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ANALYSIS OF EDUCATIONAL CONTENT ON THE ONLINE PLATFORM FOR EARLY CHILDHOOD EDUCATION, IN LIGHT OF DIGITAL CITIZENSHIP VALUES

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Abstract
This research aims to analyze the content of educational units on the early childhood e-learning platform in Saudi Arabia in light of digital citizenship values. To achieve this objective, a list of digital citizenship values that should be included in the educational units on the early childhood e-learning platform was developed. This was done using a descriptive-analytical approach and a content analysis checklist developed by the researchers to assess the extent to which these values are present on a unit-by-unit basis. The checklist includes six main dimensions of digital citizenship values and thirty sub-indicators. The study's findings indicate a general deficiency in the degree to which digital citizenship values are included in the educational units on the early childhood e-learning platform. The results also revealed a disparity among the dimensions of these values. Digital access and digital etiquette and ethics were ranked highest with a moderate level of inclusion, while digital rights and responsibilities and digital literacy were ranked lowest. Digital health and safety and digital security were completely omitted. Therefore, the research recommends updating the content of the Saudi national early childhood curriculum to include digital citizenship values to a high degree.

***Keywords*:** Inclusion - Analysis - Childhood Curriculum - Virtual Platform - Citizenship - Values and Principles.

Introduction

The rapid growth witnessed by the technological revolution in various aspects of life and in all its fields - industrial, commercial, educational, scientific, health, and urban development - and at all levels: governments, individuals, and societies; is due to the contribution of technology in developing and advancing these fields and achieving their development. This has made countries and governments pay attention to the digital domain, which consequently resulted in what is known as digital education.

Digital education, in its broad concept, is considered an educational system that includes several areas in the digital aspect, such as e-learning, educational technologies, digital citizenship, and other related concepts. This means that digital citizenship is an integral part under the umbrella of digital education. (Al-Assiri, 2020, 75- 76,) [1]With the sovereign status that technology occupies in the contemporary reality and the challenges it poses that threaten the future civilization of societies, not to mention their present, digital citizenship becomes one of the most important objectives of modern education.

The term "digital citizenship" has emerged as a discipline with its own concept, characteristics, and objectives, along with the emergence of the term "digital citizen" introduced by the American technology expert Marc Prensky. He distinguished between the characteristics of a technology user as pure technical skills, calling them digital immigrants, and likened them to someone learning a new language at a late stage of their life, mastering it and not using it properly, and the characteristics of a digital citizen who can properly use technology in all its aspects: technological, cultural, scientific, and recreational, with optimal and conscious use in light of digital challenges. (Wagner, 2015, 15).

[1] APA system is used for intext citation and references

Digital citizenship plays an important role in the development of societies, as it seeks to instill in students a sufficient awareness that contributes to reducing negative manifestations in the digital space and limiting the danger of contemporary technological challenges. (Ibn Sham, 2017) Undoubtedly, the responsibility for instilling this awareness falls on educational institutions, jointly and in cooperation, the family with its guidance and educational roles, and the school with its curriculum and educational tools, especially after the recent trend in education towards virtual educational platforms. Studies such as Al-Shehri's (2016) study indicated: the growth of integration and participation between home and school, which increased during the period of distance learning and the development of educational platforms, has made it necessary to pay attention to what achieves this principle to raise a generation guided by a culture of knowledge and learning in a safe environment. (Al-Shehri, 2016, 12-14) This is particularly relevant given the role played by educational institutions in preparing individuals educationally and socially, and providing them with the values and behaviors associated with digital citizenship, which has become a social necessity for raising a digital citizen capable of effective communication, obtaining educational, cultural, and governmental services, and being aware of their rights, duties, and responsibilities towards their country and society.

In this regard, the Kingdom of Saudi Arabia has developed the Human Capabilities Development Program, which, through its first focus area (developing a solid and flexible educational system for all), aims to ensure citizens' readiness for the future, starting from early childhood and continuing through lifelong learning. This is achieved by emphasizing the instillation of national belonging and global citizenship values, and building behaviors, developing knowledge, and acquiring 21st-century skills such as technological skills (Human Capabilities Development Program,2021,pp.10-12).

Education, in its aspects and dimensions of instilling values, building behaviors, and training skills, does not bear its fruits unless it starts from the early childhood stage, according to the words of the poet Salih bin Abdul Quddus from the book "Fasl al-Miqal fi Sharh Kitab al-Amthal" by al-Bakri (1971):

"Discipline may reach children... but after abundance, discipline is of no benefit if you straighten the branches, they become straight... but if you straighten the trunk, the tree is ruined"

This is what Islamic education meant in its guidance regarding caring for the child's upbringing and disciplining them in their early years, according to the saying of the Prophet (peace be upon him) in the hadith of Sa'eed bin Al-Aas (may Allah be pleased with him): "No father has ever given his child anything better than good manners" (Al-Tirmidhi, 1998, 1871). This guides us to the importance of raising children with good manners and disciplining them accordingly because what the child is raised upon in terms of good behavior and upright character in the real world is what they will have in the virtual world and digital space. Therefore, this research deals with the values of digital citizenship based on educational principles and guidelines in the early childhood stage through the content of virtual educational platforms.

Research Problem and Questions

In light of the expansion of the multiple uses of technology, and based on the role of digital technology in bringing about a qualitative and tangible shift in human life, and its impact on achieving sustainable development in education, it has become necessary to promote the positive aspects of technology, benefit from it, and guide society to achieve a deeper understanding of the concepts of digital citizenship and its behavioral normative indicators.

Since the capabilities and skills of the digital citizen are among the most important resources that must be invested in by developing a generation capable of dealing with and using technology positively in a way that serves society and the nation, as guiding proper dealing with technology is one of the goals of digital citizenship. (Al-Ahmadi, 2020, 56)
Towards achieving the goals of the Kingdom's Vision 2030, within the framework of its main pillars: a vibrant society, a thriving economy, and an ambitious nation, and in response to the goals and principles of the Human Capabilities Development Program, the Ministry of Education has designed virtual educational platforms and curricula in accordance with the core values, behaviors, knowledge, and skills aimed at creating a digital citizen capable of local and global competition. (Vision 2030 - Human Capabilities Development Program, 2021, 7)
In light of the results of Al-Zahrani's (2019) study, which affirmed the role and contribution of educational curricula in achieving digital citizenship by disseminating its values, concepts, importance, and areas.In addition , based on the results of Dotterer and et al.,'s study (2016), which found that teaching digital citizenship helps eliminate digital illiteracy and provides students with an ethical framework for dealing with technology, as well as increasing their ability to interact with the digital space. The study recommended the need to develop a technology program in schools so that digital citizenship becomes an essential part of it.
In light of what was indicated by Al-Jazzar's (2014) study that spreading the culture of digital citizenship among all members of society has become an urgent necessity that programs and projects must be prepared for in all institutions, so that the protection of this society from the increasing negative impact of technology can be enhanced. Likewise, what was emphasized by the results of Sadiq's (2019) study is that the concept and principles of digital citizenship are circulated in educational institutions in general in a way that highlights its importance as an approach that emphasizes students' commitment to their duties and responsibilities during their digital transactions. It also works on preparing a digital citizen by promoting the principles of digital citizenship as a national priority and by training them on the optimal use of digital technology in the educational process, making them capable of facing contemporary digital challenges and limiting their spread in light of the availability of a technical infrastructure and qualified human cadres to prepare the digital citizen. (Sadiq, 2019, 60)
The results of studies by Al-Shehri (2016), Al-Tawalbeh (2017), and Al-Sufiani (2021) also indicated a weakness in digital citizenship values among school students. These studies recommended the importance of maintaining balance and integration in distributing digital citizenship values according to the characteristics of each age stage and raising awareness among learners about systematic ways to protect against electronic abuses and how to deal with them.
Based on this background and in light of the most prominent developments in e-learning in the early childhood stage, which resulted in the Rowdhati platform, and with the scarcity of analytical studies on the content of this platform, and within the framework of the trend towards incorporating digital citizenship values into educational curricula, the current study seeks to reveal the degree of inclusion of digital citizenship values in the e-learning content of the Rowdhati platform by answering the main questions: What is the degree of inclusion of digital citizenship values in the educational units of the Rowdhati platform? From this, the following sub-questions arise:

1. What is the concept of digital citizenship, and what are its value dimensions from this perspective?

2. What is the degree of inclusion of digital citizenship values in the educational units of the Rowdhati platform?

Research Objective The research aims to identify the extent to which the dimensions of digital citizenship values are available in the content of the educational units of the Rowdhati platform at the kindergarten stage in the Kingdom of Saudi Arabia.

Importance of the Research The importance of the research stems from the importance of the topic itself, as its results are expected to be useful in their theoretical and practical aspects in the following points:

- Keeping pace with the development movement in the field of education, which was based on the constructivist philosophy in developing curricula and employing technological innovations related to digital citizenship values.
- Expanding reliance on e-learning and emphasizing the Kingdom of Saudi Arabia's Vision 2030 in education and enhancing the national identity.
- Making digital citizenship more effective and influential in education and society by incorporating it into the educational units of the Rowdhati platform.
- Helping curriculum developers when planning and developing educational curricula by taking into consideration the inclusion of digital citizenship values in the curricula.
- Providing scientific material for educational supervisors and those working in the educational field to hold training sessions for teachers to train them on how to employ digital citizenship values to keep pace with scientific and technological development in the educational institution.
- It may benefit researchers in the field of digital citizenship to research the effectiveness of using digital citizenship values with other variables and for different educational stages.

Research Limitations:

The research was limited by the following limits:

Subject Limits: The research was limited to analyzing the educational units on the Rowdhati platform in light of digital citizenship values: the (I) unit, and the (My Body) unit as examples.

Time Limits: The research tool was applied in the first semester of 1444 AH - 2023 AD.

Spatial Limits: Rowdhati platform in the Kingdom of Saudi Arabia.

Defintion of terms:

A- Digital Citizenship

Defined by the Digital Life Quality Council as: A set of necessary skills and knowledge that a digital citizen possesses to navigate the digital world, use digital technologies in a positive way through which they consume digital content, participate, communicate and contribute positively to the digital community. (National Program for Happiness and Life Quality, 2018, UAE)

It is defined procedurally as: The standards, controls and principles included in early childhood digital curricula that a kindergarten child needs to develop their concepts and skills towards the optimal use of technology, in light of digital citizenship values.

B- Educational Units:

They are: "Organized around specific topics, presented to the child over a specific period of time, through which they learn various and different concepts and activities, and aim to achieve the desired goals." (Hikmi, 2021, p.6)

It is defined procedurally as: A systematic organization that places the child in an educational situation that includes concepts, values, and varied activities that suit their

abilities, and that ensures they undergo certain experiences to achieve the desired educational goals.

C- Rowdhati Platform:

It is: "An attractive learning management system that provides e-learning and distance learning services for kindergarten children." (Ministry of Education, 2021)

It is defined procedurally as: An electronic platform for kindergarten curricula content set up by the Ministry of Education in the Kingdom of Saudi Arabia that allows kindergarten teachers and children to digitally use the basic and enrichment educational units.

Second Axis - Conceptual Framework and Previous Studies

First - The Conceptual Framework This section deals with the topics of digital citizenship and the virtual Rowdhati platform, with a conceptual clarification in terms of linguistic and terminological definitions, importance, characteristics, and values.

1. **Digital Citizenship**: The concept of digital citizenship has emerged with the spread of social media and e-governance, using technology tools that have become an urgent necessity in all fields of life, especially the main ones: scientific, social, economic, etc. Here is a clarification of this concept, its importance, and the identification of its values and dimensions.

A- The Concept of Digital Citizenship :There are many definitions that have dealt with the concept of digital citizenship, including the following:

Ribble (2004) defined it as: "Students' understanding of human, cultural, and societal issues related to technology and practicing legal and ethical behavior regarding it." (pp. 6-7)

In another more concise definition, Ribble, Bailey, and Ross summed up the concept of digital citizenship as: "The norms of appropriate, responsible behavior with regard to technology use." (Ribble, Bailey, & Ross, 2004)

It is also defined as: An approach that helps teachers and leaders understand what students should know in order to use technology optimally. Instead of focusing on the process of digitally accessing information, attention is paid to the ethics and responsibilities of digitally using information. (Al-Musmali, 2014, p. 23)

Some educational writers and researchers have defined it as: "The set of controls, standards, ideas, principles, rules of behavior and skills that an individual adopts in the optimal and proper use of technology, which citizens, young and old, need in order to contribute to the advancement of the nation." (Mazen, 2016, p. 82; Al-Mallah, 2017, p. 26; Nada, 2021)

It was also defined as: "The set of values adopted by the digital citizen while dealing with digital technologies, which reflects their ability to bear the responsibility of dealing with its digital sources, and obligates them to self-censorship while dealing with its various media." (Tawalbeh, 2017, p. 296)

In light of the previous definitions of digital citizenship, we find that most of the definitions agreed that the concept of digital citizenship can be summarized in the following points:

- It represents rules, standards, and guiding principles emanating from the values of digital citizenship.
- These standards and principles regulate digital behavior in dealing with technology consciously and wisely in a digital world.
- Its goal is to form an upright digital citizen who contributes to building the earth, advancing their society, and developing their nation, being aware of their rights and responsibilities.

B- The Importance of Digital Citizenship: There is no doubt that digital citizenship is of paramount importance in light of the digitized world we live in today, starting from websites, passing through virtual programs, and ending with digital applications for official

government sites across all sectors such as education, health, judiciary and personal status, which increased the need for awareness of the optimal and proper use of technology in the digital environment.

The importance of digital citizenship has been identified in safe practices and the responsible, legal and ethical use of digital information, acquiring positive behavior characterized by cooperation, learning, productivity, and taking personal responsibility for lifelong learning. This comes within the framework that "digital citizenship" is a project whose mission is to prepare a qualified society to deal with electronic issues by spreading the culture of electronic security among different age groups in the society by providing a comprehensive reference for common electronic issues, and clarifying the optimal ways to deal with them according to the values and needs of the society. (Al-Muslmani, 2014; Sadiq, 2019)

In addition, the importance of teaching digital citizenship emerged in that it has become an integral part of a person's life, and because of the increasing number of internet users, digital technology has come to represent the largest proportion in life affairs, which led to an increase in the rate of electronic crimes due to lack of awareness and deficiency in societal culture in dealing with this technology. This made the manifestations of digital citizenship a necessity to raise societal awareness of the proper use of technology. Digital citizenship seeks to find the optimal ways that protect teenagers and children without reaching a state of excessive control, especially since it has become practically impossible to control what children and teenagers view on the internet and through electronic media. (Al-Dehshan and Al-Fawaihi, 2015)

The need for awareness of the importance of digital citizenship also increased in light of the emergence of some negative habits associated with the use of electronic media and devices, such as: adhering to the use of mobile phones even in places not designated for that, in addition to users' deviation from the basic framework for using modern technological devices, such as: digital drugs, electronic addiction, neglecting social tasks, as well as the emergence of some organic diseases such as: dry eyes, pain in the joints from sitting and squinting for long periods, and psychological diseases such as introversion and isolation. Likewise, wasting most of the time in front of electronic screens, which affected the overall output. (Al-Mallah, 2017, pp. 42-43)

In addition, the importance of digital citizenship comes in emphasizing guiding those responsible for raising the child to promote the values of digital citizenship among kindergarten children, and contributing to achieving the desired goals of promoting the values of digital citizenship in the kindergarten stage, in a way that ensures preserving the health, safety and security of our children through practicing proper digital citizenship. (Abdrabbo and Al-Rifai, 2021)

In light of the foregoing, the paramount importance of digital citizenship and awareness of its principles and instilling its values in the youth becomes evident, so that it becomes a behavior that accompanies the student in their digital life and virtual environment, contributing to preparing capable individuals to participate positively and effectively in building and advancing society.

C- Dimensions of Digital Citizenship

1- Dimensions of Digital Citizenship: The dimensions of digital citizenship refer to the set of axes and domains that include the optimal use of digital technology, represented in: political participation, digital nationalism, digital laws, digital rights and responsibilities, digital exchange of information, digital security and safety, digital etiquette and ethics, which can be incorporated into curricula. (Salam, 2016, p. 382)

It is also defined as: "A set of multiple and diverse principles that include citizenship in their content." (Al-Janabi et al., 2018, p. 573)
It is procedurally defined as: Those principles that were identified within the framework of digital citizenship values, and the degree of their inclusion in the digital content of early childhood curricula will be measured through their sub-indicators. These principles are: the digital access dimension, the digital etiquette and ethics dimension (digital behavior), the digital rights and responsibilities dimension, the digital culture dimension, the digital health and safety dimension, and the digital security dimension.
The International Society for Technology in Education (ISTE) identified the dimensions of digital citizenship in nine elements, as mentioned by (Al-Hussain and Al-Asiri, 2020, pp. 130-132):
1- Digital Access: It means full electronic participation in the digital society according to acceptable levels of use, which points to the importance of providing technology to all members of the digital society equally.
2- Digital Communication: It means exchanging information electronically and understanding the various multimedia forms of digital communication and social networking applications.
3- Digital Literacy (Digital Literacy): It refers to the educational processes, teaching technology and digital devices, knowing how to use them, educating the digital citizen on the responsible and healthy use of technology positively, and encouraging continuous learning with ongoing technological development.
4- Digital Etiquette and Ethics: It refers to the set of laws and behavioral rules that define standards of acceptable and positive behavior in the digital society, which the digital citizen must adhere to. It is one of the most important principles that education should work on inculcating, with the aim of leading the learner to the highest values of digital citizenship.
5- Rights and Responsibilities: It refers to the requirements and duties extended to all individuals in digital societies and the readiness of the digital citizen to protect their digital rights and the rights of others and defend them.
6- Digital Security: It refers to the digital security precautions to ensure the safety and protection of the digital citizen's private information, and protecting the information of others, whether individuals or organizations, by taking preventive measures followed in technological and digital environments to confirm digital security.
7- Digital Laws: It refers to the rules, laws, and legislations that define digital electronic procedures, behaviors, and responsibilities, and the extent of the digital citizen's awareness of using those governing laws, rules, and legislations that govern digital societies. This includes cybercrime laws, and awareness of the legal consequences of unconscious digital behavior that violates digital regulations and laws. Just as illegal behaviors are punished in the real world, so too in the digital world, and illegal behaviors must be reported, such as theft of intellectual digital property, which is no less important than physical theft.
8- Digital Health and Wellness: It refers to the necessary health guidelines and precautions to ensure the physical, health, and psychological safety of the digital citizen, and ward off health risks that may cause harm. The use of technology by children and youth is a major source of concern for health and quality of life, in addition to the older generations of parents who were not born in the digital age. Thus, digital citizenship enables digital citizens to benefit from technology without compromising their physical or psychological health.
9- Digital Commerce: It refers to the processes of buying, selling, and practicing trade offers for all products and goods electronically. It includes proper understanding of digital

economy controls and enabling the consumer to shop intelligently and effectively. E-commerce is one of the most prominent phenomena that characterizes digital societies and their citizens, as it is witnessing increasing demand in daily transactions.

D - Values of Digital Citizenship: Since the current research deals with the dimensions of digital citizenship in terms of their value classification, in order to achieve its objectives of analyzing the content of the educational units on the Rowdhati platform in light of the values of digital citizenship, the study tended to identify those dimensions in terms of the values that were induced from the concept, objectives, and importance of digital citizenship, by clarifying the concept of digital citizenship values, followed by a review of the value classification of the dimensions of digital citizenship.

The values of digital citizenship are defined as: "The set of rules, controls, standards, norms, and ideas followed in the optimal and proper use of technology, which citizens, young and old, need in order to contribute to the advancement of the nation." (Al-Takhaineh and Al-Safasfah, 2017, p. 8)

They were also defined as: "The ethics and behaviors that the citizen believes in their importance, which are reflected in their use of technology, attitudes, and interactions in the digital world, govern their relationships with others, drive them to develop and protect themselves, and increase their love and loyalty to their country." (Al-Saadi, 2018, p. 144)

They were also defined as: The behaviors that determine the individual's behavior towards their society and country, which are: education, respect, and protection. (Al-Murikhi, 2021, p. 9)

Looking at the aforementioned dimensions of digital citizenship, those dimensions specified in nine elements, and since the concept of digital citizenship and its aim of forming the upright digital citizen, and what this concept carries within it is a set of values through which this goal is achieved, the classification of those dimensions came as a set of values that differed from one researcher to another in terms of number and varied in the subjects of classification, from one study to another. We mention some of them as follows:

Most of what researchers and writers in this field have adopted are those axes presented by Mike Ribble (2015) as an attempt to separate the overlaps between the dimensions of digital citizenship, as follows:

A- The First Axis: Values of Security and Protection: Including the dimensions of digital security and self-protection - digital rights and responsibilities - digital health and safety.

B- The Second Axis: Values of Respect and Social Interaction: Including the dimensions of digital laws - digital etiquette and ethics - digital access.

C- Scientific and Cultural Values: Those concerned with employing technology in exchanging information, including the dimensions of digital communication - digital education and literacy (digital literacy) - digital commerce.

The Digital Life Quality Council in the UAE (2018) also classified the values of digital citizenship as follows:

- **The Value of Security:** Focusing on the importance of preventing risks and protecting oneself and others.
- **The Value of Wisdom:** Focusing on the importance of lifelong learning, staying constantly updated on concepts and variables related to the digital world, and the ability to make wise decisions when using technology.
- **The Value of Social Interaction**: Revolving around the importance of respecting oneself and others in the digital world, to build and promote positive and cooperative social relationships among digital citizens.

As for Al-Saadi (2018), he identified four main values as follows:

- **Belonging and Loyalty to the Nation**: Including commitment to digital identity, loving and being loyal to the nation, defending its capabilities and resources, and benefiting from technological advancements to contribute to the development of society in all aspects of life.
- **Commitment to Ethics of Dealing:** Achieved through commitment to digital duties and responsibilities, adherence to digital laws that govern the digital citizen's interaction and communication with others, regulate their behaviors, and drive them towards building positive relationships based on mutual respect and benefit for all.
- **Active Participation:** Including the ability to achieve equal digital access for all members of society, providing opportunities for all to participate and interact, freedom to benefit from educational materials and digital media, and express opinions without infringing on others.
- **Protection:** Including self-protection, which includes health protection and financial protection from the risks of technology on devices and bank accounts, in addition to protecting others by preserving intellectual property rights.

Based on the foregoing, and to achieve the objective of the current research, which seeks to reveal the degree of inclusion of the dimensions of digital citizenship through their value classification, and in line with the educational content of the Rowdhati platform, the current study adopted the classification of these dimensions in terms of the values that were induced from the educational literature, and in light of the axes presented by Mike Ribble (2015) mentioned earlier.

In light of the foregoing, it can be said that these values and the dimensions of digital citizenship they include are what the current study seeks to reveal the degree of their inclusion in the content of the educational units on the Rowdhati platform through the relevant indicators.

The Rowdhati Platform: To clarify the conceptual understanding of the Rowdhati platform, it is necessary to address the virtual kindergarten with a definition and explanation, as it is considered one of its components. It is worth mentioning the background of the Rowdhati platform launched by the Ministry of Education as a basic virtual education platform for a virtual classroom to replace the actual classroom if needed, such as in emergency cases and weather conditions that result in the suspension of in-person study. The Rowdhati platform came after the experience of the virtual kindergarten that the Ministry of Education established during the coronavirus pandemic for the years 2020-2021, which included basic digital educational units, which soon became enrichment educational units supporting asynchronous learning after the establishment of the Rowdhati platform, which in turn included the actual basic educational units that were previously approved before the virtual kindergarten experience, after converting them into digital units.

Accordingly, the current Rowdhati platform includes two types of education according to the Ministry of Education website:

A- Synchronous Education: As applied on the "Madrasati" platform, it includes ten basic educational units, which are: the Hello Unit, Friends Unit, Family Unit, Housing Unit, Clothing Unit, Hands Unit, My Country Unit, My Health and Safety Unit, My Book Unit, Water Unit, and Sand Unit.

The Ministry of Education launched the "Rowdhati" platform for the kindergarten stage in conjunction with the start of the new academic year 1443 AH, defining it as: "An attractive learning management system that provides e-learning and distance learning services for kindergarten children, aiming to provide supportive and ideal technological solutions that

contribute to facilitating and easing the distance learning process." (Ministry of Education, 2021)

The "Rowdhati" platform provides quality digital content that supports synchronous and asynchronous learning according to the services provided on the "Madrasati" platform, allowing the teacher to communicate directly with children, as well as teach according to the kindergarten program currently applied in schools, which provides synchronous e-learning tools and services, in addition to asynchronous learning. It also allows access to diverse digital content formats, and enables the teacher to create, provide and use interactive digital content within the kindergarten program through virtual classrooms, as well as provide activities and digital content to them, monitor attendance and absence, in addition to holding virtual meetings between school staff and educational supervisors, and sending inquiries from parents and responding to them.

The "Rowdhati" platform targets children from male and female students enrolled in the kindergarten stage, their parents, teachers, kindergarten principals, educational supervisors, in addition to all administrative elements in the kindergarten stage.

Accordingly, the Rowdhati platform is a distance learning environment designed by the Ministry of Education in the Kingdom of Saudi Arabia for the early childhood stage from three to six years old, enabling the teacher to teach children synchronously and communicate with them directly (visually, audibly, or in writing) through the attached communication tools, to acquire the necessary knowledge and skills, in a way that achieves the educational goals of this stage. (Azhar and Al-Mujrabi, 2022, p.21)

B- Asynchronous Learning: According to the application of the "Virtual Kindergarten", it includes ten enrichment educational units, which are: Me Unit, My Body Unit, My Family Unit, My Home Unit, My Friends Unit, My Community Unit, My Country Unit, My Favorite Animals Unit, The World Around Me Unit, My Food Unit, and The Environment Unit.

In the context of the Kingdom of Saudi Arabia's interest in children's education, many projects have been established, including the Experimental Virtual Kindergarten project, which presents its educational content through (10) educational units, each unit containing from (30) to (50) educational elements, in addition to interactive technical activities that contribute to teaching the child through their accomplishment of some tasks within the application, with varying levels of difficulty according to the age group and the child's progress in accomplishment. (Al-Oteiq, 2019)

The Ministry of Education in the Kingdom of Saudi Arabia launched the Virtual Kindergarten for children aged three to six on Tuesday, 02/02/1441 AH. These virtual kindergartens allow parents to directly monitor their children as they are in front of their eyes, giving these kindergartens the characteristic of safe education (Ministry of Education, 2020).

The Ministry of Education defined it as: A diverse digital educational content that supports asynchronous learning and provides e-learning tools and services for the child, the teacher, and the parent. It also helps the teacher to use the content in synchronous learning through the Rowdhati platform or guide them to benefit from the content during asynchronous learning, aiming to provide an exciting virtual learning experience for children aged 6-3 years under the supervision of their parents. It offers educational content through 11 educational units, each unit including a diverse series of educational elements (videos, stories, chants, games, interactive activities, and the Little Muslim). (Ministry of Education, 2021, Virtual Kindergarten).

In light of the foregoing conceptual framework for the virtual kindergarten, we find that its characteristics can be summarized in the following points as explained by the study of Bawazeer et al. (2022):

- The virtual kindergarten is characterized as an asynchronous educational platform that provides learning for the child anywhere and anytime.
- The virtual kindergarten includes a set of educational elements, including video clips, chants, activities, and stories.
- The virtual kindergarten includes a set of instructions, guiding messages, and assessment tools to help support the child's learning from home.

In light of the above review of the concept and platform of Rowdhati, and its inclusion of a basic synchronous educational platform and an asynchronous virtual kindergarten platform, the difference between them can be determined as follows:

The Rowdhati platform is a basic platform for a virtual classroom for distance learning in the governmental kindergarten stage in the Kingdom of Saudi Arabia, allowing the teacher to follow up with the child by uploading their works and achievements, and then evaluating the child accordingly. As for the virtual kindergarten, it is an enrichment platform containing interactive supporting activities that enable the child to comprehend the knowledge and information they obtained with their teacher in synchronous learning through the Rowdhati platform.

This means that the virtual kindergarten relies on the child's self-learning without the need for a teacher, in contrast to the Rowdhati platform, which requires synchronous learning to explain scientific and practical concepts.

Since the current research aims to uncover the degree of inclusion of digital citizenship values in the content of educational units at the kindergarten stage, the researcher's choice of the cognitive educational units came from the fact that the basic units have received attention and a greater share of researchers' interest in scientific studies in various fields.

Secondly - Previous Studies

Al-Sharary's study (2022), entitled: "The Level of Digital Citizenship in the Jurisprudence and Hadith Courses for the First Intermediate Grade in the Kingdom of Saudi Arabia," which aimed to identify the level of digital citizenship in the jurisprudence and hadith courses for the first intermediate grade in the Kingdom of Saudi Arabia. It followed the descriptive approach using the content analysis method. The tool was a content analysis card consisting of (46) indicators distributed over the nine dimensions of digital citizenship. It was applied to the books of the first and second semesters for the hadith and jurisprudence courses for the first intermediate grade, 1440 AH edition. The results showed that the level of digital citizenship in the course books was low and highly unbalanced. The percentage of availability of indicators was (34.8%), with (16) indicators out of (46) indicators. Moreover, these sixteen indicators were not available in a balanced way, as most of their repetitions were concentrated in nine of them, while each of the remaining seven indicators appeared only once or twice. At the dimension level, four of them were not available at all: (Digital Law, E-Commerce, Digital Security, Digital Health and Safety). The availability of indicators for (Digital Behavior and Digital Communication) was scarce, at the level of both course books. The study recommended monitoring technological trends and issues and framing them Islamically, as well as developing a mechanism for incorporating them in a balanced way into Islamic education curricula at the intermediate stage.

Al-Habib's study (2022), entitled: "The Role of Islamic Education Curricula at the Primary Stage in Achieving Elements of Digital Citizenship from the Viewpoint of Teachers,"

which aimed to identify the current role of Islamic education curricula at the primary stage in the Kingdom of Saudi Arabia in achieving elements of digital citizenship in the areas of (respect, education, and protection), from the viewpoint of Islamic education teachers in the Kingdom. The study adopted the descriptive survey method, where an electronic questionnaire consisting of 18 items was designed. 181 completed questionnaires were collected, and their data were analyzed using descriptive statistics (frequencies and percentages). The results of the study revealed that the current Islamic education curricula play a significant role in achieving the elements of digital citizenship among youth, with a slight variation among these elements from the viewpoint of teachers. The element of digital education had the highest frequencies among the responses of teachers, while the element of digital commerce received the lowest, with a slight difference. In light of the results, the study recommended the inclusion of digital citizenship elements within the standards for developing Islamic education curricula. It also suggested conducting qualitative studies for a deeper understanding of how Islamic education curricula can achieve the elements of digital citizenship.

Al-Bassam's study (2021), entitled: "The Degree of Availability of Digital Citizenship Values Dimensions in Islamic Education Curricula for the Secondary Stage from the Viewpoint of Teachers in Makkah Al-Mukarramah," which aimed to identify the degree of availability of digital citizenship values dimensions in Islamic education curricula for the secondary stage from the viewpoint of teachers. The study used the descriptive approach, and the tool was a questionnaire whose validity and reliability were verified. The study population consisted of all Islamic education teachers for the secondary stage in Makkah Al-Mukarramah governorate.

As for the sample, it consisted of 48 female teachers. Among the most important results that the study reached: The degree of availability of the dimensions of digital citizenship in Islamic education courses for the secondary stage came at a moderate degree in all dimensions.

Al-Zahrani and Al-Shakra (2021) study, entitled: Analyzing Islamic curricula in light of digital citizenship, which aimed to know the degree of availability of digital citizenship dimensions in the Jurisprudence course (1) for the secondary stage in the Kingdom of Saudi Arabia. To achieve the goal, the two researchers designed a list of digital citizenship dimensions that should be available in the Jurisprudence course (1) for the secondary stage. The list included the nine dimensions of digital citizenship. The two researchers used the descriptive analytical approach to reach the degree of availability of digital citizenship dimensions based on the paragraph unit. The research reached several results, the most important of which are: the existence of a deficiency in including the Jurisprudence course (1) for the dimensions of digital citizenship, and the lack of balance in the dimensions of digital citizenship.

Davis (2020) study, entitled: Content Analysis of Ontario Curricula According to the Principles of Digital Citizenship, which aimed to analyze the principles of digital citizenship in the public education curricula in the city of Ontario. The researcher used the descriptive analytical approach to analyze the content of 10 curricula for the English language in the city of Ontario. The study tool consisted of a scale prepared by the researcher with the principles of digital citizenship. The research found that these curricula develop digital responsibility.

Basarmak, et al. (2019) study, entitled: Content Analysis of Digital Citizenship Dimensions in Secondary Education Curricula, which aimed to analyze secondary school curricula in light of the principles of digital citizenship. The study used the descriptive

analytical approach. The study tool consisted of a digital citizenship scale to analyze the content of secondary education curricula subjects in Turkey for the first, second, third, and fourth grades. The study reached a number of results, including: the percentage of digital citizenship was high in the Computer and Democracy, and Human Rights courses, while the rest of the courses came with a very small percentage.

Salam (2016) study, entitled: Principles of Digital Citizenship in National Education Curricula at the Secondary Stage: An Evaluative Study, which aimed to identify the principles of digital citizenship that can be included in the national education curricula at the secondary stage, and to determine the extent to which the principles are available in the curricula. The research tools were identified as a list of digital citizenship principles and two forms for analyzing the objectives and content of national education curricula at the secondary stage in light of the list of digital citizenship principles. The research procedures were determined in preparing a list of digital citizenship principles that can be included in national education curricula at the secondary stage, analyzing the objectives and content of national education curricula in light of the list of digital citizenship principles, recording the results of the analysis, analyzing and interpreting them. The researcher followed the descriptive analytical approach to analyze the objectives and content of the curricula, describe the analyzed results, and the researcher reached results represented in the fact that the national education curricula at the secondary stage have a deficiency in terms of including their objectives and content with the principles of digital citizenship.

Comment on previous studies

The current study agreed with previous studies in clarifying the extent to which the principles and values of digital citizenship are available in the educational curricula. However, it differed in the educational stage, and the curriculum to be analyzed, as the current study was unique from previous studies in analyzing the content of the educational units curriculum for kindergarten on the Rowdhati platform. While most previous studies shared in analyzing the content of Islamic education courses with different educational stages, the study of Al-Zahrani and Shoukra (2021) addressed the jurisprudence course for the secondary stage, and likewise, the study of Al-Shammari (2022) addressed the jurisprudence and hadith courses but for the intermediate stage. As for the study of Al-Bassam (2021), it addressed Islamic education courses for the secondary stage, and the study of Al-Habeeb (2022) also addressed Islamic education courses but for the primary stage. Meanwhile, the studies of Islam (2016) and Basarmak et al. (2019) analyzed the dimensions of digital citizenship in the national education curriculum at the secondary stage. As for the study of Davis (2020), it was unique in analyzing the content of English language curricula in general education stages.

Regarding the study methodology and its tool, the current study agreed with all previous studies in using the descriptive analytical approach, due to their agreement on the main objective, which is to analyze the content of academic courses and educational curricula. However, the studies differed in the use of the tool, as the current study agreed with the studies of Al-Shammari (2022), Al-Zahrani and Shoukra (2021), and Salam (2017) in using the study tool (content analysis card). In contrast, the studies of Al-Habeeb (2022) and Al-Bassam (2021) used a questionnaire as a tool to know the role of courses in achieving the dimensions of digital citizenship and the degree of their availability from the point of view of teachers. As for the studies of Davis (2020) and Basarmak et al. (2019), they used digital citizenship scales prepared by the researchers to detect the extent of incorporating digital citizenship principles in the courses under study.

In light of the above, the current study was unique from previous studies in its objective limits in terms of the educational stage (kindergarten), the type of content (educational units), and the fact that the content is digital on the Rowdhati platform.

The third axis - Research methodology and field procedures: This axis dealt with an explanation of the research methodology, determining its procedures, describing the characteristics of the content to be analyzed, presenting how the research tool was built, ensuring the validity and reliability of the tool, how it was applied in the field, and the statistical methods used to analyze the statistical data.

Research Methodology: The research adopted the descriptive analytical approach using the content analysis method (analyzing the educational units on the Rowdhati platform in light of the values of digital citizenship).

Educational Units under Study: The analysis was limited to two educational units from the educational units on the Rowdhati platform as a model for the remaining educational units at the kindergarten stage, which are: the "My Body" unit, and the "I" unit. The following table shows the contents of the two units.

Table (1) Describing the content of the "My Body" unit on the Rowdhati platform for kindergarten in Saudi Arabia:

The content of the "My Body" unit on the Rowdhati platform						
Topics	Activities	N		Topics	Activities	
The young Muslim	Surat Al-Asr	2				
	Mentioning putting on a new garment					
Parts of the body	1. Video on the concept of body parts	7		Identifying the hand	1. Video on the concept of finger names	7
	2. Story of sitting in the dental clinic				2. Story what's this sound?	
	3. Story of our favorite toy				3. Story my new shoes	
	4. Tech activity number rhyme				4. Song God is our creator	
	5. Tech activity my healthy habits				5. Tech activity flower words	
	6. Sensory activity I express with my hand				6. Tech activity what do you hear?	
	7. Sensory activity my beating heart				7. Sensory activity guess what this is?	

Names of fingers	1. Video on maintaining body health	8		Maintaing my body	1. Video on the concept of finger names	7
	2. Story my body is mine				2. Story what's this sound?	
	3. Story surprise in our garden				3. Story my new shoes	
	4. Song five from the police				4. Song God is our creator	
	5. Interactive activity emergency car				5. Tech activity flower words	
	6. Interactive activity the amazing scale				6. Tech activity what do you hear?	
	7. Sensory activity paper cutting				7. Sensory activity guess what this is?	
	8. Sensory activity I can measure					
Scientific experiments	Floating and sinking experiment	1		Values	Value of hand hygiene	1
Letters	Letters (d, y, a)	3		Physical activity	Relaxation and breathing	
Art activity	Innovation - From a glove	1		Games	Lost dolls game	2
					Match and discover game	
Total 40						

Table (2) Describing the content of the "I" unit on the Rowdhati platform for kindergarten in Saudi Arabia:

The content of the "I" unit on the Rowdhati platform						
Topics	Activities	N		Topics	Activities	
The young Muslim	Surat Al-Ikhlas Surat Al-Fatihah Supplication upon waking up Monotheism	4				
Who am I	1. Video on the concept of who am I	7		I am growing	1. Video on the concept of I'm growing	7
	2. Story I am a human				2. Story of the lone sock	
	3. Story I am strong				3. Story letter mess	
	4. Interactive activity colored flower basket				4. Song days of the week	
	5. Interactive activity different emotions				5. Tech activity human growth stages	
	6. Sensory activity who looks like me				6. Tech activity I, you, we	
	7. Sensory activity my ID card				7. Sensory activity I grew up	
Feelings	1. Video on the concept of feelings	8		Children's rights	1. Video on child's rights concept	7
	2. Story I fly with my dreams				2. Story calm down Talal	
	3. Story what do I do when?				3. Story Bunny dresses himself	
	4. Song little hands				4. Song I have a dress oh Hassan	
	5. Interactive activity hidden letters				5. Tech activity number values	
	6. Interactive activity shape domino				6. Tech activity expressive faces	
	7. Sensory activity I				7. Sensory activity I express my	

	express my happiness				feelings	
	8. Sensory activity I help others					
Scientific experiments	Floating and sinking experiment	1		Values	Value of self-esteem	1
Letters	- Video letters (a, t, n)	3		Physical activity	- Control and balance	1
Art activity	Innovation - Printing my hand	1		Games	1. Where's my twin game	2
					2-Frog adventure game	
Total 42						

Research Tool: A content analysis card was prepared with the assistance of the tools used in the studies of Al-Zahrani and Shoukra (2021) and Sadiq (2019) for some indicators of digital citizenship values.

Designing the Content Analysis Card Tool: After reviewing previous studies and educational literature on the concept of digital citizenship values, its dimensions, and sub-classifications, six dimensions of digital citizenship were identified (two dimensions for each value of digital citizenship values) to be measured and studied in the "My Body" and "I" units available on the Rowdhati platform. An initial list of digital citizenship value dimensions was created consisting of 25 sub-indicators.

Validity of the Content Analysis Card Tool: The face validity (expert validity) of the tool was verified by presenting it to a group of educational supervisors, kindergarten teachers, faculty members, and educational leaders to determine the suitability of the tool for the aspects it was designed to measure.The tool was modified based on the experts' opinions and suggestions. The linguistic phrasing of the items was modified, two items were deleted, and 7 items were added, bringing the total number of items in the analysis card to 30 distributed over six dimensions.

Reliability of the Content Analysis Card :The analysis included: analyzing the existing content and activities. The number of items in the "My Body" unit was 40, while the "I" unit contained 42 items. To ensure the reliability of the content analysis card, two rounds of analysis were conducted with a one-week time gap. The analyses were then compared, after which another analyst performed the analysis, and a comparison was made between the second analysis and the other analyst's analysis. This was done by calculating the reliability coefficient using the Holsti equation. The following table shows the calculation of the reliability process for the content analysis card.

Table (3) Results of calculating the reliability coefficient for the content analysis card of the "My Body" unit on the Rowdhati platform.

Dimension	Analysis (1)	Analysis (2)	Number of agreement times	Number of disagreement times	Reliability coefficient
Digital Access	11	11	11	0	1
Digital ethics	9	8	8	1	0.94
Digital rights and responsibilities	5	3	3	2	0.75
Digital culture	5	4	4	1	0.88
Digital health and safety	0	0	0	0	0
Digital security	0	0	0	0	0
Total	30	26	26	4	0.92

It was shown in Table (3) and by applying the Holsti equation that the total analysis expressions came in at a ratio of (0.92). This is a good percentage that indicates the accuracy of the analysis card and the suitability of the tool for the purposes of the study.

Table (4) Results of calculating the reliability coefficient for the content analysis card of the "I" unit on the Rowdhati platform.

Dimension	Analysis (1)	Analysis (2)	Number of agreement times	Number of disagreement times	Reliability coefficient
Digital Access	11	11	11	0	1
Digital ethics	11	11	11	0	1
Digital rights and responsibilities	10	9	9	1	0.94
Digital culture	7	5	5	2	0.83
Digital health and safety	0	0	0	0	0
Digital security	0	0	0	0	0
Total	39	36	36	4	0.96

It was shown from the table and by applying the Holsatti equation that the sum of the analysis expressions came to a ratio of (0.96). This is a good percentage that indicates the accuracy of the analysis card and the suitability of the tool for the purposes of the study.

Statistical Methods Used

The following statistical methods were used:

- Holsti equation to calculate the reliability of the analysis form for the digital citizenship dimensions included in the "My Body" unit.
- Frequencies, percentages, and mean scores to answer the research questions.

The following table was used to judge the degree of inclusion:

Table (5) Judging the Degree of Inclusion

Percentage		the degree of inclusion
from	to	
0%		not included
0.1%	20%	Very low embedded
More than 20%	40%	Low embedded
More than 40%	60%	moderately embedded
More than 60%	80%	highly embedded
More than 80%	100%	Highly embedded

The Fourth Axis - Results of Research Questions, Discussion and Interpretation

The following presents the research results by answering the questions, discussing the results, and providing interpretations:

First: Results of the Research Questions

Results of the First Question: What are the dimensions of digital citizenship values that should be available in the content of the Rowdhati platform?

This question was answered by preparing a list of digital citizenship dimensions that should be available on the Rowdhati platform. A number of sub-items were included under each dimension. Table (6) shows the detailed list of digital citizenship value dimensions.

Table (6) Final List of Digital Citizenship Value Dimensions and Indicators of their Inclusion in the Educational Unit Content on the Rowdhati Platform

citizenship value	citizenship value dimensions.		
Respect and social interaction values	Digital Access	**1.**	Using search engines to access the platform
		2.	Referring to authenticated sources and websites when taking content
		3.	Using search engines to access unit elements
		4.	Using digital devices to solve assignments and tasks
		5.	Diversifying the use of different digital sources
		6.	Benefiting from various digital sources
	Digital Etiquette and Ethics	**7.**	Instilling correct digital values and behaviors in light of ethical values
		8.	Developing self-monitoring when using digital devices and sensing God's watching
		9.	Adhering to acceptable digital usage methods
		10.	Presenting models of good example in the digital community
		11.	11. Avoiding unacceptable behaviors in digital communities (impersonation, spreading rumors, inappropriate images, etc.)

Security and protection values	Digital Rights and Responsibilities	**12.**	Promoting cultural identity in the digital community
		13.	Promoting Saudi cultural identity in the digital community
		14.	Taking pride in the Arabic language in the digital community
		15.	Defending national values in the digital community.
		16.	Spreading peace and tolerance in the digital community
		17.	Urging respect for others' opinions and attitudes in the digital community
		18.	Avoiding infringement of others' digital intellectual property rights (academic integrity)**.**
Scientific and cultural values	Digital Culture	**19.**	Keenness to seek religious and applied knowledge through self-learning
		20.	Benefiting from other societies' cultures in accordance with religious constants and national values
		21.	21. Enhancing participation in cultural programs with national identity
		22.	Encouraging participation and spreading Saudi culture in the digital community
security and self-protection values	Digital Health and Wellness	**23.**	Observing physical health rules when using digital devices
		24.	Observing psychological health rules when using digital devices
		25.	Importance of time management when using digital devices
		26.	Considering good specifications for healthily safe digital devices (in terms of accuracy, lighting, manufacturing materials)
	Digital Security	**27.**	Warning against sharing private data of the digital community
		28.	Taking preventive and security measures against digital crimes and not hacking individuals' devices
		29.	Warning against using unsafe digital applications and websites
		30.	Introducing safe applications and websites

Results of the second Question: What are the dimensions of digital citizenship values that should be available in the content of the Rowdhati platform?
This question was answered by analyzing the content of the "My Body" Unit Available on the Rowdhati Platform. Results of the analysis showed the following:

Table (7): Frequencies, Percentages and Ranks of Digital Citizenship Value Dimensions in the "My Body" Unit Available on the Rowdhati Platform

N	Dimensions of Digital Citizenship Value	Frequencies											Total frequences	Percentage	Degree
		Young Muslim	Parts of the body	Identifying the hand	My five fingers	Maintaining my body's health	Scientific Experiments	Values	Letters	Physical Activity	Art Activity	Games			
1	Digital Access	1	1	1	1	1	1	1	1	1	1	1	11	42.3 %	Moderate
2	Digital Ethics	1	1	1	1	1	0	1	0	0	1	1	8	30.7 %	Moderate
3	Digital Rights & Responsibilities	0	0	1	1	1	0	0	0	0	0	0	3	11.5 %	Low
4	Digital Culture	1	0	0	0	0	1	1	1	0	0	0	4	15.3 %	Very Low
5	Digital Health & Wellness	0	0	0	0	0	0	0	0	0	0	0	0	0%	Not Included
6	Digital Security	0	0	0	0	0	0	0	0	0	0	0	0	0%	Not Included
Total		1	2	3	3	3	2	3	2	1	2	2	26	100 %	

The table shows a variation in the inclusion of digital citizenship value dimensions in the content of the "My Body" unit, according to the content analysis card. The total frequencies reached 26 (100%), distributed among the digital citizenship dimensions as follows:
The "Digital Access" dimension ranked first with a moderate degree of 42.3%, the highest inclusion degree among the other dimensions in the "My Body" unit. The "Digital Ethics" dimension came second with 30.7% and a low degree. The "Digital Culture" dimension ranked third with 15.3% and a very low degree. The "Digital Rights and Responsibilities" dimension ranked fourth with 11.5% and a very low degree. Finally, the "Digital Health and Wellness" and "Digital Security" dimensions had a mean score of zero, indicating a weak

inclusion of digital citizenship value dimensions in the "My Body" unit content on the Rowdhati virtual platform.

Table (8): Frequencies, Percentages and Ranks of Digital Citizenship Value Dimensions in the "I" Unit on the Rowdhati Platform

N	Dimensions of Digital Citizenship Value	Frequencies											Total frequences	Percentage	Degree
		Young Muslim	Concept of who aml	I am developing	Feelings	Child's rights	Scientific Experiments	Values	Letters	Physical Activity	Art Activity	Games			
1	Digital Access	1	1	1	1	1	1	1	1	1	1	1	11	42.3 %	Moderate
2	Digital Ethics	1	1	1	1	1	1	1	1	1	1	1	11	42.3 %	Moderate
3	Digital Rights & Responsibilities	1	1	1	1	1	1	1	1	0	1	0	9	25%	Low
4	Digital Culture	0	1	1	1	1	0	1	0	0	0	0	5	13.8 %	Very Low
5	Digital Health & Wellness	0	0	0	0	0	0	0	0	0	0	0	0	0%	Not Included
6	Digital Security	0	0	0	0	0	0	0	0	0	0	0	0	0%	Not Included
Total		3	4	4	4	4	3	4	3	2	3	2	36	100%	

It is evident from the previous table that there is a variation in the inclusion of the content of the "I" unit for the dimensions of digital citizenship values, as stated in the content analysis card. The total number of recurrences was (36), with a percentage of (100%), distributed in order on the dimensions of digital citizenship values as follows:

The first rank was for the (Digital Access) dimension and the (Digital Etiquette and Ethics) dimension with a percentage of (42.3%), which is the highest percentage for the degree of inclusion of digital citizenship values dimensions. Then, in the second rank came the (Digital Rights and Responsibilities) with a low degree of (25%). In the third rank was the (Digital Culture) dimension with a very low degree of (13.18%). Finally, with a degree of inclusion of (zero) for the two dimensions: (Digital Health and Safety) and (Digital Security) with a mean of (zero), indicating a weakness in the inclusion of digital citizenship

dimensions in the content of the educational units on the Rowdhati platform: the "I" unit and the "My Body" unit as examples.

Secondly: Discussion and Interpretation of Results: In light of the detailed results of analyzing the content of the educational units on the Rowdhati platform ("I" unit and "My Body" unit as examples), a general conclusion was reached that there is a low degree of inclusion of the dimensions of digital citizenship values in the educational units on the Rowdhati platform. This result agrees with the findings of Al-Zahrani and Al-Shukri's (2021) study and Salam's (2016) study, while it differs from Al-Bassam's (2021) study, which came with a moderate percentage. This may be attributed to the fact that the concept of digital citizenship in the kindergarten stage is still new, and the efforts of those concerned with developing early childhood curricula are still ongoing to update the content of these curricula by including the concepts, values, and skills that contribute to achieving the goals of the Kingdom's Vision 2030 and the goals of the Human Capabilities Development Program, which includes the dimensions of digital citizenship values.The results also indicated that there is a variation in the inclusion of the dimensions of digital citizenship values; some of them came with a moderate degree, while others were not included. This result agrees with the studies of Al-Shammari (2022), Al-Zahrani and Al-Shukri (2021), Al-Bassam (2021), and Basarmak et al. (2019).

The results also showed, based on the variation in the degree of inclusion of the dimensions of digital citizenship values, the ranking of those dimensions; where the (Digital Access) dimension and the (Digital Etiquette and Ethics) dimension got the highest ranking, although the degree of inclusion was moderate. This result agrees with the findings of the studies by Al-Habib (2020) and Al-Zahrani and Al-Shukrh (2021), which confirmed the high rate of inclusion of the (Digital Access) dimension in Islamic education curricula. The researchers may attribute this result to the provision of diverse sources and means in the educational units that the child can refer to to complete the learning process, in addition to the existence of electronic educational programs that help the child access information. As for the (Digital Etiquette and Ethics) dimension, the researchers may attribute this to the existence of a clear code of ethics with specific items regarding digital dealing within the framework of digital ethics.However, this result differs from the results of Al-Shirari's (2022) study, which indicated a severe decline in the indicators of the (Digital Behavior) dimension. This difference may be attributed to the difference in the learning platform, being virtual in the current study, while it is a real physical environment in Al-Shirari's (2022) study.

The second and third ranks went to (Digital Rights and Responsibilities) and (Digital Culture) with low and very low degrees. This result differs from the findings of Al-Habib's (2022) study, in which the highest frequencies were in favor of (Digital Education), and Davis' (2020) study, which found that educational curricula develop through the use of the (Digital Responsibility) dimension. This may be attributed to the delay in developing the early childhood curriculum in the Kingdom of Saudi Arabia in the aspects of digital culture and digital responsibility, despite the efforts of the Ministry of Education to incorporate the new curricula and provide them with the digital dimension in general. However, digital activities were not mandatory but rather optional.

The results came with an inclusion degree of (zero) for the (Digital Health and Safety) dimension, and the (Digital Security) dimension. This result differs from the results of Al-Habib's (2022) study, which indicated that the digital health and safety dimension gained the highest percentage of agreement among teachers' perspectives on including it in Islamic education curricula at the primary stage. However, it agrees with what came in Alshirari's

(2022) study results, which indicated: The least represented among the dimensions of digital citizenship values are: the (Digital Security) dimension, and the (Digital Health and Safety) dimension. The researchers attributes this assumption to the fact that this result came within the framework of the delay in developing educational curricula in the digital environment, which results in a low or lack of dimensions of digital citizenship values, despite the efforts of the National Cyber Security Authority represented by its branches in the bodies affiliated with the Ministry of Education in launching awareness programs for digital security. However, the matter may need more than awareness, by training curriculum developers or providing them with a specialized and intensively trained team in all areas of digital citizenship.

Research recommendations

First: recommendations

In light of the research objective and the findings, the following recommendations can be :made

- -Updating the content of the Saudi national curriculum for early childhood by including the values of digital citizenship
- Benefiting from global experiences in developing digital citizenship in the digital society, especially in the kindergarten stage.
- Holding awareness and educational meetings for children and parents on the best practices for using technology.
- Promoting the values of digital citizenship among leaders and teachers, and holding conferences on the importance of spreading digital citizenship.
- The need to focus on the partnership between the family, educational, media, and religious institutions in consolidating the axes of digital citizenship.

Second – Suggestions

In light of the previous results and Suggestions , the following can be proposed:

- Building an educational unit on the dimensions of digital citizenship for the kindergarten stage.
- Analyzing the curricula of the early grades in light of the values of digital citizenship.
- Conducting a study to identify the challenges facing early childhood teachers in instilling the values of digital citizenship.
- Conducting a study to identify the level of digital citizenship among parents in the early childhood stage.

References

Abdrabbo, Obair; Al-Sulayani, Salha; Al-Rifai, Duaa; Muhammad, Rehab; Abdelmaqsoud, Rasha. (2021). Promoting Digital Citizenship Values among Kindergarten Children in Light of Some Psychological Variables from the Mother's Point of View, Journal of Youth Researchers, Sohag University, Faculty of Education, No. 7, pp. 566-610.

Abu Zir, Salwa Abu Bakr; Al-Dhubaiani, Ilham Ahmed; Al-Omair, Afaf Rashid; Al-Hassan, Jumana Faisal; Al-Zahrani, Wad; Said, Al-Baqami, Al-Hanawf Majed. (2022). Analyzing the "The World Around Me" unit in the virtual kindergarten in light of enhancing cultural identity. Journal of Curricula and Teaching Methods, 1, 16.

Al-Adwan, Zaid. (2015). The Impact of a Training Program on Developing the Principles of Global Citizenship among History Teachers in Jordan, Journal of Educational

Sciences Studies, Princess Alia University College at Al-Balqa Applied University, Vol. 2, No. 11.

Al-Ahmari, Ilham. (2020). The role of student activities in Saudi universities in achieving the goals of Saudi Vision 2030 from the students' perspective. Scientific Research Journal in Education, 21, 46-109.

Al-Aqab, Abdullah. (2017). The Role of Electronic Discussion and Debate Forums in Enhancing the Academic Performance of Graduate Students and the Obstacles to Their Application in the Department of Curricula and Teaching Methods, College of Social Sciences, Imam Muhammad bin Saud Islamic University, Master's Thesis in Education and Psychology, p. 58.

Al-Bakri, Abu Ubaid Abdullah bin Abd al-Aziz al-Andalusi. (1971). Fasl al-Maqal fi Sharh Kitab al-Amthal [Decision of Speech in Explaining the Book of Proverbs]. Beirut.

Al-Bassam, Najalaa Saleh Suleiman. (2021). The degree of availability of digital citizenship value dimensions in Islamic education curricula for the secondary stage from the viewpoint of its teachers in Makkah Al-Mukarramah. Journal of Educational and Psychological Sciences, 5(19).

Al-Bayhaqi, Abu Bakr Ahmad bin Al-Husayn bin Ali Al-Khurasani. (1423H-2003). Shuab al-Iman [Branches of Faith], edited by Mukhtar Ahmad Al-Nadwi. Al-Rushd Library.

Al-Dehshan, Jamal; Al-Fawaihi, Hazza. (2015). Helping digital citizenship as an approach for our children to live in the digital age. Journal of Psychological and Educational Research, College of Education, Menoufia University, Egypt, 30(4), 1-24.

Al-Ghazali, Abu Hamid Muhammad bin Muhammad. (1413 AH). Al-Mustasfa min 'Ilm Al-Usul, edited by: Muhammad Abdul Salam Abdel Shafi, Dar Al-Kutub Al-Ilmiyah.

Al-Habeeb, Ibtisam Saleh Habeeb. (2022). The role of Islamic education curricula for the primary stage in achieving the elements of digital citizenship from the teachers' point of view. Journal of Educational Sciences, 9(2).

Al-Husain, Ahmed; Al-Assiri, Bandar Mufrih. (2020). Digital Education to Achieve the Requirements of Vision 2030: Concepts, Objectives, Values, Programs, Charter, Fields, Requirements. Dar Takwin for Publishing and Distribution.

Al-Jazar, Hala Hassan. (2014). The role of the educational institution in instilling the values of digital citizenship: A proposed conception. Arab Studies in Education and Psychology, Arab Educators Association, 56.

Al-Junabi, Fayez; Al-Ajjar, Haidar; Farhan, Mahmoud. (2018). Analyzing the content of social studies books for the primary stage according to the principles of citizenship. Journal of the College of Basic Education for Educational and Human Sciences, University of Babylon, 38, 569-589.

Al-Mallah, Tamer. (2017). Digital Citizenship: Challenges and Hopes, Cairo: Dar Al-Sahab for Publishing and Distribution.

Al-Murikhi, Reem Awad Obaid; Al-Anzi, Naif bin Ammar Al-Suwailim. (2021). The Role of School Administration in Promoting Digital Citizenship Values among Secondary School Students in Al-Majma'ah Governorate, Master's Thesis. Imam Muhammad bin Saud Islamic University, Riyadh.

Al-Musalmani, Lamia. (2014). Education and Digital Citizenship: A Proposed Vision, World of Education, Vol. 15, No. 47, pp. 49-15.

Al-Qarni, Mafr Ahmed Mussal. (2021). The Role of Saudi Universities in Promoting Digital Citizenship Values - An Analytical Study of the Websites of Saudi

Universities, Journal of King Abdulaziz University: Arts and Humanities, Vol. 29, No. 2, pp. 247-290.

Al-Saadi, Ahmed Ayed Barak. (2018). The Role of the School in Promoting the Values of Digital Citizenship among Intermediate School Students in Makkah Al-Mukarramah, Journal of the Educational Association for Social Studies, Vol. 15, No. 99, pp. 127-153.

Al-Sa'di, Abd al-Rahman bin Nasir bin Abdullah. (1420H-2000). Taysir al-Karim al-Rahman fi Tafsir Kalam al-Mannan, edited by Abd al-Rahman bin Mu'alla al-Luwayhiq. Beirut: Mu'assasat al-Risalah, 1st edition.

Al-Samadi, Hanad. (2017). Perceptions of Qassim University Students towards Digital Citizenship (A Field Study on a Sample of Qassim University Students), Journal of Psychological and Educational Studies, Laboratory for the Development of Psychological and Educational Practices, No. 18.

Al-Shahri, Fatima. (2016). The Challenge of the Family in Promoting Digital Citizenship Values: A Proposed Vision, a working paper presented to the scientific forum "The Role of the Family in Preventing Extremism", October 18-19, 2016, College of Social and Administrative Sciences - Naif Arab University for Security Sciences.

Al-Shirari, Al-Anoud Sabi Dayish. (2022). The level of digital citizenship in the jurisprudence and hadith courses for the first intermediate grade in the Kingdom of Saudi Arabia. Journal of Educational Sciences, 9(1).

Al-Sijistani, Abu Dawud Sulaiman bin Al-Ash'ath Al-Azdi. (1436H-2015). Sunan Abi Dawud, edited by Raed bin Abi Ulfah. Jeddah: Dar Al-Hadharah.

Al-Sulayani, Nadia. (2021). The degree to which the computer course contributes to promoting the values of digital citizenship from the viewpoint of teachers in the intermediate and secondary stages in Al-Qura, Makkah [Unpublished master's thesis]. Umm Al-Qura University.

Al-Takhaina, Rushdi Ahmad; Al-Safasfah, Muhammad Ibrahim. (2017). The effectiveness of a multi-model counseling program in developing digital citizenship and improving self-management level among tenth-grade students [Unpublished doctoral dissertation]. Mu'tah University.

Al-Tawalba, Hadi. (2017). Digital Citizenship in National and Civic Education Textbooks - An Analytical Study, Jordanian Journal of Educational Sciences, Vol. 13, No. 3, pp. 291-308.

Al-Tirmidhi, Abu Isa Muhammad bin Isa bin Sawrah bin Al-Dahhak. (1998). Al-Jami' Al-Kabir [The Great Collection], edited by Bashar Awad Maroof. Dar Al-Gharb Al-Islami.

Al-Utayq, Al-Jawhara. (Tuesday, 13 Rabi' Al-Akhir 1441 - December 10, 2019). Virtual Kindergarten: Interactive Technical Activities, Al-Riyadh Newspaper, https://www.alriyadh.com/1792402.

Al-Zahrani, Muajjab. (2019). The school's contribution to achieving digital citizenship for its students in light of contemporary challenges. College of Education, Educational Journal, 68, 394-422.

Al-Zahrani, Samira; Al-Shukrah, Maradi. (2021). Analyzing Islamic curricula in light of digital citizenship. Scientific Journal of King Faisal University, Human and Administrative Sciences, King Faisal University, 22(2), 137-144.

Azhar, Rayam Asaad; Al-Mujrabi, Randa Muhammad. (2022). The role of the "Rowdhati" platform in acquiring some social skills for early childhood children during the Corona pandemic. Arab Journal of Media and Child Culture, 22, 15-552.

Başarmak, U., Yakar, H., Güneş, E. & Kuş, Z. (2019). Analysis of Digital Citizenship Subject Contents of Secondary Education Curricula. Turkish Online Journal of Qualitative Inquiry, 10 (1) , 26-51 . DOI: 10.17569/tojqi.438333

Davis, A .(2020). Digital Citizenship in Ontario Education: A Concept Analysis, University of
Ottawa,26(1) .46-26.DOI: https://doi.org/10.37119/ojs2020.v26i1.467

Dotterer, George, Hedges, Andrew, Parker, Harrison. (2016). Fostering Digital in the Classroom,
Education Digest Journal, vol.82, No.3, Vilnius, Lithuania.

Human Capabilities Development Program. (September 15, 2021). Pillars of the Human Capabilities Development Program. https://www.vision2030.gov.sa/ar/v2030/vrps/hcdp

Ibn Kathir, Abu Al-Fida Ismail bin Omar Al-Qurashi Al-Dimashqi. (2001). Tafsir Al-Quran Al-Azim, edited by: Sami Al-Salama, Riyadh: Dar Taibah, 1st Edition.

Ibn Sham, Nada Ali Hassan. (2017). Citizenship in the Digital Age: The Kingdom of Bahrain Model. Bahrain Institute for Political Development.

Mazen, Hussam al-Din. (2016). In Light of Post-Modernity Challenges and Digital Citizenship, Rectifying Science Curricula, Scientific Education Programs and Their Engineering, a scientific paper presented to the 18th Scientific Conference: Science Curricula between Egyptian and Global, Egyptian Society for Scientific Education, Sheikh Saleh Kamel Center, Al-Azhar University, Cairo.

Ministry of Education. (2021). Rawdati Platform.. Exciting Digital Educational Content for Young Children and Interactive During the Learning Journey, https://www.moe.gov.sa/ar/Pages/default.aspx

Ministry of Education. (2021). The Female Teacher's Account in Applying the Virtual Kindergarten,
https://www.moe.gov.sa/ar/mediacenter/MOEnews/Pages/RD1442-578.aspx

Muhaidib, Hassan. (2018). Awareness of Digital Citizenship among Social Network Users and Its Relationship with Some Variables, International Journal of Learning Management Systems, Vol. 6, No. 1.

Mujahed, Faiza. (2021). The Extent to which Faculty Members at Umran University Practice the Principles of Digital Citizenship from Their Point of View, Al-Bayda University Journal, Special Issue with the Research of the Second Scientific Conference of Al-Bayda University, Vol. 3, pp. 513-541.

Nada, Safa. (2021). Digital Citizenship and Value Change in Egyptian Society: A Descriptive Study Applied to the Faculty of Education - Alexandria University, Journal of the Faculty of Arts, Fayoum University, Vol. 13, No. 2, pp. 2073-2130.

National Program for Happiness and Quality of Life. (2018). Digital Citizenship. UAE, Digital Wellbeing website. https://www.digitalwellbeing.ae/ar/digital-citizenship

Ribble, M. (2015). Digital citizenship in schools: nine elements all students should know. Eugene, Oregon:
International Society for Technology in Education. (Third ed.).

Ribble, M., Bailey, G., & Ross, T. (2004). Digital citizenship addressing appropriate technology behavior.learning & leading with technology, 32(1).

Sadiq, Muhammad. (2019). The Role of the University in Achieving the Principles of Digital Citizenship among its Students in Light of Contemporary Challenges (An

Analytical Study), Journal of the Faculty of Education in Benha, Vol. 3, No. 91, pp. 58-120.

Salam , Basam Sabri. (2016). Dimensions of digital citizenship in national education curricula at the secondary stage: An evaluative study. Journal of Educational Sciences, South Valley University, Faculty of Education in Qena, 29(29), 135-183.

Saudi Vision 2030 - Vision Realization Programs. (2021). Human Capabilities Development Program, the First Pillar: A Globally Competitive Citizen Initiative. https://www.vision2030.gov.sa/ar/v2030/vrps/hcdp

Shaaban, Amal Abdel-Qader. (2018). A proposed vision for promoting the values of digital citizenship for pre-university education students in light of contemporary global trends. Journal of the Future of Arab Education, 25(114), 73-132.

Shafiq, Muhammad. (1996). Scientific Research: Methodological Steps for Preparing Social Research. Alexandria: Modern University Office.

Wagner, Tony. (2015). Creating Innovators: Raising the Next Generation of Innovators Who Will Change the World, translated by Munther Muhammad and Dawood Al-Qarna, Obeikan Library.