

**TECHNOLOGICAL INNOVATION AND
SUSTAINABILITY FOR BUSINESS
COMPETITIVE ADVANTAGE**

TECHNOLOGICAL HORIZONS

PART A

**TECHNOLOGICAL SKILLS AND
KNOWLEDGE FOR PRACTITIONERS
WITHIN BUSINESS ENVIRONMENT**

EDITED BY

**HASHEM ALSHURAFAT
CLAIRE BEATTIE**

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ALLAM HAMDAN | REEM KHAMIS

Technological Horizons

TECHNOLOGICAL INNOVATION AND SUSTAINABILITY FOR BUSINESS COMPETITIVE ADVANTAGE

Series Editors: Allam Hamdan and Reem Khamis

Innovation and sustainability are broad terms that describe many interdisciplinary sciences – business success and competitiveness may not be separated from social and cultural aspects that interfere with any future development prospects. Research in across areas would provide a better understanding of international experiences, bridging the gap between developing and developed nations. This series promotes new visions for business research prospects that work in favor of innovation and sustainability in terms of governance, environment, and ethics.

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Technological Horizons: Technological Skills and Knowledge for Practitioners within Business Environment

EDITED BY

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Preface

The book is a collaborative effort among esteemed contributors, who bring a wealth of expertise to explore technology across accounting realms. The book chapters are encapsulating a holistic view of technological horizon for practitioners in the business environment. The purpose of *Technological Horizons* is rooted within the emerging markets context.

The book focuses on the essential technological skills and knowledge required for modern practitioners in the business environment, emphasizing the evolving landscape of financial literacy and digital transformation. It begins with a study on how financial literacy fosters innovative thinking among students, followed by an analysis of the impact of digital entrepreneurship on strategic vigilance in five-star hotels in Jordan. The relationship between transformational leadership and job satisfaction is explored, highlighting the mediating role of knowledge sharing. The chapters also examine governance for environmental sustainability through the lens of internal control, environmental accounting, and auditing. Further, the pioneering role of digital transformation in advancing the accounting profession in Jordan is discussed, alongside an investigation into how top-management remuneration influences charitable contributions of nonfinancial companies. Each chapter provides valuable insights into the integration of technological advancements and strategic practices in accounting and auditing.

As editors, we extend our sincere gratitude to the contributors for their scholarly contributions and to the readers for joining us on this intellectual journey. May this book serve as an inspiration, guiding us toward a future where technology converge harmoniously for the betterment of accounting, auditing, and internal control professions.

The editors
Hashem Alshurafat
Claire Beattie

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Chapter 1

The Role of Financial Literacy in Developing Innovative Thinking Among Basic Stage Students From the Perspective of National and Civic Education Teachers in Al-Mafraq

Esraa Abdullah Alsharafat and Mamdouh Al-Sorour

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Abstract

This study investigates the relationship between financial literacy and innovative thinking among elementary school students in Mafraq city, utilizing a descriptive survey methodology. Through field study approaches and questionnaires directed at subject teachers, data were collected from a sample of 148 teachers in both government and private schools. The study instrument underwent rigorous validation processes, ensuring its reliability and validity. The study procedures were meticulously outlined, covering aspects such as introducing the research problem, reviewing previous literature, and detailing the methodology, including sample selection and instrument development. Statistical analysis, conducted using Statistical Package for Social Sciences (SPSS) software, revealed crucial insights into the relationship between financial literacy and innovative thinking. Descriptive analysis illuminated the characteristics of the main study variables, providing a foundation for further examination. Normal distribution tests indicated the suitability of the data for statistical analysis. Cronbach's alpha tests confirmed the high reliability of the study instrument, bolstering confidence in the measurement of variables. Linear regression analysis unveiled a significant positive relationship between financial literacy and innovative thinking among students. The robust statistical model elucidated that innovative thinking plays a pivotal role in fostering financial literacy.

The study's findings underscore the importance of nurturing innovative thinking in educational settings to enhance financial literacy among students.

Keywords: Financial literacy; innovative thinking; elementary school students; Jordan; Mafraq city

1. Introduction

Financial literacy represents one of the fundamental aspects in developing entrepreneurial and innovative thinking among basic stage students, and teachers play a crucial role in conveying and enhancing this literacy among students. The basic stage is a vital period in individual development, forming the foundation for personality formation and initial concepts about financial matters. Through this stage, students can learn about the concepts and values of financial literacy, potentially producing a generation capable of economic thinking and responsibly managing their financial resources. Teachers play a pivotal role in guiding students and raising their awareness of these concepts, as well as developing their skills.

Developing financial management skills and economic thinking among individuals is important in fostering entrepreneurial spirit and innovation. Today's global economy requires creative and entrepreneurial thinking to deal with increasing financial and economic challenges and understand financial literacy. Knowledge related to financial and economic matters plays a central role in encouraging entrepreneurial and innovative thinking, starting from managing personal finances to understanding national and global economies through concepts such as investment, savings, debt, financial markets, and others. Developing financial literacy among individuals is the first step toward fostering entrepreneurial and innovative thinking. Financial literacy contributes to stimulating investment and entrepreneurship when individuals have a good understanding of investment and business planning, giving them more opportunities to develop their own projects (Shiyyab et al., 2024).

Understanding financial matters and acquiring financial management skills are essential in today's era, where individuals must deal with a variety of daily and future financial decisions. Therefore, the importance of financial literacy lies in equipping individuals with the knowledge and skills necessary to make sound financial decisions and plan for a sustainable financial future. The educational stage holds a special place in developing and shaping an individual's personality, as thinking grows during this stage, and values and beliefs are formed. Thus, shaping and directing this thinking toward innovation and entrepreneurship can be achieved by building strong foundations for financial education (Alsharafat, Al Shbail, et al., 2024).

Financial literacy has not yet received the importance it deserves at the Arab level because Arab administration still does not fully appreciate the importance of financial education, despite the developments in administrative practices and processes (Goyal & Kumar, 2021).

Financial literacy is the basic understanding and awareness of individuals regarding financial concepts and how to deal with financial matters correctly and effectively. A deep understanding of financial literacy helps reduce the risks associated with entrepreneurial activities, as individuals with strong financial literacy can evaluate financial probabilities and make informed decisions in projects (Lyons & Kass-Hanna, 2021). Innovative thinking is one of the most important abilities that educators should pay special attention to. Today's world is characterized by numerous challenges and problems faced by individuals and societies, as well as increased competition and conflict between countries for survival and asserting existence (Dewi et al., 2020).

National and civic education teachers play an important role in guiding students toward developing their ideas and guiding them in dealing with financial literacy, as this role contributes to developing their innovative ideas. The role of the teacher goes beyond providing information and facts only; they must guide students in all aspects of their lives to form students capable of interacting effectively with their environment and society, and building a prosperous future through the abilities and skills they acquire. This guidance enhances their ability to achieve personal success and contribute to societal development.

This study contributes to directing attention and efforts toward developing educational curricula that contribute to the development of innovative thinking among youth, thereby achieving sustainable development and prosperity in society. Therefore, through this research, the researcher aims to shed light on the importance of the role of financial literacy in developing innovative thinking among basic stage students and its contribution to building a creative generation capable of facing future challenges. The researcher also seeks to understand the perspective of national and civic education teachers regarding the impact of this literacy on students.

The squandering of money and the widespread phenomenon of consumerism among societies worldwide have led some individuals to adopt irregular financial behaviors, such as purchasing unnecessary goods and services, leading to extravagance and wastefulness contrary to virtue. Additionally, it plunges individuals into financial distress that may lead to bankruptcy. All these issues and more necessitate the school to fulfil its educational roles in reshaping children's perspectives on money by instilling in them the values, attitudes, methods, tools, and financial, entrepreneurial, and innovative ideas that enable them to perceive the value of money, acquire it, spend it, and save it to manage their lives in a manner consistent with the educational directives that preserve the dignity of the individual and achieve their prosperity and happiness (Al-Zahrani, 2015). The researcher found shortcomings in studies addressing the impact of financial literacy on the development of students' innovative thinking and the role of national and civic education subjects in emphasizing financial literacy concepts (Alshurafat et al., 2023).

To identify the study problem, the researcher met with national and civic education teachers in Al-Mafraq and asked them about the role of financial literacy in fostering innovative thinking among basic stage students, and the importance of reinforcing this literacy among students in general, and basic stage students in particular, considering this stage as crucial in their lives and essential in shaping individuals' personalities. Teachers at this stage can build an

innovative generation capable of financial matters by clarifying financial concepts and values, thus creating a creative generation capable of facing future challenges.

The study's question arises from its problem, indicating a need to examine the role of financial education in enhancing innovative thinking among basic stage students from the perspective of national and civic education teachers in Al-Mafraq. Consequently, the study answers the following questions:

- What is the role of financial literacy in fostering innovative thinking among basic stage students from the perspective of national and civic education teachers in Al-Mafraq?

This study aims to explore the role of financial literacy in fostering innovative thinking among basic stage students from the perspective of national and civic education teachers in Al-Mafraq. It seeks to analyze and evaluate the effectiveness of financial literacy in stimulating and developing students' critical thinking skills and their ability to think innovatively during this crucial stage of their lives. Summarizing the study's goal in light of its problem and questions, it can be outlined as follows:

- Clarifying the role of financial literacy in fostering innovative thinking among basic stage students.

Completing this study may help direct attention and efforts toward developing educational curricula that contribute to fostering financial and innovative thinking among learners, thus achieving sustainable development and prosperity in society (Al-Mawali et al., 2023; Alkhalaileh et al., 2024; Alshurafat, Al Shbail, et al., 2024; Ananzeh et al., 2024). Therefore, the significance of this study lies in highlighting the importance of the role of financial literacy in fostering innovative thinking among basic stage students and its contribution to building a creative generation capable of facing future challenges. The importance of this research can be divided into two parts (theoretical significance and practical significance) as follows:

- The study sheds light on previous research in the fields of financial literacy and innovative thinking, listing the most important findings and clarifying research gaps.
- It conducts a significant partial study in the field of literacy in general and financial literacy in particular, helping to understand the role of financial literacy as an influencing factor in developing innovative thinking among basic stage students from the teachers' perspective.
- Forming a comprehensive view of money and its importance in problem-solving, capacities, and idea development.
- The possibility of benefiting relevant parties from the recommendations resulting from this study, including the national and civic education curriculum developers, thereby aiding governmental entities and voluntary organizations concerned with developing the capabilities of the people in those provinces.

2. Literature Review and Theoretical Literature

Education is considered one of the most important pillars of economic and social progress, achieving prosperity and well-being for the society it serves. Schools and universities are institutions of education that can supply society with trained human resources, thoughtful minds, and leadership capable of assuming responsibility. Therefore, they are investment institutions for resources. Moreover, they work to spread noble knowledge and proper education among talented individuals and competencies to educate and prepare them to serve and develop society, contributing to its progress (Alkhalaileh et al., 2023).

The Hashemite Kingdom of Jordan has shown clear interest in education at all levels since its establishment, allocating part of its resources and giving it special attention. This interest can be observed in the decrease in illiteracy rates, the increase in the number of schools, the establishment of community colleges and universities, and the increase in the number of students enrolled in higher education (Alaqrabawi et al., 2023; Alkhalaileh et al., 2023).

2.1. Financial Literacy

Financial literacy refers to a set of skills that help individuals manage their financial affairs, acquired through learning or life experience while dealing with money, its sources, and methods of obtaining it to determine the means in which it will be invested in various matters, whether related to personal or professional expenses (Goyal & Kumar, 2021).

The issue of financial literacy is one of the most important issues aimed at achieving development through society's resources and literacy. The individual's financial orientation also depends on the type of habits and attitudes that have been formed and rooted in them since childhood (Dewi et al., 2020).

The need for financial literacy is essential in both developed and developing countries, especially with the increasing complexity of financial products. Therefore, economic empowerment and financial literacy must be dealt with as parallel pillars. While financial literacy stimulates demand by raising individuals' financial awareness and thus increasing demand for services and products that meet their needs, economic empowerment works on the supply side by providing financial services and products that align with the growing demand (Lyons & Kass-Hanna, 2021).

One of the modern global trends emphasizes the need for personal financial education and imparting financial literacy to students as the most important requirement for sustainable human development. Hence, the role of the curriculum in this matter is evident through designing financial knowledge programs focused on the student, developing educational programs, and using teaching and learning strategies that support financial knowledge as an important part of financial literacy. Many countries are focusing on supporting curricula concerned with teaching information about financial literacy in educational stages, contributing to increasing awareness among students about the importance of money as a fundamental driver for most aspects of life (Alshurafat, Hamdan, & Sands, 2024; Goyal & Kumar, 2021).

A study by [Hassan \(2019\)](#) clarified some of the goals sought by financial literacy, including:

- The emergence of the need to focus on financial literacy, as it is no longer limited to students in schools and universities or individuals with financial expertise, but it has become important to become part of the life of all individuals.
- Developing concepts, skills, values, and attitudes among students while giving them the opportunity to participate in the decision-making process, get accustomed to economics and saving.
- Preparing a generation to contribute to economic reform and empowering students with leadership personalities capable of assuming responsibility later on, providing them with economic principles.
- Clarifying the nature of financial services because there are many services offered by the financial sector to various segments of society, and there are many individuals who do not have sufficient information about these services or how to deal with them.
- Developing students' financial skills by providing them with information that enables them to make informed decisions about their financial transactions, reducing the risk of exposure in their practical lives.

2.1.1. Importance and Benefits of Financial Literacy

- Ability to make financial decisions, repay debts, and preserve a portion of income.
- Influence on the future of future generations in terms of their financial capability and savings.
- Providing money for a longer period, as individuals live longer, meaning they need more money.
- Keeping pace with the changing environment due to technological advancement, making financial markets constantly volatile.
- Enabling individuals to allocate sufficient amounts of money to cover their expenses in the absence of an income source.

2.2. National and Civic Education Teachers

National and civic education teachers in Jordan hold various specializations in their first university degrees, including history, geography, and social studies.

2.3. Innovative Thinking

Innovative thinking involves identifying problems, awareness of weaknesses, gaps, lack of harmony, and information shortage, searching for solutions, predicting, formulating new hypotheses, testing them, reformulating them, or modifying them to reach solutions or new connections using available data, and conveying or

transmitting results to others. Innovative thinking is a special type of problem-solving, and the results of this process are innovations if they are new and valuable, either for the thinker himself or for the literacy in which he lives (Salman & Ghannad, 2020).

Innovative thinking is considered one of the types of thinking that enables individuals to face situations and problems in new ways. It highlights the individual's ability to produce unconventional and diverse ideas with accurate results. Innovative thinking is not intelligence or superiority; rather, it is dealing well with matters, i.e., seriousness with suitability for each individual. Each individual has a certain ability for innovative thinking, and the difference between one person and another lies only in the degree of this thinking (Al-Anani, 2023).

Innovative thinking enables individuals to confront the problems they encounter, aware of their ability to overcome them, making them optimistic, persevering, satisfied with themselves, confident in their learning abilities, and striving to achieve their goals by focusing on the positive aspects rather than focusing on the negative aspects (Al Shbail, Esra'a, et al., 2021).

Students represent a societal human wealth, and their upbringing on innovative thinking contributes to their qualification and education of life skills in developing societies and achieving progress and innovation. Moreover, students are the foundation and mainstay for the progress of societies, as they constitute the vital resource for innovative ideas and new solutions to the challenges facing societies. Schools play a role in preparing innovative students capable of finding creative solutions to the problems faced by society (Al-Sagheer, 2019). Among the skills of innovative thinking are:

- Fluency: Producing ideas easily within a specified time frame.
- Flexibility: The ability to think in more than one direction to produce varied responses to the problem.
- Originality: Thinking and producing unconventional ideas and responses.
- Detail skill: Presenting accurate and varied details about the idea or problem, aiding in the development process (Al Shbail, Alshurafat, et al., 2021).

Al-Sharida's study (2020) aimed to develop national standards for financial literacy and measure their availability in elementary school textbooks in Jordan. To achieve the study's objectives, the researcher developed standards for financial literacy suitable for the Jordanian environment, consisting of six main criteria. The study sample included 54 textbooks from various subjects such as Mathematics, Arabic Language, Science, Islamic Education, and Vocational Education, ranging from first to sixth grade. The study results indicated that the criterion of spending and saving ranked first with a percentage of 65%, indicating a high availability degree. The criterion of risk management and insurance ranked second with 19% indicating a moderate availability degree. The criterion of work and income ranked third with 15% indicating a moderate availability degree. The criterion of financial decision-making ranked fourth with 60% indicating a low availability degree. The criterion of lending and borrowing ranked fifth with 40% indicating a low availability degree. The criterion of investment ranked sixth with 0% indicating a nonexistent availability degree. The study revealed significant deficiencies in addressing financial literacy

topics in elementary school textbooks. The researcher recommended revising the content of elementary school textbooks to better incorporate proposed financial literacy standards, aligning them with contemporary requirements, economic conditions, and technological advancements. Additionally, a financial literacy textbook for elementary school students was suggested to enhance financial literacy concepts and terminology from an early age.

Al-Anani and others' study (2022) aimed to identify the relationship between secondary school students' achievement test results, innovative thinking, and their attitudes toward self-directed learning. The study utilized descriptive-analytical and experimental methodologies and highlighted the importance of providing educational situations and activities that foster innovative thinking and self-directed learning attitudes. The study emphasized the need to expand students' thinking horizons and develop innovative thinking and self-directed learning attitudes in Biology using augmented reality-enhanced blended learning.

Salman and Ghannad's study (2020) aimed to assess the innovative thinking and cognitive abilities of university students in Iraq. The study selected a random sample of students and adopted a set of tests for innovative thinking. The results showed gender differences in innovative thinking and cognitive abilities, with males scoring higher. The researcher recommended developing programs and activities to enhance skills related to innovative thinking and cognitive abilities and training students on activities that promote innovative thinking.

This study complements previous research efforts in the field of financial literacy and innovation, seeking to fill the existing research gap regarding the implications of imparting financial concepts to students and their positive impact on the innovative thinking level of elementary stage students in schools in Mafraq Governorate.

3. Method and Procedures

This section provides a description of the study methodology, the study population and sample, the study questionnaire, methods of verifying its validity and reliability, and includes a description of the statistical procedures to be used to achieve the research objective.

3.1. Study Methodology

The descriptive survey methodology was used to understand the role of financial literacy in fostering innovative thinking among elementary school students in Mafraq city. A field study approach was employed, where questionnaires were designed and directed to subject teachers in Mafraq.

3.2. Study Population and Sample

The study population consisted of a random sample of national and civil education teachers in government and private schools in Mafraq, totaling 148 individuals.