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The Role of Digital Educational Content in Eliminating Traditional Methods in the Educational Process within Iraqi Universities

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Abstract

Background/purpose. This research aims to explore the role of digital educational content in eliminating traditional teaching methods within Iraqi universities. The study addresses the increasing shift towards digital learning and the necessity of adapting educational processes to modern technological advancements, particularly in response to challenges faced by traditional education.

Materials/methods. The study employs a descriptive survey method, utilizing a questionnaire distributed to 120 faculty members (60 males and 60 females) from various Iraqi universities between August 31 and September 15, 2024. The collected data was analyzed to assess the effectiveness of digital educational content and its potential to replace traditional teaching approaches.

Results. The findings reveal that faculty members widely acknowledge the effectiveness of digital educational content in enhancing student engagement and learning outcomes. The study highlights the extensive adoption of Google Classroom, especially during the COVID-19 pandemic, which significantly contributed to the continuity of education.

Conclusion. To fully integrate digital educational content into Iraqi universities, it is essential to expand its use through structured training programs and workshops. Encouraging educators to develop and utilize digital tools effectively will support the transition from traditional to digital learning environments, ultimately improving the quality of education.

1. Introduction

With the emergence of the internet, scientific and educational institutions, as well as commercial companies, began to make their information and resources available through their websites. As programs and applications evolved—including mobile apps and social media—various forms of digital media emerged, including electronic books, journals, databases, and educational platforms that assist in preparing and designing digital educational content.

Recently, all ministries of higher education and education around the world have shown significant interest in digital educational content production to suit distance education and virtual universities. Given the closure of many scientific and educational institutions due to disasters, crises, and global pandemics that hinder traditional education (Arnout, Abdel Rahman, Elprince, Abada, & Jasim, 2020).

This research aims to explore the role and significance of digital educational content in modern education, addressing key questions such as: What constitutes digital educational content? What are its types and elements? Which platforms support its creation and design? How does it benefit students and educators? And what role does it play in replacing traditional teaching methods? The study is divided into two main sections: The first establishes the research framework by defining its problem, significance, objectives, methodology, data collection tools, hypotheses, operational definitions, and review of previous studies. The second section presents the practical framework, including an analysis of questionnaire data, followed by key findings and recommendations.

2. Literature Review

In their study, Nocar, T. Qianjun, and K. Bártek (2016) addressed the effective use of information and communication technology (ICT) and digital learning materials in "Next-Generation Classrooms." highlighting useful software tools to support a self-inquiry approach to learning. Teachers can create digital educational content themselves or use pre-made content from various repositories. These classrooms combine traditional methods with the latest educational technologies to enhance knowledge construction. The study included results from a research project in China examining the use of ICT in teaching mathematics in elementary schools (Nocar, Qianjun, & Bártek, 2016). In his study, Othman (2018) aimed to improve the teaching process in schools and universities through modern technology and to identify the reasons for its limited use. It adopted a descriptive-analytical methodology and concluded that using technologies fosters creativity in teaching, while a lack of awareness serves as a significant obstacle. The study recommended raising awareness among faculty members through training courses and workshops, emphasizing the importance of traditional education and the teacher's guiding role (Othman, 2018). The study by Al-Desouky, D. A. Shawky, and G. A. R. Hussein (2019) aimed to develop programming skills among preparatory students using digital educational content based on constructivist and communicative approaches. It involved a sample of 40 third-grade preparatory students divided into two groups: one using the constructivist approach and the other using the communicative approach. The results indicated the superiority of the communicative group in academic achievement and practical performance, highlighting the effectiveness of communicative digital content (Al-Desouky, Shawky, & Hussein, 2019). Al-Mutaie (2020) focused on the concept of digital content, electronic courses, and their relationship with traditional and distance education in his study. It applied interactive digital content for a printing technology course for graphic design students at Al-Zahra College for Women. The experiment demonstrated the impact of digital content in improving instructional levels. The study recommended enhancing course design using digital design programs (Al-Mutaie, 2020).

The current study is distinguished from previous studies as a descriptive study that examined the opinions of Iraqi university instructors regarding the concept of digital educational content and its role in eliminating traditional methods in the teaching process. The benefit derived from previous

studies was twofold: firstly, in writing the theoretical framework of the research and, secondly, in determining the practical framework of the study.

3. Methodology

This study investigates the role of digital educational content in eliminating traditional methods in the educational process. The research question guiding this study is: What is the role of digital educational content in eliminating traditional teaching methods?

The significance of this research lies in its relevance to educators who need to prepare and produce digital educational content for students aimed at learning and acquiring knowledge. This allows for full control over ideas and values that help guide students appropriately. It also aids students in re-attending lectures or accessing them any time after they conclude. Furthermore, it enhances students' learning capabilities and their use of modern technologies while opening them up to the world. Additionally, the importance of this research is realized through achieving its objectives by demonstrating the role of digital educational content in eliminating traditional methods by analyzing responses from questionnaire items.

Researchers adopted a descriptive survey method to achieve research objectives. The questionnaire was distributed to faculty members at Iraqi universities from August 31 to September 15, 2024.

The following research hypotheses guide the study:

- Digital educational content is more effective than traditional teaching methods.

- Using digital educational content contributes to improving students' learning experiences.

- Digital educational content can help overcome challenges posed by traditional teaching methods.

- Limited time and lack of training represent challenges in adopting digital educational content.

4. Operational Definitions

The effectiveness of pedagogical interventions was evaluated using quantitative methods. Specifically, quantitative data analysis techniques were employed to analyze the results of vocabulary pronunciation pre-test and post-test evaluations, along with the insights derived from responses to open-ended questions. The quantification of subjects' advancements in speaking performance was achieved through calculations that incorporated the average scores and standard deviations of the pre-test and post-test assessments.

4.1. Digital Educational Content

Digital eEducational content is a collection of selected knowledge organized systematically to achieve educational purposes. (Content analysis, its concept, objectives and application, 2021)

Document that is organized or unorganized on or off the internet. (Hassanein & Al-Jazzar, 2011) It expresses various written texts along with images or graphics. Additionally, it includes videos, audio recordings, articles, and posts on websites or social media platforms. (Digital educational content: definition, history, types, transition towards it, and how to create it, 2021).

The use of digital educational content occurs within a digital learning environment where scientific contents are presented digitally through activities and skills that can be exploited by

teachers or learners to achieve desired educational goals for both face-to-face or distance learning formats (Bensir, 2022, p. 141).

The operational definition for digital educational content refers to courses prepared by educators for students digitally using books, research studies, images, graphics, as well as videos and audio recordings available online or on social media platforms.

4.2. Educational Process

The educational process consists of an organized set of activities aimed at meeting specific educational needs within established conditions set by higher education authorities. It relies on fundamental principles such as democracy, science, humanity while aiming to equip learners with various skills that enhance their character's strength and balance while providing job opportunities. (Jaber, 2018).

It is defined as an interactive process between educators and learners within an academic institution aimed at achieving objectives through activities facilitated by various means (Tunisian, Youlbah, & Masoud, 2018, p. 178).

The operational definition for the educational process describes it as an interactive engagement between core elements (educator-student-educational material) within an academic framework utilizing various techniques to achieve required educational goals.

4.3. Traditional Methods in Education

The term "method" refers to a specific approach to writing or expressing ideas (Masoud, 1992, p. 74); traditional education relies on conventional culture where teachers are central to learning processes while students receive information directly through documents like books containing written texts or images (Shaker, 2020).

The operational definition for traditional methods indicates that they refer to direct instructional processes occurring between educators and students inside classrooms where teaching materials are presented verbally or printed—this type being most common worldwide.

5. Theoretical Framework

5.1. Types and Elements of Digital Educational Content

Digital educational content encompasses various types that enhance the learning experience. Digital texts include e-books, e-journals, articles, and university theses, providing essential academic resources. Visual content, such as images, educational films, videos, animations, and slides, helps illustrate complex concepts. Audio content supports auditory learning, including recordings, podcasts, and recorded lessons. Interactive content, such as interactive books, quizzes, and educational games, engages learners through hands-on activities. Additionally, presentations integrating text, images, and videos facilitate effective knowledge delivery (Al-Omari, 2014).

Digital educational content comprises several key elements that enhance the learning experience. Texts serve as the foundation, providing printed and written information. Multimedia, including images and videos, improves students' understanding and perception of concepts. Interaction plays a crucial role by facilitating communication between instructors and students through various educational tools. Additionally, an interactive interface ensures that the platform is user-friendly and engaging, making the learning process more effective. Finally, evaluation tools such as tests and interactive questions enable assessing students' knowledge and progress (Al-Ameriya & others, 2023).

5.2. Websites for Creating and Designing Digital Educational Content

There are numerous websites that assist in creating virtual classrooms, managing digital education, and effectively designing and preparing digital educational content. Some examples include:

-   Google Classroom: A platform for organizing and managing online classrooms. Website link: https://classroom.google.com

-   Moodle: An open-source learning management platform that allows creating and managing online classes and courses. Website link: https://moodle.org

-   Schoology: An educational platform that combines learning management with social networking, providing educational content, organizing lectures, and monitoring students. Website link: https://app.schoology.com

-   FlipHTML5: An interactive educational tool that enables teachers to create engaging online learning materials. Website link: https://fliphtml5.com

-   Blackboard: A platform various educational institutions use to manage education, create classrooms, and provide multimedia educational content.

-   Focus KY: A platform aimed at teachers and students for designing interactive educational content. Website link: https://focusky.com

-   Canva: A versatile design platform that can be used to create visual educational materials. Website link: https://www.canva.com

-   Mango Animate: A tool for creating animated educational videos. Website link: https://mangoanimate.com/products/wm

-   iSpring Free: Offers e-learning authoring tools (slide-based courses, interactive pages, educational videos, smart quizzes, role-play simulations, e-learning interactions, character builders). Website link: https://www.ispring.ae

-   Venngage: Provides various templates for creating educational content. Website link: https://ar.venngage.com/features/education-content-maker

5.3. The Importance of Digital Educational Content

The importance of digital educational content for students and educators lies in the following:

•   Digital educational content combines texts, images, videos, and interactive activities, making learning more engaging and effective.

•   The content of digital libraries includes topics that help students conduct research, inquire, and write about subjects more deeply.

•   Certain platforms contain educational content with activity units supporting the educational process.

•   Some educational platforms allow educators to create digital content or upload pre-made materials. This means that once the educational materials are prepared, they can be reused in subsequent years, saving time and effort.

•   Digital content is continuously updated to keep pace with modern advancements and scientific developments.

• The use of artificial intelligence and machine learning technologies allows for digital content that helps tailor learning paths according to students' needs and academic levels (Al-Osaimi, 2021). Digital educational platforms and preparing teachers to use them.

6. Practical Research Framework

6.1. Validity and Stability of the Questionnaire

The validity of the questionnaire means the ability of the questionnaire form to measure the research variables that the questionnaire was designed to measure, as it was taken into account the comprehensiveness in its absorption of the research variables and the lack of duplication, and for the purpose of verifying the apparent validity of the questionnaire, the questionnaire was presented to a number of specialized referees (Appendix 1) to explore their opinions about the validity of the tool in terms of the validity of its paragraphs and its suitability for the research objectives and its ability to measure the research variables, In order to ensure the clarity and scientific accuracy of its paragraphs, the questionnaire won the agreement of the majority of the arbitrators (100%), and the arbitrators' comments were taken regarding the correction of some phrases and the formulation of some of them in a more appropriate way to make the tool more comprehensive in representing the two research variables.

Stability means that if the questionnaire is applied to the same group of individuals after a period of time, it will give the same results, and to achieve this, a sample of (20) individuals was taken, and the questionnaire was applied to them, and then reapplied after two weeks, the Pearson correlation coefficient was used between the scores of the two applications, and the value of the stability coefficient was (0.85), which means that the research questionnaire has high stability and can be adopted at different times for the same individuals and give the same results.

6.2. Describing the research community

6.2.1. Gender, Educational Attainment, and Educational Specialization

An equal distribution of males and females was ensured in the sample, with 50% of participants being male and 50% female. Regarding educational attainment, the majority of participants held a doctoral degree (97%), while only 3% had a master's degree. In terms of academic specialization, the humanities discipline accounted for the largest proportion of the sample at 65%, whereas the scientific specialization constituted 35%. Table 1 presents a detailed breakdown of these distributions.

Table1. Distribution of Sample Members According to Gender, Educational Attainment and Educational Specialization

Gender	Frequency	%	Academic achievement				Educational specialization			
			M.A.		PhD.		Scientific		Humanities	
			F.	%	F.	%	F.	%	F.	%
Female	60	50%	3	2%	57	48%	19	16%	41	34%
Male	60	50%	1	1%	59	49%	23	19%	37	31%
Total	120	100%	4	3%	116	97%	42	35%	78	65%

6.2.2. Scientific Title

Table 2 illustrates the distribution of the research sample based on academic titles. The assistant professor category represented the highest proportion of participants, accounting for 38% of the sample. This was followed by teachers at 27%, and professors at 23%. The assistant teacher category had the lowest representation, comprising only 12% of the sample. Table 2 provides a detailed breakdown of these percentages.

Table 2. Distribution of the Research Sample According to Scientific Title

N.	Academic Title	Frequency	Percentage
1	Professor	28	23%
2	Assistant Professor	45	38%
3	Teacher	32	27%
4	Assistant Teacher	15	12%
	Total	120	100%

6.2.3. Years of Experience

As illustrated in Table 3; the distribution of the research sample is presented based on years of experience. The largest proportion of participants had 11–20 years of experience (41%), followed by those with more than 20 years of experience (31%). Participants with 5–10 years of experience accounted for 28% of the sample, while no participants had less than 5 years of experience (0%). Table 3 provides a detailed breakdown of these distributions.

Table 3. Distribution of the Research Sample According to Years of Experience

N.	Years of experience	Frequency	Percentage
1	Less than 5 years	0	0%
2	5-10 years	34	28%
3	11-20 years	49	41%
4	More than 20 years	37	31%
	Total	120	100%

7. Results

The current research deals with the description of the main research dimensions, which are digital educational methods and digital educational content, the importance of digital educational content, and the role of digital educational content in getting rid of traditional methods and based on this, statistical analyses such as frequency distributions, percentages, and relative importance were used using the (SPSS. v26) program.

7.1.Traditional Teaching Methods

7.1.1.Teachers' opinions of traditional educational methods

Table 4 indicates that the response "useful" had the highest frequency, accounting for 48% of responses. This was followed by "moderately useful" at 43%. The response "very useful" was selected by 7% of participants. In contrast, "unhelpful" received only 2%, while "very unhelpful" had the lowest frequency at 0%. Both the table and the corresponding figure visually represent this distribution.

Table 4. Frequency distribution and percentages for the question (What is your concept of digital educational content?) (More than one option can be selected)

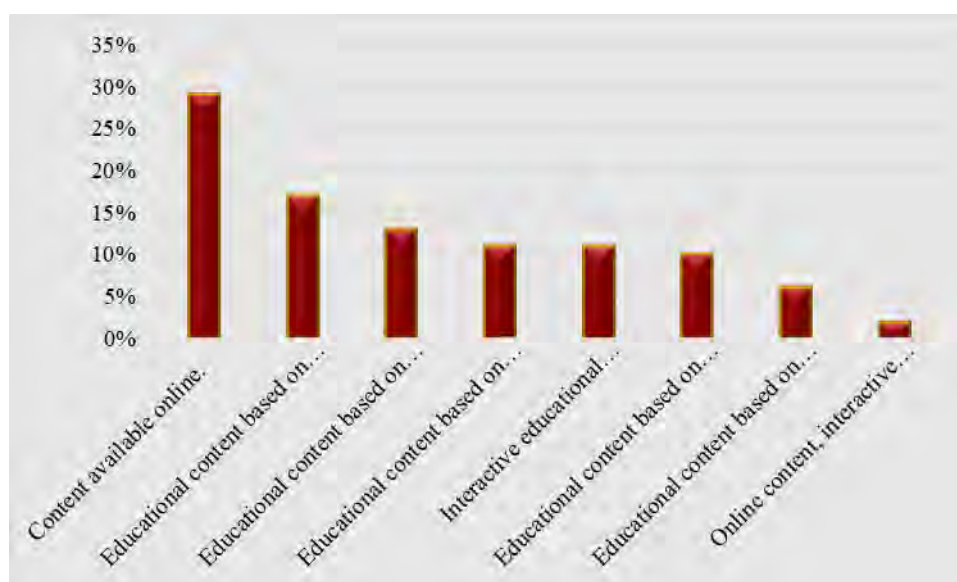| N.	What is your concept of digital educational content? (More than one option can be selected) Frequency Percentage Weight	Frequency	Percentage Weight
1	Content available online.	35	29%
2	Educational content based on electronic media.	20	17%
3	Educational content based on electronic media, online content, social media content, social media content, interactive educational programs, and applications.	16	13%
4	Educational content based on electronic media, online content, social media content, interactive educational programs, and applications	14	11%
5	Interactive educational programs and applications.	13	11%
6	Educational content based on electronic media, interactive educational programs, and applications.	12	10%
7	Educational content based on electronic media, online content, interactive educational programs, and applications.	7	6%
8	Online content, interactive educational programs, and applications.	3	2%

Figure 1. Percentage weight of the frequency of responses to the question "What is your concept of digital educational content?

7.2.2. Using Digital Educational Content in Teaching

Table 5 shows that the frequency of the answer (yes) got the highest percentage (68%), followed by the frequency of the answer (no) with a percentage of (32%), and the table and figure 2 shows this.

Table 5. Frequency distribution and percentages for the question "Do you use digital educational content in teaching?

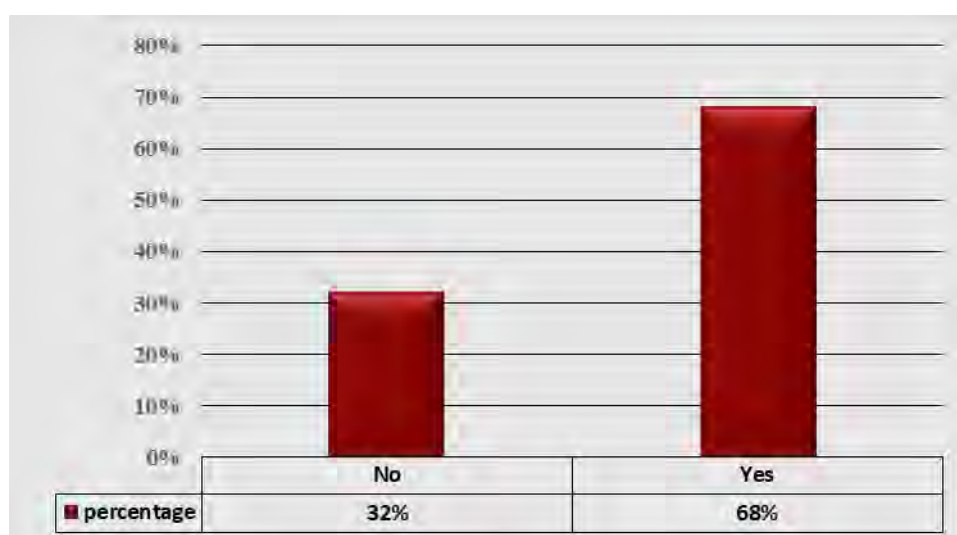| Paragraph	Answer Scale			
	Yes		No	
	F.	%	F.	%
Do you use digital educational content in teaching	82	68%	38	32%

Figure 2. Percentages of the frequency of responses to the question (Do you use digital educational content in teaching?)

7.2.3. Types of digital educational content used by teachers in teaching

Table 6 presents the frequency distribution of responses regarding the types of digital educational content used in teaching. The most commonly used type was instructional videos, selected by 30% of participants. This was followed by video tutorials, PowerPoint presentations, and interactive learning platforms at 23%. In contrast, the least frequently selected category was video tutorials, e-books, and PowerPoint presentations, accounting for only 3% of responses. Figure 3 visually represents these findings.

Table 6. Frequency distribution and percentages for the question (What types of digital educational content do you use in teaching?)

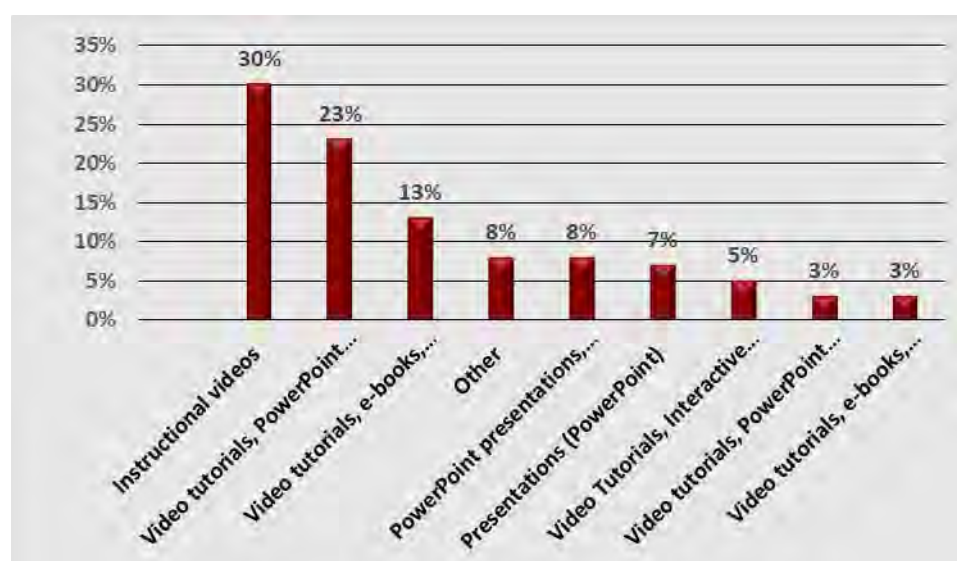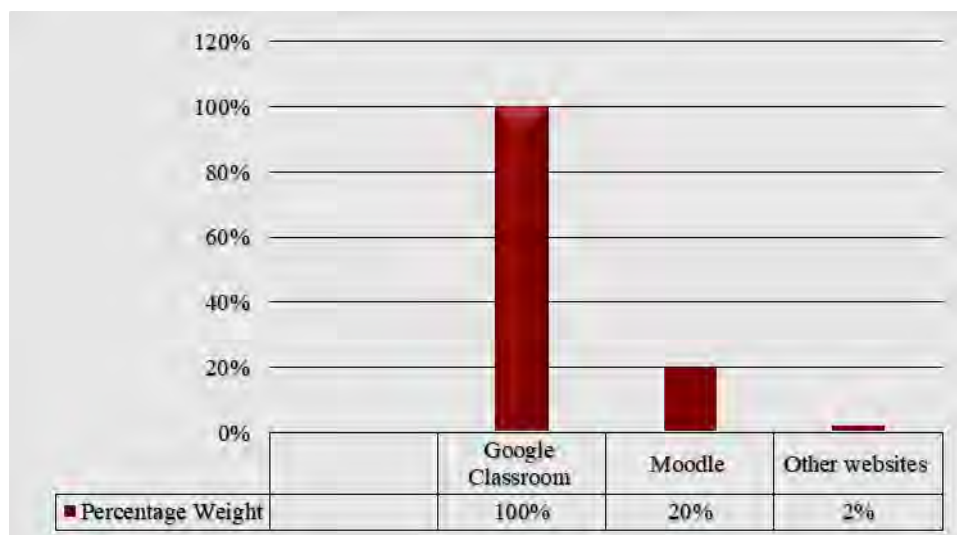| N.	What types of digital educational content do you use in teaching? (More than one option can be selected)	Frequency	Percentage Weight
1	Instructional videos	36	30%
2	Video tutorials, PowerPoint presentations, interactive learning platforms	28	23%
3	Video tutorials, e-books, PowerPoint presentations, interactive learning platforms, other	16	13%
4	Other	10	8%
5	PowerPoint presentations, interactive learning platforms	9	8%
6	Presentations (PowerPoint)	8	7%
7	Video Tutorials, Interactive Learning Platforms	6	5%
8	Video tutorials, PowerPoint presentations	4	3%
9	Video tutorials, e-books, PowerPoint presentations	3	3%

Figure 3. Percentage weight of the frequency of responses to the question (What types of digital educational content do you use in teaching?)

7.2.4. Websites used by teachers to prepare and design digital educational content

As illustrated in figure 4 and table 7, it can be understood that the frequency of the answer (Google Classroom) obtained the highest percentage (100%), and the percentage of the answer (other websites) obtained the lowest percentage (2%).

Table 7. Frequency distribution and percentages for the question (What websites do you use to prepare and design digital educational content?)

N.	What websites do you use to prepare and design digital educational content? (You can choose more than one option) Frequency Percentage Weight	Frequency	Percentage Weight
1	Google Classroom	120	100%
2	Moodle	24	20%
3	Other websites	2	2%

Figure 4. Percentage weight of the frequency of responses to the question (What websites do you use to create and design digital educational content?)

7.2.5. Digital educational content can replace traditional educational methods

As illustrated in Table 11, the 'partially agree' option received the highest percentage of responses at 46%, followed by the 'strongly agree' option with 23%. The 'agree' option received 16% of the responses. (16%), while the table shows the frequency of the answer (disagree) with a percentage of (13%), and the table shows the lowest frequency of the answer (don't know) with a percentage of (2%), as both the table 8 and figure 5 illustrate.

Table 8. Frequency distribution and percentages for the question (Do you think digital educational content can completely replace traditional educational methods?)

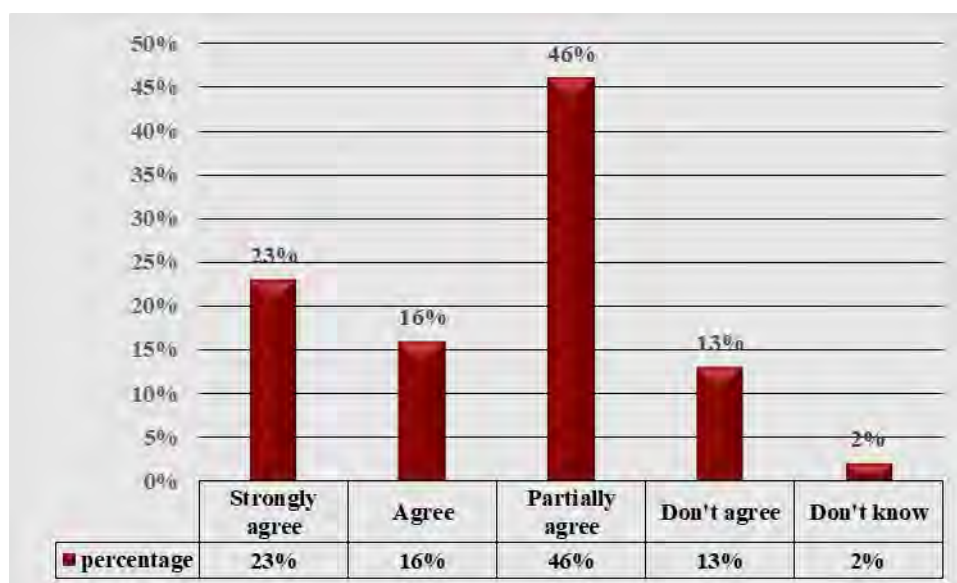| Paragraph	Answer Scale									
	Strongly agree		Agree		Partially agree		Don't agree		Don't know	
	F.	%	F.	%	F.	%	F.	%	F.	%
Do you think that digital educational content can completely replace traditional educational methods	28	23%	19	16%	55	46%	16	13%	2	2%

Figure 5. Percentages of frequency of responses to the question (Do you think digital educational content can completely replace traditional educational methods)

7.2.6. Basic elements of effective digital educational content

As illustrated in Table 9, the 'clarity of information' option received the highest frequency of responses (30%), while the lowest frequency was recorded for the 'ease of access' option (5%). These results are further supported by the data presented in table 9 and figure 6.

Table 9. Frequency distribution and percentages for the question (What are the essential elements that effective digital educational content should contain ? More than one option cab be chosen)

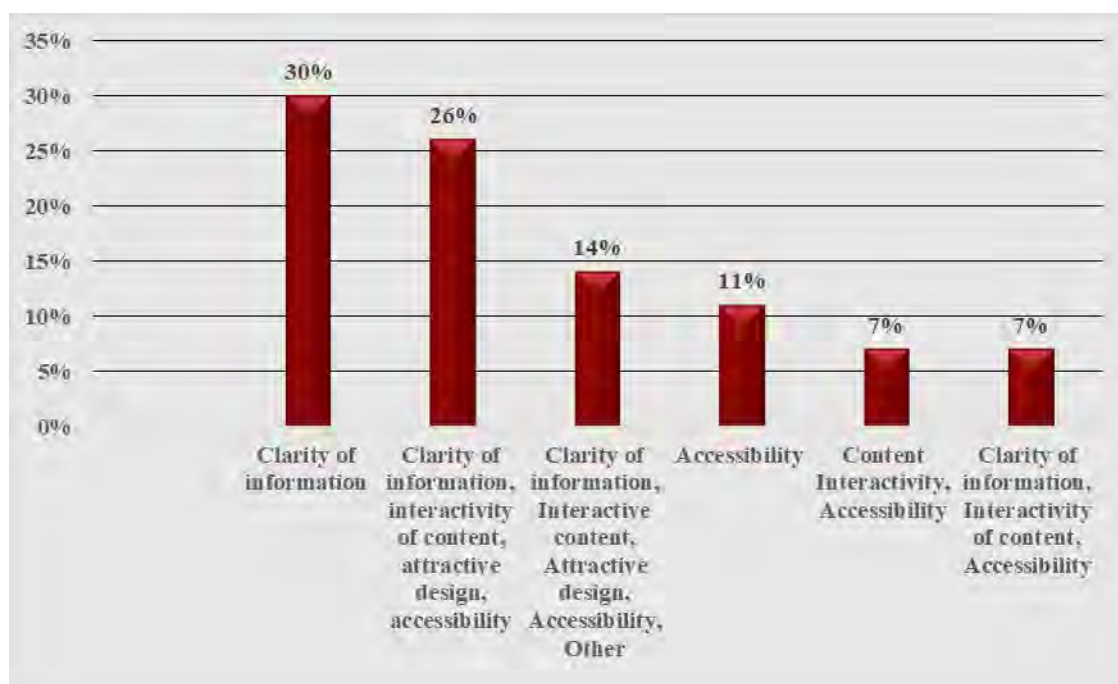| N.	What types of digital educational content do you use in teaching? (More than one option can be selected)	Frequency	Percentage Weight
1	Clarity of information	36	30%
2	Clarity of information, Interactivity of content, Attractive design, accessibility	31	26%
3	Clarity of information, Interactive content, Attractive design, Accessibility, Other	17	14%
4	Accessibility	13	11%
5	Content Interactivity, Accessibility	8	7%
6	Clarity of information, Interactivity of content, Accessibility	9	7%
7	Clarity of information, Accessibility	6	5%

Figure 6. Percentage weight of the frequency of responses to the question (What are the basic elements that effective digital educational content should contain)

7.3. Importance of digital educational content

7.3.1. The importance of digital educational content in improving the learning experience of students

As illustrated in Table 10, the response 'important' recorded the highest percentage at 46%, followed by 'very important' with 45%. Conversely, the response 'not very important' registered the lowest percentage at 0%. This analysis is further supported by the data presented in table 10 and figure 7.

Table 10. Frequency distribution and percentages for the question (How important is digital educational content in improving students' learning experience?)

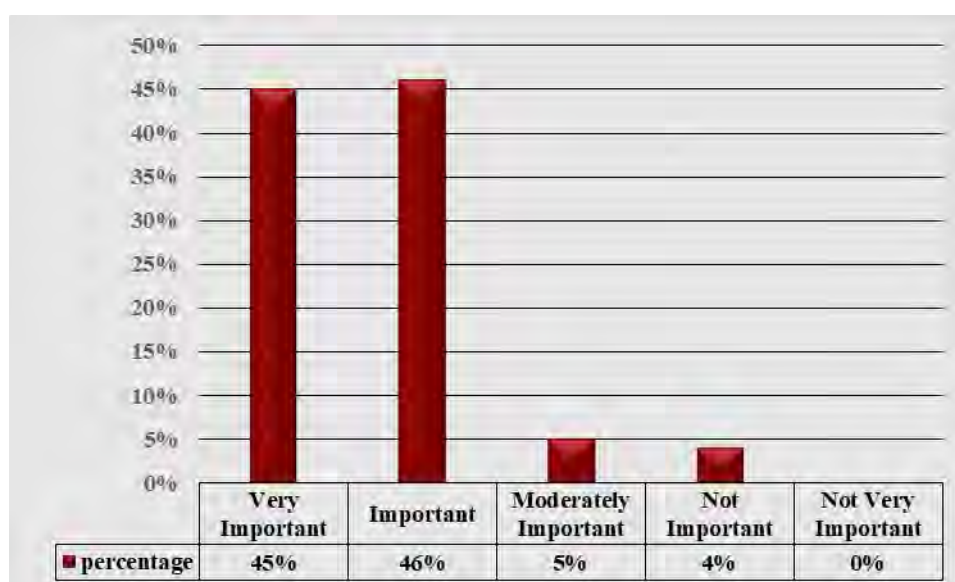| Paragraph	Answer Scale									
	Very Important		Important		Moderately Important		Not Important		Not Very Important	
	F.	%	F.	%	F.	%	F.	%	F.	%
How important is digital educational content in improving the learning experience for students	54	45%	55	46%	6	5%	5	4%	0	0%

Figure 7. Percentages of frequency of responses to the question (How important is digital educational content in improving students' learning experience?)

7.3.2. The main benefits that digital educational content provides to students

Table 14 shows that the frequency of the answer (enhancing interaction with the content) got the highest percentage (29%), and the lowest percentage was for the answer (facilitating access to educational materials, developing critical thinking skills), with a percentage of (2%). The table 11 and figure 8 show this.

Table 11. Frequency distribution and percentages for the question (What are the main benefits that digital educational content provides to students?) (You can choose more than one option)

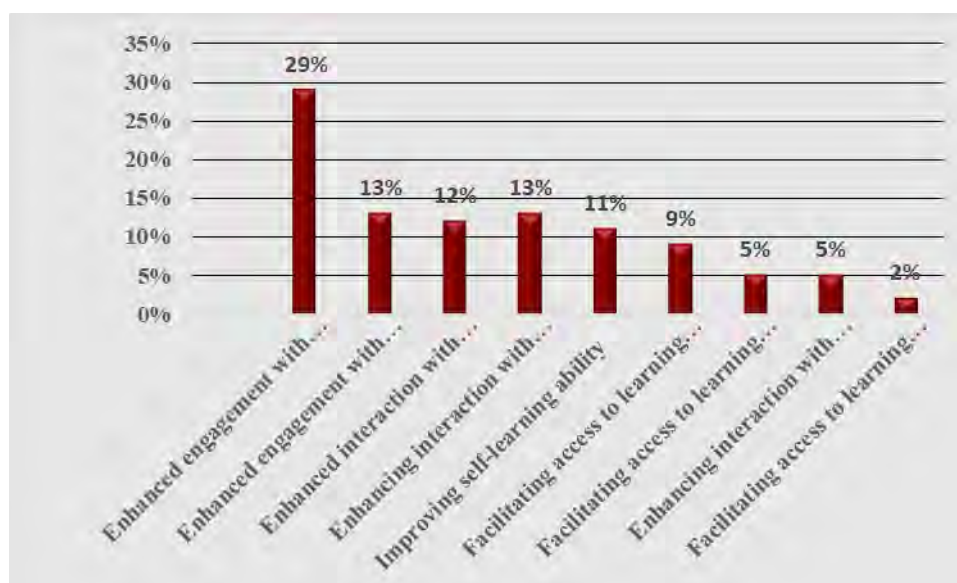| N.	What are the main benefits that digital educational content provides to students? (You can choose more than one option)	Frequency	Percentage Weight
1	Enhanced engagement with content	35	29%
2	Enhanced engagement with content, easier access to learning materials, development of critical thinking skills, improved self-learning ability, other	16	13%
3	Enhanced interaction with content, facilitating access to learning materials, developing critical thinking skills, improving self-learning ability	15	12%
4	Enhancing interaction with content, developing critical thinking skills, improving self-learning	15	13%
5	Improving self-learning ability	13	11%
6	Facilitating access to learning materials, improving self-learning ability	11	9%
7	Facilitating access to learning materials	6	5%
8	Enhancing interaction with content, facilitating access to instructional materials, improving self-learning ability	6	5%
9	Facilitating access to learning materials, developing critical thinking skills	3	2%

Figure 8. Percentage weight of frequency of responses to the question (What are the main benefits that digital educational content provides to students?) (You can choose more than one option)

7.3.3. The contribution of digital educational content in improving teaching efficiency

Table 12 shows that the frequency of the answer (ease of lesson preparation) got the highest percentage (27%), and the lowest percentage was for the answer (ease of lesson preparation, providing additional time for interactive activities, improving student interaction, supporting personalized teaching, other), which got a percentage of (2%). The table 12 and figure 12 illustrate this.

Table 12. Frequency distribution and percentages for the question (How does digital educational content improve teaching efficiency for you as a teacher?)

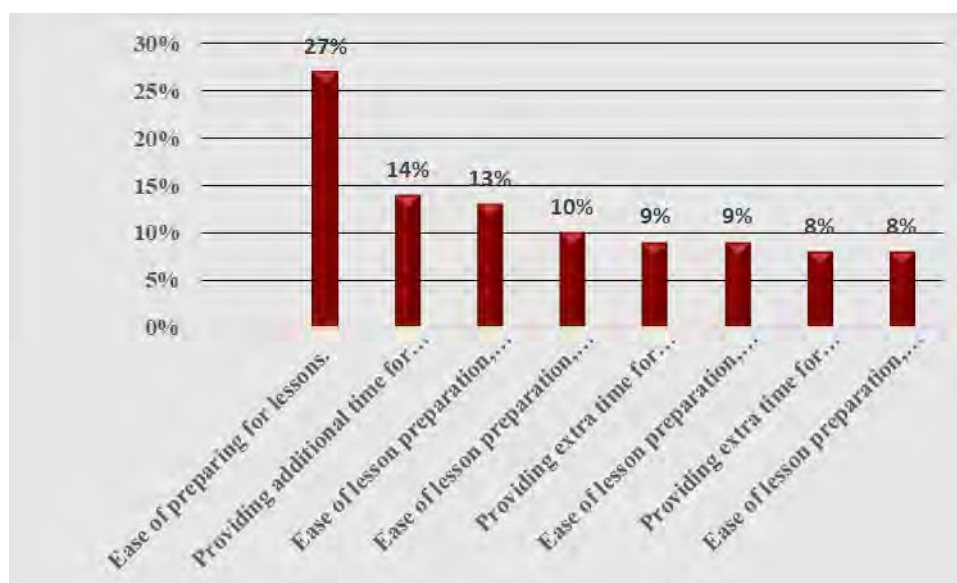| N.	How does the digital educational content improve teaching efficiency for you as a teacher?	Frequency	Percentage Weight
1	Ease of preparing for lessons.	32	27%
2	Providing additional time for interactive activities, improving student engagement, supporting personalized teaching, etc.	17	14%
3	Ease of lesson preparation and personalized teaching support.	15	13%
4	Ease of lesson preparation, providing extra time for interactive activities, improving student engagement, supporting personalized teaching	12	10%
5	Providing extra time for interactive activities.	11	9%
6	Ease of lesson preparation, improving student engagement, supporting personalized teaching	11	9%
7	Providing extra time for interactive activities and improving student engagement.	10	8%
8	Ease of lesson preparation, improving student engagement	9	8%
9	Ease of lesson preparation, providing extra time for interactive activities, improving student engagement, personalized teaching support, other	3	2%

Figure 9. Percentage weight for the frequency of responses to the question (How does digital educational content contribute to improving teaching efficiency for you as a teacher).

7.4. The role of digital educational content in eliminating traditional methods

7.4.1. Digital educational content can completely replace traditional teaching methods

Table 13 shows that the frequency of the answer (strongly agree) got the highest percentage (26%), followed by the frequency of the answer (neutral) with a percentage of (25%). In comparison, the table showed the frequency of the answer (agree) with a percentage of (23%), while the table showed the frequency of the answer (disagree) with a percentage of (23%). In comparison, the table showed the lowest frequency of the answer (strongly disagree) with a percentage of (4%), and the table 13 and figure 10 shows this.

Table 13. Frequency distribution and percentages for the question (How much do you agree with the following statement: "Digital educational content can completely replace traditional educational methods.)

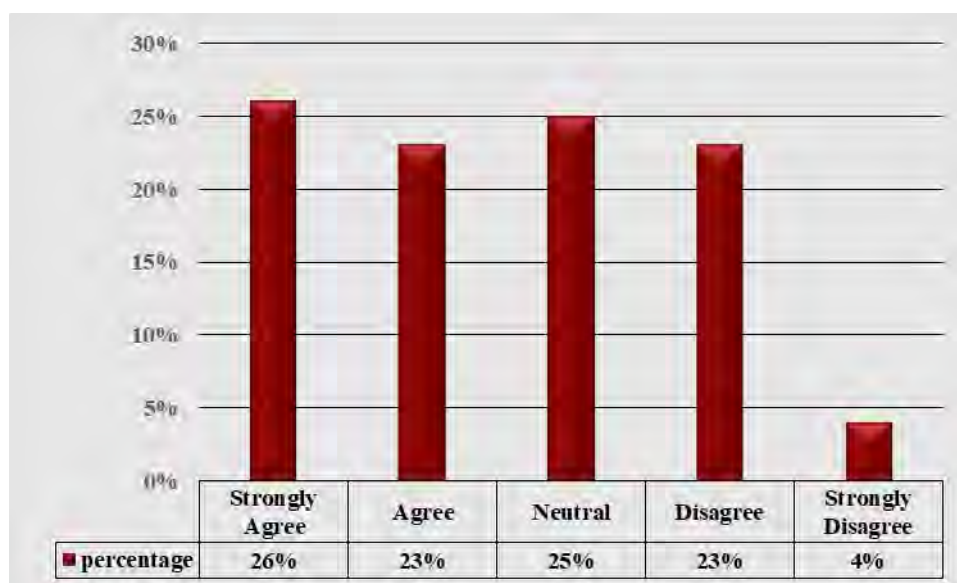| Paragraph	Answer Scale									
	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F.	%	F.	%	F.	%	F.	%	F.	%
How much do you agree with the following statement: "Digital educational content can completely replace traditional educational methods"	31	26%	27	23%	30	25%	27	23%	5	4%

Figure 10. Percentage frequency of responses to the question (How much do you agree with the following statement: "Digital educational content can completely replace traditional educational methods.)

7.4.2. The contribution of digital educational content in overcoming the limitations imposed by traditional teaching methods

Table 14 shows that the frequency of the answer (increased interaction with students) got the highest percentage (32%), and the lowest percentage was for the answer (other), which got a percentage of (6%). Table 14 and Figure 11 also show this.

Table 14. Frequency distribution and percentages for the question (How does digital educational content contribute to overcoming the limitations imposed by traditional teaching methods?)

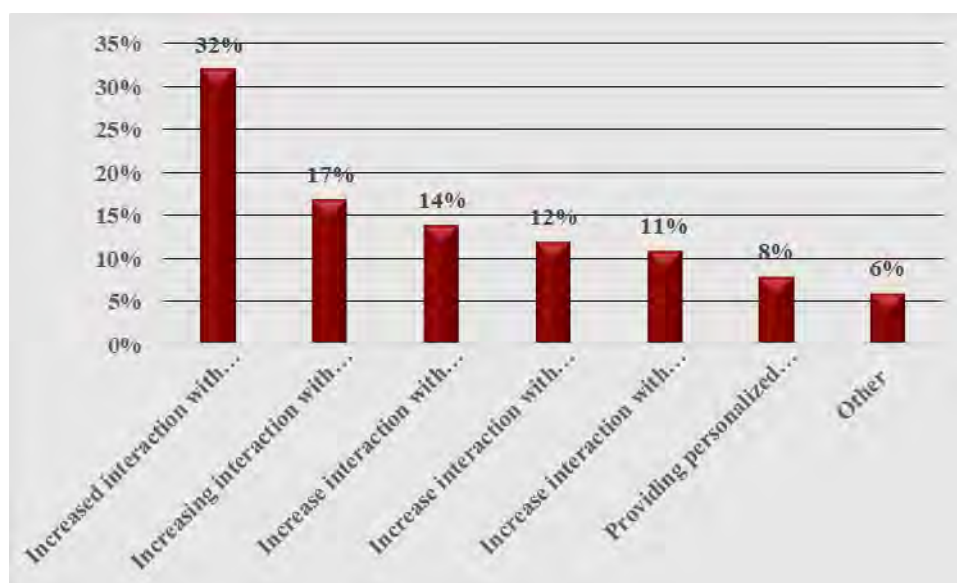| N.	How does digital educational content contribute to overcoming the limitations imposed by traditional teaching methods? (You can choose more than one option)	Frequency	Percentage Weight
1	Increased interaction with students.	38	32%
2	Increasing interaction with students, facilitating access to multiple learning resources	21	17%
3	Increase interaction with students, provide personalized instruction, facilitate access to multiple learning resources, improve assessment and follow-up, other	17	14%
4	Increase interaction with students, Provide personalized learning according to students' needs, Facilitate access to multiple learning resources, Improve assessment and follow-up.	14	12%
5	Increase interaction with students, Facilitate access to multiple learning resources, Improve assessment and follow-up.	13	11%
6	Providing personalized instruction, facilitating access to multiple learning resources	10	8%
7	Other	7	6%

Figure 11. Percentage weight of the frequency of responses to the question (How does digital educational content contribute to overcoming the limitations imposed by traditional teaching methods?)

7.4.3. Challenges you face when using digital educational content in teaching

Table 15 shows that the frequency of the answer (lack of time available to prepare the content) got the highest percentage (27%), and the lowest percentage was for the answer (lack of training on digital tools, lack of sufficient technology), which got a percentage of (2%). The table 15 and Figure 12 show this.

Table 15. Frequency distribution and percentages for the question (What challenges do you face when using digital educational content in teaching?)

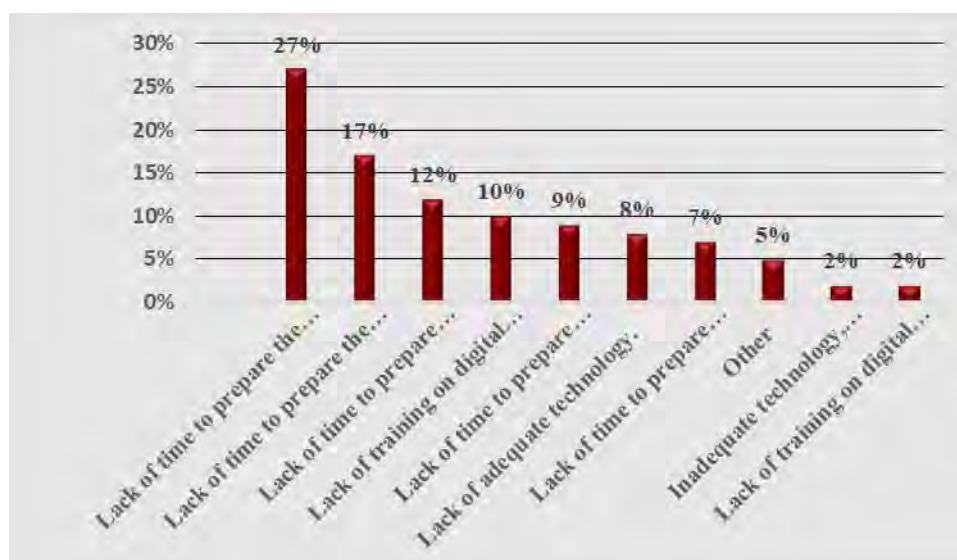| N.	What challenges do you face when using digital educational content in teaching? (You can choose more than one option)	Frequency	Percentage Weight
1	Lack of time to prepare the content	33	27%
2	Lack of time to prepare the content, lack of sufficient technology	21	17%
3	Lack of time to prepare content, Lack of training on digital tools, Lack of sufficient technology, Students' resistance to change, Other	14	12%
4	Lack of training on digital tools, Inadequate technology, Other	12	10%
5	Lack of time to prepare content, Lack of training on digital tools, Inadequate technology, Student resistance to change, Other	11	9%
6	Lack of adequate technology.	10	8%
7	Lack of time to prepare content, Lack of training on digital tools	8	7%
8	Other	6	5%
9	Inadequate technology, student resistance to change	3	2%
10	Lack of training on digital tools, Lack of adequate technology	2	2%

Figure 12. Percentage weight for the frequency of responses to the question (What challenges do you face when using digital educational content in teaching?)

7.4.4. Based on your experience, do you think digital education is the future

Table 16 shows that the frequency of the answer (yes) got the highest percentage (58%), followed by the frequency of the answer (maybe) with a percentage of (36%). In comparison, the table shows the frequency of the answer (no) with a percentage of (4%), while the table shows the frequency of the answer (unsure) with a percentage of (2%). In comparison, the table shows the lowest frequency of the answer (very unsure) with a percentage of (0%), and the table and figure 13. shows this.

Table 16. Frequency distribution and percentages for the question (Based on your experience, do you think digital education is the future)

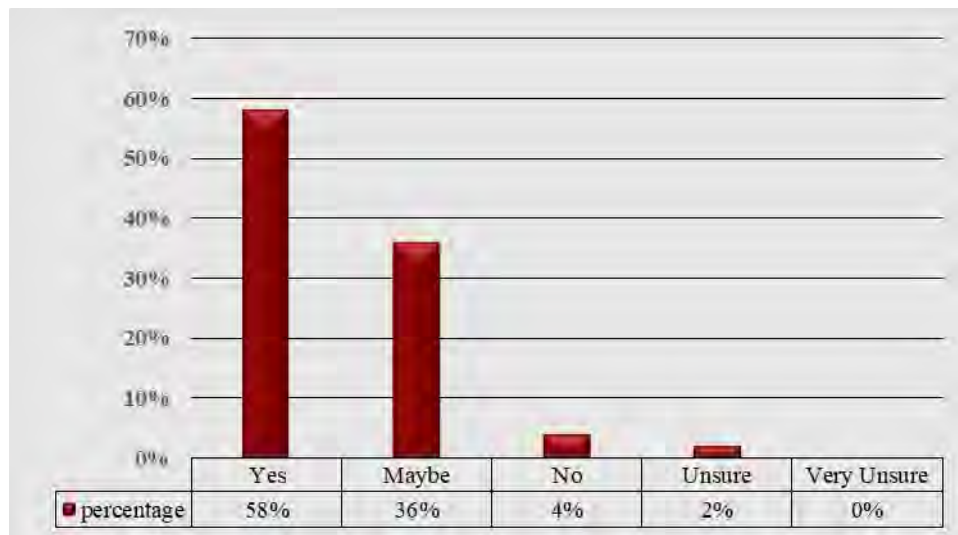| Paragraph	Answer Scale									
	Yes		Maybe		No		Unsure		Very Unsure	
	F.	%	F.	%	F.	%	F.	%	F.	%
Based on your experience, do you think digital education is the future	70	58%	43	36%	5	4%	2	2%	0	0%

Figure 13. Percentages of frequency of responses to the question (Based on your experience, do you think digital education is the future).

8. Discuss the results and prove the hypotheses

Hypothesis (1): Digital educational content is more effective than traditional educational methods.

The results indicate that more than half of the sample teachers (68%) believe that digital educational content can replace traditional methods, and (47%) of them believe that digital content is "very useful" compared to traditional methods. This result supports the validity of the hypothesis, as teachers recognize the importance and usefulness of digital educational content compared to traditional methods. The research findings show that educational videos are the most commonly used type of digital content, and the use of Google Classroom was 100% among teachers, which enhances the effectiveness of digital content in improving the teaching process compared to traditional methods.

Hypothesis (2): The use of digital educational content contributes to improving the learning experience of students

Teachers indicated that the use of digital educational content contributed to improving the learning experience and student engagement. Also, 47% of the participants considered digital content "very useful" compared to traditional methods, which clearly proves the hypothesis, as the statistical analysis and opinions support the idea that digital content enhances teaching efficiency by providing interactive resources that make the learning process more effective.

Hypothesis (3): Digital educational content can help overcome the challenges posed by traditional teaching methods.

32% of teachers indicated that digital content increases interaction with students, which enhances its ability to overcome some of the limitations associated with traditional teaching, such as the inability to customize lessons for each student or not having enough time for interactive activities, and this result supports the hypothesis, as digital tools allow teachers to customize the content to suit the needs of students, and increase interaction and interaction between the student and the teacher.

Hypothesis (4): lack of time and lack of training are challenges in adopting digital educational content.

The results showed that the lack of time available to prepare the content was one of the most prominent challenges facing teachers at 27%. This confirms that there is a need for greater support in this aspect, and this proves the hypothesis, as the results indicate that teachers need more support in terms of available time and preparation, and training on digital tools is an influential factor in improving the effective use of digital educational content.

9. Conclusion

Enhancing the use of digital educational content in higher education requires a comprehensive and integrated approach. Continuous training and workshops for educators are essential to develop their skills in preparing, designing, and effectively utilizing digital tools. Equally important is developing a robust digital infrastructure, ensuring the availability of advanced technology, communication systems, and information networks to facilitate seamless access to digital content for faculty and students. Furthermore, incorporating interactive methods such as educational games and simulations can significantly boost student engagement and motivation, making the learning experience more dynamic and enjoyable. By addressing these key areas, universities can successfully transition to a more effective and inclusive digital education system aligned with the demands of the modern era.

Declarations

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Appendix

Appendix 1. List of Experts to Demonstrate the Validity of the Questionnaire

N.	Name	Specialization	Affiliation
1	Prof. Dr. Daoud Abdul Salam Sabri	Curricula and teaching methods	College of Education (Ibn Rushd) for Human Sciences / University of Baghdad
2	Prof. Dr. Yasin Hamid Ayyal	Measurement and evaluation	College of Education (Ibn Rushd) for Human Sciences / University of Baghdad
3	Assist Prof. Zshyan Yahya Bilal	Measurement and evaluation	College of Education (Ibn Rushd) for Human Sciences / University of Baghdad