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Review Article

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The State of Art, Advantages, and Shortcomings of Blended Learning (BL) While Applied in the Fields of Social Sciences: A Review Article

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Abstract

Blended learning (BL) has been introduced and infused from elementary to higher educational settings. In most cases, overall, the studies found that the stakeholders of blended learning enjoy an added opportunity of a better teaching-learning environment utilizing both f2f and online means of learning. However, most of the studies conducted on blended learning were focused on some specific fields of study or were focused on educational institutions or learners to answer some specific academic inquiries throughout the studies. However, very few studies have been concretely conducted on applying blended learning in the fields of social sciences. Therefore, the current study took the initiative to investigate the state-of-the-art, merits and challenges of blended learning applied in social science. Blended learning has simultaneously brought about many advantages and challenges in social science. Benefits of BL include the cost-effectiveness of education, the customizability of material development, flexibility of teaching-learning activities, swift communication, the flexibility of progress tracking, the efficacy of assessment, reduction of physical presence, avoidance of time consumption, global availability of courses without border concern, and the opportunity of self-paced learning. However, BL has different demerits too, such as classroom design, the lack of technical skills, digital literacy, and competency of teachers and students for utilizing BL, which leads the students to face miscommunication, procrastination, technical illiteracy, poor Internet connection, along with technological problems such as outdated software, hardware, technologies, etc. Even the stakeholders do not fully understand the nature, functions, advantages, and techniques for designing the course aligned to the needs of BL; hence, they create asymmetry between the ideal use and benefit and the real practice of BL. This study mainly aimed to bring the issues involved in applying BL to the fields of social sciences to light.

Keywords: Blended learning (hybrid learning); Face-to-face (f2f); Online; Pedagogy; Synchronous learning

Introduction

A variety of techniques and tools have been introduced since the 2000s [1] and are still being developed every day in educational settings and landscapes worldwide [2]. Blended learning is one of such newly introduced educational techniques [3] that has emerged and been introduced in educational settings during the last decades [4]. Blended learning is an approach that exploits the online and offline means (synchronous and asynchronous) to run the teaching-

learning activities [5] and is considered complementary to face-to-face learning activities [6]. The term itself determines the meaning of blended learning that requires both kinds of teaching activities such as a certain number of activities should be conducted as online classes with online resources and a certain number of activities should take place in the traditional way in the classroom with the physical interactions among teachers and students [7]. It combines



face-to-face classroom interactions and computer-assisted systems into a class with a well-crafted portion of physical presence and virtual performances [8]. Garrison and Kanuka [6] define BL as “a thoughtful integration of classroom face-to-face learning experiences with online experiences.” BL has been involved with the combination of f2f and technology-assisted instruction [9].

As blended learning plays various roles depending on the context, it is very difficult to define it in concrete meaning and scope [10,11]. Instead, it has broadened its meaning through various educational techniques and practices, and it continues to expand, necessitating specific definitions for B-learning [12]. In short, blended learning means a mixture of online and in-person delivery in which a virtual role takes place and supplants many face-to-face (f2f) classroom activities instead of complementing the lessons [11]. The term blended learning (BL) has also been used as hybrid learning, online learning (OL), technology-mediated learning, and distributed learning [8,11]. It can be called OL based on the content delivery mode if the content covers 30%-79% in an online format [11,13]. However, some experts argue that BL should offer at least half of the f2f classroom activities [14].

Many scholars think that BL is the added use of technologies in the traditional classroom practice for delivering terse concepts as a supplement to a class [10]. However, it is a kind of model that helps to redesign the way of teaching by utilizing technologies that combine the physical and virtual ways of teaching [15]. BL has offered this new way that surpasses the difficulties of time and place compared to the traditional teaching style [16,17]. The flexibility and contingency of BL allow it to continuously transform and adapt to the next level of condition and widen the spectrum [18]. Also, it has shown positive outcomes in cost reduction, effectiveness, situational convenience, and customization for both literate and non-literate learners [19,20,21]. However, the overall success of blended learning (BL) depends on student satisfaction [22], as it is a major factor in determining the effectiveness of BL in instruction [10,23].

In the mentioned situation, experts consider blended learning to be one of the broad fields of study and practice that cannot be defined narrowly [11,14,24]. Rather, they consider blended learning to be a broad and evolving field that demands more detailed and discipline-specific definitions to capture its diverse applications comprehensively. Moreover, only a limited number of universities worldwide actively share comprehensive details about their courses conducted in a blended learning format [25]. Hence, BL has not been explored or proven yet how course designers or instructors create courses based on their expertise. This lack of evidence leaves the understanding of blended learning unclear for fellow practitioners [26]. Most studies related to BL were identified from some other stream than social science, which makes the practitioners of SS more confused, vulnerable, and resourceless to learn, design, and use BL in their teaching. Recognizing this gap, the current study is designed to investigate how blended learning enhances social science education, and the advantages and limitations of this pedagogical approach in various fields of social science.

Statement of concerns involved in BL and social sciences

BL has occupied its space and importance in every educational setting today [11]. It has been considered advantageous in different ways compared to other educational techniques such as only f2f learning or only e-learning or traditional way [27,28]. However, most of the existing empirical studies have been conducted on one or some specific academic problems such as the application of BL in teacher education programs [28], nursing education [29,30], mathematics education [31], engineering education [32,33], foreign language teaching-learning via BL [34]. Very few studies have been conducted on the disciplines that fall under social science, such as sociology, political science, and social or cultural studies [35-38]. In addition, most often, people visualize BL or any hybrid model of education as the means of learning a foreign language or as a supplementary classroom instruction method [39,40,41].

Hence, as a technology-enhanced pedagogical approach, blended learning (BL), so far, has not widely been acknowledged and associated with the programs targeting the streams of social sciences. One of the reasons behind this is the relatively less research, underrepresentation of BL, and the scarcity of scholarly investigations into the role of blended learning (BL) in social science. Hence, there is a need for a more detailed examination of the role of blended learning in the context of diverse and unexplored fields, especially in social science, which may provide a more explicit understanding of BL and involvement in this field. Based on this backdrop, the current inquiry aims to understand why Blended Learning (BL) does not extend the coverage or attempt to apply the principles across various fields, such as designing BL for social science or exploring the conditions of BL in the social science domain. The proposed study investigated the role, efficacy, and challenges of BL in social science studies. Therefore, this study is expected to inform readers regarding the insights, status, prospects, and challenges of BL in practice in the fields of social sciences.

Definition of Social Science

As the current study investigates the phenomena relating to social science, it requires a comprehensive meaning of social science and its scope before delving further [42]. In general, social science means a scholastic discipline or direction of study that studies human behavior, human society, socio-cultural aspects of human society, and human conduct in society [43]. The term social science generally covers a wide range of sub-disciplines of scholarly pursuit both socially and politically [44]. It commonly includes anthropology, economics, geography, history, political science, sociology, psychology, communicative studies, linguistics, law, education, behavioral science, environmental sciences, et cetera [44,45]. The fields of study mentioned above, referring to social science, could be examined using the blended learning model with the aid of assistive technologies.

Research questions

1. In what ways does BL facilitate the teaching and learning activities in the fields of education involved in social sciences?
2. What financial, social, personal, and pedagogical

advantages does BL offer for the practitioners and learners of the social science stream?

3. What shortcomings do stakeholders still face in applying BL within social science technically and pedagogically?

Overview of Existing Literature

There are plenty of applications of blended learning in language and literature learning in different contexts around the world [46,47,48]. Not only has the language learning curriculum exploited the opportunities of B-learning, but the fields of science have also welcomed the exploitation of B-learning to make the educational practice more live and flexible [49,50,51,52]. In addition, various attempts, and models, including the Science Learning Activities Model (SLAM), have been implemented to derive benefits from blended learning [26,53,54]. A notable study on BL was conducted by Çırak Kurt and Yıldırım [55] in Turkey that utilized the Q method to elicit learner perceptions and revealed a positive response from both students and teachers regarding the academic benefits of blended learning. In addition, Owston, York, & Malhotra [56] examined the role of blended learning (BL) and student perceptions across four distinct BL models focusing on design, interaction, learning, and satisfaction. The findings indicated that three of these models effectively satisfied learners in terms of interaction and learning outcomes, with one model being an exception. BL should begin its implementation with a well-researched and developed methodological framework for teaching social science, which may enhance the effectiveness of the hybrid teaching-learning process of the field [57].

Today more universities and educators have been offering courses online as blended courses worldwide [23,27,32,37,58]. The increased use of blended learning in pedagogy can be attributed to the developments and advancements in science and technology [59]. Online and blended learning (OBL) has recently been recognized with increased attention for justifying the educational landscape from the learners' point of view rather than considering the providers' perspective [60]. A study on teaching a foreign language by Shorustam & Marjona [61] has shown that a teaching-learning model that deploys an integrated model for facilitating the teaching can be very effective in benefitting foreign language learning among learners. Additionally, in certain regions, including India [62], prevalent issues exist related to educational inequalities. Blended learning has proven effective in addressing these challenges, particularly in providing educational opportunities for underprivileged children [63].

Though there are many studies on the advantageous applications of B-learning, it has still many challenges and shortcomings of blended learning at the practice level. For instance, Mozelius & Hettiarachchi's [64] study on the application of BL in higher education asserted that alongside the success stories, BL still faces some of the challenges that were prevalent at the early age of BL, such as low pass rate, poor learning outcomes, et cetera. Rasheed et al. [1] focused on the challenges of BL faced by students, teachers, and institutions and found that students face the most difficulty when they need self-regulation and learn new

technologies to benefit their education. Conversely, educators encounter challenges in learning and utilizing recently introduced technologies, while institutions face the task of selecting suitable technologies and providing training to teachers for the effective implementation of blended instructions in the classroom [1].

Curriculum design is an integral part of lesson delivery [65]. However, curriculum-based B-learning has not yet been developed due to the unidentified factors that influence the design of a course [64]. Furthermore, there are some of the critical challenges that still need to be solved while designing the environments for blended learning [66]. These challenges encompass the incorporation of flexibility, the promotion of interactions, the facilitation of students' learning processes, and the cultivation of an effective learning climate [67]. Additionally, obstacles such as increased workload, course and time management issues, overlaps, and the establishment of harmony between face-to-face and online environments hinder the effective implementation of blended learning design [66].

Discipline-based Literature

In a comprehensive study conducted by Parks et al. [68], the preparedness of social, educational, and teachers across the Southeastern United States was examined. The findings indicated that teachers who identified as blended educators were largely newcomers, including novices. Consequently, the study suggests that fostering greater proficiency in blended classroom-based instruction could significantly enhance efficacy in the classroom. Adding to this, Asarta and Schmidt [69] delved into the blended learning experience of business students, contending that the impact of BL on the students' performance was minimal or negligible. Instead, they emphasized that the student's level of dedication and seriousness played a crucial role and made a significant difference.

Numerous studies have explored the implementation of blended learning (BL) in language acquisition [39,40,47,48,70,71]. Many universities have already tried to apply BL in educational settings for teaching and learning English in tertiary institutions [72]. For instance, Atmacasoy and Aksu [73] argued that the faculty of education adopts a blended learning model for training pre-service teachers more frequently than other fields of study. Moreover, an investigation conducted by Isda et al. [71] revealed substantial benefits of blended learning, particularly in enhancing English-speaking skills within high school settings. The research demonstrated a notable improvement in English speaking, with pre-test English speaking skills at 77.04 and post-test skills at 88.95, indicating a significant impact on English speaking proficiency in the classroom.

Another study by Zhu [24] found that the previous experiences of the learners and other situational variables such as international or local, full-time or part-time students, etc., mattered significantly on the practice of BL. Unlike international students, local and part-time students benefitted much more from the blended learning mode. However, the constant support and efficacy of teachers were very important variables for making BL successful [24]. While a majority of studies highlight the positive aspects of blended

learning (BL), challenges persist, including issues, such as low internet speed, unstable connections, and teachers who may be less prepared and equipped for BL classes [62,74-76]. Adding to this, the relationship between perceived efficacy and satisfaction of BL by learners remains uncertain and unexplored in the literature [77].

Literature search, retrieval strategies, and inclusion

The current review looked into the role, efficacy, drawbacks, and in-depth phenomena of using BL in social sciences. This study conducted multiple layers of the literature search that could help to answer the mentioned research questions directing this study to provide an impartial ground, synthesis, representation, and interpretation of the findings. As appropriate and quality literature is inevitable for eliciting a solid foundation for the study and making a legitimate conclusion, this study investigated the literature and resources as systematically as possible from different perspectives and sources. The literature that this study investigated includes books, published journal articles, dissertations, thesis papers, government reports, and publications, reviews from different government agencies and non-governmental organizations, periodicals, and other academic documents from relevant sources, such as databases.

This study utilized and retrieved resources from many relevant and leading databases for the literature, which included Web of Science (Social Science), ProQuest (Education Database), SAGE Journals, Scopus, Springer Link, Taylor & Francis, Google Scholar, EBSCO – ERIC, Elsevier ScienceDirect, Emerald Ejournal and Wiley Online Library. The pieces of literature were identified and selected based on the appropriateness, relevance, and dates of the publications from journals, databases, and electronic and manual sources. This study included articles that aligned with the inquiries of the current research and helped validate the contents, concepts, and data that have been applied and represented in this article.

Fields Identified of Included Literature

The current review tried to stick to the stream of social sciences. However, most of the included literature regarding BL came from both arts and humanities and social sciences, such as language teaching-learning [34,78], education [29,30], higher education [79,80], teacher education [28], psychology [81,82] and a few other fields [29,30,32,58]. Most of this literature discusses the particular problem or certain efficacy of BL in a certain community or age group [23,83].

Moreover, a majority of the literature had been found from a select few countries such as the USA [68,84], Canada [30,85], New Zealand [86], Indonesia [37,87], Malaysia, Turkey [55,70,73,88-93], Ghana [94], Uganda [23] that can avail the infrastructures and other equipment for applying BL in educational practice. However, many regions on different continents still cannot avail themselves of the required technologies and instructional resources to benefit their education [95]. Therefore, this study missed the opportunity to represent the conditions of BL around the geographies. Thus, the current study acknowledges that it would be more comprehensive

if the literature had come equally from different backgrounds.

Findings

Many of the studies reviewed in this current study have explored how BL facilitates social science education and also identified various strengths and shortcomings of blended learning. It is not the fact that BL has only brought positive development in educational practice. Rather, it accompanied several difficulties as well. This study has categorized the findings into two major categories, i.e., positive developments by BL and negative aspects of blended learning while applying the educational fields targeting social sciences.

Advantages of using BL in social sciences

The advantages brought by blended learning were identified by dividing it into two categories: students and teachers.

Advantages for the students

Quick feedback and community development opportunities

One of the most visible strengths of BL is that it allows the learners and the instructors a quick channel for communication through social interactions and feedback electronically [96]. BL has brought about a very high level of opportunity for interactions between the learner, instructor, content, and the course interface [97,98,99,100]. Likewise, Uzun and Özkılıç [101] and Orhan [89] commented that feedback is an important feature of blended learning. The sense of classroom community becomes a very significant sense of bondage among fellow learners of the BL course through different interactions [102]. Therefore, the experts always advocate for combining major variables such as field of study, course organization, students' experience, etc., into consideration while designing a BL course so that the learners can make a proper channel for more customised and flexible communication among the fellow learners and between the students and teachers [103].

Facilitating online communication

Foreign language learners and teachers enjoy an added opportunity of continuous communication via the online model of communication in BL that helps them boost language learning speed and efficacy [70]. Moreover, BL helps the learners learn listening skills and vocabularies faster and smoother than other methods. Learning a foreign language was one of the scary and challenging parts of education and communication as it used to require a huge money, effort, time, and isolation while learning a foreign language [104]. However, today the technologies have offered these tremendous jobs to be solved virtually through online communication, friendship, interactions, and foreign language practice through virtual platforms [71].

Learning output and development of a positive attitude

Teacher education has a very close connection with BL as most of the pre-service teachers responded to BL as one of the most effective developments [93,105,106]. Participants of Mahiroğlu and Usta [90] expressed their positive impressions about the quick and constant virtual communications through technology-

enhanced means. Moreover, they were much more content with the learning materials in BL compared to the traditional classes [90]. Additionally, courses that enabled BL learners to regulate the pace of their learning fostered a progressively positive attitude compared to online learners.

Advantages for the teachers and institutions

Flexibility and customizability of materials

BL has offered a possibility and scope of highly customizable resources and content for educating and learning through the BL courses [21]. It has not only offered opportunities for utilizing the technologies through digital platforms but also offered the opportunity for learning through pedagogically proven ways [10]. These courses allow variances of materials, design of the classes, customized time, and learning [107]. BL has offered an outstanding opportunity to develop customizable materials for face-to-face and virtual classes in an integrative model that considerably increases the learning outcome [21,108]. Once a teaching material is developed for the blended learning courses, it is then highly flexible to customize and fit for the next time and course with the maximum facility to adjust to new aims and objectives of the new course [11].

Eradicating inequality in education

In many countries, the schooling system is heavily biased towards the rich and poor, especially in public schools [109]. Public schools are somehow financially reachable; however, these schools are marked with the negligence of the teachers, inadequate training of teachers, insufficient teaching materials, and poor supervision of teachers and authority [62]. Often, the students drop out due to the negligence of teachers and management [76]. In this regard, BL has benefitted the underrepresented schoolchildren by preventing them from dropping out and by allowing them to learn better than in the traditional classroom [63]. In Mayr & Oppl [110] students from marginalized communities have expressed a strong preference for specific learning tasks and formats, particularly valuing interactions through global discussion boards and the flexibility provided by offline and multimedia learning packages. Additionally, the teaching method received positive recognition for being efficient and comfortable.

Technical and pedagogical challenges of applying blended learning

The challenges were also considered to be divided into two main categories: challenges for students and teachers.

Challenges faced by institutions and teachers

Technology changes every day, and educational institutions always need to update their management systems and educate teachers and students regularly to meet the demands of the time. The swift evolution of educational technology necessitates a proactive approach to curriculum development, ensuring that course content remains relevant, up-to-date, and reflective of the latest advancements in the field [111]. However, challenges remain in navigating the balance between embracing technological innovations and preserving the foundational principles of effective

pedagogy, especially when incorporating blended learning into curricula [112]. The existing studies do not properly cover the difficulties faced by the institutions, rather, they limit their focus on the students' and teachers' perceptions, advantages, and challenges of BL [1]. Kaur [113] expressed that those institutions face hardship in selecting appropriate technologies for making BL successful. In addition, institutions usually have financial concerns such as maintenance costs, expenses for teachers' training, and acquiring new gadgets, when it comes to incorporating BL-supporting technologies [114,115]. Assessing the technological effectiveness and pedagogical validity of devices is also challenging [116].

Teachers suffer from the lack of sufficient training for applying new technologies to blended learning ([1,117]. Teachers and students need the latest skills and training for practicing BL [10]. The experts argue that most of the institutions do not arrange sufficient training for the teachers and students, thinking that they do not need extensive training as they meet f2f [117]. Moreover, most institutions do not have a sufficient budget to provide training for BL teachers who deliver high-quality training [117]. Finally, there is always a problem of developing a mechanism of technological maintenance (e.g., fixing, troubleshooting, solving bugs, etc.) [115], and the teachers face technical issues often while they try to use those technologies.

Difficulties in designing the instructions and courses using the BL

Blended learning is limited in capacity for flexible integration concerning time, location, and learning progression, as well as in the creation of an effective learning environment [31]. As blended learning is based on the sophisticated applications of technologies, methodologies, and pedagogies, it requires a very balanced course design with methodological combinations of online and traditional (face-to-face) class activities [118,119]. Thus, the resource development for BL courses is a high-skill and effort-demanding task that requires much time, pedagogical and technological skill from the teachers [120,121,122]. The instructors need to juxtapose the online and offline activities focusing on the course variables such as the characteristics of students, the aims of the course, the context of the learning, et cetera [123]. However, still now, many faculties do not have any transparent idea regarding the infusion of technologies in their curriculum [121]. They are also not clear on how to develop the courses and design the course patterns that are integrative and aligned with pedagogies and technologies [124]. Therefore, it is highly essential to train teachers to cope with the utilization of technologies [125,126].

The poor technical skills and competencies among the teachers

Managing the online classes and creating content for both online and f2f modes of classes were (are) always constant challenges for a teacher [127]. The teachers reported that they face most challenges while they face the technical issues and operation of the BL system for operating a BL course [128]. They often lack the motivation to learn new technologies for offering BL courses [129]. Another concerning drawback is the lack of knowledge on how to create

quality content for an online management system [130]. Teachers not only face challenges but also exhibit reluctance when they are required to acquire new technologies and competencies to align with emerging educational tools [127,131].

Making the video for the classes has been an added challenge for educators today [114]. It is not easy to make quality videos aligned with the pedagogical framework for delivering lessons for learners with different variants in their competency levels [132]. Moreover, there are many situations where the Internet does not work properly [75]. The teachers are under the challenge of operational skills of instructional technologies [133]. They suffer from time-consuming troubleshooting and resolving technical difficulties [75]. Moreover, surprisingly, many teachers hold a strong skepticism about the effectiveness of blended learning (BL) or online learning in general [86,134].

Challenges of engaging and motivating the students

Students are the most active and vital stakeholders of BL, and they are supposed to benefit from BL [33]. Yet, the most crucial challenge for educators is ensuring that learners are informed about the online materials accessible for studying on the designed BL platform [10]. As BL depends on the perfect combination of f2f and virtual interactions, it is highly recommended that educators hold an in-depth knowledge of space, material development, and time management systems to make the BL a successful delivery [66].

Challenges faced by students

Miscommunication and failure of communication

Maintaining consistent and meaningful communication is a challenging aspect of implementing blended learning [6]. Timely feedback is essential for benefitting the learning while the students need it [135,136]. However, it is often experienced in this type of teaching-learning environment that the students do not get feedback or instruction when they need it urgently [137]. Asynchronous learning does not cover any specific schedule of the educators and learners which leads to unstable and inefficient communication between the educators and the learners [138]. If the learners cannot get the instruction they need urgently, then they might become very reluctant and demotivated from the blended learning courses [129].

Higher chances of procrastination among students

Blended learning allows learners much autonomy, which also paves the way for practicing laziness [1]. The online component of BL allows the learners the most flexible schedule for participation in the blended courses [139]. Hence, the learners require a high level of self-control to benefit from BL [67] and they face the difficulty of taking control of their actions and managing their time [66]. Gradually, the learners become habituated with the delay and procrastination in everything.

Unavailability of instant and constant online help

Multiple studies have highlighted that during the implementation of blended learning courses, teachers often faced

challenges in providing consistent support stemming from the absence of instructors, particularly when they were not available for face-to-face interactions [1,114,140,141]. The students also faced difficulty in seeking help from the instructors and learned the technologies required for utilizing blended courses [142]. Most horrible situations occur when it comes to adult learners through BL courses, as they face difficulty and confusion regarding seeking help from online platforms [143]. Instead, they go for searching over other online platforms or search engines such as Google or Yahoo [74]. While they suffer from the less constant and reliable answers from their assigned platforms, they try to get help from other informal or less reliable but available sources from different sources, such as surfing different websites, posts, social media, and other informal platforms [140].

Lack of technical skills and digital literacy

The students require a variety of skills and awareness of technologies to adopt and receive education today [144]. Education and technology are getting amalgamated every day, which requires students to be savvy in blending education and technology [145]. However, recent studies show that students still suffer from a lack of digital literacy and skills in emerging technologies [146,147]. Moreover, the inefficiency in communication while continuing BL courses makes the learners procrastinate and become confused about their roles and time management [147]. Adult learners are the worst sufferers of technological difficulties [148,149]. Thus, the learners are often intimidated while they think of applying some unknown devices or techniques for classes [74]. Due to this, students enrolled in blended courses are strongly encouraged to possess sufficient digital competence to maximize the benefits of blended learning (BL), though, an opposite scenario has been observed in many cases [114,150]. Another added challenge of today is the ever-changing variations of different interfaces such as a wide range of software, hardware, and other embedded systems that require constant adaptation to keep updated [116].

Unavailability and technical issues with the devices and Internet

Studies indicate that learning activities are important for facilitating learning rather than only focusing on the delivery mode [151,152]. The learners want to be more interactive during their learning and want to be involved, exercise, and use the learning materials and tools often and smoothly [131,153]. If the students face difficulties while watching online lectures or downloading ebooks or videos, they get demotivated by the poorly abled data connection. However, sufficient studies from different regions and different times indicate that they suffer from poor internet speed and connection [62,74,75].

Blended learning requires highly adaptable and capable devices, software, and hardware that require a big budget to purchase [154]. It is not sufficient merely to acquire devices; learners must also become proficient in using them effectively to navigate competitive environments [146,147,155]. Moreover, many of the learners might not be able to purchase the required devices and software [114,141]. The low speed of the Internet is another problem that

is prevalent in many cases and many places of the world where the Internet has not been sufficient to continue online classes [74]. Moreover, the device is outdated now and then. Unequal access to electronic and software resources may be viewed as an opportunity disparity [156]. Safford & Stinton [74] found that online activity is extremely troubled by the low quality of the Internet.

Complexity, anxiety, alienation, and demotivation of the learners

Human learners need company, and they feel very lonely and devoid of social connections while they stay disconnected socially [157]. While a learner is supposed to complete their study online, they become distracted [158]. Moreover, a significant number of students frequently experience discomfort when engaging in blended courses due to concerns such as communication difficulties (verbal delivery, voice tone, facial expression, accent, etc.), low-quality internet service quality, and the competitive online environment [159].

The students need to install and learn a variety of tools, software, and other complex systems to participate in the BL classes which puts huge pressure on the students [1]. They become more concerned about the required skills for having the classes than preparing them for the course contents that plan for learning from any particular course [116]. Another kind of the worst case is that many of the learners do not have some essential electronic or technological means at all, such as Wi-Fi or the streaming facility of YouTube, etc. [160]. The primary challenge with the pedagogical authenticity of blended learning (BL) is evident [161,162]. Research suggests that a majority of online videos and lectures often become information-heavy, losing pedagogical value.

Incomplete understanding of BL in detail among the stakeholders

Blended learning is under massive expansion all over the world; however, it has not been understood in its entirety yet [163]. A pedagogical study by Parks et al. [68] showed that teachers self-identifying as blended educators often lack adequate BL criteria knowledge. Only 21% of teachers were confirmed as BL practitioners, and standardized systems for BL implementation are scarce outside of IT classes [68]. In addition, Gear [45] observed that in many cases, no significant difference was found between traditional and blended learning. Moreover, the efficacy of group study had decreased in the BL course, particularly in science education [164].

Hence, it is crucial to make face-to-face interactions more accessible to enhance learning through direct engagement between fellow learners and the teacher [73,165]. Many studies indicate that there are two types of learners: the surface learner and another kind is the deep learner [166]. Even if both of these groups perform at the same level of academic achievement, there is a big difference between these two kinds of learners [88,92]. Blended Learning discourages surface learning and promotes deep learning by emphasizing comprehension, adjusting material presentation, and reducing lecture time [167]. It enables students to explore concepts deeply through quizzes, projects, and enrichment materials [167].

As a result, the BL method is unsuitable for surface learners.

Conclusion and Recommendations

Blended learning has already occupied a vital space in education and research worldwide, and the appeal of this approach is gradually increasing every day globally [168]. However, there is no published academic production yet that follows different models for different streams of educational fields [169]. Hence, the stream, namely, social science, does not have a range of resources or models to facilitate the teaching and learning activities in this area of education. Rather, blended learning (BL) is the most popular in language teaching, learning, and communication studies [170]. There are many studies on some specific portion of academic inquiries and practice, such as the student perception or the teachers' acceptance, et cetera in general [171]. Therefore, the current study focused on the phenomena relating to the field of social sciences and blended learning.

The current study found that the researchers tended to focus on a few specific issues that relate to the teachers, students, and other stakeholders' acceptance or similar issues. For example, the frequently researched areas cover (a) a comparison between blended learning and traditional learning [172], (b) analyzing the perception through different academic disciplines using BL [173], (c) flipped classroom and the students' perceptions [174] and (d) analysis of time consumption on blended learning versus traditional classroom activities etc., [175]. These focal points have been sufficiently researched and interpreted throughout the current study from different points of view. There are many studies that focus on disciplines individually such as sociology and anthropology [87], economics [176], psychology [85], and so on [35,36,37,38]. However, these studies do not cover the wholesome case of a stream of education or a generalized understanding of applying BL in teaching social sciences.

However, the studied literature shows that some fields of social science exploited blended learning to be a more commonly used technique for running educational activities than other fields (majors) [35,36,37,38]. The fields that utilized the blended learning model more frequently are foreign language teaching and learning [39,40,47,48,71], education and research [26,53,177,178] anthropology [87], and information and communication technologies [58]. There are many other fields of study in social science that have not received much attention from researchers, such as political science, economics, and many more [179]. Most of the research fields studied in the current study indicate some common advantages and disadvantages prevalent in social science while applying blended learning [38,180].

The current article has found that the learners enjoy the opportunity for smooth communication and interactions while they receive the blended learning courses in social science majors because they do not have many courses that essentially require physical presence and demonstration, such as political science [37,181]. Instead, they interact with their instructors and peer learners through online communication platforms and facilitate metacognition along with quick responses to the platforms and

the teachers [182,183]. In this way, they also enjoy autonomy in learning, a personalized way of learning, flexibility in learning, and avoiding physical travel and cost [21].

In the same way, teachers and institutions have been able to expand the scope of their educational practices more extensively than ever before [184]. They can design and offer their courses nationwide and even worldwide, and they can extend their service without the barriers of geographical boundaries [185]. Thus, they become universal, more democratic, dynamic, and multifaceted with the latest provision of knowledge discovered in any certain domain of knowledge [186]. Therefore, learners from different backgrounds can participate in learning activities reducing the inequality in education. Consequently, the blended model of teaching offers a way of educational transformation and revolution [187].

The disadvantages of blended learning cannot be ignored as well. This type of teaching practice requires huge peripheral equipment and system installation [188]. Therefore, the learners suffer from uneasiness and anxiety about learning the new techniques for attending the classes [94]. Many of the students also might not have access to the latest technologies to benefit from blended learning [156]. BL needs high-speed internet connectivity, devices, techniques, and training by the stakeholders that are very difficult to meet [84,178]. Moreover, the technologies cost huge amounts of money beyond the affordance of the learners [84,189]. Thus, BL is still in the position of research and adaptation.

Research gap and recommendation for the future

Most of the advantages and drawbacks of BL have emerged from the online parts of blended learning [1], as almost, no study took the online and offline parts to be equally important for the study. Nevertheless, we know that blended learning consists of both online and offline versions of interactions [11]. Therefore, f2f and online parts must be included in any research to elicit the original advantages and challenges of BL. Educators encounter numerous challenges in organising both online and face-to-face components of blended learning classes [190]. However, existing studies tend to give minimal attention to the face-to-face (f2f) aspect of blended learning. The students also must face some variations and difficulties in coping with both the modes online and f2f. It requires attention and in-depth studies, of course. Future studies should be focused and conducted on both sides, i.e., online and f2f [191,192,193].

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Conflict of Interest

No conflict of interest.

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