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## Level of 21st Century Skills among Students of the Special Education Department in the College of Education at King Faisal University

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### Abstract

The impulse beyond this study is to decide how much the level of 21st century skills is among students of the Special Education Department (SED) at King Faisal University (KFU). The researcher employed the descriptive analytic method in the survey to suit the nature of the study. The study population is composed of all students of the SED at KFU. The study participants consisted of 65 students who were selected randomly from the SED. The questionnaire of the study was developed by the researcher with (80) items on 21st century skills, of five major components; overall sustainability, inventive thinking, effective communication, high productivity, and religious values, connected to the examination test. Results of the findings affirmed that the level of 21st century skills of the students was within the intermediate level, except for the religious value dimension, which was at a high level. The variables of specialization and the level of the academic year study in the level of 21st century skills were not statistically significant. The study recommends that educational institutions and educators should provide and promote the acquisition of new skills and knowledge to all learners to enable them to stay in the labor force.

**Keywords:** 21st century skills, higher education institutions, overall sustainability, inventive thinking, effective communication, high productivity, and religious values.

### Introduction

Establishing educational systems with a high level of quality to conform to social and economic realities of the 21st century is a high priority for most governments and nations. These governments and nations should be aware of current challenges facing educational systems. These changes include the rapid and strong impact of Information and Communication Technologies (ICTs) and marketing of education. For addressing these challenges, the educational systems require to reconsideration of the skills that learners need to prepare for life and for their communities successfully. However, a deep gap exists between the skills that students are learning in the university and the skills they need in life and work in the knowledge society. The current curriculum is no longer enough to prepare students for life and work in today's changing world driven mostly by technological progress and global integration. As a

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result, education should provide learners with the skills needed to succeed in their societies and work in the 21st century. The skills needed for the 21st century should be defined and integrated into the educational system and basic fields of study (Atobi & Alfawair, 2016).

In addition there is a near-consensus that the education systems and reform used in many countries of the world, including the Arab countries, failed to provide graduate students with the 21st century skills, which contribute to the preparation, education and rehabilitation to be successful in their life and work (NCATE, 2015). In this regard, the need to develop a new educational system at the higher education institution level, such as universities and colleges or at the school level has increased in response to the growing globalization and rapid changes of the 21st century (Sbhi, 2016). Universities are the most interested institutions in knowledge, research, teaching, and application to prepare and qualify teachers. Therefore, the focus of universities is in interpreting and adapting these transformations. Whether these are changes in the demographic structure, academic, economic, social, political or democratic, these unavoidable transformations are needed to understand and clarify the future and to retain the lead role of universities in the Transformation of Societies (Shalaby, 2014). Matthew *et al.* (2016) emphasizes that teachers have an essential role in the development of the educational process. Thus, teachers must be provided with training that would develop their performance to meet the needs and requirements of the 21st century. In the same context, Khalil (2015) refers to the objectives of the UNESCO World Conference for Education in Germany in 2009, as follows:

- Attention to education is the decisive factor for the outcome of society's well-being and progress.
- Education must be provided to gain 21st century skills.
- Work must exploit opportunities to improve all forms of life and methods of work as well as making the change.
- The development and promotion of international and regional cooperation for education is needed for sustainable development.

According to Saudi Arabia's Vision 2030 which aims to restructuring the education sector, the development of curricula, enrollment of teachers in the educational sector, organization of the educational supervision process, and the continuous improvement of professional development and training, which in turn set a base for predicting the 21st century skills that must be acquired to next generation in order to achieve the vision and goals of his nation by insert these skills in educational standards, curricula, evaluation, and teachers training. Therefore, the main aim of educational institutions in Saudi Arabia is to provide students with the skills and knowledge in various subjects by enabling them to solve problems and make decisions in daily life based on scientific attitudes and moral values. The courses curricula were adapted to include the 21st century skills such as higher thinking skills, scientific skills, creative and critical thinking skills, effective communication and high productivity, scientific attitudes and moral values (Khamis, 2018).

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**Problem of the Study**

At the beginning of the 21st century, the world witnessed remarkable development in all aspects of life, particularly in information and communication technology. This remarkable development requires educational institutions to keep pace by preparing teachers professionally, educationally, and scientifically because they are the core of the educational process and the tool of its success. According to previous literature, educational systems in many universities around the world, including Arab universities, realized that they do not enable their graduates to develop 21st century skills. Such skills would lead the graduates to succeed in all aspects of life, but success requires sustainable preparation. Based on the above situation, the current study seeks to investigate the level of 21st century skills among students in the Department of Special Education (SED) at King Faisal University (KFU) to provide scientific and concrete evidence on the issue.

**Purpose of the Study**

The purpose of this study was to investigate the level of 21st century skills among students of the SED at KFU according to their level of study and specialization.

**Questions of the Study**

The study question was reflective of the study purpose as follows:

- What is the level of 21st century skills among SED students at KFU?

**Hypotheses of the Study**

The hypotheses of the study were as follows:

1. There are no statistically significant differences in the level of 21st century skills among SED students of KFU due to specialization (mental disability, hearing disability, and learning difficulties) in SED.
2. There are no statistically significant differences in the level of 21st century skills among SED students at KFU based on their study level (second, third, or fourth year).

**Importance of the Study**

The importance of this study stems from its addressing the level of 21st century skills among students of universities. No previous study in the Arab world in general and in Saudi Arabia in particular has attempted to address this issue. This study will provide concrete and procedural evidence on university students' possession of 21st century skills. This study will also contribute to enriching the theoretical aspect and filling the shortage of Arabic literature in this field. The results of this study will be useful to the authorities in their planning, implementation, and modification of the programs of teacher qualifications in Saudi universities.

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## The Theoretical Background

### – The 21st Century Skills Are an Exigency

Specialists believe that the integration of 21st century skills systematically in the curricula of education will enable educators to accomplish many of the goals they could not achieve for many years. These skills enable students to learn and achieve core subjects at higher levels. A structured framework ensures the active involvement of the learners in the learning process and helps build their confidence, addresses the professional development of teachers, and prepares students for innovation, leadership in the 21st century, and active participation in civic life (Ken Kay, 2010). The 21st century skills require students who can apply technology and overcome the illiteracy of the digital age, possess creative and critical thinking, and have distinct social skills in dealing with others (Kellner, 2000).

Based on data from the Partnership for 21st Century Skills, the technological revolution has significant impact on the culture of society (Partnership for 21st Century Skills, 2002). In addition, students who lack or do not acquire these skills will face intense competition because the skills required in the workplace will continue to increase along with economic development and new technologies in the global market (Soh, Arsad, & Osman, 2010). Yusof (2008) indicates that the challenges of education in the 21st century are the quality of education and individual qualities, which include innovative thinking. Thus, people who learn and have courage to change and innovate are highly appreciated within the institutions they work in and subsequently become key pillars that will contribute to the development of education and economy.

Moreover, we live in a knowledge-based economy, where economic competition among countries depends on labor force skills compatible with the characteristics of this age. Consequently, these changes led to different requirements of the labor force on whose shoulders the economy depends. Individuals should have the skills to enable them to live and work in the society of the age of knowledge. In addition, the concepts have changed in this age, where cooperation replaces competition, effective communication with others depends on technology, and non-stereotypical problem-solving skills are needed as well as access to creative solutions to these problems. Therefore, educations need to reconsider the skills that learners need and to prepare them appropriately for life and work in this age (Osman & Marimuthua, 2010).

In summary, 21st century skills are concerned with “direct production of the partnership between educators, the economy sector and political decision-makers in order to build a national intellectual framework for the education.” The national intellectual framework for education aims to develop and build a model of education systems for all levels of education starting from elementary education and ending with university education. This system has been followed in many countries, such as the United States of America, Canada, and England (Al-Ghamdi, 2015).

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## – 21st Century Skills

The most important skills that teachers of the 21st century should possess to enter the age of knowledge economy are developing higher thinking skills, supporting the knowledge economy, and managing life skills, abilities of students, education technology, education, and assessment system. Thus, these skills need to be reconsidered in developing pre-service programs as well as training during service (The Partnership for 21st Century Skill, 2006b). Education should provide learners with the necessary skills to succeed in their societies and work in the 21st century. In this context, many educational institutions have sought to develop frameworks for defining 21st century skills and proposed how they should be integrated into the education system in general. One of the institutions concerned with such task is the North Central Regional Educational Laboratory (NCREL). NCREL reported that 21st century skills are divided into four main skill groups, namely, digital age, creative thinking, effective communication, and high productivity (Metiri Group & NCREL, 2003).

The Organization for Economic Co-operation and Development (OECD) in 2005 developed its framework for 21st century skills, which was composed of three main areas of interactive use of tools, interaction in different groups, and independent action (OECD, 2005). Additionally, the Partnership for 21st Century Skills-P21, which developed its framework for 21st century skills, divided the skills into three sets, namely, learning and innovation, information, media, and technology, and life and work skills. The Partnership for 21st Century Skills invited the educational community to take advantage of the skills and integrate them into the educational systems in general and in the curriculum (Dede, 2009).

In 2007, the American Association of Colleges and Universities (AACU) referred to a set of 21st century skills by developing a framework for graduate specification in the form of learning outcomes, as follows:

**First:** Knowledge on human culture and the natural and physical world through the study of science, mathematics, social sciences, humanities, history, languages, and the arts.

**Second:** Practical and mental skills, including investigation and analysis, critical and innovative thinking, verbal and editorial communication, quantitative culture, information culture, and teamwork and problem solving.

**Third:** Social and personal responsibility, including civic knowledge, local and global engagement, knowledge of diverse cultures, thinking and ethical work, skills and basics of the life-long learning.

**Fourth:** Integrative learning, including creativity and advanced achievement through general and specialized studies (Association of American Colleges and Universities, 2007).

Many educational institutions provide the best preparations for their graduates to work in the developed world by inserting many necessary skills in the academic content, such as critical thinking skills, communication, technological literacy, cooperation, etc. Graduates should develop these skills to succeed in college and their career, thereby ensuring participation, achievement, and competitiveness in our global community (American Management Association, 2010, Miller, 2009).

Eventually, to achieve the vision of student acquisition of 21st century skills and educational outcomes, universities and colleges involved in teacher preparation must provide support during the pre-service and service terms (Lim, Ching, & Churchill, 2010).

## Methodology

### – Design of the study

This study employed a survey method to determine the level of 21st century skills among SED students at KFU. The survey focused on the five elements of 21st century skills, as follows: overall sustainability, inventive thinking, effective communication, high productivity, and religious values.

### – Participants of the study

The study population was composed of all students of SED at KFU. The participants were composed of 65 students who were selected randomly from SED. Table 1 shows the distribution of the participants in the SED according to the variables of the study (the specialization and the academic year)

**Table 1: Distribution of The Study Participants, according to Specialization, and Academic year**

variables	Variable categories	No	percentage
Specialization	Mental Disability	37	56,92%
	Hearing disability	14	21,54%
	learning difficulties	14	21,54%
	Total	65	%100
Academic year	Second Year	11	16,92%
	Third Year	34	% 52,31
	Fourth year	20	30.77%
	Total	65	100 %

### – Instrument of the Study

The questionnaire was used as a data collection instrument in the current study, as it is an appropriate instrument for collecting data about the opinions or trends of respondents on specific subject. The researcher reviewed previous studies to identify the components of the instrument of

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21st century skills. The statements about the 21st century skills were used (NCREL & Metiri Group, 2003) as a major source to design the instrument of the 21st century skills, as well as that of the studies of (Arsada, Osman, and Soh, 2010), (Melhem & Alsamara, 2017), (Trilling & Fadel, 2009), (Atobi & Alfawair, 2016) and (Sbhi, 2016). An analysis of previous literature revealed the skills included in the 21st century skills, enGauge21st, represented the necessary components in preparing students toward success and prosperity in life on the one hand, and success in the university and their future jobs on the other hand (NCREL & Metiri Group, 2003). Moreover, skills included the ability to retain competitiveness internationally (Partnership 21st century skills, 2006). So, the major components of 21st century skills became five: overall sustainability, inventive thinking, effective communication, high productivity, and religious values. The fifth component, "religious values," was added because of its close association with the Saudi society in addition to be a fundamental element in the philosophy of education in Saudi Arabia.

#### – **Validity and Reliability of The Study Instrument**

The significances of validity and reliability of the study instrument was extracted before it was applied to the original study participants as follows:

##### **1- Validation of The Study Instrument**

###### **A-Face Validity**

To be sure of the instrument validity in its preliminary form, it was presented to (10) arbitrators in Saudi universities in different specialties who were asked to arbitration the instrument. After that the researcher studied their modifies and suggestions on the instrument, where adopted a standard of agreement (70%) of the arbitrators is equivalent to (7) from all arbitrators for adaptation the amendment, deletion, and addition. Considering the arbitrators' opinions, the necessary amendments were made, such as the paraphrase of certain items.

The response of the study instrument was designed according to the Likert scale (Strongly disagree, disagree, neutral, agree, strongly agree), where take grades (1, 2, 3, 4, 5) respectively. The instrument of study contains some negative items which indicate a reversal of the level of 21st century skills among participants these items as follows: Items (3, 14) in the first dimension, " Overall sustainability ", and items (12, 14) in the third dimension, "effective communication", The negative items were taken into account when analyzed data collected.

Therefore, the instrument was divided into seven sections. Section A consists of questions on the students' background and demographic data, such as academic year and student's specialization. Section B consists of 80 items on 21st century skills, which was composed of 16 items on comprehensive sustainability, 29 items on inventive thinking, 14 items on effective communication, 14 items on high productivity, and 7 items on religious values.

**B-Internal Consistency Validity**

To be sure the instrument validity, the researcher applied a pilot study into exploratory sample that consist (20) female students at SED, in order to extract the internal consistency validity coefficients by using the Pearson correlation coefficient between each items with the dimension contained therein, to show the consistency of the items in measuring the dimension contained therein. Table (2) shows the values of the correlation coefficient for items of each dimension of the study instrument dimensions.

**Table 2: values of the correlation coefficient to measure the internal consistency to items of the study tool, with the total score to the dimension contained therein.**

Overall Sustainability Dimension		Inventive Thinking Dimension			
No	Correlation Coefficient	No	Correlation Coefficient	No	Correlation Coefficient
١	**، ٠٧٦٠	١	**، ٠٨٠٦	١٦	**، ٠٨٥٩
٢	**، ٠٨٢٣	٢	**، ٠٦٩٥	١٧	**، ٠٧٧٧
٣	**، ٠٧٠٥	٣	**، ٠٧٥٤	١٨	**، ٠٧٤٧
٤	**، ٠٨٢٤	٤	**، ٠٨٦٧	١٩	**، ٠٧٧٦
٥	**، ٠٨٦٨	٥	**، ٠٨٥٤	٢٠	**، ٠٦٤٥
٦	**، ٠٧٤٩	٦	**، ٠٨١٥	٢١	**، ٠٧٩٤
٧	**، ٠٨٣١	٧	**، ٠٨٥٦	٢٢	**، ٠٧٤٣
٨	**، ٠٧٦٢	٨	**، ٠٨٠٨	٢٣	**، ٠٧٠٤
٩	**، ٠٨١٠	٩	**، ٠٧٧٢	٢٤	**، ٠٨٤٧
١٠	**، ٠٧٦٢	١٠	**، ٠٧٨٣	٢٥	**، ٠٧٥٨
١١	**، ٠٨٥٨	١١	**، ٠٨٥٩	٢٦	**، ٠٦٨٨
١٢	**، ٠٧٥٦	١٢	**، ٠٧١٩	٢٧	**، ٠٨١٥
١٣	**، ٠٧٠٩	١٣	**، ٠٧٥٠	٢٨	**، ٠٦٨٨
١٤	**، ٠٦٣٤	١٤	**، ٠٨٢٥	٢٩	**، ٠٨٦٨
١٥	**، ٠٧٩٤	١٥	**، ٠٨٤٣		
١٦	**، ٠٧١٩				
Effective Communication Dimension		High Productivity Dimension		Religious Values Dimension	
No	Correlation Coefficient	No	Correlation Coefficient	No	Correlation Coefficient
١	**، ٠٨٥٨	١	**، ٠٩٦٥	١	**، ٠٨٣٦
٢	**، ٠٨٦٤	٢	**، ٠٩١٦	٢	**، ٠٨٩٨
٣	**، ٠٨٨١	٣	**، ٠٩٣٠	٣	**، ٠٨٤٩
٤	**، ٠٨٩٤	٤	**، ٠٩١٧	٤	**، ٠٧٩٨
٥	**، ٠٨٤٩	٥	**، ٠٨٦٢	٥	**، ٠٩٠٣
٦	**، ٠٨٩٢	٦	**، ٠٨٥٠	٦	**، ٠٨٦٧
٧	**، ٠٨٧٦	٧	**، ٠٨٥٤	٧	**، ٠٨٤٤
٨	**، ٠٧٤٦	٨	**، ٠٨٢٠		
٩	**، ٠٨٥٦	٩	**، ٠٨١٢		
١٠	**، ٠٨٨٢	١٠	**، ٠٩٤٧		
١١	**، ٠٧١٢	١١	**، ٠٨٠٦		
١٢	**، ٠٨٠١	١٢	**، ٠٨١٩		
١٣	**، ٠٧١١	١٣	**، ٠٩٣٥		
١٤	**، ٠٨٦٢	١٤	**، ٠٩٠٠		



\*\*Correlation coefficient is statistically significant at the significance level ( $\alpha = 0.01$ )

The results in Table (2) indicate that the values of correlation coefficients for each item with the total score for the dimension which belong it was positive and statistically significant at ( $\alpha = 0.01$ ); which means that the items appropriateness for measuring the dimension contained therein. Consequently, no item of the instrument was deleted according to the internal consistency results

## 2- Reliability of The Study Instrument

To be sure of the instrument reliability. the researcher calculated Cronbach's alpha coefficients to estimate the internal consistency of the instrument. The values obtained for various scales ranged from 0.934 to 0.977 (see Table 3). Hence, the item reliability index was very good given its closeness to 1.0 The repetition of the estimation for all constructs were high if administered to the different respondent groups with the same abilities (Brase & Brase, 2016). Therefore, the values of the alpha coefficients suggested the instrument displayed adequate internal consistency.

**Table 3: Cronbach's Alpha for the six dimensions (constructs) of 21st century skills**

Dimension	No. items	Cronbach's Alpha
Comprehensive sustainability	16	0.954
inventive thinking	29	0.976
effective communication	14	0.965
high productivity	14	0.977
religious values	7	0.934
Total	80	0.981

## Findings and Discussion

### First: The Main Question of The Study

The study question being studied was to see the level of 21st century skills among SED students at KFU. The findings of the study question indicated several outcomes, as presented in Table 3. Descriptive statistics of means and standard deviations were used to explore the level of the 21st century skills among SED students at KFU. The result of the analysis revealed that the levels of 21st century skills were within the intermediate level, with overall mean of 3.49 with SD= 0.33. The results of the current study is consistent with the results of the studies of Shalaby (2014), Kellner (2000), Yusof (2008), Abdullah and Osman (2010), National Institute of Literacy and the Small Business Administration (NCREL 2002), and Miller (2009). Hence, universities in general need to develop a new education system in line with the rapid shifts and changes in the 21st century.

**Table 3: The Means and standard deviations of the level of 21st century skills among students of the SED, in general**

Ranking	number of dimension	Dimensions of Century Skills	21st Mean	Std. D	The level of skill
1	5	Religious values	3.71	0.62	High
2	4	High productivity	3.52	0.61	Intermediate
3	2	Inventive thinking	3.49	0.37	Intermediate
4	3	Effective communication	3.47	0.52	Intermediate
5	1	Overall sustainability	3.39	0.47	Intermediate
<b>Overall the level of 21st century skills</b>			3.49	0.33	Intermediate

The findings also affirmed that KFU, like other universities in different countries of the world, is still focusing on the curriculum and not paying attention to 21st century skills. Therefore, the universities should reconsider in the formulation of their educational policies and the modernity in the employment of the 21st century skills. These skills should be integrated in all educational systems that contain different curricula, methods, strategies, and learning environments. Furthermore, the inclusion of the 21st century skills within the outcomes of learning in teacher training programs in colleges of education in Saudi Arabia should be a turning point in the development of educational process in the universities in general. In addition, the mean of religious value dimension is 3.71 with SD= 0.62, which ranked to be the first with a high level. Second, the high productivity dimension has a mean of 3.52 and SD= 0.61 with intermediate level. Third, inventive thinking dimension has a mean of 3.49 and SD= 0.37 with intermediate level. Fourth, effective communication dimension has a mean of 3.47 and SD= 0.52 with intermediate level. Fifth, the overall sustainability dimension came in last ranking with a mean 3.39 and SD= 0.47 with intermediate level. As mentioned above, the level of 21st century skills in the religious value dimension tanked ahead of the other dimensions. Certainly, this result is expected due to the nature of family education and upbringing in Saudi Arabia, which is keen to mold the behavior of children in all aspects of life, especially in religious values. Furthermore, this result agrees with the study of Al Awadi (2005).

### **Second: Testing the First Hypothesis**

The first null hypothesis being studied was to see whether there are no statistically significant differences in the level of 21st century skills among SED students of KFU due to specialization (mental disability, hearing disability, and learning difficulties) at SED. The findings of the first null hypothesis are presented in Table 4. A Kruskal Wallis test was conducted to explore the differences in the level of 21st century skills among SED students at KFU due to specialization (mental disability, hearing disability, learning difficulties). The result of analysis revealed that the differences between the means of the participants' responses on the instrument of the study in overall and in the five dimensions were not statistically significant due to the specialization variable. Therefore, this null statistical hypothesis is accepted, which

assumes that there are no statistically significant differences in the level of 21st century skills among SED students of KFU due to specialization (mental disability, hearing disability, and learning difficulties) at SED. Consequently, this result indicated that the level of 21st century skills among the respondents did not differ because of their specializations. Hence, the variable of specialization was not an effective variable.

**Table 4: Results of the Kruskal Wallis test to detect the differences between the means of the participants' responses on the study instrument, due to the specialization variable.**

Dimensions of 21st Century Skills	Categories of Specialization Variable	N	Mean	Mean Rank	Chi Square	df	Asymp. Sig.
Overall sustainability	Mental disability	37	3.36	31.07	4.729	2	0.094
	Hearing disability	14	3.53	42.54			
	learning difficulties	14	3.34	28.57			
Inventive thinking	Mental disability	37	3.52	34.23	1.166	2	0.558
	Hearing disability	14	3.50	34.57			
	learning difficulties	14	3.43	28.18			
Effective communication	Mental disability	37	3.41	29.88	3.176	2	0.204
	Hearing disability	14	3.61	40.36			
	learning difficulties	14	3.48	33.89			
High productivity	Mental disability	37	3.47	31.01	1.099	2	0.577
	Hearing disability	14	3.61	37.00			
	learning difficulties	14	3.57	34.25			
Religious values	Mental disability	37	3.71	32.86	0.470	2	0.790
	Hearing disability	14	3.73	35.61			
	learning difficulties	14	3.66	30.75			
Overall instrument	Mental disability	37	3.48	32.34	1.860	2	0.394
	Hearing disability	14	3.56	38.61			
	learning difficulties	14	3.47	29.14			

### Third: Testing the Second Hypothesis

The second null hypothesis being studied was to see whether there are no statistically significant differences in the level of 21st century skills among SED students at KFU based on their study level (second, third, or fourth year).

The findings of the second hypothesis are presented in Table 5. A Kruskal Wallis test was conducted to explore the differences in the level of 21st century skills among SED students because of their academic year (second, third, or fourth). The result of the analysis revealed the differences between the means of the study sample responses on the instrument of the study in overall and in the five dimensions were not statistically significant because of the academic year

variable. Therefore, this null statistical hypothesis is accepted, which assumes that there are no statistically significant differences in the level of 21st century skills among SED students of KFU based on their study level (second, third, or fourth year). Consequently, the level of 21st century skills among the SED was not different because of their academic year. Hence, the academic year of a student is not an effective variable.

**Table 5: Results of the Kruskal Wallis test to detect the differences between the means of the participants' responses on the study instrument, due to the academic year variable.**

Dimensions of 21st Century Skills	Categories of academic year Variable	N	Mean	Mean Rank	Chi Square	df	Asymp . Sig.
Overall sustainability	Second year	11	3.25	29.77	0.469	2	0.791
	Third year	34	3.44	34.22			
	Forth year	20	3.39	32.70			
Inventive thinking	Second year	11	3.48	29.82	0.898	2	0.638
	Third year	34	3.50	35.07			
	Forth year	20	3.49	31.23			
Effective communication	Second year	11	3.52	34.32	0.299	2	0.861
	Third year	34	3.45	31.78			
	Forth year	20	3.47	34.35			
High productivity	Second year	11	3.60	38.23	1.308	2	0.520
	Third year	34	3.47	30.87			
	Forth year	20	3.56	33.75			
Religious values	Second year	11	3.69	33.00	0.009	2	0.991
	Third year	34	3.71	32.94			
	Forth year	20	3.71	33.10			
Overall instrument	Second year	11	3.48	32.36	0.022	2	0.989
	Third year	34	3.49	33.29			
	Forth year	20	3.50	32.85			

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## Recommendations

The research recommendations are organized according to the findings of the study which mentioned above, as follows: Firstly, the KFU and other universities in the Kingdom of Saudi Arabia need to integrate the skills of the twenty-first century into its various programs. Secondly., they need to reconsider the design of university courses in terms of content, teaching methods and assessment patterns in a way that employs 21st century skills for learning that prepares the students for facing the challenges of daily life. Thirdly, they need to document the community partnership between the universities and the local community and form a team to continuously improve and develop the society's requirements and market need. Fourthly, they need to develop the positive attitudes for the faculty members in colleges and universities towards 21st century skills by preparing an integrated system of procedures (seminars, workshops, educational lectures, etc.). Fifthly, the need to use and activate the methods and strategies of teaching for the curricula that encourage students to skills of the 21st century. Finally, preparation of similar Arab studies on larger samples to include various institutions of higher education in the Arab world.

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مستوى مهارات القرن الواحد والعشرين لدى طلبة قسم التربية الخاصة في جامعة الملك فيصل

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### الملخص

هدفت الدراسة الى التعرف على مستوى مهارات القرن الواحد والعشرين لدى طلبة قسم التربية الخاصة في جامعة الملك فيصل. حيث استخدم الباحث المنهج الوصفي في جمع بيانات الدراسة من مجتمع الدراسة المكوّن من جميع طلبة قسم التربية الخاصة في جامعة الملك فيصل. وتكونت عينة الدراسة من ٦٥ طالبًا تم اختيارهم بشكل عشوائي. قام الباحث بتطوير استبيان الدراسة المكون من (٨٠) فقرة حول مهارات القرن الواحد والعشرين، موزعة على خمسة ابعاد رئيسية، وهي: الاستدامة الشاملة، والتفكير الاختراعي، والتواصل الفعال، والإنتاجية العالية، والقيم الدينية. اشارت نتائج الدراسة الى أن مستوى مهارات القرن الواحد والعشرين لدى الطلاب كان ضمن المستوى المتوسط، باستثناء بعد القيم الدينية والذي جاء ضمن المستوى المرتفع. ايضا اشارت نتائج الدراسة الى أنه لا توجد دلالة احصائية في مستوى مهارات القرن الواحد والعشرين وفقاً لمتغيري التخصص ومستوى السنة الأكاديمية. وقد أوصت الدراسة الحالية المؤسسات التعليمية في البيئة العربية بتوفير وتعزيز اكتساب مهارات القرن الواحد والعشرين لجميع المتعلمين لتمكينهم من البقاء بقوة في سوق العمل من خلال اعادة النظر في البرامج والمقررات الجامعية لتتوافق مع متطلبات ومهارات العصر الحالي.

**الكلمات المفتاحية :** مهارات القرن الواحد والعشرين، مؤسسات التعليم العالي، الاستدامة الشاملة، والتفكير الاختراعي، والتواصل الفعال، والإنتاجية العالية، والقيم الدينية.