



THE DEGREE OF INCLUSION OF DIGITAL CITIZENSHIP DIMENSIONS IN ENGLISH LANGUAGE TEXTBOOKS FOR INTERMEDIATE LEVELS IN THE KINGDOM OF SAUDI ARABIA

Shatha Al-Ghamdi¹ⁱ,

Hassan Saleem Alqurashi²

Department of Curriculum and Instruction,
College of Education,
University of Jeddah,
Jeddah, Saudi Arabia

Abstract:

This study investigates the extent to which English language textbooks prescribed for intermediate school students in the Kingdom of Saudi Arabia incorporate the dimensions of digital citizenship based on Ribble's nine-dimensional model. These dimensions include digital access, digital commerce, digital communication, digital literacy, digital etiquette, digital law, digital rights and responsibilities, digital health, wellness, and digital security. A descriptive-analytical research design was adopted to achieve the objectives of the study. Content analysis served as the primary methodological approach. The study sample consisted of three English language textbooks approved for use in the first, second, and third intermediate grades during the academic year 2025. The analysis was conducted using Al-Ghamdi and Al-Saadoun's (2021) content analysis instrument, which encompasses nine main principal dimensions of digital citizenship represented through thirty-eight indicators. The analysis indicated a low overall level of digital citizenship integration in the examined textbooks, with a mean inclusion rate of 24.6%. Inclusion levels varied by grade, with the second intermediate-grade textbook ranking highest, followed by the first intermediate-grade textbook, and the third intermediate-grade textbook ranking lowest. With respect to specific dimensions, digital literacy demonstrated the highest frequency of inclusion, followed by digital communication. Conversely, digital commerce, digital etiquette, digital law, and digital rights and responsibilities were entirely absent. The dimension of digital security was incorporated to a minimal extent. In light of these findings, the study recommends the systematic and balanced integration of digital citizenship dimensions within English language textbooks to support the development of digitally aware learners capable of engaging with digital technologies in a responsible and ethical manner, consistent with national educational development objectives.

ⁱ Correspondence: email salghamdi1662.stu@uj.edu.sa

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1. Introduction

Modern technologies, including the internet, have considerably changed most individuals' lives; their habits, worldview and personal relationships have been significantly affected as their everyday life has been infused with cell phones, computers and high-speed internet (Puthur *et al.*, 2023; Hassan & Mirza, 2021). The information transmitted through technological tools has a positive and negative impact on people's lives. Worldwide, people became more aware of and familiar with cyber ethics, intellectual property, online privacy, and proper behaviour on the internet (Dass & Kumar, 2025).

In our contemporary world, the concept of education has expanded to encompass moral, social, and cognitive development in addition to being an instrument to obtain academic knowledge in a particular field. It not only prepares individuals for life but also presents life itself (Dewey, 1916). Recently, this view has been expanded to include the preparation of students for the digital era that requires technical skills and ethical awareness. Within this new perspective, school curricula became the main tool to achieve the objectives of educational institutions; they need to be flexible and responsive to modern technological developments and enable lifelong learning (UNESCO, 2021). Therefore, school curricula became flexible frameworks that go in line with the digital era, where digital knowledge and ethical considerations are integrated.

The digital revolution has fundamentally changed how individuals, institutions, and societies communicate and seek information. Saudi Arabia exemplifies this transformation, with a drastic increase in internet usage reaching 99% in 2023; the percentage of internet users who spend more than seven hours a day reached 49.4% (DataReport, 2023). Such a dramatic increase necessitates that educational institutions consider equipping students with specific skills to enhance their ethical and digital engagement.

Modern learners, also called 'Generation Alpha', grown and developed in an environment rich in smartphones and digital platforms; they have been described as 'digital citizens', which means that they are individuals equipped with inherent technological skills who are accustomed to acquiring knowledge through digital interactions (Hayek, 2014). This highlights the need for innovative teaching methods that combine both digital tools and ethical awareness.

The role of technology in developing creativity and advancing international connectivity cannot be neglected. However, this is not always the case. Technology use may negatively affect its users, including students; it may lead to 'digital addiction', which, in turn, requires a kind of balance and responsibilities while using such technologies in order to enable sage and ethical users of the online platforms (Isamil, 2018).

Accordingly, the researchers undertook a significant need to conduct this study to examine the extent to which English textbooks used in Saudi middle schools incorporate digital citizenship themes as outlined in Ribble's (2015) nine-element framework. The study is intended to generate insights to support curriculum developers and educators in strengthening the integration of digital citizenship, thereby contributing to the preparation of a generation capable of engaging with the digital world responsibly and ethically in alignment with the goals of Saudi Vision 2030.

1.1 Research Problem

Given the growing emphasis on digital transformation as outlined in Saudi Arabia's Vision 2030, and in response to the recommendations of previous studies that called for conducting analytical investigations of curricula in light of digital citizenship, such as (Al-Asmi & Akram, 2023; Alzahrani & Alshakrah, 2021; Al-Ghamdi and Al-Saadoun, 2021; Alsharari, 2022; Al-Sharif, 2023; Al-Qarni & Al-Qarni, 2022; and Aloufi & Alzahrani, 2021), A research gap has emerged. Furthermore, despite the increasing number of studies on digital citizenship across various subjects, there is still a lack of analytical research focusing on English language textbooks at the middle school level in Saudi Arabia, to the best of the researchers' knowledge. Since curricula are among the most influential instruments in shaping students' values and digital behaviors, content analysis serves as an appropriate method to identify the degree to which these curricula integrate digital citizenship dimensions.

1.2 Research Objective and Question

The main objective of the study is to identify the degree of inclusion of digital citizenship dimensions in the English language textbooks for middle school in the Kingdom of Saudi Arabia. To achieve this objective, the study posits the following research question:

RQ: What is the degree of inclusion of digital citizenship dimensions in English language school textbooks at the middle school in the Kingdom of Saudi Arabia?

1.3 Research Importance

The importance of this study stems from the fact that it responds to the recommendations of previous studies that advocated for the inclusion of elements of digital citizenship in all school textbooks. It may also direct the attention of curriculum developers to the importance of including elements of digital citizenship in English language textbooks for middle school. Finally, this study may provide curriculum developers with a list of elements of digital citizenship.

2. Literature Review

2.1 Digital Citizenship

The term digital citizenship refers to the self-enactment of the people's role in society through the use of digital technologies (Hintz *et al.*, 2016). It also refers to the individual's

ability to use the tools of information technology in a safe, responsible, and productive manner (Farmer, 2011). Mossberger *et al.* (2008) defined the concept of digital citizenship as the ability to participate in society online, through access to technology, literacy, and civic engagement, whereas Ribble (2015) defined it as the norms of appropriate, responsible behaviour with regard to technology use. In this regard, Öztürk (2021) states that digital citizenship refers to “*the rules for correct and responsible technology usage that provide guidance to students on how to direct the online world in their personal and academic lives*” (p. 31). According to Jones and Mitchell (2016), digital citizenship involves engaging in technology use that is positive, safe, legal, and ethical, enabling individuals to participate responsibly in digital communities and contribute constructively to online society.

Digital citizenship includes a number of activities and categories. For example, Richardson and Milovidov (2019) mentioned that it involves activities such as consuming, producing, sharing, connecting, searching, learning, and working. Digital citizenship is a set of values and behaviours based on the use of technology for constructive communication and active electronic participation in society. It includes five categories of behaviours: online respectful behaviour, online civic engagement behaviour, helpful bystander behaviour, online harassment victimisation behaviour, and online harassment perpetration behaviour (Jones & Mitchell, 2016). Furthermore, it is one of the standards of the International Society for Technology in Education (2016). This standard comprises subcomponents, including management of digital identity, reputation and awareness of the performance of an individual’s behaviours in the digital world; using technology with safe and ethical behaviour; understanding the rights and obligations of using intellectual property; and personal data management. Chukwuere and Munapo (2023) stated that digital citizenship includes the knowledge of using digital technology in order to participate in social discourse, communicate with others, and create content; it is a guiding principle for activities that transform individuals’ knowledge and offer new opportunities for global citizenship, civic participation, and engagement.

As for students, Ribble (2012) contended that digital citizenship has a vital role and schools should be part of the process of depending on digital tools as required by the aspects of the present world. In this process, students have to follow curricula that provide opportunities for learning citizenship through various software, games and different multimedia applications (Martin *et al.*, 2019). Furthermore, digital citizenship has become an important concept for enhancing students’ appropriate behaviour and safe life habits when using technology; it becomes a necessity for schools to include digital citizenship in their curricula (van de Oudeweetering & Voogt, 2018). This indicates that digital citizenship has become inevitable and should be included in our educational lives (Jones & Mitchell, 2016).

Ribble (2015) justified the inclusion of digital citizenship into educational curricula in his ‘Nine Elements of Digital Citizenship’. They address digital access, digital commerce, digital communication, digital literacy, digital etiquette, digital law, digital rights and responsibilities, digital health and welfare, and digital security. These

dimensions present a comprehensive framework that connects technology, ethics, and law, aiming to build a balanced digital citizen who contributes to sustainable development and exercises freedom in the digital world with awareness and responsibility. This makes digital citizenship a cornerstone in building contemporary societies. This also highlights the need to establish secure and ethical online communication and collaboration across various domains. With this, digital citizenship becomes a responsibility shared by educators who must include it through the integration of the ethical uses of technology into the process of teaching and learning in schools and universities.

The importance of digital citizenship lies in its pivotal role in preparing individuals who use technology with awareness and responsibility, while also facilitating their participation in electronic communication within an ethical and moral context. It functions as an instrumental framework for cultivating citizens who are adept at comprehending the cultural and societal challenges related to technology, thereby encouraging lifelong learning and advocating for the lawful and ethical application of digital resources, as a result, contributing to the development of a cohesive digital society (Mujahid, 2024). It is also important in that it strengthens the culture of digital responsibility and keeps individuals safe from any unethical use of technology (Ribble, 2015). Moreover, the importance of digital citizenship has increased with the support offered by the Saudi Vision 2023, in which digital citizenship has been incorporated into educational curricula with the aim of improving technological literacy and developing ethical behaviour (Education and Training Evaluation Commission, 2019).

In light of the aforementioned considerations, a set of key objectives of digital citizenship can be identified, which aim to prepare citizens who are responsible for their digital and social behaviour, establish a culture of digital security, and guide the use of technology toward educational advancement and positive community development.

2.2 Previous Studies

The inclusion of digital citizenship in the school curricula has attracted the attention of researchers (e.g., Alzahrani & Alshakrah, 2021; Al-Ghamdi & Al-Saadoun, 2021; Aloufi & Alzahrani, 2021; Aljenobi, 2023; Alsharari, 2022; Al-Ghamdi *et al.*, 2022).

Alzahrani and Alshakrah (2021) conducted a study aimed at determining the degree of availability of digital citizenship dimensions in the 'Islamic jurisprudence' curriculum for middle school students in Saudi Arabia. The study employed a descriptive analytical method and developed a list of the nine main dimensions of digital citizenship: digital access, digital communication, digital culture, digital health and safety, digital commerce, digital rights and responsibilities, digital etiquette and ethics, and digital security. The study relied on the paragraph as the unit of analysis and reached several findings, the most significant of which was the inadequacy of the 'Islamic jurisprudence' curriculum in incorporating digital citizenship dimensions, and a lack of balance in the digital citizenship dimensions included in the curriculum. The study recommended that

the 'Islamic jurisprudence' curriculum for high school, in particular and religious science curricula in general, should incorporate dimensions of digital citizenship.

Al-Ghamdi and Al-Saadoun (2021) conducted a study to analyse the content of the third-grade intermediate social studies textbook in Saudi Arabia in light of digital citizenship dimensions. The study adopted a descriptive analytical approach and developed a content analysis instrument that included nine main dimensions comprising 38 sub-indicators. The results of the study revealed that digital citizenship dimensions are not fully integrated in the investigated textbook. Among the investigated dimensions, the digital literacy recorded the highest proportion (35%), whereas the lowest proportion was recorded by the dimension of digital commerce, with only 9%. Similarly, Aloufi and Alzahrani (2021) explored the level of the digital citizenship elements in the content of computer and information technology books for the third grade of the intermediate stage in Saudi Arabia. A content analysis method was used for data collection. The results of the study showed that only 15 indicators out of 63 are available within the elements of digital citizenship in the specified book, indicating the poor presence of the digital citizenship elements. In their analysis, the highest record was by digital culture (83.79%), whereas other elements were poorly integrated with varying low percentages that did not exceed 9%. Moreover, the results showed that digital health and safety and digital rights elements were not available. Furthermore, Aljenobi (2023) investigated the degree to which digital citizenship elements are included in the Arabic language curriculum of the three grades of middle school in Saudi Arabia. Using a content form for data collection, the results of the study indicated poor and insufficient inclusion of the elements of digital citizenship in the curricula of the middle school. Based on the findings, the study recommended more attention to the inclusion of digital citizenship elements in the curricula in order to align with the students' interests and needs of the digital age.

Alsharari (2022) conducted a study to examine the level of digital citizenship in the 'Jurisprudence and Hadith' textbooks for first-grade intermediate students in Saudi Arabia. Using a descriptive analytical approach, the researcher developed a content analysis instrument comprising 9 dimensions and 46 indicators. The results showed that the level of digital citizenship in both textbooks was low and unbalanced, with the availability rate of the indicators at 34.8%, corresponding to 16 indicators out of 46. Additionally, there were four dimensions that were absent: digital law, electronic commerce, digital security, and digital health and safety. The availability of indicators in the dimensions of digital behaviour and digital communication was also very low, approaching rarity. The study recommended that curricula be updated to monitor technological developments, align them with Islamic principles, and integrate digital citizenship elements in a balanced manner within intermediate-level Islamic education.

Al-Ghamdi *et al.*'s (2022) study aimed at identifying the dimensions of digital citizenship that should be included in the social studies textbook for the second intermediate grade in Saudi Arabia, as well as the level of their inclusion. The researchers employed a descriptive analytical approach, utilising a content analysis card consisting of 9 dimensions and 36 criteria. The findings revealed a significant deficiency in the

inclusion of digital citizenship dimensions in the social studies textbook for the second intermediate grade, along with a variation in the inclusion across different units. Out of the 9 dimensions, the textbook included the dimension of digital accessibility at a rate of 66%, with a moderate level of inclusion, while the dimension of digital illiteracy was included at a rate of 34%, indicating a low level of inclusion. The study recommended reviewing social studies textbooks to incorporate necessary concepts of digital citizenship and establishing an independent subject titled 'Digital Citizenship'.

3. Research Methodology

To answer the research question of the study and achieve its objectives, a descriptive analytical survey method was employed. This approach was used because of its suitability for the aims of the study, which seeks to explore the degree to which the digital citizenship dimensions are incorporated into the English language textbooks of middle school in Saudi Arabia.

3.1 Research Population and Sample

The research population consists of all the English language textbooks prescribed for middle School students. These include the Student's Book and the Activity Book for the three grades: Grade 7, Grade 8, and Grade 9 for the first and second terms in the Kingdom of Saudi Arabia. The student's books for the three grades constitute the study sample, as the analysis was conducted on the student's books for the three grades, edition 2025. Each textbook comprises a set of instructional units that include a variety of topics, activities, exercises, illustrations, and dialogues. Table 1 presents the distribution of units and pages across the textbooks.

Table 1: Number of Units and Pages in Middle School English Language Textbooks

Grade Level	Number of Units	Number of Pages
Grade 7	16	155
Grade 8	16	153
Grade 9	12	145

3.2 Research Instrument

To achieve the objectives of the present study, the study adopted a content analysis card as the primary research instrument. This instrument was selected after a thorough review of relevant previous studies on digital citizenship, including those conducted by Aloufi and Alzahrani (2021) and Al-Ghamdi and Al-Saadoun (2021), in order to ensure that the content analysis tool reflects the key dimensions and indicators identified in the literature. The study instrument was adapted from Al-Ghamdi and Al-Saadoun (2021), who developed a comprehensive framework for analysing the inclusion of digital citizenship dimensions in curriculum content. As the present study employs the same instrument in its final validated form, there was no need to conduct additional procedures of validity

and reliability. The final form of the analysis instrument consists of nine main dimensions of digital citizenship, which are Digital Access, Digital Commerce, Digital Communication, Digital Literacy, Digital Etiquette, Digital Law, Digital Rights and Responsibilities, Digital Health and Wellness, and Digital Security. Under these nine dimensions fall thirty-eight (38) sub-criteria, which represent the specific indicators used to assess the degree to which these dimensions are reflected in the textbooks' content (Al-Ghamdi & Al-Saadoun, 2021).

3.2.1 Research Instrument Application Procedures

To implement the research procedures, the study followed the following steps:

- 1) Determining the objective of the research tool: The aim is to identify the degree to which the dimensions of digital citizenship are integrated into English language textbooks for the middle school in the Kingdom of Saudi Arabia.
- 2) Defining the unit of analysis: The researchers adopted the paragraph as the unit of analysis due to its suitability for the research objectives. The paragraph is neither as small as a single word nor as broad as an entire topic; rather, it encompasses all the statements, information, and meanings related to the issue either directly or indirectly, explicitly or implicitly.
- 3) Defining the categories of analysis: The categories of analysis in the current research were determined in nine main dimensions, which are further divided into thirty-eight (38) sub-indicators, as shown in Table 2.

Table 2: Main Dimensions and Number of Sub-Indicators of the Content Analysis Tool for Middle School English Language Textbooks

Main Dimensions of Digital Citizenship	Number of Sub-Indicators
Digital Access	5
Digital Commerce	5
Digital Communication	4
Digital Literacy	4
Digital Etiquette	4
Digital Law	4
Digital Rights and Responsibilities	4
Digital Health and Wellness	4
Digital Security	4
Total	38

1. Transforming the content analysis card into a quantitative form in order to record frequencies.
2. Determining the elements of the textbook content to be analyzed, which included Scientific Content (Information), Illustrations, Activities, Enrichment Materials and Evaluation Questions.
3. Reading each topic of the textbook carefully, after which the researchers identified the paragraphs on each page by framing them and assigning each paragraph a number, starting from (1).

3.2.2 Statistical Processing of the Obtained Data

Determining the criteria for judging the degree of inclusion of digital citizenship dimensions was based on previous studies, such as Aloufi and Alzahrani (2021) and Al-Ghamdi and Al-Saadoun (2021). The levels of judgment for the degree of inclusion of digital citizenship dimensions in Middle School English language textbooks in the Kingdom of Saudi Arabia were established, as illustrated in Table 3. The data were statistically processed by calculating frequencies and percentages in order to answer the study question.

Table 3: Criteria for Judging the Degree of Inclusion of Digital Citizenship Dimensions in Middle School English Language Textbooks

Degree of Inclusion	Percentage Range
Not Included	From 0% to less than 1%
Very Low Inclusion	From 1% to less than 20%
Low Inclusion	From 20% to less than 40%
Moderate Inclusion	From 40% to less than 60%
High Inclusion	From 60% to less than 80%
Very High Inclusion	From 80% to 100%

4. Results and Discussion

The research question states: What is the degree of inclusion of digital citizenship dimensions in English language textbooks at the middle school in the Kingdom of Saudi Arabia? To answer this question, the study instrument, the content analysis form, was applied to analyze the textbooks and identify the number of main and sub-dimensions of digital citizenship incorporated in their content. This is illustrated in Table 4 below.

Table 4: The Percentage of Criteria Reflecting the Dimensions of Digital Citizenship in the Textbooks

Textbook	Total Number of Criteria	Number of Included Criteria	Percentage (%)	Degree of Inclusion
Grade 7	38	9	23.7	Low inclusion
Grade 8	38	11	28.9	Low inclusion
Grade 9	38	8	21	Low inclusion
Total	114	28	24.6	Low inclusion

It is evident from that the degree of inclusion of digital citizenship dimensions in the English language textbooks prescribed for Middle School in the Kingdom of Saudi Arabia is generally low. The analysis shows that the Grade 8 textbook achieved the highest level of inclusion, with 11 criteria out of 38 (representing 28.9%), followed by the Grade 7 textbook, which included 9 criteria (representing 23.7%). Meanwhile, the Grade 9 textbook recorded the lowest level of inclusion, with only 8 criteria (representing 21%). These results indicate that while the textbooks contain some references to digital

citizenship, the overall integration of its nine dimensions and corresponding sub-criteria remains limited, suggesting the need for greater emphasis on digital citizenship concepts in future curriculum development.

Overall, the results indicated that the degree of inclusion of digital citizenship dimensions in English language textbooks for the intermediate stage in the Kingdom of Saudi Arabia was below the expected level. The study revealed that the number of items that included digital citizenship dimensions in the Grade 7 English textbook reached 9 out of 38, representing 23.7%. In the Grade 8 textbook, there were 11 items out of 38 (representing 28.9%), while the Grade 9 textbook contained 8 items out of 38, with a percentage of 21%.

In general, the inclusion levels of digital citizenship dimensions in English language textbooks for the intermediate stage were low in both frequencies and percentages. The textbooks did not include four dimensions of digital citizenship: Digital Commerce, Digital Etiquette, Digital Law, and Digital Rights and Responsibilities. The Digital Security dimension appeared only once across all three textbooks.

The results also showed that the Grade 7 textbook included the dimensions of Digital Communication, Digital Literacy, and Digital Access; the Grade 8 textbook included Digital Communication, Digital Literacy, Digital Access, Digital Health and Wellness, and Digital Security; while the Grade 9 textbook included Digital Communication, Digital Literacy, and Digital Health and Wellness.

Based on the total frequencies and percentages of inclusion across the three textbooks, the ranking of the nine digital citizenship dimensions is shown in the following table 5.

Table 5: The Frequency of Digital Citizenship Dimensions
 Included in English Language Textbooks for Middle School

Digital Citizenship Dimensions	Grade 7	Grade 8	Grade 9	Total
Digital Literacy	18	16	12	46
Digital Communication	14	10	6	30
Digital Health and Wellness	0	1	11	12
Digital Access	3	4	0	7
Digital Security	0	1	0	1
Total	35	32	29	96

The results demonstrated that the Digital Literacy dimension ranked first, with 46 occurrences (47.9%) of the total included dimensions across the three textbooks. The Digital Communication dimension came second, with 30 occurrences (31.1%). The Digital Health and Wellness dimension ranked third, with 12 occurrences (12.5%). The Digital Access dimension ranked fourth, with 7 occurrences (7.3%), while the Digital Security dimension ranked last, appearing only once (1.04%) of the total included dimensions. These findings indicate that English language textbooks for the intermediate stage place greater emphasis on technical and communicative aspects of digital citizenship (such as literacy and communication) while paying less attention to the ethical, legal, and security

dimensions, which are essential for building responsible and safe digital behaviour among students.

The findings of current study align with the studies of Alzahrani and Alshakrah (2021), Aloufi and Alzahrani (2021), Al-Ghamdi and Al-Saadoun (2021), Alsharari (2022), and Al-Ghamdi, *et al.*, (2022) in that the overall inclusion of the Digital Citizenship Dimensions in the various curricula is generally weak; there is considerable variation among the dimensions; some dimensions appear at relatively higher levels, while others are nearly absent; there is a clear dominance of technical and skill-related dimensions, such a digital literacy, digital access, and digital communication; the presence of a noticeable weakness in value-based and legal dimensions, such as digital law, digital rights and responsibilities, digital security, and digital commerce; finally, there is a lack of balance in inclusion, as the frequencies concentrate in only two or three dimensions across all studies, while the remaining dimensions appear rarely. The findings also agree with Alsharari (2022) and Al-Ghamdi *et al.* (2022) in the absence of several Digital Citizenship Dimensions, such as Digital Law and Digital Commerce. However, the current study differs from Alsharari (2022) regarding the Digital Security dimension, as it appeared in the present study at a low percentage (1.04%), while it did not appear at all in Alsharari's study. The same applies to the Digital Health & Wellness dimension, which also did not appear in Alsharari (2022), yet was present in the current study at 12.5%. However, the findings of the current study differ from those of Al-Ghamdi *et al.* (2022), which concluded that only two of Ribble's nine Digital Citizenship Dimensions, namely, Digital Access and Digital Literacy, were present.

5. Conclusion and Recommendations

The present study explored the extent to which English language textbooks of middle school in Saudi Arabia incorporate the nine digital citizenship dimensions of Ribble (2015). The results of the study revealed a low overall level of digital citizenship integration in the examined textbooks, with a mean inclusion rate of 24.6%. Inclusion levels varied by grade, with the second intermediate-grade textbook ranking highest, followed by the first intermediate-grade textbook, and the third intermediate-grade textbook ranking lowest. The results also showed that the dimension of digital literacy demonstrated the highest frequency of inclusion, followed by digital communication, whereas the digital security dimension was incorporated to a minimal extent. However, digital commerce, digital etiquette, digital law, and digital rights and responsibilities were entirely absent.

In light of these findings, the study recommends integrating the dimensions of digital citizenship across all subjects in the intermediate stage in a balanced and comprehensive manner that aligns with students' developmental characteristics. It also recommends rebalancing the inclusion of digital citizenship dimensions in English language textbooks for the intermediate stage to ensure an appropriate balance between the technical and communication-related dimensions on one hand, and the behavioral,

ethical, and legal dimensions on the other. Furthermore, the study recommends increasing the representation of the Digital Security dimension in English language textbooks for the intermediate stage, due to its very limited appearance in the current content. Finally, the study recommends including the missing dimensions of digital citizenship in English language textbooks, namely, digital commerce, digital etiquette, digital law, and digital rights and responsibilities, so as to address the shortcomings identified in the analysis.

The current research is limited to analyzing the English language textbooks prescribed for middle school students in the first, second, and third grades (student books) for the school year 2025, which corresponds to a total of three textbooks for the two academic terms, in light of the dimensions of digital citizenship. Based on this, the study encourages future research to include a content analysis study of English language textbooks at other educational stages (elementary and secondary) to compare the level of inclusion of digital citizenship dimensions across different levels. Moreover, field studies are encouraged to measure students' actual acquisition of digital citizenship dimensions, and to examine the relationship between their level of digital citizenship and the degree to which these dimensions are included in the curriculum, in order to determine the impact of content on learners' digital practices. Finally, researchers are encouraged to conduct experimental studies of developed instructional units that incorporate all nine dimensions of digital citizenship and an evaluation of their effectiveness in enhancing digital awareness and responsible digital behaviour among intermediate-stage students.

Conflict of Interest Statement

The authors declare no conflict of interest.

About the Authors

Shatha Al-Ghamdi is an M.A. student at the Department of Curriculum and Instruction, College of Education, University of Jeddah, Saudi Arabia. Her research interests include second language acquisition, syntax and teaching methodologies.

Hassan Saleem Alqurashi is an Associate Professor of TESOL at the Department of Curriculum and Instruction, College of Education, University of Jeddah, Saudi Arabia. He completed his PhD from the University of Reading, UK. His research interests include second language acquisition, error analysis and pragmatics. He published several articles in international journals.

ORCID: <https://orcid.org/0000-0002-5190-3088>

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