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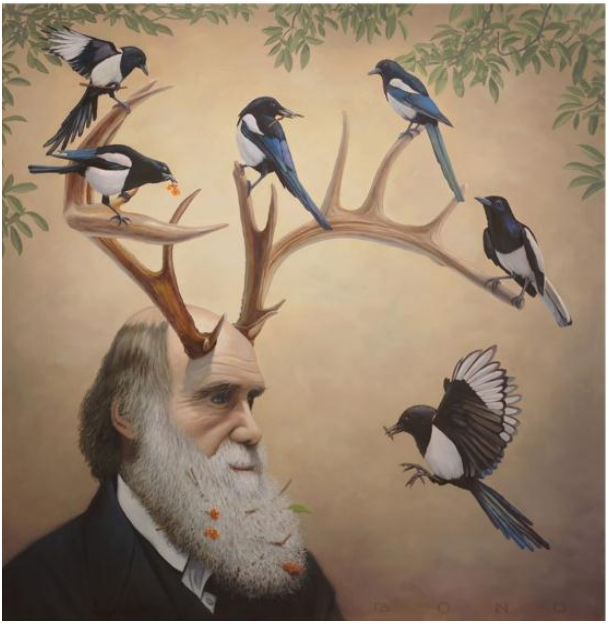

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Comparing The Content Of The Iraqi Mathematics Book With The Saudi Mathematics Book For The Third Intermediate Grade And The Availability Of 21St Century Skills In The Iraqi Book

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Abstract

Mathematics curricula represent an important curriculum that most countries seek to develop and modernize, in order to meet the recent developments and changes in the twenty-first century, and it is appropriate that the curriculum of mathematics to keep pace with this change and keep pace, and must take off the traditional math, and must be updated and developed to achieve its goals , And keep pace with the requirements of the times of scientific and technological innovations, especially as the age in which we live is characterized by rapid changes in all aspects of life. In this age of knowledge is no longer defined, change has many manifestations, the most important of which is the revolution of knowledge and the explosion of knowledge, which in turn affects the curriculum, can not imagine the existence of a consistent curriculum in a permanent and rapidly changing era, which urged educators to conduct development and change of the curriculum, to keep pace Tremendous cognitive progress in all fields (Salem, 2008: 18), and the rapid development of life and conditions in the twenty-first century from what it was in the last century, made it necessary to develop curricula to cope with the remarkable transformation in all areas of life, where we must add New skills keep pace with this development By adding components into the curriculum and pedagogical practices to help students develop future work environments, such as collaboration, communication, problem solving, and information dissemination (Al-Ghamdi and Khalid, 2015: 4), the technological revolution poses an important challenge: With high abilities in the use of mathematics, computer literacy, problem solving, and decision-making (Rafael and Mohammed, 2001: 20), one of these challenges is the availability of 21st century

skills in our curriculum, and the training of students to keep pace with other countries and curricula in development, To catch up Wheel evolution.

Comparar El Contenido Del Libro De Matemáticas Iraquí Con El Libro De Matemáticas Saudí Para El Tercer Grado Intermedio Y La Disponibilidad De Habilidades Del Siglo Xxi En El Libro Iraquí

Resumen
Los planes de estudio de las matemáticas representan un plan de estudios importante que la mayoría de los países buscan desarrollar y modernizar, a fin de cumplir con los desarrollos y cambios recientes en el siglo XXI, y es apropiado que el plan de estudios de las matemáticas mantenga el ritmo de este cambio y mantenga el ritmo, y debe despegar las matemáticas tradicionales, y debe actualizarse y desarrollarse para lograr sus objetivos, y mantenerse al día con los requisitos de los tiempos de las innovaciones científicas y tecnológicas, especialmente porque la edad en que vivimos se caracteriza por cambios rápidos en todos los aspectos de vida. En esta era del conocimiento ya no se define, el cambio tiene muchas manifestaciones, la más importante de las cuales es la revolución del conocimiento y la explosión del conocimiento, que a su vez afecta el currículum, no puede imaginar la existencia de un currículum consistente en un permanente y una era rápidamente cambiante, que instó a los educadores a llevar a cabo el desarrollo y el cambio del plan de estudios, a mantener el ritmo del progreso cognitivo tremendo en todos los campos (Salem, 2008: 18), y el rápido desarrollo de la vida y las condiciones en el siglo XXI. Fue en el siglo pasado, hizo necesario desarrollar planes de estudio para hacer frente a la notable transformación en todas las áreas de la vida, donde debemos agregar Nuevas habilidades para mantener el ritmo de este desarrollo Al agregar componentes al plan de estudios y prácticas pedagógicas para ayudar a los estudiantes a desarrollar el futuro entornos laborales, como la colaboración, la comunicación, la resolución de problemas y la difusión de información (Al-Ghamdi y Khalid, 2015: 4), la revolución tecnológica n plantea un desafío importante: con altas habilidades en el uso de las matemáticas, la alfabetización informática, la resolución de problemas y la toma de decisiones (Rafael y Mohammed, 2001: 20), uno de estos desafíos es la disponibilidad de habilidades del siglo XXI en nuestro plan de estudios, y la capacitación de los estudiantes para mantenerse al día con

otros países y planes de estudio en desarrollo, para ponerse al día con la evolución de la rueda.

Introduction:

The researcher seeks to compare the content of the mathematics book for the third grade of the average Iraqi with the content of the Saudi book corresponding to it, to know the similarities and differences in the mathematical topics included in them, and the relative weights of topics, and to analyze the content of the Iraqi mathematics book by monitoring the availability of skills of the twenty - first century.

The research problem can be formulated with the following questions:

1. What are the mathematical topics included in the Iraqi mathematics book for the third intermediate grade and its relative weight?
2. What are the mathematical topics included in the book of mathematics in Saudi Arabia for the third grade average and their relative weight?
3. What are the similarities and differences between the topics included in the content of the Iraqi mathematics book, and the content of the Saudi mathematics book corresponding to it?
4. The extent of the availability of the skills of the twenty-first century in the textbook of mathematics for the third grade Iraqi average.

research importance

1. The importance of this research comes from comparing the content of the mathematics book of the third Iraqi average with the content of the Saudi book corresponding to it, and the availability of skills of the twenty-first century.
2. Current research represents a response to global trends that call for continuous analysis and evaluation of the curriculum.
3. Benefit those who develop the curriculum by shedding light on the current status of the curriculum, and the skills available in the twenty-first century.
4. The third medium curriculum is a new approach where no research study has been conducted, comparing it to the corresponding Saudi curriculum, and knowing the availability of the skills of the twenty-first century.
5. The target age group in this research, where the third grade students are considered an important turning point in the student's academic career.
6. Provide curriculum developers with a number of recommendations and criteria that should be taken into account in the curriculum.

Research Objectives: The current research aims to:

1. Identify the mathematical topics included in the Iraqi mathematics book

for the third intermediate grade and what their relative weight?
2. Identify the mathematical topics included in the Saudi mathematics book for the third intermediate grade and what their relative weight?
3. Identify the similarities and differences between the topics included in the content of the Iraqi mathematics book, and the content of the Saudi mathematics book corresponding to it?
4. Identify the availability of the skills of the twenty-first century necessary in the content of the book of mathematics for the third grade intermediate in Iraq.

Search limits:
1.The book of mathematics for the third intermediate grade in Iraq first edition 2018, and the Saudi mathematics book corresponding to it.
2. The academic year 2018-2019.
Define terms:
Curriculum: means all the experiences that the school organizes, defined and supervised and influence on the personality of the individual so that the growth of comprehensive development integrated with life and society, whether experiences within the school or outside. (Al-Tamimi, 2006: 12)
Scope: The amount determined by experts from the scientific subject included in a curriculum, where they can determine through their experience to determine the extent of what is provided to students at each level of education, so as not to be shortage or increase, so that the decisions taken in this regard related to the specific objectives of the curriculum.

(Lakkani and Camel, 2003: 23)

Comparative Studies of Curricula: Science examines the aims, curricula and methods of education and the education system in a country compared to a country that shares some features and features. (Hyena, 2006: 21)
21st Century Skills: Know It
(Rafael & Mohammed, 2001): "The skills that enable the learner to deal and interact with the developments of life in the twenty - first century, such as thinking skills in multiple types, and take responsibility and the ability to solve problems and adapt to variables and skills to develop values, trends and appreciation." (Raphael and Muhammad, 2001: 19)
(Radja, et al, 2011): "It is a multidimensional process that is dynamic and ready to be developed and includes new and renewed aspects of life for human development"

(Radja, et al, 2011: 7)

The researcher knows them procedurally: the skills that make the learner able to interact and deal with the requirements of the twenty-first century, which are the skills of critical thinking and problem-solving, and skills of innovation and creativity, skills of cooperation and teamwork and leadership, and the skills of a culture of communication and information and media, and the skills of a culture of computing and information and communication technology Skills, career and self-learning, and multicultural understanding skills.

Chapter II: Theoretical background and previous studies

Through rapid developments and changes in technology, means of communication, and information sources, the media environment has become strong and needs new skills for the individual to be able to deal with this environment and developments, although education in this century did not stop at the walls of the school, and at the same time It did not end by the end of the school day, we note that the school environment has not changed, but still far from these technological and information developments, as we note our schools are free from any form of technological development, the teacher still stands, and uses the pen and blackboard only, and the student and despite the exposure For E-school shake-out of communication, computers and video games devices, but it is not to take advantage of this development through the teaching and learning process.

The role of education in the 21st century

Education in this century takes us to the present time (the era of knowledge that has started recently), where education has become a different role requires a greater role and double efforts to form an individual or citizen beneficial to himself, and to society and the world, where the new world is characterized by the global interdependence of knowledge work, global markets, and interconnected citizens In this age, mental power replaces muscular power, and the horse's mechanical power gives way to the power of hertz, where the goals of breeding in our time are shaped by the highly efficient techniques we use in communicating, sharing and learning. P Education plays a central role for life. (Trillian and Charles, 2013: 16), it is therefore necessary to link education with technology and communication skills and all the imposition of the age in the development of digital means, and the link between the knowledge world and the labor market, in order to converge between education and skills necessary to keep pace with the changes of the times.

Basics of developing the content of mathematics curricula for the twenty-first century:

In order for mathematics to achieve its goals and meet the requirements and challenges of the 21st century, there should be clear foundations for developing curriculum content in general and mathematics in particular. Mathematics can be summarized as follows:

1. The content should contain mathematical applications related to community problems and students' lives.
2. The content should include topics to train students to make mathematical models to solve life problems, and decision-making skills.
3. The content should clarify the role of mathematics in the interpretation of data, including statistics for local and international economic projects.
4. The content should include topics for employing computer, internet and multimedia services.
5. Content should be formulated to help self-learning.
6. The content should include various interactive activities to develop multiple types of thinking and creativity.
7. The content should include various activities that allow the use of different types of learning.
8. The content should include some subjects that serve other subjects.
9. The need to provide mathematical terms and concepts and some activities and solutions in Arabic and English (especially in the early stages of education) until the student is familiar with it.
10. The content should include parts of applied and field research.
11. The content should include lists of additional sources of information.
12. The content should include the social values, attitudes and appreciation needed to be developed for students. (Raphael and Joseph, 2001: 44-46)

The Role of Mathematics Curricula in Meeting the Challenges of the 21st Century

The goal of teaching and learning mathematics is to develop the skills of mathematical operations, and solve abstract problems, but now has become the goal of learning mathematics is to develop methods of thinking for the learner, and making the right decision, and other goals that keep pace with the requirements of the times.

The most important objectives of learning mathematics to meet the challenges of the twenty-first century, as mentioned in (Raphael and Joseph, 2001) and (Mahmoud, 2015) as follows:

1. The mathematics curriculum should keep pace with the scientific and technological developments of the age, by studying the language of the age, including concepts, terminology and symbols, and using it as a communication tool.

2. The use of general concepts and principles that work to clarify mathematics, in addition to linking branches of mathematics integrated on the one hand, and understanding and linking different sciences and human life on the other.
3. Teach mathematical proof, and focus on its importance in the rest of science.
4. The use of technology in all aspects of teaching and learning mathematics, in addition to highlighting its role.
5. Teach different types of thinking, develop the ability to discover patterns, and encourage students to innovate and creativity.
6. Develop students' ability to analyze, predict, and make decisions, in addition to using mathematical modeling, by linking and bridging mathematical knowledge with others, so that the learner understands and realizes the relationship between mathematics and the real world.
7. Linking mathematics to realistic projects, from the learner's environment.
8. Improve the methods of students' acquisition of concepts and principles, and the economy of time and effort necessary for the growth of ideas and general concepts.
9. Training students to collect information, and use them in the study of mathematics, and linking them to the above, and generate new knowledge.
10. Interest in self-learning and peer learning.
11. Training students on communication skills, dialogue, non-bullying and criticism, and accepting the opposite opinion.
12. Teaching mathematical skills that depend on the professions.
13. Attention to the development of skills to assess the value of time and organization, planning and taking responsibility, and self-reliance.

(Raphael and Joseph, 2001: 35-41) and (Mahmoud, 2015: 80-90)

21st Century Skills:

Studies and literature on the definition or classification of the skills of the 21st century differed, as the focus of attention varies according to interest. The skills required to acquire are reading, writing and arithmetic, which is called 3RS, but under the developments of the twenty-first century, these skills also include Wharf skills and the application of information and communication technology and media, in addition to the development of a lifetime.

The need for 21st century skills is illustrated by the following facts:

1. International assessments, studies and tests showed that the level of education in the Arab countries is low compared to the international indica-

tors.
2. Teachers and teachers do not know enough about what the skills of the twenty-first century, and therefore it is difficult for them to train, and teach students on them.
3. Most students learn more about technology and information technology outside the school than in the school, despite the global knowledge growth, which is characterized by the abundance of information and technology.
4. Complaint of the bodies, companies and institutions, of the lack of qualification of graduates to the reality and requirements of the labor market.
(Shawahin, 2015: 9) (Kay, 2007; 14 Ken)

Therefore, a group of mathematics professors turned to a map showing the integration of 21st century skills and mathematics. :
1. To help students develop the cognitive, emotional and skillful competencies they need to succeed in life for the 21st century.
2. The development of basic knowledge in mathematics, so that students can think critically, and communicate effectively, must be based on sound academic knowledge.
3. To make students able to solve problems and critical thinking, communication, cooperation and technological education, flexibility and adaptability, innovation and creativity, media education, and concern for global affairs. (a Partnership for 21 st Century Skills, 2009)

The skills of the 21st century can be illustrated with three sets of urgently needed skills:
1. Learning and creativity skills: include critical thinking and problem solving, communication and sharing, innovation and creativity.
2. Digital culture skills: include digital culture, and information culture.
3. Life and career skills: include flexibility and adaptation, direct and self-directed, social interaction and interaction across continents, productivity and accountability, leadership and responsibility. (Trilling and Charles, 2013: 47-48)

The 21st century partnership framework has become a guide to the 21st century skills movement. The outputs that we expect from students are more accurate, more relevant to reality, and can be illustrated in the following table:

Seven skills	21st Century Partnership Skills
	Learning and creativity skills
- Critical thinking and problem solving - Culture of communication, information and media - innovation and creativity	-Critical thinking and problem solving - Communication and cooperation - innovation and creativity
	Digital Culture Skills
-(Included in communications) -(Included in communications) -Culture of computing, information and communication technology	-Information culture - Media Culture - Culture of information and communication technology
	Life skills and profession
- Profession and self-learning - (Included in professional skills and self-reliant learning). - Understanding of multiple cultures - (Included in professional skills and self-reliant learning). - (Included in the skill of collaboration, teamwork and leadership)	- Flexibility and adaptation - Initiative and self-direction - Social interaction and cross-cultural interaction. - Productivity and accountability - Leadership and responsibility

(Trilling and Charles, 2013: 176)

Characteristics of 21st Century Skills:

1. Central Skills: All students in all stages of education should have access to learning opportunities and acquire these skills.
2. Diverse: Students all over the world need to learn how to use the right tools to be able to learn and practice different life activities.
3. Interactive: Students need to learn the scientific content through examples, applications and experiences of real life, the student learns better when it is linked to learning relationships and interactions meaningful and linked to the reality of life.

(Hassan, 2015: 306)

21st century skills and teaching mathematics

21st century skills can support math curricula by:

1. Interest in the development of mathematics curricula to integrate the skills of the twenty-first century with the curriculum of mathematics.

2. The mathematics curriculum is in line with the recommendations of the National Council of Mathematics Teachers (NCTM), which calls for the development of the skills of the twenty-first century.
3. Attention to the development of skills of the twenty-first century teaching, through professional support programs before and during service.
4. Attention to the diversity of methods and methods of teaching, and methods of assessment students for the skills of the twenty-first century.
5. Provide appropriate and different opportunities for students to practice educational activities that encourage critical thinking, problem solving, scientific research, and conceptual development.

(a Partnership for 21 st Century Skills, 2009)

Previous studies:

Studies can be classified into two axes:

Axis 1: Studies on the skills of the twenty-first century in general courses and mathematics:

- Hassan Study (2015): The study aimed to present a proposed concept for developing the mathematics curriculum at the primary stage, in the light of the skills of the twenty-first century. The contents of the curriculum were analyzed in the textbook of mathematics for the sixth grade of primary, and the researcher prepared a list of skills of the 21st century to be developed by the sixth grade primary students, through the curriculum of mathematics, and the availability of these skills was measured in the sixth grade primary students through the preparation of a test of skills For the 21st century, a card to observe those skills, was applied to a group of fifth grade primary students (as the beginning of the sixth grade primary), and to a group of sixth grade students (as the end of the sixth grade primary), and then prepare a proposal to develop a math curriculum for the sixth grade in the light 21 century skills, applied to (80) students, were divided into two groups, experimental study of the proposed concept, and an officer studying the textbook, and the results proved the effectiveness of the proposed concept in the development of some skills of the 21st century.

Axis II: Studies dealing with the analysis of mathematics books according to the skills of the twenty-first century, or others.

-Rubaie study (2009), the study aimed to analyze and compare the mathematics textbook for the sixth grade in Iraq, with the mathematics book for the third grade secondary scientific section of the Republic of Yemen, and to achieve this goal, the researcher prepared a form containing three axes, the first subject titles in the book, and the second number of pages, which Given the subject, and percentage, and was analyzed the chapters

of the Iraqi book, and the chapters of the Yemeni book, and the researcher reached a clear similarity in the chapters and their number with some differences in the topics, and the Yemeni book surpassed the Iraqi book in fifteen topics, while the Iraqi book only seven topics, the book For the Iraqi is commensurate with the level of the student in the preparatory stage but lacks some topics related to university mathematics, such as derivative exponential functions, and logarithms, and integration, as the Yemeni book is intensive and more comprehensive than the Iraqi book, and takes into account individual differences.

Chapter Three: Research Methodology and Procedures

• Research Methodology: Since the aim of the research is to compare the textbook of mathematics for the third grade medium in Iraq with the corresponding mathematics book in Saudi Arabia and identify the most important points of similarity and difference, the appropriate research methodology is the comparative approach, where the study of vocabulary of the topic and stand on similar topics and different With her and come up with conclusions and proposals.

• The research community and its sample: the third grade intermediate mathematics book in Iraq with the corresponding mathematics book in Saudi Arabia for the chapters representing the contents of the two curricula as shown in the following tables:

The book of mathematics in Iraq includes chapters and agencies:

%	Pages	Unit	s
		part One	
%15.16	31-4	First: Relationships and inequalities in real numbers	1
%17.42	63-32	Second: Algebraic amounts	2
%17.42	95-64	Third: Equations	3
		Part 2	
%17.42	35-4	Fourth: Coordinate Engineering	4
%17.42	67-36	V: Engineering and measurement	5
%15.16	95 -68	Sixth: Statistics and Probability	6

The Saudi mathematics book includes the following chapters:

%	Number of pages	Pages	Semester	
				First semester
%9.3	35	46-11	The first: is linear equations	1
%10.9	41	90-49	Second: Relationships and linear functions	2
%7.18	27	120-93	Third: Linear Functions	3
%8.24	31	154-123	Fourth: Linear Inequalities	4
%9.04	34	191-157	V: Systems of linear equations	5
				Second Semester
%14.89	56	56-9	Six: polynomials	6
%11.44	43	102-59	Seventh: Analysis and quadratic equations	7
%8.24	31	136-105	Eighth: Quadratic Functions	8
%11.44	43	182-139	IX: root equations and triangles	9
%9.3	35	220-185	Tenth: Statistics and Probability	10

Research Tool: Comparative Study:
A form has been prepared that includes the following axes:
the fourth chapter :
View and interpret results:
Results will be displayed sequentially and according to the objectives to answer the research questions:
Results related to the first question: What are the mathematical topics included in the Iraqi mathematics book for the third grade average and their relative weight?

To answer this question, the content of the Iraqi mathematics book was analyzed by the first and second parts of the third intermediate grade by identifying the mathematical topics in the book, and calculating the relative weight of each topic according to the number of pages, where it shows from the previous table that the mathematical topics are converged where the relative weight of the chapter First: Relations and variations in real numbers (15.16%), second - relative weight of algebraic amounts (17.42%); Engineering and Measurement (15.16%) Link VI - Statistics and probabilities (15.16%), and

the following graph shows the relative weights of the chapters

We note that there is an approximation in the relative weight of the sports topics presented in the Iraqi sports book.

Results related to the second question: What are the mathematical topics included in the book of mathematics in Saudi Arabia for the third grade average and their relative weight?

To answer this question, the content of the Saudi mathematics book was analyzed in the first and second parts of the third intermediate grade by identifying the mathematical topics in the book, and calculating the relative weight of each topic according to the number of pages, as in the previous tables, where the table shows that the mathematical topics are presented in different proportions where The relative weight of the first semester - linear equations (9.3%), the relative weight of the second semester - relationships and linear functions (10.9%), the relative weight of the third semester - linear functions (7.18%), and the relative weight of the fourth semester - linear inequalities (8.24%). The relative weight of the fifth chapter - pain systems Linear equations (9.04%), the relative weight of Chapter VI - polynomial (14.89%), the relative weight of Chapter VII analysis and quadratic equations (11.44%), the relative weight of Chapter VIII - quadratic functions (8.24%), the relative weight Chapter IX – Equations

Roots and triangles (11.44%) and relative weight of Chapter 10 - Statistics and probability (9.3%) The following diagram shows the relative weights of the seasons

We note from the above that there is a convergence in the ratios between most chapters of the Saudi mathematics book, except the sixth chapter, which represents the highest percentage between the chapters where it reached (14.89%), as shown in the graph above.

Results related to the third question: What are the similarities and differences between the topics included in the content of the Iraqi mathematics book, and the content of the Saudi mathematics book corresponding to it?

After observing and analyzing the contents of mathematics for the

third grade Iraqi and Saudi average, as shown in the following table:

The Saudi Book	The Iraqi Book
Chapter One: Linear Equations	Chapter I: Arrangement of operations on preparation
Equations: - Use of compensation package - Solutions of equations - Matches - Solving equations with two variables - Higher-order thinking skills **Solving equations** - Addition equations - Subtraction equations - Multiplication equations - Solving one-step equations - Solving equations using addition or subtraction - Solving equations using multiplication or division - Solving multiplication equations (real life) - Higher-order thinking skills **Solve multi-step equations** - Solve problems involving consecutive integers - Higher-order thinking skills **Solve equations that contain one variable** -Variables at both ends of the equation -Solve an equation containing parentheses	**Arrange operations on numbers** - Use calculator and rounding to simplify numerical sentences **Applications** - Application and its representation at the coordinate level - Types of application - Installation of applications **Sequences** - Sequential and function - Sequential computations **Composite inequalities** - Composite inequalities including (f) - Composite inequalities involving (or) - Trigonometric disparity **Abs variations** - Plan to resolve the issue - Review the chapter - Separation test

- Higher-order thinking skills **Solve equations that contain the absolute value** -Use the setup line to solve problems - Higher-order thinking skills	
Chapter II: Relationships and Linear Functions - relations - Real life (independent variables and dependent variables) - Analysis of graphical representations **Functions** -Define functions -Graphical representation -Equations as functions -Function values -Nonlinear function values -Higher-order thinking skills -Graphical representation of linear equations -Find the sections X and Y -Graphically represent the linear equation -Graphical representation of the composition of the table -Higher-order thinking skills - Mid-term test **Solve linear equations graphically** -Solve the equation that has one root -Unsolved equations -estimation using graphical	**Chapter II: Algebraic Amounts** - Pre-test - Multiplying algebraic amounts - Multiply two algebraic quantities of two terms - Multiply the algebraic amount of two terms in the last of three limits - Algebraic analysis using the largest common factor -Algebraic amount analysis using aggregation -Analysis of the amount of algebraic matches - Algebraic analysis of the full square - Analysis of the algebraic magnitude from three limits by experiment - Analysis of the algebraic amount of the sum of two cubes or the difference between two cubes - Simplification of relative algebraic amounts - Simplify and divide relative algebraic amounts - Simplify and subtract relative

representation -Higher-order thinking skills **Rate of change and inclination** -Rate of change -The rate of change is not constant -Fixed rates of change -Find the inclination -Positive, negative or zero slope -Undefined tendency -Find the coordinate if informed of inclination -Higher-order thinking skills -Sequential arithmetic as linear functions -Sequential arithmetic and functions -Higher-order thinking skills	algebraic amounts - Plan to resolve the issue - Review the chapter - Separation test
Chapter III: Linear Functions -Configuration for Chapter 3 -Representation of equations written in slope and graphically -Write the equation and represent it graphically -Graphical representation of linear equations -Write a linear equation and represent it graphically -Higher-order thinking skills -Cumulative review Write equations in slope and syllable formulas -Write an equation straight flag inclination and a point passes by the inclination and syllable	**Chapter III: Equations** - Pre-test - Solving a system of two equations with two variables - Solving a system of two equations with two variables - Solving a system of two linear equations - Solving a system of two linear equations - Solve a system of two equations written compensation - Solve a system of two equations written by deletion - Solve quadratic equations with one variable

-Write an equation straight learned two points pass by -Higher-order thinking skills -Mid-term test Write equations in tilt and point form -Standard formula for a straight equation -Higher-order thinking skills Parallel and orthogonal lines -Two parallel lines -Orthogonal straight lines -Miles perpendicular straight -Rectum passing by a given point and perpendicular straight known -Separation test - Cumulative test	- Solve quadratic equations with one variable - Solve equations by analyzing the difference between two squares -Solving equations with the square root property - Solving quadratic equations by experiment - Solve the quadratic equation by the whole square - Solve the quadratic equation by completing the square - Solving equations by common law - Solving fractional equations - Separation test - - Separation test Classroom exercises
Chapter Four: Linear Inequalities -Configuration for separation -Solving inequalities by addition or subtraction -Using inequalities to solve problems -Higher-order thinking skills Solving inequalities -Representation and analysis -Solving inequalities by multiplication or division -Writing variations and solving them -Higher-order thinking skills -Cumulative review -Prepare for the next lesson	***The second part:*** **Chapter IV: Coordinate Engineering** -Pre-test -Graphical representation of equations at the coordinate level -The slope of the rectum -Equation of the rectum -Parallel and orthogonal lines -Distance between two points -Trigonometric proportions -Plan to solve the problem (determine the reasonableness of the answer) -Separation test

-Solving multi-step inequalities -Variance solutions that include distribution -Higher-order thinking skills -Mid-term test -Read compound phrases -Composite disparate solution -Divergence that contains the linker (f(-Variations that contain the linker (or(-Higher-order thinking skills Solve inequalities that contain abs -Higher-order thinking skills -Cumulative tes	
Chapter V -Systems of linear equations -Preparation for the fifth chapter -Quick test Solve a system of two linear equations graphically -Solution by graphic representation -of two equations and their solution (writing a system of real life(-Higher-order thinking skills -Solving the system of two linear equations -Solving the system of two equations written compensation -Write a system of two equations and solve it -Higher-order thinking skills -Cumulative review -Solve a system of two linear equations by deletion using addition or subtraction	**Chapter Five: Engineering and Measurement** -Pre-test -Polygons and figures (pyramid and cone(-Triangles -Proportion and measurement in triangles - Circle -Triangle and circle, straight and circle pieces -Angles and circle -Problem solving plan (drawing(- Separation test

-Higher-order thinking skills -Training on the test -Cumulative review -Prepare for the next lesson Mid - term test -Solve a system of two linear equations by omission using multiplication -Higher-order thinking skills -Training on the test -Cumulative review -Prepare for the next lesson Applications on the two-equation system -Separation test - Cumulative test	
Mathematics book / second semester Chapter six - Polynomial -Preparation for Chapter 6 -Hit the limit monocytes -Subdivision of monocytes - Polynomial -Polynomial collection and subtraction -Mid-term test -Lonely hit limit in many limit -Multiply the border -Special cases of polynomial strikes - Chapter test cumulative test	**Chapter Six: Statistics and Probability** -Pre-test -Designing a survey and analyzing its results -Misleading data and statistics -Permutations and combinations -Experimental probability and theoretical probability -Compound events -Problem solving plan (create a template(-Separation test Classroom Exercises - Multiple Choice
Chapter 7: Analysis and Quadratic Equations -Configuration for separation -Analysis of monocytes reduction	

-Use the distribution property -Analysis of triangular quadratic equations -Quadratic equations: the difference between two squares -Trigonometric equations: full squares -Separation test - Cumulative test	
Chapter 8: Quadratic Functions -Preparation for Chapter VIII -Functions representation -Rate of change in quadratic function -Solve the quadratic equation graphically -Mid-term test -Solve quadratic equations by completing the square -Solving quadratic equations using common law -Separation test - Cumulative test	
Chapter 9: Root Equations and Triangles -Configuration for separation -Streamline root phrases -Neglected Graphing Calculator: Relative Foundations -Operations on root phrases -Root equations - Phitagors theory -Mid-term test	

-Distance between two points -Similar triangles -Trigonometric proportions -Separation test -Cumulative test	
Chapter 10: Statistics and Probability -Configuration for separation -Survey design -Analysis of the survey results -Sample statistics and community milestones -Mid-term test -Permutations and combinations -Probability of vehicle accidents -Separation test -Cumulative test.	

There are similarities in a number of mathematical topics raised in the content of Iraqi and Saudi mathematics books for third grade students, but in varying proportions, as explained:

- The first chapter of the Iraqi book (relations and disparities in real numbers) and the fourth chapter of the Saudi book (linear disparities).
- Chapter II in the Iraqi mathematics book (algebraic amounts) and Chapter VI in the Saudi book (polynomials).
- Chapter III in the book of Iraqi mathematics (equations) and the first chapter of the Saudi book (equations).
- While there is a difference in the two books in the fourth chapter of coordinate geometry, where it appeared in the book of Iraqi mathematics did not appear in the Saudi book.
- There is a difference in the fifth chapter in the Iraqi book (geometry and measurement), which dealt with topics (polygons and cone, triangles, proportionality and measurement in triangles, circle, triangle and circle, straight pieces and circle, angles and circle), and in contrast to the Saudi book there is no chapter on these topics mentioned However, in Chapter IX he touched upon the similarity of triangles.

- Chapter VI in the Iraqi book (statistics and triangles), and Chapter X in the Saudi book (statistics and triangles), there is similarity in these two chapters.
- The Saudi mathematics book included other chapters such as chapter three (linear functions), chapter five systems of linear equations, chapter seven (analysis and quadratic equations), chapter eight (quadratic functions), chapter ninth root equations and triangles).

Results for Question 4: How well are the 21st century skills in the third grade Iraqi math book?

In general, the results showed that the skills of the 21st century did not receive the required attention in the textbook of mathematics for the third grade intermediate, where the standards were not available in the required form, but almost non-existent ratios, and there are ratios did not achieve any example or question in the book of mathematics as in the skills of innovation and creativity There are some skills found in very few percentages such as critical thinking and problem solving skills (15.22%), while communication, information and media culture skills were (0.36%) less. From the right one The skills of the culture of computing, information and communication technology were found by (0.97)%, while the skills of the profession and self - reliant learning were (22.10)%, ie the mathematics curriculum for the third grade intermediate did not take into account in preparing the skills of the twenty - first century.

Conclusions:

1. There is an approximation in the relative weight of the sports topics presented in the Iraqi sports book.
2. There is an approximation in the relative weight between most chapters of the Saudi mathematics book.
3. There are similarities in a number of mathematical topics raised in the content of Iraqi and Saudi mathematics books for third grade students, but in varying proportions.
4. The skills of the twenty-first century did not receive the attention required in the textbook of mathematics for the third grade intermediate.

Recommendations:

1. Utilize the skills of the twenty-first century in the development of mathematics and science books for all levels of education.
2. Holding seminars and conferences to discuss the strengths and weaknesses in the textbook of mathematics for the third grade intermediate, and in all curricula of mathematics.
3. Enrichment of mathematics books for the third grade and the rest of the

academic stages with examples and questions that develop the skills of the twenty-first century, in addition to the need to have enrichment books for all stages of study in mathematics.
4. Conducting further research and studies on mathematics books, by analyzing their content in the light of the skills of the twenty-first century.
5. Educate those who develop curricula and teachers on the importance of keeping abreast of developments in the world in general, and benefit from the skills of the twenty-first century to develop the educational process.
6. Integrating 21st century skills in mathematics and science curricula.
Proposals:
1. Conduct a comparative study of the rest of Iraq's curricula with Arab and developed foreign countries.
2. Comparing the mathematics curricula of all stages with the curricula of other countries.
3. Conducting a study to design an educational learning of the skills of the twenty-first century on the curricula of mathematics.
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