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Social Media Facilitated Education Process Framework for Iraqi Higher Education

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Abstract

Many barriers impede the development and implementation of online tools in Iraqi education. As a result, several scholars have turned to examining social media use in education, which has proven its significance and influence on the teaching and learning process. The adoption of online tools in the field of education has led to several significant improvements in recent times. This has made it possible for higher learning institutions to benefit from various chances to engage with their surroundings, such as the integration of social media as a technique to enhance and simplify the learning process. Despite this, few studies have been conducted regarding the adoption processes of social media in Iraqi higher education. This research aims to provide a deep understanding of the processes required to adopt social media in Iraqi higher education. The research proposes an initial framework for supporting teachers, students, and institutions.

Keywords: Social Media, Education, Iraqi Higher Education

Introduction

Information and communication technology (ICT) is becoming a crucial element of our lives in the modern world, with applications embracing many different fields. Technology is an essential component of economic growth and advances national development. It has affected our work and way of life in a variety of filed including marketing, education, business (Serin Hamdi, 2022; Zhang et al., 2022). One of the many advantages of technology is its ability to create an environment that is easy to use and makes tasks simpler. One of the most significant fields profoundly influenced by technology is education. The use of diverse technological tools by educational institutions, many of which rely on the Internet, has significantly enhanced the education system. In recent years, social media has become a widely used tools in education (Hamadi, El-Den, Sriratanaviriyakul, et al., 2021). Social media (SM) refers to a group of online platforms and applications that enable users to exchange voice recordings, text messages, images, and videos with one another. Social media is regarded as one of the most important tools in communication at the present day (Hassan Alia, 2022; Otchie et al.,

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2022). SM makes it possible for individuals and groups to create content and share it throughout the world. SM plays a crucial role in today's communication landscape by enhancing information-sharing mechanisms and bridging the gap between the virtual and real worlds. As a result, millions of individuals use social media for its various services and features. Numerous social media apps, including YouTube, Telegram, Facebook, Instagram, WhatsApp, Twitter, and many more, have different user interfaces and functions (Al-Hamad et al., 2022).

Due to its many advantages, social media has drawn the interest of several scholars in recent years (Hamadi et al., 2022). SM is currently used as an online tool in several industries and it's more than just a source of entertainment. Scholars have investigated the effects of SM on the learning process and how it can benefit students (Fuchs, 2022). Numerous studies have demonstrated the significant impact of social media on education, highlighting how it has transformed the education system. Integrating social media into education can accelerate and simplify teaching and learning by facilitating resource sharing between students and teachers, improving the quality of information delivered, making it easier for students to access materials, and enhancing student engagement, decision-making skills, and academic achievement. (Al-Qaysi et al., 2020; Fuchs, 2022; Jackson et al., 2018). Most studies have focused on students' and teachers' perspectives and experiences with social media as an educational tool, with little emphasis on its practicality and efficacy of the method of adoption SM in education (Hamadi et al., 2022). Due to lack of practical research on integrating social media into education, there is a need for a framework proposal that clearly describes the social media adoption processes in higher education.

The study aims to understand the processes of social media adoption in Iraqi Higher Education. This eventually towards the development of a framework that can be a guideline on how social media can be utilised effectively in Iraqi Higher Education. Even though the adoption of social media is seen as significant in education, it should be complemented by a comprehensive framework that provides a complete overview of social media use in Iraqi Higher Education. All elements such as a policy of use, info structure and infrastructure, support staff, activities, training, etc should be taken into consideration. To answer the question, the study focused on three main objectives: 1) Obtaining in-depth knowledge about the importance of social media in education. 2) Understanding the current practice of SM in Iraqi higher education. 3) Understanding the process of social media adoption in education.

Literature Review

Social Media in Education

Social media has become an important tool in education and several scholars have examined its significance and effects on the educational system. Many studies have focused on the effects of social media use on students and lecturers. Despite this, there have been persistent discrepancies among studies regarding the acceptance of social media use in the classroom and its impact on students' academic performance. However, a recent study has shown that social media can have an important role in education (Fuchs, 2022).

Several scholars argue that social media has diverse applications that can enhance the teaching and learning process. Khaola et al. (2022) and Fuchs (2020), indicated that the use of social media in education can bring many benefits, as it will increase the interaction of

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lecturers and students, facilitate the sharing of information and knowledge, and improve the quality of education. Employing SM in education entails utilizing Internet-based services and technologies to improve the educational process and obtain the benefits of educational platforms and applications (Fuchs, 2022; Khaola et al., 2022). The use of SM in education has increased, especially during the pandemic, as it has been considered the main source of communication between teachers and students. There are many applications and social media platforms that provide a unique number of features that can be used in education, such as sharing photos, videos, and audio recordings where everyone can view them, as well as sharing files and providing an environment to discuss many topics and assignments easily. However, Haines (2015) emphasizes that a misunderstanding of the use of social media can lead to underutilization, thereby impacting the potential of using social media as an educational tool. (Otchie et al., 2022).

Social Media as an Educational Tool in Iraqi University

Educational institutions around the world are rushing to adopt new technology to improve and facilitate the educational process. This is what educational institutions in Iraq seek to achieve, and although this process faces some obstacles, the Iraqi Ministry of Higher Education and researchers are working to provide many solutions as they attempt to improve Iraq's response to new technology. As mentioned in this study earlier, education in Iraq faces encounters numerous challenges, particularly regarding the adoption of technology. The term e-learning has gained widespread usage in universities, yet its adoption in Iraq remains problematic across many institutions due to numerous obstacles hindering its implementation in educational settings. Studies highlight several obstacles hindering the adoption of e-learning in Iraq, including financial constraints, unstable security condition, inadequate infrastructure scarcity software developers, and the challenge of transitioning from traditional education methods to e-learning (AbdulRazak & Ali, 2019; Mjhool et al., 2021). This underscores the importance of offering alternative electronic tools to aid in education. At the same time, since the use of social media in education has grown in recent years throughout the world, many Iraqi scholars have begun to highlight its value and why it is the best option for Iraqi education. Both Serin Hamdi (2022) and Elameer et al. (2017) suggest that social media can act as a useful educational tool in Iraqi educational institutions. They pointed out that one of the most important obstacles to adopting social media in Iraq is the lack of understanding of how to use social media in education.

Therefore, researchers have undertaken studies to explore the use of social media in Iraqi education, aiming to elucidate its potential benefits, as well as its advantages and disadvantages (Elameer, 2021). In the past few years, the world has undergone a digital transformation that has resulted in many changes. The pandemic period has been particularly challenging for Iraqi education, highlighting the difficulties faced by Iraqi higher education (Elameer, 2021). Some researchers have emphasized the usefulness of social media as a tool in Iraqi universities and how it can improve the academic performance of students and facilitate communication between students and teachers, particularly given the obstacles still faced in the adoption of e-learning. Examples of these studies include Amer's (2017) study, which focused on Facebook as an educational tool in Iraqi universities, highlighting its importance and ease of use for Iraqi students. The study also notes that social media can be used in both formal and informal education and can help make educational materials more accessible and available. Social media is advantageous in Iraq as it requires no training or

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installation of additional programs, and it is freely accessible, providing an effective solution to technological obstacles. Therefore, it is important to understand how social media can work in educational institutions (Elameer et al., 2017; Elameer, 2021). Khalaf and Zangana (2020) are other scholars who explained the impact of SM in education, especially on the ability to learn new language. According to their study, social media may be a helpful tool and play an important role in student's performance. The study demonstrated that social media could improve students' vocabulary comprehension by enhancing their retention of words. The study suggested including social media in the educational process to improve communication between teachers and students. It can aid in their word learning and skill improvement both inside and outside of the classroom. The study also advised that educators and students understand the purpose and significance of social media use in education (Nesrallah Khalaf & Zangana, 2020).

Research Methodology

To answer the questions of this paper, a study was conducted of previous papers between 2018-2023 that addressed the use of social media in education. This study aims to understand the process for adopting social media in education and to present an initial framework for adopting social media in Iraqi higher education. To answer the study question, a strategy was developed. Several studies have explored the use of social media in education and recommended the process of adoption from the perspective of students or lecturers. Figure 1 shows the research methodology conducted to achieve the identified objectives, starting with clarifying the research questions, reviewing the literature, stating the criteria for exclusion and inclusion, obtaining data, and the final results.

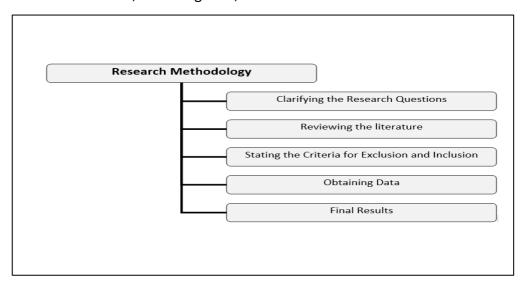


Figure 1. Research Methodology

Clarifying the Research Questions: This study includes three objectives: 1) obtaining indepth knowledge about the importance of social media in education, 2) understanding the current practice of SM in Iraqi higher education, and 3) understanding the process of social media adoption in education. Therefore, this study identified the main question: What are the processes required to adopt social media in education? To answer these questions, this study identified a set of papers that were chosen to obtain suitable explanations for this paper.

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- Reviewing the literature: Many online databases have been used by researchers as a source for obtaining data. These platforms are characterized by being a primary canter for high-impact studies, such as Scopus and Science Direct. To obtain data, the filter feature was used, using the keywords social media in education, "social media in universities," and "adoption of social media in education." Several research papers were extracted to be processed in the next stage.
- Stating the Criteria for Exclusion and Inclusion: The purpose of this step is to sort and select relevant studies to answer the research questions and achieve the expected objectives of this study. Since the concept of social media is general, it is worth mentioning that some criteria were used for inclusion and exclusion, such as that all selected research be research that discusses the use of social media in university education, that all research be fully published in a journal and in the English language, and that it be published between 2018 and 2023 to provide a broad understanding of the development taking place in the use of social media in education.
- Obtaining Data: At this stage, this study obtained data by extracting and preparing
 information using Excel and Mendeley. The extracted information is: the name of the
 author(s), the title of the research, the year of publication, the importance of social
 media in education, challenges, the proposed framework or model, adopting social
 media in education processes (if any), and results.
- Final Results: This review has reached a deep understanding of the importance of social media in education in terms of the positives and negatives that can affect the educational process. The final number of studies selected in this paper is 15 that explain the importance of using social media in universities, including 4 studies that discuss the processes of effectively adopting social media in education. Through these results, this paper achieves its objectives by presenting a proposed initial framework for adopting social media in higher education, in addition to providing a summary of the importance of social media in education, as explained in the following sections.

A Proposed Conceptual Framework

Previous studies have shown that integrating social media into educational Institutions improves academic reality and acts as a powerful tool to enhance communication and participation. To adopt social media, the Institutions must study how to benefit from social media and what existing systems can be used to work with social media, as this study discussed. The adoption process must include a set of elements to adopt SM in the university education system.

Numerous studies illustrate the significant role of SM in education. However, the lack of suitable frameworks for outlining the adoption process has impeded its successful implementation. The proposed frameworks for using social media in education should consider key issues such as technology, infrastructure, environment, change preparedness, and other essential considerations. Hamadi et al. (2021) discuss in their study SM adoption in higher education's classrooms, which includes several factors such as the teaching approach used (collaborative education, traditional education), challenges such as safety and privacy, acceptance, development, adoption, effective management of resources, and implementation. This study proposes a framework for SM adoption in education, incorporating elements from frameworks proposed by Hamadi et al. (2021), Al-Qaysi et al. (2021), Hamadi et al. (2021a), and Hamadi et al. (2022). There are only a few suggested

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techniques for using social media in education, and these frameworks are some of them (Al-Qaysi et al., 2021a; Hamadi, El-Den, Azam, et al., 2021; Hamadi, El-Den, Narumon Sriratanaviriyakul et al., 2021; Hamadi et al., 2022). They are known for being current and modern. However, there are some limitations to these frameworks, such as not being comprehensive enough or not actually being applied in practice. The four research studies selected in this study provide one or more processes for the adoption of social media in education, as shown in Table 1.

Table 1
Initial Framework Elements

Framework Elements	Sources
Choose the educational pedagogy	
Type of Social Media	
Approach to use Social Media	
Privacy /security concern	
Professionalism	
Ethics and legal issues	
IT infrastructure	
Create accounts	
Adhering to the SM policy by the institution	
Manage/Monitor activates	(Hamadi, et al., 2021) * (Hamadi, et al., 2021a) * (Hamadi, et al., 2022) (Al-Qaysi et al., 2021b)
Setting Clear Guidelines	
Delivery approach	
Rules and guidelines	
Activities control	
University attribute	
Students attribute	
Contents managements/learning materials	
Contents managements /instructor	
Contents managements /SM functional	
Examined students attribute	
Students learning process	
Survey	
Reflection/ feedback	
Enhancing	

To offer a more comprehensive understanding of social media adoption in education, this study presents a preliminary framework outlining six phases of the adoption process. Each phase includes several elements designed to elucidate and simplify the adoption process in Iraqi higher education.

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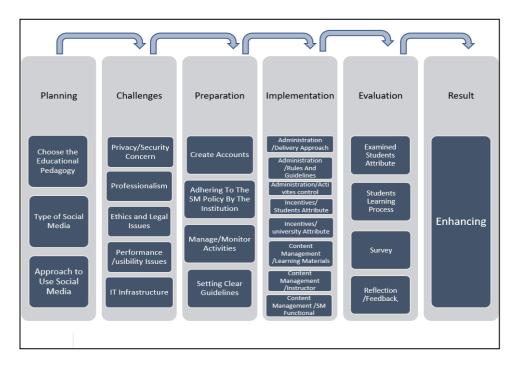


Figure 2. The Proposed Initial Framework

The phases of adopting social media are divided into six phases, each of which includes several processes to achieve the aim of adopting social media in Iraqi higher education:

- Planning: This stage involves planning to integrate social media into the educational institution. It requires selecting and evaluating the type of social media to be adopted, understanding the methodology for its use, and determining the approach for effective implementation within the institution.
- Challenges: One of the most crucial steps in adopting any technology is to clearly understand the associated challenges, which can vary by location and can be categorized into technological, infrastructural, and environmental challenges. This study identified several significant challenges frequently encountered in the adoption of social media, including privacy and security concerns, professionalism, ethical issues, and IT infrastructure limitations.
- Preparation: This stage encompasses several essential elements for preparing the
 adoption process. These include creating accounts for both students and lecturers,
 assigning permissions based on roles, clarifying the university's usage policy, and
 managing and monitoring activities conducted by students and lecturers. It is
 recommended to educate users on how social media functions within educational
 institutions and how to use it effectively to enhance the educational process.
- Implementation: The implementation stage is crucial in the adoption process, as it involves executing the strategy developed in the previous stages. At this point, it is essential to select the appropriate educational techniques and the type of social media to be used.
- Evaluation: One of the study's objectives is to successfully integrate social media into
 education, which requires a thorough assessment process. This step involves examining
 the student learning process, investigating student approaches, evaluating the impact
 of social media on students, and gathering feedback from students, lecturers, and staff.

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 Result: After completing all stages, the final stage involves obtaining the framework's outcomes and enhancing its performance to make it applicable to multiple institutions. This step includes incorporating feedback to refine and improve the framework and its processes.

Results and Discussions

This study focuses on achieving three main objectives: first, providing a deep understanding of the importance of using social media in education. To achieve this objective, this paper studied and analysed 15 papers that were interested in studying the impact and importance of social media in education. As the study mentioned previously, researchers must understand all aspects of any technology, whether negative or positive, especially in an important field like education. Although some research discusses the negative use of social media in education, there is no doubt that social media is a trend for many researchers interested in the significant impact of social media in higher education. The researchers concluded that the use of social media is important in improving the academic performance of students, making the educational process easier and more enjoyable. Students can obtain information more widely and at any time and place, which helps strengthen communication between students among themselves and between lecturers and improves students' ability to search for information and enhance decision-making skills, easy access to resources, quick feedback from lecturers, and increasing the skill of students and teachers in using platforms and technology (Fuchs, 2022; Hamadi, El-Den, Sriratanaviriyakul et al., 2021). The study concludes that in recent years, many researchers have turned to studying the impact of the use of social media in education. As a result, the study has had rich studies that have focused on many aspects regarding how to use SM and the positives of using social media in university education, which is considered a motivation for many institutions to respond positively to adopting such tools in education. The second objective of this study is to understand the processes of social media adoption in education.

The second objective of this study is to understand the current practice of SM in Iraqi higher education. As mentioned previously, the current situation in Iraq regarding the use of online tools faces many obstacles. There is a need for solutions that help in adopting online tools that aim to improve and facilitate education. Researchers, for example, AbdulRazak and Ali (2019) and Al-Nuaymy et al. (2019), have tended to study the challenges facing e-learning and what solutions must be available, including SM as an educational tool. SM can work effectively in education, especially since it is a well-known tool and is used by many students and teachers. Until then, a protocol must be developed on how to adopt social media effectively to ensure the success of its integration into education, which is what this study aims to achieve.

After the data selection and examination stage, four studies were selected that addressed one or more parts of the process of adopting social media in education to achieve the third objective of this study. By analysing these studies, it was revealed that there are some basic processes that must be taken into consideration when adopting social media in education, as discussed by Al-Qaysi et al. (2021). The challenges that the institution may face when adopting social media in education addressed privacy, security, ethics, technological and institutional challenges, and others, according to the study by Hamadi et al. (2021) and Hamadi et al. (2022).

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In the process of adopting social media into Iraqi education, it's crucial to acknowledge and address the challenges that may impede its adoption. The initial framework outlines several key obstacles that may evolve based on case study data. These challenges encompass privacy concerns, professionalism, ethics and legal issues, availability, and performance issues. The issues range from defending sensitive data and maintaining professionalism to addressing ethical considerations and ensuring the smooth functioning of social media platforms. These elements play a critical role in the successful implementation of social media as a collaborative tool in Iraqi education. In the journey of adopting social media in Iraqi education, it is necessary to face big challenges that require thoughtful solutions to address these challenges, and to ensure the successful integration of social media as a collaborative tool in Iraqi education, the framework provides not only the identification of problems but also the proposing of solutions as phases in the framework address in the preparation phase and implementation phase, which include creating accounts for teachers and students to reduce privacy breaches and improve work ethics.

Also, set rules for the use of social media by teachers and students, and manage, control activities when using SM so each of them knows their duties regarding using this tool. To study the main steps in adopting social media in school classrooms, such as the methodology followed, implementation, evaluation, and others. After achieving the research objectives, the answer to the research question became clearer, as this study proposed six phases that are considered the basic pillars in adopting university media in Iraq, which provide a more comprehensive picture of many of the elements that constitute an important factor in the success of the adoption and implementation of social media in Iraqi education. Which includes planning, challenges, preparation, implementation, evaluation, and result. The framework hasn't been evaluated yet; however, the next phase of this study, the researcher looks forward to developing and testing the proposed framework using a case study of Iraqi universities.

Conclusions

The significance and influence of integrating social media into education have been exhaustively studied. In modern education, there is a high demand for online tools, especially among students and teachers. However, the phases of social media adoption are still not completely clear due to different factors that impact the adoption process, which may differ from one environment to another. This is especially accurate for SM adoption as an educational tool in education. Therefore, it is necessary to comprehend the aspects that influence the adoption phases in Iraqi education. This research aims to provide a deep understanding of the processes required to adopt social media in Iraqi higher education

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References

- AbdulRazak, N., & Ali, M. (2019). Challenges of implementation e-learning platforms in Iraqi Universities. *Engineering and Technology Journal*, *37*(4C), 400–406. https://doi.org/10.30684/etj.37.4c.3
- Al-Hamad, N., Salem, H., & Al-Omari, F. (2022). Students' perception of employing social media in the educational process in the light of education 4.0 requirements. *Journal on Efficiency and Responsibility in Education and Science*, 15(2), 82–93. https://doi.org/10.7160/eriesj.2022.150203
- Al-Qaysi, N., Mohamad-Nordin, N., & Al-Emran, M. (2020). What leads to social learning? Students' attitudes towards using social media applications in Omani higher education. *Education and Information Technologies*, 25(3), 2157–2174. https://doi.org/10.1007/s10639-019-10074-6
- Al-Qaysi, N., Mohamad-Nordin, N., & Al-Emran, M. (2021a). Developing an educational framework for using Whatsapp based on social constructivism theory. In *Studies in Systems, Decision and Control*, 295, 243–252. Springer. https://doi.org/10.1007/978-3-030-47411-9_14
- Al-Qaysi, N., Mohamad-Nordin, N., & Al-Emran, M. (2021b). factors affecting the adoption of social media in higher education: A systematic review of the technology acceptance model. In *Studies in Systems, Decision and Control, 295*, 571–584. Springer. https://doi.org/10.1007/978-3-030-47411-9 31
- Bagarukayo, E. (2018). Social media use to transfer knowledge into practice and aid interaction in higher education. In *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 14(2).
- Elameer, A. S. (2021). Iraqi higher education digitizing trail during Covid19 pandemic. European Journal of Molecular & Clinical Medicine, 08(02).
- Elameer, A., Saleem Elameer, A., & Mansur, N. (2017). Using the social media in Iraqi higher education. *International Advanced Research Journal in Science, Engineering and Technology*. https://doi.org/10.13140/RG.2.2.27486.33607
- Fuchs, K. (2022). An exploratory interview study about student perceptions of using social media to facilitate their undergraduate studies. *Frontiers in Education*, 7. https://doi.org/10.3389/feduc.2022.834391
- Hamadi, M., El-Den, J., Azam, S., & Sriratanaviriyakul, N. (2022). Integrating social media as cooperative learning tool in higher education classrooms: An empirical study. *Journal of King Saud University Computer and Information Sciences*, 34(6), 3722–3731. https://doi.org/10.1016/j.jksuci.2020.12.007
- Hamadi, M., El-Den, J., Azam, S., & Sriratanaviriyakul, N. C. (2021). A novel framework for integrating social media as cooperative learning tool in higher education's classrooms. Research and Practice in Technology Enhanced Learning, 16(1). https://doi.org/10.1186/s41039-021-00169-5
- Hamadi, M., El-Den, J., Narumon Sriratanaviriyakul, C., & Azam, S. (2021). A social media adoption framework as pedagogical instruments in higher education classrooms. *E-Learning and Digital Media*, *18*(1), 55–85. https://doi.org/10.1177/2042753020950869
- Hamadi, M., El-Den, J., Sriratanaviriyakul, C. N., & Azam, S. (2021). A stochastic framework for social media adoption or abandonment: Higher education. *Advances in Intelligent Systems and Computing*, *1158*, 287–299. https://doi.org/10.1007/978-981-15-4409-5_26

Vol. 14, No. 12, 2024, E-ISSN: 2222-6990 © 2024

- Hassan Alia, A. A. (2022). Effect of using social communication in education during the COVID-19 pandemic. *International Journal of Information and Education Technology*, 12(7), 658–662. https://doi.org/10.18178/ijiet.2022.12.7.1667
- Jackson, J., Gettings, S., & Metcalfe, A. (2018). The power of Twitter: Using social media at a conference with nursing students. *Nurse Education Today*, *68*, 188–191. https://doi.org/10.1016/j.nedt.2018.06.017
- Khaola, P. P., Musiiwa, D., & Rambe, P. (2022). The influence of social media usage and student citizenship behaviour on academic performance. *International Journal of Management Education*, 20(2). https://doi.org/10.1016/j.ijme.2022.100625
- Mjhool, A. Y., Alsabah, R., Aljshamee, M., Alajwadi, M., & Al-Sabbagh, A. (2021). E-learning trends and internet challenges in Iraq. *International Journal of Computing and Digital Systems*, 10(1), 1407–1414. https://doi.org/10.12785/ijcds/1001124
- Nesrallah Khalaf, O., & Zangana, I. M. (2020). Impact of social media in learning efl Iraqi students new words. *Utopia y Praxis Latinoamericana*, 25(Extra1), 436–449. https://doi.org/10.5281/zenodo.3784883
- Otchie, W. O., Bardone, E., & Pedaste, M. (2022). Bridging the pedagogical gap between operational and contextual affordances with social media. *Encyclopaideia*, *26*(62), 57–80. https://doi.org/10.6092/issn.1825-8670/13223
- Serin Hamdi. (2022). Challenges and opportunities of e-learning in secondary school in Iraq. International Journal of Social Sciences & Educational Studies, 9(3). https://doi.org/10.23918/ijsses.v9i3p305
- Zhang, J., Zhao, W., Cheng, B., Li, A., Wang, Y., Yang, N., & Tian, Y. (2022). The impact of digital economy on the economic growth and the development strategies in the post-COVID-19 era: Evidence from countries along the "Belt and Road." *Frontiers in Public Health*, 10. https://doi.org/10.3389/fpubh.2022.856142