https://africanjournalofbiomedicalresearch.com/index.php/AJBR
Afr. J. Biomed. Res. Vol. 27(October 2024); 742-753

Research Article

The 21st-Century Skills: How to Acquire Them and Why They Are Important to Kuwait Vision 2035

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Abstract
Equipping Kuwait's workforce with 21st-century skills is crucial for achieving the nation's vision of a diversified and sustainable economy. From a human resources management perspective, the acquisition of the 21st-century skills is essential for developing a workforce capable of driving Kuwait Vision 2035 forward. HR professionals play a crucial role in identifying and fostering these skills within the workforce. By utilizing a qualitative methodology, the study delves into the experiences and perspectives of thirty-three individuals, comprising fifteen academics from the College of Business Studies (CBS) at PAAET, eleven representatives from the government sector, and seven professionals from the private sector. Through focus group discussion, this study identifies key 21st-century skills, including critical thinking, collaboration, communication, creativity, digital literacy, problem-solving, and flexibility. The research emphasizes the necessity of these skills for driving economic diversification, human capitals, technological advancement, sustainable development, global competitiveness, and enhanced quality of life, all of which are pillars of Kuwait Vision 2035. Furthermore, the study proposes a framework to help in gaining the 21st-Century Skills that are important for individuals to achieve Kuwait Vision 2035. The Framework highlights effective methods for acquiring these skills, such as project-based learning, industry collaborations, internships, workshops, online courses, research projects, and gamification. The Framework also highlights the challenges in skill acquisition, including outdated curricula, lack of resources, insufficient faculty expertise, limited access to technology, and cultural attitudes. This research provides valuable insights into aligning educational and professional development initiatives with the strategic goals of Kuwait Vision 2035, ensuring a well-prepared workforce capable of meeting future demands.

Keywords: 21st Century Skills, Human Resource Management, Kuwait vision 2035, development, Education and Training.

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DOI: https://doi.org/10.53555/AJBR.v27i3.2829

Introduction

Buckle (2023) defined 21st century skills as knowledge, life skills, functional skills, habits and traits that are critical to the success of students in today's world, especially as students move to university and various employers (Lee, et al., 2023). With alumni skill demands on the rise, especially with digital transformation and changing economies, many educational institutions now include twenty-first-century skills in strategic plans to better prepare the students (Howlett & Waemusa, 2018; Francis, et al., 2023). According to (Saavedra & Opfer, 2012), many of the skill lists that are being circulated for the 21st century is not entirely made up of skills that fall into a particular category but rather include many aspects of skills, understanding, and cognition (Al-Hunaiyyan, Bimba, & Al-Sharhan, 2020 R). These skills can be classified into three main types: mental, technological, technical, and social life skills that enable individuals to live in confidence and security while ensuring access to appropriate work that guarantees a decent life (Md. Ibrahim Khalil, et al., 2023; Senathirajah, et al., 2024). As a result, educational institutions in developed countries have been forced to reconsider their curricula and goals with a view to providing graduates with the necessary preparation to keep abreast of the ongoing developments and changes that have engulfed global and local communities. This preparation should allow them to interact with the many challenges and transformations imposed by globalization (Alainati & Al-

Hunaiyyan, 2024). Furthermore, many of these lists place an emphasis on tendencies such as curiosity, creativity, and collaboration, which are not skills in the traditional sense. From a human resources perspective, developing twenty-first-century skills is crucial because it prepares students and workers for the labor market in line with today's employers (Ying, et al., 2023). The education system plays a vital role in equipping individuals with the skills needed for the twenty-first-century workforce (Al-Zahrani & Ibrahim, 2019). This role involves creating an educational environment that fosters the development of a wide range of skills that are critical in today's society, such as digital literacy, critical thinking, effective communication, teamwork, self-directed learning, creativity, and entrepreneurship (Alainati & Al-Hunaiyyan, 2024). Instructors play a pivotal role in guiding and motivating students to develop these skills and apply them in their daily lives and future endeavors (Al-Hunaiyyan, Al-Sharhan, Alainati, & Al-Duaij, 2023; Alainati, Al-Hunaiyyan, Alhajri, Alahmad, & Alkhatib, 2023C; Alainati, Al-Hunaiyyan, & Alkhatib, 2023B). At Kuwait's national and international levels, academics and education officials should support the improvement and development of the educational system to meet the needs of the twenty-first century (Kuwait National Assembly, 2011). This includes potential investment in education towards curriculum development, improving school structure, providing educational technology, and training instructors (Alainati, 2021). In addition, there should be a focus on reducing education opportunity gaps among students from different economic and social backgrounds and ensuring quality education for all. This is particularly important given that the current era is characterized by a knowledge-based economy, where the economic competitiveness of countries depends on the skills possessed by their workforce (Alainati, Alshawi, & Al-Karaghouli, 2009). As a result, employees need to possess the 21st century skills that enable them to succeed and contribute to a knowledge-based society to achieve Kuwait's vision of 2035.

The demands of the 21st century include the ability to solve problems in a flexible manner, to think critically and creatively, to apply knowledge and skills in novel situations, to collaborate and communicate effectively, and to be technologically literate. These skills unquestionably support people's career readiness in industries that are constantly evolving. Educators and researchers in Kuwait and the Gulf States should present proposals, solutions, and research results in order to shape education systems within this situation so that students can acquire the skills of the 21st century, which not only enable them to acquire knowledge but also gives them the ability to produce and apply knowledge in various aspects of life (Senathirajah & Haque, 2022). This is so that students can acquire the skills necessary for a successful future in which they will not only be able to acquire knowledge but also produce knowledge and apply it in various aspects of life. It also aims to provide an organized framework that ensures the involvement of learners in the learning process, helps them build confidence, prepares them for innovation and leadership in the 21st century, and encourages them to actively participate in life (Bimba, et al., 2021; Alainati, Almonawer, & Al-Hammad, 2023D). This is done in order to be able to work according to digital transformations and knowledge-based economies and to realize the visions of the Kuwait and Gulf Cooperation Council (GCC) (Al-Sharhan & Al-Hunaiyyan, 2012).

The objective of this research is to look at the scientific evidence that shows how important these skills are for success in today's business world and how to get them through education and training. Theoretically, this study is significant because it studies and investigates newly adopted skills in the digital. The results may help academics, educators, and curriculum designers benefit from the findings and draw attention to the importance of these skills in all stages of education and training to accommodate the requirements of newly developed economies especially in Kuwait and the Gulf region. Therefore, this article is structured into distinct sections. Section 2 delineates the research objectives, whereas Section 3 conducts a comprehensive literature review and Section 4 explicates the methodology. In section 5, the findings and a discussion of those findings are provided, and an implementation framework is proposed. The paper is concluded in Section 6, which also presents potential directions for future research.

Research Objectives

The objective of this study is to understand the importance 21st Century skills in modern knowledge-based economies and the role of education and training in equipping students and workers with these skills to achieve Kuwait Vision 2035. The specific objectives governing this study are as follows:

1. Identify the 21st-century skills that are mostly needed, specifically in Kuwait.
2. Outline the drivers behind the need for 21st-century skills and its impact on knowledge economies.
3. Understand the opinions of academics and professionals in respect to the 21st century skills, why they are important, how to acquire them, the challenges.
4. Propose an implementation framework to help in gaining the 21st-Century Skills that are Important for individuals to achieve Kuwait Vision 2035.

Literature Review

Comprehensive literature review was conducted to gain a deep understanding of the existing theories, frameworks, and best practices related to the role of educational systems in developing twenty-first century skills. This literature review served as a foundation for the research, enabling the researchers to identify research gaps and formulate research questions.

According to (AlHariri, 2020), the development of higher-order cognitive abilities is directly correlated with the acquisition of these skills through the instruction of twenty-first-century skills. Historically, the primary focus of education was on the acquisition of knowledge and information, which was subsequently followed by periodic testing to evaluate students' comprehension of the material. Nevertheless, it became evident that a more comprehensive approach was necessary to address the changing needs of society as a result of the evolution of education systems and the transition to digital platforms among employers (McKinsey, 2021). Al-Sharhan and others (2020) emphasized that instructors are anticipated to employ advanced technology to deliver educational or training programs at any time and in any location. This will involve the use of information and interactive communications, video

conferencing, and artificial intelligence applications. The acquisition of digital and twenty-first-century learning skills is particularly important when considering the significant transformations that will occur in conjunction with the upcoming learning environments (Al-Hunaiyyan, Al-Hajri, & Bimba, 2021). The learning mechanisms, resources, and future prospects will be significantly impacted by these changes (World Economic Forum, 2016). The absence of proficiency in the integration of educational technology into the public education system, as well as in the development of competencies in technology as a whole, is a substantial impediment to a country's efforts to close the digital educational divide (Al-Sharhan & Al-Hunaiyyan, 2023). Deficits in cognitive and digital abilities are substantial barriers to the general public's internet access, as per the ITU study on the information society (ITU, 2018). This is also applicable to the Gulf Countries Council (GCC) societies, as Internet access and technical access suggest that as e-Government, digital work, and educational activities become more intricate, populations with fewer computer skills will have greater access to these technologies in comparison to developed nations (Al-Hunaiyyan, Alhajri, Alzayed, & Alraqqas, 2016). The research also noted that personal talents, which surpass technical and fundamental abilities, are becoming more in demand, which is a significant indication of the insufficient development potential of countries.

It is essential that the educational system fosters critical thinking, encourages creative thinking, and improves students' ability to develop original concepts and innovative solutions to problems (Al-Sharhan & Al-Hunaiyyan, 2023; Katara, 2023). Additionally, it is imperative that students enhance their research skills by conducting a critical analysis of scientific sources and online content to ensure the availability of reliable and accurate information (Al-Hunaiyyan, Alhajri, Al-Sharhan, & Al-Ghannam, 2021C). Furthermore, it is imperative to enhance and fortify students' self-learning capabilities in order to encourage the acquisition of new skills, collaboration, and continuous learning (Oliver & Jorre de St Jorre, T, 2018). In a society that necessitates proficient interpersonal interactions, the importance of leadership and collaboration skills is paramount (Almonawer, et al., 2023). In addition, engaging learning experiences in authentic contexts should be provided to students in order to teach and integrate the abilities of the twenty-first century into the current curriculum (Sherifi, 2015). Similarly, flipped classroom, Active Learning, Effective Learning, Problem-Based Learning, Active Learning, and Game-Based Learning are all instructional approaches and strategies that facilitate the integration of twenty-first century competencies into the academic curriculum (Benq, 2021; Liu, Zhao, & Su, 2022). Educators are authorized to implement modern learning methodologies that prioritize students' requirements and encourage the acquisition of skills that are in high demand in the labor market and industries. These abilities may encompass the ability to solve problems, critical thinking, proficiency in computer applications, and a comprehension of how to integrate them into educational environments. The focal points of the learning process is to assume diverse roles, and innovation, are equally essential for attaining success in the twenty-first (Bashir & Miyamoto, 2020; Oliver & Jorre de St Jorre, T, 2018). Instructors are responsible for the transmission of the knowledge, skills, and resources that are essential for success in the labor market and industry, as well as the promotion of ethical and cultural values.

Teachers are accountable for motivating students to achieve their life goals and providing them with the requisite skills to navigate the ever-changing job market (Bedir, 2019). Instructors face a multitude of challenges when teaching twenty-first-century skills, which must be effectively addressed and overcome. Instructors are significantly obligated to improve students' understanding of their community, as indicated by the research conducted by (Al-Zahrani & Ibrahim, 2019; Zahra & Tilly, 2020). In order to achieve this, educators must effectively assess and distinguish between positive and negative components of social media and other media content (Al-Hunaiyyan, Alhajri, Al-Sharhan, & Bimba, 2021C; Alhajri, Al-Sharhan, Al-Hunaiyyan, & Alothman, 2011; Al-Kandari, Al-Sumait, & Al-Hunaiyyan, 2017). Instructors must possess a comprehensive knowledge base in order to effectively support the cultural identity of their community, accommodate diverse learning styles (Alhajri & Al-Hunaiyyan, 2016), articulate national and local initiatives, and promote positive ideas and values that are prevalent in the community. Furthermore, Al-Zahrani and Ibrahim (2019) introduced the concept of learning for knowledge, which incorporates lifelong learning and abilities such as information-seeking. It is essential for educators to redirect their focus from the transmission of scientific knowledge to the implementation of effective pedagogical approaches, as (AlHariri, 2020) has stated. This requires the transformation of students from passive recipients of knowledge to active contributors who possess the ability to communicate and innovate, as well as critical thinking, collaboration, and creativity (Saddiq, 2020; Al-Hunaiyyan, Al-Sharhan, Alainati, & Al-Duaij, 2023).

Much research has shown how important 21st-century skills are. The results of a study by Thang et al. (2014) showed that using digital storytelling to teach English for academic purposes is well received by both students and teachers. The main focus of the review of the preliminary results was on how well the new way of teaching promotes 21st-century skills like language skills, interpersonal skills, interactive communication skills, and technology literacy skills. A recent and important study by (Norahmi, 2017) asked people to write down their thoughts on the activities teachers use during the teaching and learning process. The results showed that most of the students thought teachers in the 21st century would know how to use modern technology and understand how students will behave in the future. A large literature review conducted by (Ahmadi, 2018) found that using technology improves the interaction between EFL teachers and students, helps students develop their thinking skills, makes the learning process more student-centered, and boosts students' independence, self-confidence, and motivation to learn a foreign language well (Al-Sharhan, Al-Hunaiyyan, & Gueaieb, 2006). Another study (Bedir, 2019) looked at how future English teachers see the 4Cs and how they can help students learn and innovate in the 21st century. Students say that 21st-century education means using technology to teach in the classroom. The 4Cs were not very

well known to them, but they had a good opinion of them. Furthermore, Asri (2019) introduced several novel techniques to be implemented in English classrooms of the twenty-first century to promote critical thinking and language acquisition. For instance, creating videos and multimedia creations, constructing an argument based on collected data, and writing several types of texts for a variety of purposes. Students can learn how to be a part of the local or global community by solving problems that affect the local or global community or by making choices at the national or international level. Another similar study (Howlett & Waemusa, 2018) looked at how much Thai high school English students thought that smart devices would help them learn and be happier. According to the results of a survey about 21st-century learning skills, most students agree that their phones help them learn and are more satisfying (Ahmed, Haque, Senathirajah, Chawdhury, & Khalil, 2022). They also showed that they were ready to learn on their own using mobile devices and 21st-century learning skills (Al-Hunaiyyan & Al-Hajri, 2018).

The "twenty-first century skills" go beyond the traditional academic subjects and encompass a combination of cognitive, social, and emotional competencies (Alainati, Al-Hammad, & Alhajri, 2023). They include critical thinking, problem-solving, creativity, communication, collaboration, adaptability, digital literacy, and global awareness, among others (Saavedra & Opfer, 2012; Abah Abah, 2020). In recent times, numerous countries have witnessed the development of educational frameworks and curricula that place a greater emphasis on fostering the competencies, understanding, and dispositions essential for achievement in the twenty-first century. Larson & Miller (Larson & Miller, 2011) pointed out that twenty-first century talents are described in a variety of ways, but in general, they emphasize the application of information practically and the utilization of communication skills in real-world contexts. Another definition, in (Wagner, 2008), suggests that students need seven skills to prepare for life, work, and citizenship in the 21st century: Critical thinking and problem solving; Collaboration and leadership; Agility and adaptability; Initiative and entrepreneurship; Effective oral and written communication; Accessing and analyzing information; Curiosity and imagination (Duz, Serkan; Aslan, Tahir Volkan , 2020). Various research has established that twenty-first century abilities are crucial. The research conducted by Thang et al. (2014), shown that the implementation of Digital Storytelling as an instructional method for English for Academic Purposes elicits favorable reactions from both students and teachers. The evaluation of the initial results revolved around the degree to which the novel pedagogical approach improves the cultivation of twenty-first century competencies, including but not limited to linguistic proficiency, technological literacy, interactive communication, and interpersonal aptitudes. An important study (Norahmi, 2017) intended to collect the written perspectives of respondents regarding the teaching-learning activities implemented by instructors (Al-Doub, Goodwin, & Al-Hunaiyyan, 2008). The findings indicated that a considerable proportion of students anticipated their 21st century educators to possess expertise in contemporary technologies and the forthcoming attributes of their contemporaries. Consequently, academic establishments in developed nations have been compelled to reevaluate their aims and curricula to equip graduates with the essential skills and knowledge required to navigate the continuous transformations and advancements that have impacted both local and global communities (Bashir & Miyamoto, 2020). This level of readiness ought to enable them to manage these persistent obstacles and confront the numerous problems presented by globalization, specifically in light of the escalating complexities associated with digital transformation and overall change (Dahlstrom, Brooks, & Bichsel, 2014).

Education serves a myriad of purposes and benefits by promoting the development of students' talents and skills, values and principles, and the ability to make significant contributions to society. The present era is distinguished by the integration of cultures, a more open global market, and advancements in knowledge cultures (Al-Hunaiyyan, 2000; Al-Huwail, Al-Sharhan, & Al-Hunaiyyan, 2007; Al-Hunaiyyan & Al-Sharhan, 2009). In the twenty-first century, it is essential to adapt to technological advancements, as the utilization of technology for collaborative work and communication has an impact on the attainment of educational objectives. The acquisition of fundamental information, technological proficiency, ingenuity, and essential professional competencies by students must be facilitated by curricula (Alainati, 2021B). The development of twenty-first century competencies, a collection of skills that enable students to effectively navigate the challenges of an ever evolving and expanding international environment, has been significantly influenced by curriculum redesign and the implementation of innovative pedagogical approaches. Participation in the development of learning in the twenty-first century is a comprehensive framework that aims to incorporate and integrate these competencies into the academic curriculum (Scott, 2015). In order to guarantee the successful integration of these skills into the educational system, it is imperative to create an era that is defined by the emergence of new perspectives and personalities, as well as the advancement of technology and knowledge. This era should enable students to create their own classrooms (Alzayed & Al-Hunaiyyan, 2021). Educators are required to evaluate their instructional strategies, integrate competencies that are relevant to the twenty-first century, and establish connections to practical scenarios (AlHariri, 2020).

According to a recent employee survey, corporations are now anticipating that colleges will shift their focus from an excessive emphasis on theoretical education to a focus on equipping graduates with the requisite skills to effectively engage in the workforce (Benq, 2021). Educational institutions must promptly confront the challenge emphasized by these advancements in order to address the skills divide in the twenty-first century. It is essential that students acquire the fundamental competencies that are relevant to the information economy in order to be adequately prepared for the demands of a renewable labor market (Hofni, 2015). By providing students with instruction in twenty-first-century skills that are specifically associated with the development of critical thinking abilities, it is possible to acquire these competencies. Historically, the primary focus of education was the acquisition of knowledge and information, with periodic assessments used

to evaluate students' understanding of the subject matter (AlHariri, 2020). However, it is clear that a more comprehensive strategy is required to meet the evolving needs of society, given the digital transformation in the workplace and the advancements in education systems.

Kuwait has acknowledged the necessity of providing its students with the necessary skills to succeed in the twenty-first century in recent years. Kuwait's educational system has undergone a significant transformation since its modest inception, transforming into a modern and comprehensive framework that prioritizes the acquisition of twenty-first-century skills (Al-Hunaiyyan, Al-Sharhan, Alainati, & Al-Duaij, 2023). In the swiftly changing world of today, it is imperative that educational systems adapt and provide students with the requisite skills to succeed in the twenty-first century. It is imperative to analyses the most effective strategies from international educational systems that have effectively implemented strategies to develop these skills as countries endeavor to improve their human capital (Al-Melaiji, 2011; Alainati, 2024 A). Education officials and policymakers in Kuwait assessed the efficacy of the educational systems of other countries and collaborated on numerous visits (Kuwait National Assembly, 2011). One notable example is Finland's educational system, which consistently rates among the top performers in various global education indices, as per (AlKandari, 2013). Finland's success can be attributed to its comprehensive educational approach, which emphasizes the development of social and emotional abilities in addition to academic achievement. Finland equips students with the necessary skills to confront a diverse array of future obstacles.

Singapore is an additional example, which is distinguished by its emphasis on science, technology, engineering, and mathematics (STEM) education. Critical thinking, innovation, and problem-solving are prioritized in Singapore's educational system. Singapore guarantees that its students acquire the essential competencies to thrive in the fiercely competitive global economy by means of project-based evaluations, hands-on learning experiences, and close collaboration between academia and industry (AlKandari, 2013). These international best practices offer Kuwait's educational system valuable insights as it endeavors to improve its human capital. Kuwait can guarantee that students acquire not only robust academic skills but also social, emotional, and vocational abilities by implementing a comprehensive educational strategy. In Kuwait, little research focuses on 21st centuries skills and future jobs, this research will fill this gap by investigating issues that may be valuable to academics, educators, and curriculum designers, as they highlight the significance of certain skills that are essential for the development of newly emerging economies, particularly in Kuwait and the Gulf region. The results spot the lights on the need to incorporate these skills into all stages of education and training.

Research Methodology

This research employs a qualitative methodology, which is particularly suited for understanding complex human experiences, phenomena, and contexts. The qualitative approach is chosen because it focuses on exploring the "how" and "why" questions, enabling researchers to gain deeper insights into the skills required for the 21st century in Kuwait. This approach provides context to the data, making it possible to understand the circumstances and settings in which participants' experiences occur (Nyumba, Wilson, Derrick, & Mukherjee, 2018). The study was conducted at the college of Business Studies (CBS) involves thirty-three participants divided into three groups: fifteen academics from CBS at PAAET in Kuwait, eleven officials from the government sector and seven supervisors from the private sector. The inclusion of participants from different sectors ensures a comprehensive understanding of the skills required across various domains. The focus group session was used as the primary data collection method. This involves guided discussions facilitated by the researchers, allowing participants to share their experiences and insights. This enabled participants to interact with each other, often leading to richer data as individuals build on each other's ideas. The researchers ask open-ended questions that encourage detailed responses. These questions cannot easily be reduced to numerical form, making them ideal for exploring complex issues. By understanding the skills needed for the 21st century, this research aligns with Kuwait Vision 2035's goals of economic diversification, technological advancement, and sustainable development. The insights gained can inform educational policies and training programs, ensuring they are aligned with the future needs of the workforce in Kuwait. In addition, the diverse participant base provides sector-specific insights, helping to tailor strategies for skill development across different industries.

Results and Discussions

This section presents the results of the qualitative analysis, providing insights within outcomes to identify the 21st century skills, importance, challenges, and ways to acquire and improve the skills of individuals to accommodate the new challenging economies providing recommendations and improvement. In addition, an implementation framework is proposed to help in gaining the 21st-Century Skills that are important for individuals to achieve Kuwait Vision 2035.

Qualitative Analysis (Focus Group Discussion)

Thirty-three individuals participated in the Focus group session (15 academics, eleven from the government sector, and seven from the private sector) to obtain insights, experiences, and opinions regarding the critical skills of the twenty-first century and the qualities that graduates must possess in a work market that is always evolving. A facilitator led a face-to-face focus group session at CBS and initiated the discussion by introducing the study's purpose and emphasizing the value of participant input. The focus group discourse was directed by the researchers' own predetermined sequence of statements. The data collection process was dependent on the written remarks of the participants and the facilitator's notes taken during team talks. The session was approximately two hours long. The feedback from the focus group was examined utilizing the "three coding methodology" as described by Nyumba et al. (2018). This aided comprehension of the present condition, challenges, prospects, and the competencies required to adapt to the recently established professional environment. Qualitative data on participant perspectives, experiences, and

recommendations were gathered using question-and-answer approach that promoted open debate. A thematic analysis was then conducted to uncover repeating themes, patterns, and major concerns that emerged (Nowell, Norris, White, & Moules, 2017). Additionally, qualitative insights regarding the incorporation of 21st century skills into education and the qualities required of graduates in a dynamic labor market are extracted. Furthermore, the discourse encompassed a broad spectrum of subjects, such as the theoretical underpinnings of 21st century competencies, instances of effective skill integration within educational institutions, obstacles encountered, and prospective approaches to overcome these issues. The ensuing comprehensive discourse in the focus group offered additional understanding of the participants' perspectives regarding the caliber of college graduates. The results were recorded in a report that underwent a process of validation and evaluation by the researchers. The focus group session, which lasted approximately two hours, was attended by thirty-three participants, including academics and experts from the private and public sectors. During this time, numerous issues were addressed and debated.

Participants, especially educators, all concur on the following points: the integration of twenty-first-century skills into the curriculum, the use of a variety of learning strategies that prioritize 21st-century skills, such as game-based learning, problem-based learning, flexible classrooms, and project-based learning. They are of the opinion that the cultivation of critical thinking, problem-solving, and collaboration skills can be improved by involving students in real-world, hands-on initiatives. One participant stated that educators can enhance students' comprehension of the subject matter and cultivate their twenty-first-century skills by designating projects that necessitate students to apply their knowledge to practical scenarios and think critically. Many participants wished that employees be as efficient as possible when using technology. They believe that leveraging a variety of technical tools and resources to build interactive working environments will foster virtual collaboration with others and motivate employees to experiment with new methods of thinking and problem-solving. A participant stated, "We live in a digital world, and our staff must be digitally literate. It is not just about using technology; it is about using it for better efficiency, communication, and overall production". Others advocate for promoting a growth mentality among students by emphasizing the importance of work, tenacity, and resilience. They emphasize the need of creating a classroom culture that values mistakes as learning opportunities while also instilling motivation and self-efficacy. Many participants stated that many employees lack self-awareness and continuous learning abilities, which are critical in today's changing workplace. They argue that the educational system discourages self-learning practices.

Numerous participants endeavored to optimize their employees' utilization of technology. They are of the opinion that by employing a diverse array of technical resources and tools, they can promote virtual collaboration, create engaging work environments, and motivate employees to think creatively and solve problems in innovative ways. The majority of them are interested in emphasizing the significance of resilience, persistence, and effort in the development of a growth mindset among students. They underscore the importance of fostering an environment that recognizes errors as opportunities for personal development and inspires students to have confidence in their capabilities. Several participants expressed apprehension regarding the fact that a substantial number of employees lack the critical thinking and continuous learning skills necessary to thrive in the fast-paced industry of today.

They maintain that the educational system does not endorse self-learning. According to a participant, "Learning does not conclude with a degree, in order to maintain our workforce's competitive edge, it is imperative that our employees adopt a continuous learning perspective". Another quotation: "It is imperative for employees in the contemporary era to consistently pursue new knowledge." It is essential to maintain a commitment to continuous learning in order to remain at the forefront of a world in which information is evolving at an unprecedented pace. Numerous participants addressed the significance of information literacy in addition to technology.

A comment was made that "in order to flourish in an information-rich environment, workers must possess the fundamental skill of being able to sift through, assess, and make prudent use of information." Information literacy is an indispensable asset, not an optional extra. The necessity of prioritizing critical thinking and problem-solving was a subject that was addressed repeatedly during the conversation. They are of the opinion that the integration of real-world events into the curriculum is an effective method for fostering critical thinking and the resolution of complex problems among students (future employees). Students would have the opportunity to pose questions and consider alternative perspectives in their ideal classroom environments.

A participant stated, "It became evident that critical thinking is not merely a desirable attribute; it is the foundation of effective decision-making." In order to effectively navigate the intricacies of our industry, our employees must be proficient problem solvers. However, certain participants underscore the significance of their employees being proficient communicators. They request that educators establish explicit guidelines and expectations to assist students in the development and improvement of their communication abilities. They advocate for students to engage in meaningful dialogue, partake in group discussions, and work in teams. A participant stated, "It became clear that effective communication and collaboration skills are indispensable." Not only are we seeking individual contributors, but we also require team members who are capable of communicating effectively across departments. Another participant stated, "Leadership is not limited to the C-suite, regardless of their position, our employees must demonstrate leadership qualities within their teams". Furthermore, one individual assert that "Our employees must navigate interpersonal relationships with self-awareness and empathy, it is not solely about technical abilities; it is also about comprehending individuals". Similarly, a participant stated, "In a world that demands collaboration and empathy, emotional intelligence is no longer a soft skill; it's a core competency".

Numerous academics have underscored the significance of fostering students' creativity and imagination. In order to enhance students' creative thinking skills, they desire that you implement project-based learning activities. They consistently encourage their employees to be innovative, take risks, and

develop novel solutions to problems. A participant stated, "Our success is rooted in innovation, it is our capacity to generate novel concepts and think creatively that distinguishes us". An additional quote from a participant "In the present day, the capacity to think creatively is a critical skill for any occupation". Additionally, participants mentioned that a more robust partnership between educational institutions and SMEs can ensure that students are given the skills that are in high demand in the job market". Internships, apprenticeships, and exchange programs are excellent opportunities for students to acquire practical experience and enhance their resumes, thereby increasing them. A participant stated, "In the 21st century, everyone is an entrepreneur. The entrepreneurial mindset characterized by initiative, resilience, and a willingness to take risks is key to seizing opportunities and navigating challenges." These views are supported by (Alkharafi, et al., 2024; Md. Ibrahim Khalil, et al., 2023). Regarding skill that are important for driving innovation and economic diversification, which are key objectives of Kuwait Vision 2035, one participant quoted "Critical thinking is fundamental in today's fast-paced world, our students need to be able to analyze complex situations and come up with effective solutions". Similarly, another said "Incorporating digital literacy into our curriculum is not just an option; it's a necessity, because students must be proficient in digital tools to compete globally and support technological advancement". In addition, "Effective communication and the ability to work collaboratively are essential skills to ensure that various departments can work together seamlessly to implement policies and projects that support sustainable development and improve the quality of life for our citizens." One participant stressed on the importance of flexibility and adaptability by saying "The ability to adapt to changing circumstances is crucial for the government workforce". She added, "we work towards the goals of Kuwait Vision 2035, we need employees who can pivot and respond to new challenges and opportunities effectively". A participant from the private sector emphasizes on creativity, she said "Creativity drives innovation, which is the backbone of the private sector". She stressed on encouraging creativity in our workforce, by saying "will lead to the development of new products and services, thereby enhancing Kuwait's global competitiveness". These quotations highlight the consensus among different sectors on the critical importance of 21st-century skills for achieving the strategic objectives of Kuwait Vision 2035.

Framework

The comprehensive literature review presented in the article, which served as a foundation for the research, and the qualitative analysis used in this study allowed to gain a deep understanding of the existing theories, frameworks, and best practices related to the role of educational systems in developing twenty-first century skills, and to the importance of these skills for informing policies and practices aligned with Kuwait Vision 2035. This helped the researchers to propose a framework that is presented in this section.

Figure 1: The 21st Century skills, achieving Kuwait vision, and challenges.

Explanation of the Framework

Acquiring skills that are relevant to the demands of the current job market is essential as it equips students and employees with the necessary abilities sought by contemporary companies. This will aid in the attainment of the objectives outlined in Kuwait Vision 2035 by promoting economic diversification, technical progress, sustainable development, global competitiveness, and improving the overall quality of life. By adopting and executing this all-encompassing framework, Kuwait may assume a crucial and influential position in attaining the goals outlined in Kuwait Vision 2035. Emphasizing the acquisition of 21st-century skills through practical, industry-aligned education guarantees that graduates are fully prepared to lead technical developments and make valuable contributions to the nation's economic diversification and sustainable development objectives. This strategic approach not only improves the quality of education

but also corresponds with the broader objective of converting Kuwait into a knowledge-based, globally competitive economy. The framework, depicted in Figure 1, consists of four categories: 21st Century skills, methods for acquiring these skills, the significance of 21st Century skills for Kuwait's vision 2023, and challenges related to implementation. In order to successfully execute this framework in Kuwait, a series of strategic measures must be undertaken. Below is a comprehensive explanation:

21st-Century Skills:

The 21st century skills as knowledge, life skills, functional skills, habits, and traits that are critical to the success of students in today's world, especially as students move to university and various employers. The acquisition of the 21st-century skills is essential for developing a workforce capable of driving Kuwait Vision 2035 forward. Below are some important skills:

1. **Critical Thinking:** The ability to analyze issues, make decisions, and solve problems by applying critical and reflective thinking.

2. Collaboration: Working effectively and efficiently with others, including teamwork and interpersonal communication.

3. Communication: Articulating ideas clearly and effectively through oral, written, and digital mediums.

4. Creativity: Generating innovative solutions and thinking freely to solve problems and create new opportunities.

5. Digital Literacy: Proficiency in using digital tools and technologies, understanding digital platforms, and leveraging technology for learning and work.

6. Problem Solving: Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

7. Flexibility: Adapting to change, managing multiple tasks, and demonstrating resilience in the face of challenges.

8. Self-Learning: Self-learning is a method of learning in which the individual takes an effort to recognize their own learning requirements, set learning goals, locate relevant resources, and evaluate their own knowledge.

9. Social Skills: A social skill is any competency that facilitates engagement and communication with others by establishing, communicating, and changing social rules and relations in both spoken and nonverbal forms.

10. Leadership: In today's workplace, leadership skills refer to the ability to advise, motivate, and educate other employees in a way that fosters success.

Methods to Achieve the 21st Century skills:

Each 21st-century skill can be acquired through various methods such as project-based learning, industry collaboration, internships, Workshops & Seminars, Online Courses, and research projects. Integrating these methods to develop essential skills, students and employees will be prepared not only for future careers but also aligns with and supports Kuwait Vision 2035.

1. **Project-Based Learning:** Involves students working on projects over an extended period, which fosters deep learning and the application of skills in real-world contexts. This will also encourage collaboration, critical thinking, problem-solving, and creativity.

2. Industry Collaborations: Partnerships with tech companies and industry leaders to provide hands-on experience and exposure to current practices and technologies. This will also help in enhancing digital literacy, communication skills, and professional networking.

3. Internships: Practical work experiences where students apply their academic knowledge in professional settings. This will help in developing problem-solving skills, flexibility, and real-world industry insights.

4. Workshops & Seminars: Short-term, focused educational experiences that provide knowledge and skills in specific areas. This will help in developing continuous learning habits, communication skills, and up-to-date industry knowledge.

5. Online Courses: Flexible, self-paced learning opportunities that cover a wide range of topics in computing and data sciences, allowing for the customization of learning paths to individual interests and needs.

6. Research Projects: Opportunities for students to engage in investigative studies, contributing to advancements in exploration, fostering critical thinking, creativity, problem-solving skills, and leadership.

Kuwait Vision 2035 Goals:

The above-mentioned methods, and strategies can directly contribute to achieving the goals of Kuwait Vision 2035 by fostering economic diversification, technological advancement, sustainable development, global competitiveness, and enhancing the quality of life.

1. **Economic Diversification:** Reducing dependence on oil by developing other sectors such as technology, which requires a skilled workforce equipped with 21st-century skills.
2. **Creative Human capital:** Human capital is the knowledge, skills, and health that people invest in and collect over their lifetimes, allowing them to reach their full potential as contributing members of society.
3. **Technological Advancement:** Ensuring Kuwait is at the forefront of technological innovation by nurturing talent capable of driving advancements in AI, data science, and computing. Skilled graduates can contribute to developing new technologies and improving existing ones.
4. **Sustainable Development:** Integrating sustainable practices and technologies into every aspect of life and industry. Educated individuals with 21st century skills can lead initiatives that promote environmental stewardship and sustainable growth.
5. **Global Competitiveness:** Positioning Kuwait as a leader in the global economy by fostering a workforce that excels in 21st-century skills. Competitive skills enable the country to attract international businesses and investments.
6. **Quality of Life:** Improving the overall well-being of citizens through advancements in healthcare, education, and infrastructure. Empowered individuals can contribute to societal improvements and innovative solutions that enhance living standards.

Challenges to Acquiring 21st-Century Skills:

It is imperative to overcome the challenges and obstacles associated with the acquisition of 21st-century skills in order to accomplish the objectives delineated in Vision 2035. Kuwait can establish a workforce that is prepared for the future by

overcoming obstacles and cultivating an environment that is conducive to skill development. This workforce will be able to support the country's strategic objective of a diversified and prosperous economy. The following are an identification of some challenges:

Educational System Limitations

- Outdated Curriculum: Many educational institutions still follow traditional curriculums that do not emphasize modern skills like digital literacy, critical thinking, and problem-solving.
- Lack of Resources: Insufficient funding and resources for advanced technology, digital tools, and hands-on learning experiences.

Faculty Expertise and Training

- Inadequate Training: Faculty may lack the necessary training in contemporary teaching methods and current industry practices.
- Resistance to Change: Some educators might resist adopting new technologies and methodologies, preferring traditional approaches.

Access to Technology

- Digital Divide: Not all students have equal access to the necessary technology and internet connectivity, leading to disparities in learning opportunities.
- Cost of Technology: High costs associated with acquiring and maintaining up-to-date technology and software.

Industry Collaboration

- Limited Industry Engagement: Insufficient collaboration between educational institutions and industries can result in a gap between what is taught and what is needed in the job market.
- Lack of Internships and Practical Experience: Limited availability of internships, apprenticeships, and real-world project opportunities for students.

Policy and Regulatory Barriers

- Rigid Regulations: Strict regulatory frameworks can stifle innovation in educational practices and curriculum development.
- Slow Policy Adaptation: Education policies may not keep pace with the rapid advancements in technology and industry needs.

Cultural and Societal Attitudes

- Traditional Mindsets: Societal and cultural attitudes that prioritize traditional career paths and educational approaches over modern, skill-based learning.

Student Preparedness and Motivation

- Lack of Awareness: Students and parents may not fully understand the importance of 21st-century skills and the opportunities they present.
- Motivation and Engagement: Engaging students and keeping them motivated to learn new, often challenging, skills.

Conclusion and Future Direction

Human resource managers focus on developing a workforce that can adapt to the rapidly changing demands of the modern economy. Therefore, this research has underscored the vital importance of 21st-century skills in the context of Kuwait Vision 2035. Through qualitative analysis of focus group discussions with academics, government officials, and private sector professionals, it is evident that skills such as critical thinking, collaboration, communication, creativity, digital literacy, problem-solving, and flexibility are indispensable for achieving the strategic objectives of economic diversification, human capital, technological advancement, sustainable development, global competitiveness, and improved quality of life. The study highlights effective methods for acquiring these skills, including project-based learning, industry collaborations, internships, workshops, online courses, research projects, and gamification. However, significant challenges remain, such as outdated curricula, resource limitations, faculty expertise gaps, technology access issues, and cultural attitudes. Addressing these challenges is crucial for aligning educational and professional development with the aspirations of Kuwait Vision 2035, ensuring that the workforce is equipped to meet future demands.

As for future research, longitudinal studies could be conducted to track the effectiveness of various educational and training programs over time. Additionally, research could explore the role of emerging technologies, such as artificial intelligence and virtual reality, in enhancing skill acquisition and training. Furthermore, investigating the impact of policy changes and government initiatives on the promotion of these skills would be beneficial. Engaging a broader range of stakeholders, including students, educators, industry leaders, and policymakers, in future research will ensure a comprehensive understanding and holistic approach to fostering 21st-century skills in alignment with Kuwait Vision 2035.

Acknowledgement

This work supported and funded by the Public Authority for Applied Education and Training in Kuwait, research project number: BS-23-05.

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