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An Exploration into Iraqi EFL Teachers' and Learners' Perspectives on the Google Classroom Platform under the COVID-19 Pandemic

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Abstract

This study explores the global influence of COVID-19 on education, particularly in Iraq, where a shift from traditional classrooms to online learning, notably Google Classroom, occurred. Iraqi English as a Foreign Language (EFL) instructors and students' perspectives were investigated using mixed methods design. Integration of the qualitative data corroborated the quantitative findings and enhanced the study's validity. Online learning, facilitated by technology, enables education without direct teacher-student interaction and engagement. Using the Technology Acceptance Model (TAM) to gauge factors influencing platform adoption is prevalent accordingly. Employing the TAM, attitudes toward Google Classroom were examined through surveys (21 teachers, 70 students) and interviews (10 teachers, 10 students). Results highlighted the platform's value for EFL education, noting benefits like collaborative learning and improved satisfaction, while technical issues emerged as a challenge. Namely, advantages encompassed accessibility, organization, collaboration, and eco-friendliness, while challenges included technical hurdles, reduced interaction, security fears, and limitations in the classroom experience. Despite pandemic hurdles, teachers and students embraced Google Classroom, suggesting its integration into teaching warrants careful consideration of Iraqi EFL learners' context and needs.

Keywords:

Google Classroom, online teaching, COVID-19, EFL, technology acceptance model, mixed-method

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Introduction

In 2019, the COVID-19 pandemic disrupted global education, leading to the closure of educational institutions worldwide (Shereen et al., 2020). To mitigate the impact, online teaching became essential, requiring educators to adapt to online learning environments swiftly. Like many parts of the world, Iraq transitioned to fully online education, employing platforms like Google Classroom for synchronous learning (Ugla & Abdullah, 2022). This sudden shift prompted teachers to explore various educational technologies, fostering collaboration and communication between teachers and students (Azhar & Iqbal, 2018).

The rise of online education offered flexibility and engagement, overcoming the traditional limitations of time and location (Gleason, 2018). Technology-enhanced classrooms enhanced motivation and language learning outcomes (AlMekhlafi, 2006; Awad & Alkaraki, 2013; Kitchakarn, 2015). Online learning merges technology and education, allowing learners to access knowledge over the Internet (Al-Fraihat et al., 2017). Amid the pandemic, the study aimed to explore Iraqi EFL teachers' and students' perspectives on using Google Classroom, utilizing the Technology Acceptance Model (TAM) to understand their attitudes and intentions toward this online platform (Davis, 1985).

TAM, widely applied in predicting technology adoption, suggests that perceived usefulness and ease of use influence individuals' attitudes and intentions toward technology (Siddiq & Tondeur, 2019). Moreover, TAM has been widely used to predict the adoption of e-learning platforms and other educational technologies (Vitoria et al., 2017). For instance, Moonma (2021) used TAM to assess Thai EFL students' acceptance of Google Classroom. Research like Alfadda and Mahdi (2021) and Mahdizadeh et al. (2008) underscored the impact of prior experience and perceptions on technology utilization. Google Classroom emerged as a prominent platform in Iraqi EFL university classes, offering educators a streamlined tool for managing coursework (Iftakhar, 2016; Omar et al., 2018). Despite its novelty in Iraq pre-pandemic, Google Classroom gained significance, facilitated by mandatory workshops for Iraqi university lecturers.

Aligned with ethical guidelines (BERA, 2011), this study ensured participants' informed consent, investigating Iraqi EFL teachers' and learners' perspectives on Google Classroom during the COVID-19 pandemic. By employing TAM, the research aimed to provide insights into the platform's adoption, shedding light on its role in transforming education delivery in challenging circumstances. Building on these findings and in light of these challenges, this research explores the Iraqi EFL university instructors and students' attitudes and perspectives and the advantages and disadvantages of EFL classrooms learning through Google Classroom. Given the

research problem for taking part in the survey and statement and the purpose of the study, the following research questions were formulated:

- What are the Iraqi EFL university students' attitudes and perspectives on using the Google Classroom platform?
- What are the Iraqi EFL university teachers' perspectives on using the Google Classroom platform?
- What are the advantages and disadvantages of EFL classrooms learning through Google Classroom?

Literature Review

Education during COVID-19

The 21st century has seen continuous advancements in education, influenced significantly by developments in information and communication technology (ICT) (Thongphan, 2020). The rapid global spread of COVID-19 led to the closure of educational institutions and the swift adoption of online education (Boca, 2021). This transition, termed "emergency e-learning," shifted traditional classroom teaching to virtual platforms (Murphy, 2020). Interestingly, some institutions had already begun incorporating a blend of conventional and online learning before the pandemic (Dhawan, 2020; Rajab et al., 2020).

Online learning, facilitated by technology, enables education without direct teacher-student interaction (Aguilera-Hermida, 2020). Technology, such as internet connectivity, supports this learning mode (Abbasi et al., 2020). Online teaching and learning, or e-learning powered by Information and Communication Technology (ICT), has emerged as a vital education delivery method (Amal Rhema, 2013). E-learning was an essential alternative during disruptions like the pandemic (Kerimbayev et al., 2017; Kumar Basak et al., 2018). Platforms like Zoom, Google Classroom, and Moodle emerged as practical tools for content delivery and distance education (Karkar et al., 2020). Adapting curriculum delivery for traditional and online settings is crucial, particularly as Iraqi educators and students face a new instructional environment (Ugla & Abdullah, 2022).

Adnan and Anwar (2020) examined Pakistani higher education students' attitudes toward online learning during the COVID-19 pandemic. The study highlighted challenges hindering effective online learning outcomes in Pakistan, such as inadequate internet access, insufficient training, and limited finances for students and instructors. The findings suggest that these obstacles impede the successful integration of online learning within the country's higher education system. Bambang et al. (2024) used technological tools in EFL speaking classes during the pandemic, and their implications

for the post-pandemic period contributed to the language teaching field. Their findings align directly with our investigation.

Studies in applied linguistics explored online English learning perspectives during COVID-19 (Adarkwah, 2020; Alfadda & Mahdi, 2021; Alodwan, 2021; Al-Shlowiy et al., 2021; Behforouz et al., 2021; Hussein et al., 2020; Sevy-Biloon, 2021). During the Coronavirus outbreak, Khatoony and Nezhadmehr (2020) studied Iranian EFL teachers, revealing challenges in technology integration. Rahman (2020) explored Indonesian EFL learners' perceptions, noting technical difficulties but also the benefits of flexibility and autonomy. Notably absent is research on teachers' and students' perspectives on Google Classroom in the Iraqi EFL context, which this study aims to address.

Google Classroom

Google Classroom, part of Google's educational apps, offers an online platform for accessible teacher-student communication and group learning (Beal, 2017). The study by Gunawan et al. (2020) highlighted that educators prefer Google Classroom due to its user-friendliness, allowing them to easily manage classes and create engaging learning experiences. Mohammed et al. (2018) emphasized that LMS tools like Google Classroom are crucial in supporting teaching processes and interactions.

Its features support material organization, assignments, and virtual classroom facilitation (Agustin & Ayu, 2021). Communication tools like announcements, emails, and push notifications foster teacher-student collaboration (Hulse, 2019). Ventayen et al. (2018) stated that Google Classroom is highly recommended because it is easy to operate this tool. It has exclusive features that fulfill teachers' and students' needs. This explanation shows that students and teachers should consider the ease of choosing online learning tools. Its benefits, including accessibility, paper reduction, and personalized learning, contributed to its popularity in Iraq and Arab nations (Ali & Ghazi, 2019). Google Classroom's convenience and ability to enhance communication and collaboration position it as an effective tool for educators and learners worldwide.

Overall, Google Classroom provides EFL teachers and learners in Iraq a free platform and helps organizations and collaboration as follows: Google Classroom is a free platform that can be accessed from any device with an internet connection, making it a viable option in a country with limited resources. The platform allows teachers to create and manage courses, share materials, and communicate with students in a centralized location. This can help to overcome challenges related to the organization and distribution of learning materials. Likewise, it offers tools that facilitate collaborative learning, such as shared documents and online discussion forums. These can enhance student engagement and improve learning outcomes.

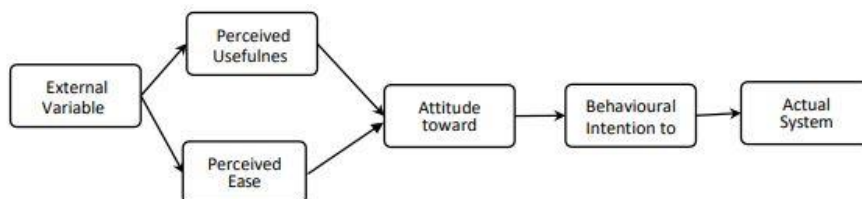
Perception of Google Classroom

Perceptions of Google Classroom among students and teachers have been extensively studied, providing valuable insights into its effectiveness as an educational tool. Al-Emran and Malik (2016) reported that teachers and students held a positive view of Google Applications, indicating a favorable reception among users. The results of their research suggest that these applications were well-regarded by the individuals involved. Iftekhar (2016) conducted a study focusing on teachers' and students' perceptions of using Google Classroom at Daffodil International University. Teachers reported more vital interaction with students when using Google Classroom, while students appreciated the easy access to learning materials and the platform's convenience in breaking the spatial and temporal constraints of traditional classrooms.

Research by Moonma (2021) used TAM to assess 111 Thai EFL students across 7 majors, studying their acceptance of Google Classroom as an online learning platform. The results showed positive attitudes, with perceived ease and usefulness influencing behavioral intention and usage. Moreover, its perceived ease and usefulness influence students' intention to use the platform.

Technology Acceptance Model

The Technology Acceptance Model (TAM), proposed by Davis in 1985, predicts user acceptance of new technologies (Davis, 1989). Perceived ease of use (PEOU) and perceived usefulness (PERUSE) are central to TAM and impact technology acceptance (Abd Hamid et al., 2016). Research supports the positive relationship between these variables and technology acceptance (Pantano, 2012; Davis, 1989).



TAM's application demonstrated its role in understanding user attitudes towards new technologies, such as E-learning platforms (Vitoria et al., 2017). Interviews with English teachers in China showcased the positive impact of technology on language instruction (Huang et al., 2019).

In a pandemic context, Bajaj et al. (2021) employed the Technology Acceptance Model (TAM) to explore teachers' intention to continue using online teaching tools during COVID-19. They observed that the ease of using technology positively impacted teachers' attitudes toward online teaching. Additionally, their findings showed that male teachers were more inclined to use online teaching platforms than female teachers during the pandemic.

Ebadi et al. (2020) employed mixed methods to explore e-learning acceptance among 78 Iranian medical students. They focused on NAVID platform usage for

English learning during the pandemic, utilizing TAM to assess attitudes. The results showed positive NAVID reception regarding system quality, service, and student-education system. Students were satisfied and enjoyed the platform, though perceived satisfaction and areas for improvement were noted.

Method

Design

This study utilized a mixed-method approach, incorporating both quantitative and qualitative research methods, to investigate the perspectives of Iraqi EFL teachers and students regarding the usage of the Google Classroom platform. Combining these methods allows the study to both quantify perceptions of Google Classroom and explore them in-depth, providing a richer understanding of the topic. This study used a sequential mixed-method approach. The researcher started collecting data by utilizing a web-based questionnaire administered through Google Forms to gather quantitative data. Subsequently, qualitative insights were obtained through individual interviews conducted via WhatsApp. They gave their consent to participate in the survey. The Cronbach's alpha coefficient of the questionnaire for teachers and students had a high level of internal consistency respectfully (Cronbach's alpha = 0.91) (Cronbach's alpha = 0.86). The face and content validity of the questionnaires were confirmed by two TEFL experts.

Participants

The convenience sampling was used to conduct Iraqi English as a Foreign Language (EFL) teachers and learners from Babylon University. The sample included 21 teachers and 70 students. The teachers who took part in the study ranged in age from 27 to 60 years, while the students' ages varied between 19 and 45 years. Both genders were represented in both groups, and participants in both categories had academic degrees in English as a Foreign Language (TEFL). From the Iraqi teacher participants, 17 held Master's degrees, and 4 had earned their PhDs. Among the students, 62 held Bachelor's degrees, 8 had completed their Master's degrees, and 2 students had obtained PhDs in TEFL.

Instruments

In order to address the first and second research questions, two comprehensive online survey were developed using Google Forms. The surveys included 106 questionnaires and then the researcher, in turn, distributed the surveys link to the teachers and students through platforms such as social media or email. Teachers and students were selected

from those who had engaged in online EFL classes through Google Classroom platform for at least two terms. Furthermore, the two questionnaires were adapted according to the current study to assess teachers' and students' perspectives on their online learning experience within the four subscales of perceived usefulness (7 items), system/service quality (24 items), student/educational system quality (16 items), perceived satisfaction/enjoyment (6 items). These items were developed and validated by ebadi et al. (2020) in a five-point Likert-scale format from strongly agree to strongly disagree . A semi-structured interview regarding the advantages and disadvantages of EFL Iraqi classes through Google Classroom was used to answer the third research question. The interview was conducted with 20 participants, 10 students and 10 teachers who took the questionnaire. Three questions were posed in Arabic. The researcher asked students and teachers who would like to be interviewed voluntarily. Twenty individual semi-structured interviews were held in Arabic over WhatsApp voice call, using three guiding questions. The interviews with both teachers and students typically lasted between 10 to 15 minutes, depending on the extent of information shared by each individual. These conversations were recorded and later transcribed for analysis.

Data Analysis

To address the first and second research questions, which focused on the viewpoints of Iraqi EFL university teachers and students regarding the usage of Google Classroom, the data collected from questionnaires were analyzed using descriptive statistics. This analysis allowed for a quantitative summary of the participant's responses. The raw data from these questionnaires were input into the SPSS software for analysis. This process allowed the researcher to compute the Minimum, Maximum and Means for each item in the questionnaires. Additionally, the responses obtained from the interviews were subjected to qualitative analysis, specifically thematic analysis. Through thematic analysis, as outlined by Braun and Clarke (2006). Based on Braun and Clarke's (2006) framework, the process involves familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. The interview transcripts were read multiple times to identify recurring ideas and patterns, which were then grouped into initial codes. These codes were then examined for similarities and differences, leading to the emergence of broader themes related to the advantages and disadvantages of Google Classroom. Identified and explored common themes and patterns within the participants' interview responses provided valuable qualitative insights into the perspectives on using Google Classroom. The study aimed to comprehensively understand the participants' attitudes toward the Google Classroom platform using quantitative and qualitative methods.

Results

Quantitative Results

The first research question of the study aimed to find out the Iraqi EFL university students' attitudes and perspectives on using the Google Classroom platform. Questionnaire items used a 5 Likert scale: Strongly disagree (1), Disagree (2), No idea (3), Agree (4), and Strongly agree (5). Scores (1 to 5) were divided by three up to 1.66 (low), 1.67 to 3.33 (average), and 3.34 to 5 (high). Student questionnaire: 53 items, scores range 53 to 265. Descriptive stats for Perceived Usefulness are presented in the table.

Table 4.1 presents the descriptive statistics and item analysis results for the Perceived Usefulness section of the Online Learning Perception Questionnaire. Items 1 to 7 are related to "Perceived Usefulness." Based on Table 4.1, items 4, "GOC was a useful tool for course practices." ($\bar{X} = 3.81$), 1 "Using GOC enabled me to accomplish my tasks more quickly." ($\bar{X} = 3.61$), and 7, "Overall, GOC was useful." ($\bar{X} = 3.61$) had the highest mean scores. On the contrary, items 2, "Using GOC improved my learning performance." ($\bar{X} = 2.85$), 6, "Holding courses on GOC helped me get prepared for the exams." ($\bar{X} = 2.92$), and 5, "I prefer taking online courses in GOC instead of attending conventional class." ($\bar{X} = 3.28$) had the lowest mean scores.

Table 4.1

The Descriptive Statistics and Item Analysis for the Online Learning Perception Questionnaire: Perceived Usefulness by Students

	N	Minimum	Maximum	Mean	Level
4. <i>Google Classroom</i> was a useful tool for course practices.	70	2.00	5.00	3.81	High
1. Using <i>Google Classroom</i> enabled me to accomplish my tasks more quickly.	70	2.00	5.00	3.61	High
7. Overall, <i>Google Classroom</i> was helpful.	70	2.00	5.00	3.61	High
3. Using <i>Google Classroom</i> helped me learn effectively.	70	2.00	5.00	3.37	High
5. I prefer online courses in <i>Google Classroom</i> instead of attending conventional classes.	70	2.00	5.00	3.28	Average
6. Holding courses on <i>Google Classroom</i> helped me prepare for the exams.	70	1.00	5.00	2.92	Average
2. Using <i>Google Classroom</i> improved my learning performance.	70	1.00	5.00	2.85	Average
Valid N (listwise)	70				

This section presents an analysis of the perceived System/Service Quality of Google Classroom (GOC) based on the responses provided by the participants. Items 8 to 31 are related to “System/Service Quality.” Based on Table 4.2, items 10 “Texts and graphics were easy to understand.” ($\bar{X} = 4.11$), 13 “I could find my way around GOC easily (just a few clicks to where I want to go).” ($\bar{X} = 4.05$), and 20 “It was easy to understand the structure of GOC and how to use it.” ($\bar{X} = 4.04$) had the highest mean scores. On the contrary, items 25, “GOC did not crash frequently.” ($\bar{X} = 2.70$), 28, “The IT services staff was available and cooperative when facing an error at GOC.” ($\bar{X} = 2.71$), and 1,5, “I did not face system errors in this GOC.” ($\bar{X} = 2.88$) had the lowest mean scores.

Table 4.2

The Descriptive Statistics and Item Analysis for the Online Learning Perception Questionnaire: System/Service Quality by Students

	N	Minimum	Maximum	Mean	Level
10. Texts and graphics were easy to understand.	70	1.00	5.00	4.11	High
13. I could easily find my way around <i>Google Classroom</i> (just a few clicks to where I want to go).	70	1.00	5.00	4.05	High
20. It was easy to understand the structure of <i>Google Classroom</i> and how to use it.	70	1.00	5.00	4.04	High
14. I could find the required information easily on this <i>Google Classroom</i> .	70	1.00	5.00	4.00	High
11. Fonts (style, color, saturation) were easily read on-screen.	70	1.00	5.00	4.00	High
19. It was easy to use <i>Google Classroom</i> .	70	1.00	5.00	3.98	High
30. The structure of <i>Google Classroom</i> was well organized into logical and understandable components.	70	1.00	5.00	3.97	High
29. Information from <i>Google Classroom</i> was in a readily usable form.	70	1.00	5.00	3.94	High
9. The vital information on the screen was placed in areas most likely to attract my attention.	70	1.00	5.00	3.92	High
21. <i>Google Classroom</i> was flexible to interact with.	70	2.00	5.00	3.90	High
18. There were enough clear instructions/training about how to use <i>Google Classroom</i> .	70	1.00	5.00	3.85	High
17. I could access the content quickly from any device (tablet, notebook, iOS, Android).	70	1.00	5.00	3.84	High

22. All components within <i>Google Classroom</i> were fully integrated and consistent.	70	1.00	5.00	3.84	High
12. I perceived the design of <i>Google Classroom</i> (e.g., fonts, style, color, images, videos) to be good and met the quality standards.	70	1.00	5.00	3.82	High
16. I was able to access pages within a reasonable time.	70	1.00	5.00	3.78	High
8. The layout was easy to navigate on PC/smartphones.	70	2.00	4.00	3.71	High
23. <i>Google Classroom</i> launched and ran right away.	70	2.00	5.00	3.65	High
31. <i>Google Classroom</i> provided proper online assistance and help.	70	2.00	5.00	3.64	High
27. <i>Google Classroom</i> provided me with a personalized entry page.	70	2.00	5.00	3.47	High
26. <i>Google Classroom</i> protected my information from unauthorized access by logging in only with my account and password.	70	2.00	5.00	3.45	High
24. I generally did not encounter any technical problems accessing this <i>Google classroom</i> .	70	2.00	5.00	3.28	Average
15. I did not face system errors in this <i>Google classroom</i> .	70	2.00	5.00	2.88	Average
28. The IT services staff was available and cooperative when facing an error at <i>Google Classroom</i> .	70	2.00	4.00	2.71	Average
25. <i>Google Classroom</i> did not crash frequently.	70	2.00	5.00	2.70	Average
Valid N (listwise)	70				

Table 4.3 presents the descriptive statistics about the Students/Educational System Quality section. Items 32 to 47 are related to “Students/Educational System Quality.” Based on Table 4.3, items 3, 4 “GOC provided me with different learning styles (e.g., flash, animation, video, audio, text, simulation, etc.) and they were interesting and appropriate in my study.” ($\bar{X} = 4.02$), 32 “GOC provided interactivity and communication facilities such as chat, forums, and announcements.” ($\bar{X} = 3.98$), and 45 “GOC's interface for holding class sessions was user-friendly.” ($\bar{X} = 3.95$) had the highest mean scores. On the contrary, items 47 “Overall, I am pleased with the experience of using GOC.” ($\bar{X} = 2.37$), 39 “My previous experience with e-learning

systems and computer applications helped me in using GOC.” ($\bar{X} = 2.85$), and 38 “I am not intimidated by using GOC.” ($\bar{X} = 2.87$) had the lowest mean scores.

Table 4.3

The Descriptive Statistics and Item Analysis for the Online Learning Perception Questionnaire: Students/Educational System Quality by Students

	N	Minimum	Maximum	Mean
34. <i>Google Classroom</i> provided me with different learning styles (e.g., flash animation, video, audio, text, simulation, etc.), which were interesting and appropriate for my study.	70	1.00	5.00	4.02
32. <i>Google Classroom</i> provides interactivity and communication facilities such as chat, forums, and announcements.	70	1.00	5.00	3.98
45. <i>Google Classroom</i> 's interface for holding class sessions was user-friendly.	70	1.00	5.00	3.95
36. I believe it was good to use <i>Google Classroom</i> .	70	1.00	5.00	3.94
35. <i>Google Classroom</i> provided evaluation components and assessment materials (e.g., quizzes, assignments).	70	1.00	5.00	3.92
41. I was satisfied with the performance of <i>Google Classroom</i> .	70	1.00	5.00	3.85
37. I have a positive attitude toward using <i>Google Classroom</i> .	70	1.00	5.00	3.75
40. I was able to perform tasks in <i>Google Classroom</i> successfully.	70	1.00	5.00	3.72
44. I enjoyed online learning using <i>Google Classroom</i> .	70	1.00	5.00	3.61
43. <i>Google Classroom</i> satisfied my educational needs.	70	2.00	5.00	3.11
33. I believe that communication facilities were effective in learning English.	70	1.00	5.00	3.04
46. It was easy for me to take part in online classes.	70	1.00	5.00	3.04
42. I enjoyed using <i>Google Classroom</i> in my study.	70	2.00	5.00	2.95
38. I am not intimidated by using <i>Google classroom</i> .	70	2.00	5.00	2.87
39. My experience with e-learning systems and computer applications helped me use <i>Google Classroom</i> .	70	2.00	5.00	2.85
47. Overall, I am pleased with the experience of using <i>Google classroom</i>	70	1.00	5.00	2.37
Valid N (listwise)	70			

Table 4.4 furnishes descriptive statistics of the Perceived Satisfaction/Enjoyment segment. Items 48 to 53 are related to “Perceived Satisfaction/Enjoyment.” Based on Table 4.3, items 48 “Using GOC increased my knowledge and helped me to be successful in the module.” ($\bar{X} = 3.75$), and 5,1, “GOC saved my time in searching for materials and cut down expenditures such as paper costs.” ($\bar{X} = 3.58$) had the highest

mean scores. On the contrary, items 5,3, “If it is possible, I would like to take all courses online.” ($\bar{X} = 2.74$), 52 “GOC helped me to achieve the learning goals of the module.” ($\bar{X} = 2.84$), and 50 “GOC made communication easier with the instructor and other classmates.” ($\bar{X} = 2.90$) had the lowest mean scores. Hence, it can be claimed that most of the participants had above-average attitudes toward Google Classrooms.

Table 4.4

The Descriptive Statistics and Item Analysis for the Online Learning Perception Questionnaire: Perceived Satisfaction/Enjoyment by Students

	N	Minimum	Maximum	Mean	Level
48. Using <i>Google Classroom</i> increased my knowledge and helped me succeed in the module.	70	1.00	5.00	3.75	High
51. <i>Google Classroom</i> saved my time searching for materials and cut down expenditures such as paper costs.	70	1.00	5.00	3.58	High
49. <i>Google Classroom</i> was a very effective educational tool that helped me improve my learning process.	70	2.00	5.00	2.91	Average
50. <i>Google Classroom</i> made communication easier with the instructor and other classmates.	70	2.00	5.00	2.90	Average
52. <i>Google Classroom</i> helped me achieve the module's learning goals.	70	2.00	5.00	2.84	Average
53. If possible, I would like to take all courses online.	70	2.00	5.00	2.74	Average
Valid N (listwise)	70				

The second question of the study aimed to find out the Iraqi EFL university teachers' perspectives on using the Google Classroom platform. The items of the teacher's questionnaire were in a Likert-scale format ranging from “strongly disagree (1), disagree (2), no idea (3), agree (4), and strongly agree (5).” The researchers divided the scores (1 to 5) by three: Up to 1.66 shows low perception. From 1.67 to 3.33 shows average perception. From 3.34 to 5 shows high perception.

Table 4.5 presents the descriptive statistics about the Perceived Usefulness segment. Items 1 to 7 are related to “Perceived Usefulness.” Based on Table 4.5, items 6 “Holding courses on Google Classroom helped me prepare my students for assessments.” ($\bar{X} = 3.90$), 1 “Using Google Classroom enabled me to accomplish my tasks more quickly.” ($\bar{X} = 3.85$), and 2 “Using Google Classroom improved my teaching performance.” ($\bar{X} = 3.57$) had the highest mean scores. On the contrary, items 5, “I prefer teaching courses online using Google Classroom instead of conducting conventional classes.” ($\bar{X} = 2.52$), 7, “Overall, Google Classroom was a useful platform for online teaching.” ($\bar{X} = 3.14$), and 3 “Using Google Classroom helped me facilitate effective learning for my students.” ($\bar{X} = 3.23$) had the lowest mean scores.

Table 4.5

The Descriptive Statistics and Item Analysis for the Online Learning Perception Questionnaire: Perceived Usefulness by Teachers

	N	Minimum	Maximum	Mean	Level
6. Holding courses on Google Classroom helped prepare my students for assessments.	21	1.00	5.00	3.90	High
1. Using Google Classroom enabled me to accomplish my tasks more quickly.	21	2.00	5.00	3.85	High
2. Using Google Classroom improved my teaching performance.	21	1.00	5.00	3.57	High
4. Google Classroom was a useful tool for organizing and managing course materials.	21	1.00	5.00	3.38	High
3. Using Google Classroom helped me facilitate effective learning for my students.	21	1.00	5.00	3.23	Average
7. Overall, Google Classroom was a useful platform for online teaching.	21	1.00	5.00	3.14	Average
5. I prefer teaching courses online using Google Classroom instead of conducting conventional classes.	21	1.00	5.00	2.52	Average
Valid N (listwise)	21				

The following table shows the descriptive statistics for the System/Service Quality part. Items 8 to 31 are related to “System/Service Quality.” Based on Table 4.6, item 11 “Fonts (style, color, saturation) were easy to read on-screen for my students.” ($\bar{X} = 4.33$), 9 “The important information on the screen was placed in areas most likely to attract my students' attention.” ($\bar{X} = 4.09$), and 10 “Texts and graphics were easy for my students to understand.” ($\bar{X} = 4.04$) had the highest mean scores. On the contrary, items 28, “The IT services staff was available and cooperative when my students faced an error with Google Classroom.” ($\bar{X} = 2.33$), 25, “Google Classroom did not crash frequently.” ($\bar{X} = 2.42$), and 31 “Google Classroom provided proper online assistance and help for my students.” ($\bar{X} = 2.90$) had the lowest mean scores.

Table 4.6

The Descriptive Statistics and Item Analysis for the Online Learning Perception Questionnaire: System/Service Quality by Teachers

	N	Minimum	Maximum	Mean	Level
11. Fonts (style, color, saturation) were easy to read on-screen for my students.	21	2.00	5.00	4.33	High
9. The important information on the screen was placed in areas most likely to attract my students' attention.	21	1.00	5.00	4.09	High
10. Texts and graphics were easy for my students to understand.	21	1.00	5.00	4.04	High
8. The layout was easy to navigate on PC/smartphones.	21	1.00	5.00	4.00	High
21. Google Classroom was flexible for my students to interact with.	21	1.00	5.00	3.90	High
22. All components within Google Classroom were fully integrated and consistent.	21	1.00	5.00	3.80	High
19. It was easy for my students to use Google Classroom.	21	1.00	5.00	3.66	High
18. There were enough clear instructions/training about using Google Classroom.	21	1.00	5.00	3.57	High
14. My students could find the required information easily on Google Classroom.	21	1.00	5.00	3.57	High
29. Information from Google Classroom was in a form that was readily usable for my students.	21	1.00	5.00	3.52	High
17. My students could access the content easily from any device (tablet, notebook, iOS, Android).	21	1.00	5.00	3.52	High
13. I could easily find my way around Google Classroom (just a few clicks to where I want to go).	21	1.00	5.00	3.47	High
30. The structure of Google Classroom was well organized into logical and understandable components for my students.	21	1.00	5.00	3.42	High
12. I perceived the design of Google Classroom (e.g., fonts, style, color, images, videos) to be good and met the quality standards for teaching.	21	1.00	5.00	3.42	High
26. Google Classroom protected my students' information from unauthorized access by logging in only with their accounts and passwords.	21	1.00	5.00	3.38	High
15. My students did not face system errors while using Google Classroom.	21	1.00	5.00	3.38	High
20. It was easy for my students to understand the structure of Google Classroom and how to use it.	21	1.00	5.00	3.28	Averag
16. My students were able to access pages within a reasonable time.	21	1.00	5.00	3.28	Averag
23. Google Classroom launched and ran right away.	21	1.00	5.00	3.19	Averag
27. Google Classroom provided my students with a personalized entry page.	21	1.00	5.00	2.95	Averag

Table 4.7 shows the descriptive statistics for the Students/Educational System Quality part. Items 32 to 47 are related to “Students/Educational System Quality.” Based on Table 4.7, item 34, “Google Classroom provided my students with different learning styles (e.g., flash animation, video, audio, text, simulation, etc.) that were interesting and appropriate in their studies.” ($\bar{X} = 4.19$) 35 “Google Classroom provided evaluation components and assessment materials (e.g., quizzes, assignments) for my students.” ($\bar{X} = 4.04$), and 41 “I was satisfied with the performance of Google Classroom as a teaching platform.” ($\bar{X} = 3.80$) had the highest mean scores. On the contrary, items 39, “My previous experience with e-learning systems and computer applications helped me in using Google Classroom.” ($\bar{X} = 2.57$), 33 “I believe that communication facilities had been effective components in my student's learning experience.” ($\bar{X} = 2.80$), and 38 “I am not intimidated by using Google Classroom.” ($\bar{X} = 2.95$) had the lowest mean scores.

Table 4.7

The Descriptive Statistics and Item Analysis for the Online Learning Perception Questionnaire: Students/Educational System Quality by Teachers

	N	Minimum	Maximum	Mean	Level
34. Google Classroom provided my students with different learning styles (e.g., flash animation, video, audio, text, simulation, etc.) that were interesting and appropriate for their studies.	21	2.00	5.00	4.19	High
35. Google Classroom provided evaluation components and assessment materials (e.g., quizzes & assignments) for my students.	21	2.00	5.00	4.04	High
41. I was satisfied with the performance of Google Classroom as a teaching platform.	21	1.00	5.00	3.80	High
45. Google Classroom's interface for holding class sessions was user-friendly.	21	1.00	5.00	3.57	High
44. I enjoyed teaching online using Google Classroom.	21	1.00	5.00	3.57	High
36. I believe it was good to use Google Classroom for teaching.	21	1.00	5.00	3.38	High
46. It was easy for me to conduct online classes using Google Classroom.	21	1.00	5.00	3.38	High
32. Google Classroom provided interactivity and communication facilities such as chat, forums, and announcements for my students.	21	1.00	5.00	3.38	High
43. Google Classroom satisfied my educational needs as a teacher.	21	1.00	5.00	3.28	Average
42. I enjoyed using Google Classroom in my teaching.	21	1.00	5.00	3.23	Average
37. I have a positive attitude toward using Google Classroom.	21	1.00	5.00	3.23	Average

40. I was able to perform teaching tasks on Google Classroom successfully.	21	1.00	5.00	3.23	Average
47. Overall, I am pleased with the experience of using Google Classroom for teaching.	21	1.00	5.00	3.00	Average
38. I am not intimidated by using Google Classroom.	21	1.00	5.00	2.95	Average
33. I believe that communication facilities have effectively impacted my students' learning experience.	21	1.00	5.00	2.80	Average
39. My experience with e-learning systems and computer applications helped me use Google Classroom.	21	1.00	5.00	2.57	Average
Valid N (listwise)	21				

The following table shows the descriptive statistics for the Perceived Satisfaction/Enjoyment part. Items 48 to 53 are related to “Perceived Satisfaction/Enjoyment.” Based on Table 4.7, items 48 “Using Google Classroom increased my knowledge and helped me to be successful in delivering the curriculum.” ($\bar{X} = 3.61$), 51 “Google Classroom saved my time in organizing and searching for teaching materials and reduced expenditures such as paper costs.” ($\bar{X} = 3.52$), and 53 “If it is possible, I would like to teach all my courses online using Google Classroom.” ($\bar{X} = 3.38$) had the highest mean scores. On the contrary, items 49, “Google Classroom was a very effective educational tool and helped me improve my teaching process.” ($\bar{X} = 2.66$), 52, “Google Classroom helped me to achieve the teaching goals of the curriculum.” ($\bar{X} = 2.76$), and 50 “Google Classroom made communication easier with my students and other colleagues.” ($\bar{X} = 3.33$) had the lowest mean scores. Considering the status of different items, it can be claimed that teachers mostly had above-average attitudes toward Google classrooms.

Table 4.8

The Descriptive Statistics and Item Analysis for the Online Learning Perception Questionnaire: Perceived Satisfaction/Enjoyment by Teachers

	N	Minimum	Maximum	Mean	Level
48. Using Google Classroom increased my knowledge and helped me successfully deliver the curriculum.	21	1.00	5.00	3.61	High
51. Google Classroom saved my time organizing and searching for teaching materials and reduced expenditures such as paper costs.	21	1.00	5.00	3.52	High
53. I would like to teach all my courses online using Google Classroom.	21	1.00	5.00	3.38	High
50. Google Classroom made communication easier with my students and other colleagues.	21	1.00	5.00	3.33	Average
52. Google Classroom helped me achieve the curriculum's teaching goals.	21	1.00	5.00	2.76	Average
49. Google Classroom was a very effective educational tool and helped me improve my teaching process.	21	1.00	5.00	2.66	Average
Valid N (listwise)	21				

Qualitative Results

The third research question tried to answer the advantages and disadvantages of EFL classroom learning through Google Classroom. The first table shows the themes and codes for the benefits, and the second table presents the disadvantages.

Table 4.9

Themes and Codes Extracted from Interview Data Coercing the Advantages of Online Google Classrooms

Themes	Codes
A. Easy Communication and accessibility	<ol style="list-style-type: none"> 1. allowing easy communication between learners and teachers 2. providing students with an easy way to ask questions 3. sending assignments easily 4. receiving feedback from teachers 5. accessing through the Internet connection 6. accessing course materials while on the go
B. Organized learning	<ol style="list-style-type: none"> 1. keeping assignments and quizzes organized 2. keeping class notes for later use 3. having access to online materials in one place
C. Group/Collaborative learning	<ol style="list-style-type: none"> 1. collaborative learning through features such as Google Docs 2. sharing Google Slides with other learners 3. working together on projects in real-time
D. Paper-Free Learning	<ol style="list-style-type: none"> 1. reducing dependence on notebooks and papers 2. keeping digital archives 3. revising and editing the files

The following are among the advantages extracted from the interviews with the participants.

Using Google Classroom has transformed my learning experience. It offers seamless communication, convenient assignment submission, and quick feedback from teachers. Its online accessibility allows me to work from anywhere, adapting to my lifestyle.” (S1)
“Google Classroom greatly benefits me as a teacher. It streamlines communication, feedback, and assignment management. The platform's efficiency enhances teaching by enabling effective guidance and simplified administrative tasks. Flexible material access supports students' needs effectively.” (T1)

“Google Classroom organizes my learning effectively, consolidating assignments, tests, and notes in one accessible platform. This simplifies material access and helps maintain focus on studies.” (S3)

“Google Classroom aids organized learning by efficiently managing assignments, tests, and notes. It enhances material accessibility and supports students' focus on studies.” (T4)

“Google Classroom fosters collaborative learning through real-time tools like Google Docs and Slides. Students can work together from anywhere, enhancing engagement and efficiency in group projects.” (S5)

“Google Classroom promotes collaborative learning through tools like Google Docs and Slides. Students collaborate in real-time, regardless of location, fostering subject understanding and essential digital skills. It exemplifies the progress of modern education.” (T3)

“Google Classroom eliminates paper usage, offering digital access to assignments and class materials. This shift streamlines learning, providing a convenient and paper-free experience.”(S4)

“Google Classroom embodies Paper-Free Learning, liberating from physical materials. Assignments and course materials transition to a digital realm, aligning with modern times and reducing environmental impact. The platform's transformative approach frees students for immersive learning.” (T6)

The following table presents the disadvantages of learning through GOCs.

Table 4.10

Themes and Codes Extracted from Interview Data Coercing the Disadvantages of Online Google Classrooms

Themes	Codes
A. Technological difficulty/knowledge	<ol style="list-style-type: none"> 1. requiring access to computers/laptops/smartphones 2. requiring internet connection 3. requiring updated software 4. not having enough facilities in rural areas
B. Reduced Personal Interaction	<ol style="list-style-type: none"> 1. reducing personal interaction between teachers and students 2. reducing face-to-face negotiations
C. Security Concerns	<ol style="list-style-type: none"> 1. raising concerns about privacy and data security 2. needing a backup manager to ensure the safety of the learning site
D. Reduced Classroom Experience	<ol style="list-style-type: none"> 1. not offering the same level of classroom experience as traditional classroom learning 2. not having the opportunity to interact with peers and teachers in person

The following are among the disadvantages extracted from the interviews: "Technical issues emerged as a challenge. The students and teachers reported technical issues as a significant challenge.

“Adopting technological innovations like Google Classroom can present challenges, including web connection disruptions and program compatibility conflicts. Online platforms demand reliable internet and computer access, which some students may lack, impacting their engagement in digital learning.” (S2)

“Navigating technology can be challenging due to internet issues and software compatibility, impacting students and teachers. Google Classroom assumes widespread computer and internet access, creating a barrier for those without such resources in embracing digital learning.” (T8)

“Online learning lacks the personal connection of in-person interactions with teachers. The absence of direct communication might impact engagement and learning, as the sense of closeness is missing.” (S6)

“Online learning alters the teacher-student connection, lacking the intimacy of in-person interactions. This absence of direct engagement might impact students' engagement and learning outcomes, with a missing piece affecting their educational experience.” (T7)

“Considering online tools like Google Classroom raises concerns about data security. In the digital realm, safeguarding information is essential for students and teachers. While learning is vital, ensuring data protection is equally important.” (S9)

“Adopting online tools like Google Classroom raises the critical concern of student data security. It becomes a responsibility for educators to safeguard their information, functioning as both teachers and guardians of privacy in the digital environment.” (T10)

“Using Google Classroom, I feel different from my usual classroom experience. The lack of in-person interactions concerns me – the absence of one-on-one chats with friends and teachers. It's not just about lessons; it's about the unique classroom connection that might be weaker.” (S10)

“GOC doesn't fully replicate traditional classrooms, lacking personal connections and one-on-one discussions.”(T5)

These challenges include unreliable internet connections and lack of access to devices that affect teaching and learning outcomes. These difficulties can directly impact teaching and learning outcomes by limiting student participation, hindering access to learning materials, and disrupting the flow of lessons. For example, if students cannot access Google Classroom consistently due to internet connectivity issues, they may miss important announcements, assignments, or teacher feedback. This can lead to gaps in their learning and ultimately affect their academic performance.

Discussion

The first research question investigated Iraqi EFL university learners' attitudes toward Google Classroom. Results showed positive perceptions across four categories: perceived usefulness, system/service quality, student/educational system quality, and perceived satisfaction/enjoyment. The findings aligned with prior studies regarding Google Classroom's value and efficiency. The platform's user-friendliness was acknowledged, reflecting similar outcomes from past research. Diverse learning styles were appreciated, consistent with earlier studies. Participants also expressed satisfaction due to time-saving and cost-effective features, echoing prior research.

The second research question explored Iraqi EFL university instructors' perspectives on Google Classroom. Positive attitudes were noted, emphasizing the platform's usefulness and enhancement of teaching performance. Similar research underscored the benefits of online platforms in education. Positive views on system/service quality were reported, though concerns regarding technical support were raised. The teachers' satisfaction with Google Classroom's teaching capabilities was evident, but some experienced challenges due to a lack of prior e-learning experience. Satisfaction/enjoyment derived from time-saving aspects despite concerns about communication limitations.

The third research question delved into the advantages and challenges that Iraqi EFL students and instructors perceived using Google Classroom. Accessibility, organized learning environments, collaborative learning, and paper-free benefits were highlighted as advantages. Challenges included technological difficulties, reduced personal interaction, security concerns, and diminished classroom experience. These findings resonated with previous studies. Our findings on the challenges Iraqi EFL teachers and students face, such as technological difficulties and reduced personal interaction, highlight the need for context-specific interventions to support the effective adoption of Google Classroom. To address this challenge, educators can provide offline learning materials to students who lack reliable internet access, offer training sessions to help students develop basic digital literacy skills, and advocate for improved internet infrastructure and access to devices in educational settings.

Conclusion

In conclusion, Iraqi EFL learners and instructors showed contentment with Google Classroom's attributes and functionalities. Advantages encompassed accessibility, organization, collaboration, and eco-friendliness, while challenges included technical hurdles, reduced interaction, security fears, and limitations in the classroom experience. Despite limitations, this study sheds light on the positive reception of Google Classroom, suggesting its potential to enhance Iraqi EFL education. Furthermore, the study's findings on the challenges faced by Iraqi EFL teachers and students can guide the development of practical strategies and interventions to support the successful adoption of Google Classroom in this context. These strategies could include addressing internet access and digital literacy issues, promoting teacher-student interaction online, and ensuring data security and privacy. The study's findings suggest that Google Classroom has the potential to enhance EFL education in Iraq by providing a readily accessible platform for communication, collaboration, and learning. These insights could inform policy decisions related to integrating technology into the EFL curriculum and providing professional development opportunities for teachers on the effective use of Google Classroom.

Another area for future research could be the relationship between Google Classroom usage and academic achievement in EFL courses. This could involve tracking

students' grades and comparing the performance of those who actively engage with Google Classroom to those who do not. Convenience sampling was used to select participants from Babylon University. As a result, the sample may not represent all Iraqi EFL teachers and learners, and the findings may not be generalizable to other universities or educational contexts in Iraq or other countries. Future research could probe deeper into its impact on language proficiency and academic achievements, specific platform features, and interventions to address challenges, thus enriching technology's role in language education. The study suggests future research on interventions to address challenges like reduced interaction and security concerns. Investigating strategies for increasing interaction and engagement in online learning environments like Google Classroom can be the subject of more studies. This could include exploring the effectiveness of different communication tools, such as video conferencing, discussion forums, and online collaborative activities. For example, researchers can investigate how different approaches to online group work affect student interaction and learning outcomes. Additionally, researchers can examine the impact of teacher presence and feedback in online settings. In addition, exploring the impact of Google Classroom on different aspects of language proficiency can be addressed for more investigations.

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