oriented model, which includes web-based collaborative group projects, are recommended to be implemented in environments where learners try new behaviours. In the talent-focused model, there are the processes of learning by doing, constantly interacting, and performing problem-solving activities with a live connection, under the guidance of a field expert, to improve the learners' quick decision-making skills (Dağ, 2011).

When the blended learning models are examined, it can be ensured that the learners reach their educational goals in the context of their individual and social needs by determining the objectives according to the curriculum and educational level and deciding to implement the appropriate model.

The Common Impact of Blended Learning

With the advancement of blended learning, student access to pedagogical practices has become equally complex (Picciano, 2006). It is observed that the blended teaching practice has become widespread rapidly, as it increases students' satisfaction with their learning experiences as well as their learning outcomes (Lim & Morris, 2009). Hameed, Badii, and Cullen (2008) emphasize that online learning blended with the traditional learning method provides a flexible learning environment (Hameed, Badii & Cullen, 2008). In learning processes where e-learning methods are used alone, blended learning becomes common since the educational goals cannot be fully achieved, communication and interaction through technology are not sufficient, and the need for face-to-face education continues (Fook et al., 2005).

According to Graham (2006), there are some reasons for the spread of blended learning:

1. Providing flexibility, access and mobility for learners,
2. Improving the pedagogical structure for the curriculum and professional development,
3. Monitoring and controlling academic activities,
4. Taking more interest in individual work in academic development,
5. Providing opportunities for global connection, cooperation and building relationships,
6. Providing cost-effectiveness in accessing educational materials and resources,
7. Providing learners with the necessary skills, knowledge and professional orientation quickly and effectively in a global economy-based society (Graham, 2006).

The blended learning environment has an encouraging characteristic for both traditional and online environments. The blended learning model has positive features such as providing interaction, face-to-face communication, community awareness, improving academic performance, collaborative tasks, feedback, active participation, and support (Tayebinik & Puteh 2012). It is known that student-student and student-teacher interaction is maintained independently of time and place in face-to-face and online learning environments. Besides, students experience knowledge by using, discussing and questioning techniques through blended learning. With blended learning, in which individual learning techniques and student-centred teaching are used, students can determine the processes according to their own choices. Readiness to learning and assessment processes decrease in terms of time with blended learning. This situation increases the efficiency of learning processes. The blended learning model, in which learning occurs according to student needs, has positive outcomes in terms of cost, updating, speed and location (Dağ, 2011). There are several studies in the literature investigating the basis of the widespread use of blended learning, which has multiple advantages such as access to education, obtaining the highest level of efficiency from education, and increasing the impact in leadership

studies (Tayebinik & Puteh 2012; Dağ, 2011; Bonk & Graham, 2012; Picciano, 2006; Driscoll, 2002; Hilliard, 2015; Busher & James, 2015; Hameed, Badi & Cullen, 2008).

Technology Leadership

In the age of information and communication technologies (ICT) , with schools starting to use technology in learning areas, it becomes a necessity for school administrators to take on new roles and responsibilities and leadership in the field of technology (Razik & Swanson, 2010; Hacıfazlıoğlu, Karadeniz & Dalgıç, 2010; Hacıfazlıoğlu, Karadeniz & Dalgıç, 2011; Anderson & Dexter, 2005). To develop a school-based technology leadership model, the school administrator has responsibilities as the starting point in five frameworks: student participation, shared vision, equal access, effective professional development, and connectivity everywhere. The school administrator demonstrates leadership roles as a learning leader, student empowerment leader, capacity building leader, community leader, and resource management leader. In the field of information technology as a learning leader, the school administrator is expected to aims to encourage teachers to demonstrate practices and continuously improve, to provide meaningful learning opportunities to all teachers, support staff, students and families, to develop students' problem-solving, collaboration, and use of technology skills to support students' construction of knowledge (Flanagan & Jacobsen, 2003).

Vision and Duties of Education Administrators as Technology Leaders

Great leaders are aware of the managerial problems arising during the practice of blended learning or other online learning practices. It is crucial for the administration to find solutions to problems by understanding employees and organizational culture (Busher, 2006, p. 149). Leaders are effective in providing technological resources and services seamlessly so that they can implement efficient and accessible online teaching programs such as blended learning (Tallent-Runnels, 2006). Education administrators are aware that the blended learning model contributes to this process and is effective in learning activities with its widespread use while researching to provide more learning opportunities and resources for students (Picciano, 2006; Hilliard, 2015).

Blended learning provides several advantages to learners, educational staff and those working at the lower levels of the organization. Offering opportunities for organizations to gradually move learners from traditional classrooms to e-learning in creating change in small steps, blended learning supports educators and curriculum developers in improving their skills in hybrid learning environments. Cost and resources are driving factors, allowing organizations to invest heavily in developing materials. Blended learning support organizations in providing complementary course material (Driscoll, 2002). Through blended learning, organizations benefit from practices facilitating business life such as online assessment, following practitioners, referencing materials, forwarding preliminary studies online, creating online study time, using mentoring/coaching approaches as a tool, cooperation, providing access to experts, providing support as a lifeguard, and maximizing e-mailing or messaging (Driscoll, 2002).

In higher education, senior officials play a crucial role in setting blended learning objectives in the context of their responsibilities. Academic staff can pursue the educational institution's academic program in line with its strategy if they are inclined to completely accept that blended learning includes objectives set for teaching and learning. In this process, dialogue, institutional strategy and learning goals are much more important than the individual teaching strategies of the academic staff (Moskal, Dziuban & Hartman, 2013).

Blended learning models are used by students, leaders, educators and all other staff. The leadership development training process continues with the support of blended learning technologies after face-to-face training processes. Most leadership programs consist of dimensions such as awareness of concepts, definition, and procedures/policy for learners. The role of technology using blended learning has broad implications for learners today. In blended lessons, online tools significantly improve student participation, learning through discussion and collaborative learning skills (Hilliard, 2015). Education administrators and educators can easily use blended learning practices. Innovative approaches to blended learning used for managerial training activities or teaching services are welcomed by all staff (Allen, Seaman & Garrett, 2007).

CONCLUSION and DISCUSSION

The evolution of blended learning, a phenomenon that has been popular in recent years but little understood, means that online teaching and face-to-face education are given together in schools, especially in higher education institutions. Although there are individual studies and case studies in this field, institutional research on blended learning is insufficient, as most education administrators do not implement adequate data collection processes to identify blended lessons (Picciano, 2006).

This study presented suggestions on the effective use of the blended learning model by school principals as technology leaders and the importance of conducting leadership practices through this model.

As a result, as technology leaders managing blended learning, education administrators can have a wide range of duties and responsibilities, from technological infrastructure to raising academic staff or researching resources for their training, planning costs, providing equipment, and providing the most suitable practices for educational goals.

RECOMMENDATIONS

It is crucial for technology leaders to cooperate with learners, teachers, administrators at other levels and family and implement blended learning as a teaching method independent of time and place in an efficient, effective and economical way in line with the organization's goals.

In this regard;

• Workshops can be organized to ensure that blended learning can be provided by policymakers and practitioners for implementation models, especially at the level of primary and secondary education, within a particular curriculum.

• Examples regarding the implementation of blended learning practices internationally can be observed through comparative studies.

• Considering that the education investment has permanent outputs in the long term, technological investments can be made to provide the opportunities of technological infrastructure's internet band to every environment.

• In blended learning transition programs, it can be recommended that educational leaders follow various promotional activities to carry out effective decision mechanisms for purchasing online applications by taking organizational goals into account.

• Enriching the educational content of the tools providing technological support to blended learning, such as Educational Informatics Network and Distance Education Centres, can play a remarkable role for learners and, as a result, increase continuity in education.

ETHICAL TEXT

""This article complies with journal writing rules, publication principles, research and publication ethics, and journal ethics. Responsibility for any violations that may arise regarding the article belongs to the author(s)."

Author(s) Contribution Rate: The author's contribution rate in this study is 100%.

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