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The DP of the 21st Century Skills for the Secondary School Students from their EFL Teachers' Perspectives in Palestine

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Thesis Approval

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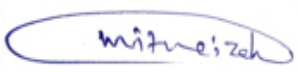
External examiner:	Dr. Mahmoud Itmeizeh	Signature: 

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Dedication

All praise to Allah, today we fold the days' tiredness and the errand summing up between the cover of this humble work.

To the utmost knowledge lighthouse, to our greatest and most honored prophet Mohamed - May peace and grace from Allah be upon him.

To the Spring that never stops giving, to my mother who weaves my happiness with strings from her merciful heart... to my beloved mother.

To whom he strives to bless comfort and welfare and never stints what he owns to push me into the path of success who taught me to promote life steps wisely and patiently, to my dearest father

To whose love flows in my veins, and my heart always remembers them, to my brothers and sisters.

To the light shining my life, my eternal young friends, whose small hand have been patting me, my beloved children.

To the one with whom I am walking the path of life, with whom I have been challenging life and circumstances to stand tall and proud, my dear husband.

To my old and new friends.

Finally, to those who taught us letters of gold and words of jewel of the utmost and sweetest sentences in the whole knowledge. Who rewarded us their knowledge simply and from their thoughts made a lighthouse guides us through the knowledge and success path, To our honored teachers and professors.

Bushra Ibrahim Sami Alhereemi

Declaration

I certify that this thesis submitted for the Degree of master's in education in Teaching English as a Foreign Language, is the result of my own research, except where otherwise acknowledged. This thesis (or any part of the same) has not been submitted for a higher degree to any other university or institution.

Signature: 

Name:Bushra Ibrahim Sami Alhereemi

Date: 12/04/2025

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Nothing in life is more captivating than a moment when a person accomplishes what her soul aspires to, and his soul longs for. Success is life's greatest delight, but we genuinely owe it to those who support us in attaining what we have accomplished.

As I reap the fruit of success, I owe it to all those who supported and helped me earn what I have.

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Bushra Ibrahim Sami Alhereemi

Abstract

The study explored the secondary school students' DP of the21st century skills from the perspective of their EFL teachers. A mixed approach was implemented to achieve the study goal. A convenientsample of (264) EFL teachers completed the questionnaire and (5) teachers participated in the interviews. Two instruments were devised, the questionnaire and the interview, and completed by Palestinian EFL teachers in the West Bank. The questionnaire data was analyzed using SPSS, while the interview transcribed following thematic analysis.

The study outcomes revealed that the degree of secondary school students' possession of the 21st Century skills from the perspective of EFLTs in Palestine is high. The students' possession of the sub-skills of the 21st century skills ranged between moderate and high.

The hypotheses analysis showed no statistically significant differences in the DP of the 21st Century skills for the secondary school students from their EFL teachers' perspectives inPalestinedue to gender but mean scores of the respondents presented differences in favor of male teachers. Also, no statistically significant differences were reportedrelatedto teachers' years of experience in the dimensions the critical thinking, communication, using technology as learning tool and total score of the 21st century skills DP, but there are differences in the dimensions of collaboration, and reflection and awareness skills in favor of the lesser years of experience, i. e., the least the years of the experience the more the differences are observed.

Moreover, no statistically significant differences were revealed the DP of the 21st Century skills for the secondary school students from their EFL teachers' perspectives inPalestinedue to the academic qualification in the total score dimension and sub-dimensions but for collaboration skills dimension. Additionally, there were no statistically significant differences due to(governorates) in the total score dimension and sub-dimensions except for the critical thinking dimension.

The study recommends reevaluation of the distribution of the 21stcentury skills in the English for Palestine curriculum for the secondary level to meet the tertiary education and future workplace requirements and Future research should be conducted to explore the knowledge of secondary school students regarding the 21stcentury skills.

درجة امتلاك طلاب المرحلة الثانوية لمهارات القرن الحادي والعشرينمن وجهة نظر معلمياللغة الإنجليزية في فلسطين

إعدادالطالبة: بشرىابراهيم ساميالهريمي

إشرافالدكتورة: أمل النتشة

الملخص

استكشفت الدراسة درجة امتلاك طلاب المدارس الثانوية لمهارات القرن الحادي والعشرين من وجهة نظر معلميهم في اللغة الإنجليزية كلغة أجنبية. تم تطبيق المنهج المختلط لتحقيق هدف الدراسة. تم تصميم أداتين، الاستبانة والمقابلة، واكمالها من قبل معلمي اللغة الإنجليزية كلغة أجنبية في الضفة الغربية. تم اختيار عينة ملائمة من (264) معلماً ومعلمة من معلمي اللغة الإنجليزية كلغة أجنبية أجابوا على فقرات الاستبيان، وشارك (5) معلمين في المقابلات. تم تحليل بيانات الاستبيان باستخدام برنامجالحزمة الإحصائية للعلوم الإجتماعية (SPSS)، بينما تم تفريغ بيانات المقابلات واجراء التحليل الموضوعي لها.

كشفت نتائج الدراسة أن درجة امتلاك طلبة المرحلة الثانوية لمهارات القرن الحادي والعشرين من وجهة نظر معلمي اللغة الإنجليزية في فلسطين مرتفع ة. وتراوحت درجة امتلاك الطلبة للمهارات الفرعية لمهارات القرن الحادي والعشرين بين متوسطة بالنسبة للتفكير الناقد، واستخدام التكنولوجيا كأداة للتعلم، ومرتفعة بالنسبة للمهارات الفرعية لمهارات التعاون، ومهارات التواصل،والتفكير، والوعي.

أظهر تحليل الفرضيات عدم وجود فروق ذات دلالة إحصائية في درجة امتلاك طلبة المرحلة الثانوية لمهارات القرن الحادي والعشرين من وجهة نظر معلمي اللغة الإنجليزية في فلسطين تتعلق بالجنس، لكن متوسطات درجات المبحوثين أظهرت فروقًا لصالح المعلمين الذكور. كما أنه لا توجد فروق ذات دلالة إحصائية في درجة امتلاك طلبة المرحلة الثانوية لمهارات القرن الحادي والعشرين من منظور معلمي اللغة الإنجليزية في فلسطين مرتبطة بسنوات خبرة المعلمين في أبعاد التفكير الناقد، والتواصل، واستخدام التكنولوجيا كأداة للتعلم، والدرجة الكلية لدرجة امتلاك مهارات القرن الحادي والعشرين، ولكن توجد فروق في أبعاد مهارات التعاون، ومهارات التفكير والوعي لصالح سنوات الخبرة الأقل، أي كلما قلت سنوات الخبرة كلما لوحظت فروق أكبر.

كما لم تظهر فروق ذات دلالة إحصائية في درجة امتلاك طلبة المرحلة الثانوية لمهارات القرن الحادي والعشرين من وجهة نظر معلمي اللغة الإنجليزية في فلسطين مرتبطة بالمؤهل الأكاديمي في البعد

الكلي للدرجات والأبعاد الفرعية إلا في بعد مهارات التعاون. كما لم تكن هناك فروق ذات دلالة إحصائية في درجة امتلاك طلبة المرحلة الثانوية لمهارات القرن الحادي والعشرين من وجهة نظر معلمي اللغة الإنجليزية في فلسطين مرتبطة بـ(المحافظات) في البعد الكلي والأبعاد الفرعية إلا بالنسبة لبعد التفكير الناقد.

أوصت الدراسة بإعادة تقييم توزيع مهارات القرن الحادي والعشرين في منهاج اللغة الإنجليزية الفلسطيني للمرحلة الثانوية لتلبية احتياجات التعليم العالي ومتطلبات سوق العمل في المستقبل، كما أوصت الدراسة بضرورة إجراء بحوث مستقبلية لاستكشاف معرفة طلبة المرحلة الثانوية بمهارات القرن الحادي والعشرين.

Chapter One

Background of the study

1.1. Introduction

In today's technology-driven information era, the function of information in society has undergone a significant shift, leading to a transformation in the composition of the workforce. While skilled labor remains essential, the emergence of new occupations reliant on information skills underscores the need for adaptability and innovation. Just as the industrial economy relied on jobs associated with goods, the information age and knowledge economy necessitate occupations focused on creating, disseminating, and utilizing information (Care, Griffin& McGaw, 2012).

The modern world is experiencing rapid progress and development along with an explosion of intellectual wealth, knowledge, and technological revolutions. This means that we are living in a century with entirely different variables, instruments, and circumstances compared to previous centuries. As a result, successive generations need to possess and develop skills that are suitable for these changes, allowing them to positively and creatively engage in this development.

Education has a new challenge to equip the population with the information skills required in an information society. However, with the right focus and adaptation, educational systems can empower individuals with the necessary information and technical skills for the information age, shifting from production-based ones(Care, Griffin & McGaw, 2012).

The current era is marked by remarkable progress in cognition and technology, leading to a profound educational landscape shift. Educators and stakeholders are united in recognizing the necessity of an educational framework that aligns with the demands of this era. There is

a growing consensus for an educational environment that fosters effective teaching methods, supports educators, enriches students, and equips them with the essential skills to navigate the intricacies of the 21st century. The focus has shifted towards educational objectives encompassing life skills, continual learning proficiencies, and broader 21st-century competencies, emphasizing the need for ongoing development and preparing students to adapt to a dynamic world and confront the demands of competition, innovation, and the labor market.

As noted by Paker (2023), 21st century skills (21st CSs) have long been ingrained in language education, encompassing communication, collaboration, problem-solving, and critical thinking, among other essential skills. What sets these skills apart is the shift from teacher-centered to student-centered education and the increasing influence of social and cultural contexts in the classroom. These changes necessitate adjustments in the skills students acquire and their approach to their surroundings, underscoring the vital role of educators in facilitating these changes and integrating them into the educational process.

Young people in general, and secondary school students in particular, are seen as the best individuals for conscious interaction and effective participation with the challenges and requirements of the twenty-first century. They are at an age and stage of life that enables them to integrate effectively and be creative within the knowledge society. They are also highly prepared for education, especially in technology, communication instruments, digital and virtual worlds, and the associated requirements that significantly impact the learning and teaching process as well as the labor market. Therefore, schools should prioritize these skills over a content-based approach. The extent to which education can address 21st-century skills is a question, particularly in developing countries. According to Abualrob (2019, 115) the Palestinian schools are "advancing toward the 21st century", yet the teachers' roles in nurturing the21st CSs in young learners is "still below expectations".

Abundant research has been published investigating how curriculum integrates 21st CSs locally, regionally, and globally. Since the current study is concerned with the Palestinian students, focusing on the Palestinian curriculum is convenient. A study by Nassar in 2022 identified a decline in incorporating 21st-century skills in English language textbooks in Palestine. The research revealed that communication skills ranked highest at 37.73%, critical thinking skills at 30.08%, cooperation skills at 19.09%, and creativity skills at 13.09%. By contrast, Amr's (2020) study on the 21st-century skills in the Tawjihi English

curriculum reported varying degrees of integration, asserting that collaboration tops the list while technological and communication skills are at the bottom.

The current body of research focuses on assessing the 21st CSs represented in the curriculum with little examination of the degree of possession (DP) of these skills among the students themselves either by self-evaluation or their teachers' assessment, therefore, the current study seeks to examine this gap through evaluating the DP of the 21st CSs among Palestinian secondary school students from the perspective of their teachers.

1.2. Statement of the problem

Upon reviewing multiple studies from Palestinian (Shalamish, 2021), Arabic (Alhawri&Alqudsi, 2020), and foreign (Uka & Bedir, 2020) sources, a significant trend became apparent. Most of these studies concentrate on the teacher's role in cultivating students' 21st CSs. To the best of researcher's knowledge, only a small number of studies address students' possession of these skills. Additionally, certain studies, including Al Rawadiah's (2021) research, evaluated the level of 21st CSs among teachers in the Jordanian governorate of Ma'an and their impact on students' acquisition of these skills from the teachers' perspective. Hence, the study tackles the subject focusing on the level of SSSs'possession of the 21st CSs from the perspective of their teachers.

1.3. The study objectives

The study aims at achieving the following objectives:

1. Identify the degree of secondary school students (SSSs) possession of the 21stCSs from the perspective of EFL in Palestine.
2. Explore whether the degree of SSSs' possession of the 21st CSs differ from the perspective of English as foreign language teachers (EFLTs) in Palestine due to the variables (gender, years of experience, academic qualification, governorates).

1.4. The study questions

1. What is the degree of SSSs' possession of the 21st CSs from the perspective of EFLT in Palestine?
2. Are there any differences between the mean scores of the English as Foreign Language teachers' perspectives(EFLTPs) in Palestine towards the degree of SSSs'

possession of the 21st CSs due to the variable (gender, years of experience, academic qualifications, governorates)?

1.5. The study hypotheses

There are no statistically significant differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due togender (male, female).

There are no statistically significant differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due toyears of experience(1-5, 6-10, 11-15, over 15).

There are no statistically significant differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to the academic qualification(BA,MA, PhD)

There are no statistically significant differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due togovernorates(northern, central, southern).

1.6. Definition of terms

21st century skills: "Twenty-first-century learning, or the twenty-first- century Skills Movement as it is commonly known …, refers to a global movement to redefine education goals and transform learning practice in response to the question, "What do students need to learn for life in our times?" - A world that is rapidly evolving from the industrial to the knowledge and innovation era" (Seel, 2011, P. 3353).

Operational definition: a set of skills, competencies, knowledge, and experiences necessary for the students to successfully by prepared for the future workforce requirements.

EFL teachers:"an EFL Teachers is a person who has obtain a teaching qualification for the English language in a teacher education institution , and whose training has been recognized by the award of an appropriate teaching certificate, and by decree he is

officially appointed to teach English as a foreign language in accordance with his teaching certificate" (Arkam, 2015, P. 2).

Operational definition:teachers who teachEnglish as an additional language to non-native speakers of that language, where the main purpose of EFL is communicative.

Perspective: "a particular way of considering something" (Cambridge Dictionary Online).

Operationally: The way Palestinian EFLTs view and assess their students' skills.

Secondary school students: "an individual enrolled in educational institutions offering programs beyond primary education, typically between the ages of 12 to 18 years. These students can pursue either a scientific-humanistic or technical-professional track, with the former preparing them for university enrollment and the latter for direct entry into the labor market" (Espinoza& González, P. 115).

Operationally:students at the stage that is joined after passing the basic education stage, which is represented by the primary and preparatory grades.

Degree of possession:the level of acquiring skills, abilities, or competencies.

1.7. Significance of the study

The research is a significant endeavor to advance educational research, specifically focusing on the 21st CSs of English as a Foreign Language (EFL) students. It seeks to contribute to the existing body of knowledge by delving into the nuanced aspects of these skills and their possession by EFL students. By examining the practical realities of the degree of these students' possession of the21st CSs, the study will provide a detailed analysis of their strengths and weaknesses in this area. This approach underscores the urgent need for targeted interventions and strategies, to enhance their mastery of these essential skills.

The study's findings will significantly impact EFLTs. They will gain insight into the specific areas where their students may be lacking in 21st CSs, such as critical thinking, communication, collaboration, and creativity. By addressing these weaknesses, teachers can prepare their students for the demands of the modern world, where these skills are crucial for success. This information will enable teachers to tailor their instructional

strategies to address these specific weaknesses and better support their students in developing and mastering these essential skills.

The study will offer valuable insights for curriculum and teaching method developers. The results may shed light on specific areas where students may be experiencing shortages of support within the curriculum. This includes potentially underrepresented aspects that are not adequately covered in the teaching instructions, hindering their overall development and possession of 21st CSs.

Chapter Two

Literature review and related study

2.1.Introduction

The beginning of the twenty-first century coincided with such processes as globalization and phenomenal development in information and communication technology, while dissolution of spatial and temporal boundaries thereby turned the concept of a global village into a living reality. This was followed by a rapid proliferation of technical programs and applications into daily life and their consolidation into modern sets of skills younger people need for life and work. These form the twenty-first-century competencies. This chapter is thus based on an elaborate background that explains the definition of 21st CSs, the classification of core skills, and why they are important to students. Related studies through a literature review make the second section of this chapter.

2.2.Literature review

The section provides an overview of the study's theoretical framework, discussing the core themes of the thesis.

2.2.1. Theoretical Framework

The theoretical framework expands on the thesis major topics and sub-themes related to the 21st century skills.

2.2.2. Skills of the 21stcentury: definitions

There is no universally accepted definition of what 'the21st CSs' are. There are a lot of skills that fall under the heading of the21st CSs, but because this definition is so vague, clear distinctions between the21st CSs and other related competencies such as soft skills

cannot be made. Analysts use the term 'the21st CSs ' to write down a general concept that encompasses several or even subcategories of skills (Joynes et al., 2019).

The Partnership for the21st CSs (P21) discusses the21st CSs in three categories: learning and innovation skills, information, media and technology skills, and life and vocational skills (Partnership for the21st CSs, 2009). As a result of several workshops that began in 2005, the US National Research Council defined the21st CSs as cognitive skills, interpersonal skills (National Research Council, 2011), and personal skills.

The Assessment and Teaching of the21st CSs (ATC) Foundation also defined the21st CSs in terms of ways of thinking which include creativity, innovation, critical thinking, problem solving, decision making, and metacognition or learning to learn, ways of working which include communication, collaboration or teamwork, instruments for work which address information literacy and information and communication technology (ICT) literacy, and living in the world which includes citizenship, life and professional skills, and personal and social responsibility (Binkley et al., 2010).

The Organisation for Economic Co-operation and Development (OECD) has grouped the21st CSs into three categories: skills in using interactive instruments, the ability to collaborate with diverse heterogeneous groups, and the ability to work independently. In addition, the OECD also emphasizes the ability of individuals to use technology effectively, communicate effectively and work in groups, self-management, self-advocacy, and the ability to defend their rights and the rights of others as the21st CSs (Dede, 2010).

The North Central Regional Education Laboratory (NCREL) in their comprehensive research (2003) included the21st CSs as digital literacy with a new perspective considering recent historical events, globalization and the digital age, creative thinking, effective communication, and advancement.

The Asia-Pacific Economic Cooperation (APEC, 2008) also states that the knowledge, skills, and attitudes needed to compete in the 21stCentury workforce are increasingly diverse, and that individuals must have a collaborative understanding and ability to use recent technologies and cope with rapid change. In this context, the 2011 APEC identified the21stCSs as lifelong learning, problem solving, self-management and collaborative teamwork, and the International Society for Technology in Education (ISTE-NETSS)

defined the skills standards that students should have by stating that ICT should be at the center of the21st CSs. The ISTE published National Educational Technology Standards for Students (NETS-S) are the standards needed to assess the knowledge and skills students need for productive living and learning in a globalized and digital world.

However, considering the varied agendas of educationalists, policymakers, employers, teaching unions, and higher education institutions. Silva (2009) noted the existence of numerous descriptors for the skill set, encompassing life skills, workforce skills, interpersonal skills, applied skills, and non-cognitive skills. The21st CSs include collaboration, communication, ICT literacy, social and cultural competencies, citizenship, creativity, critical thinking, and problem solving.

Buckle (2021) characterized the21st CSs as the essential information, life skills, job skills, habits, and traits crucial for student success in the contemporary world, particularly throughout their transition to university and employment. Saavedra and Opfer (2012) asserted that 21st CSs are interdisciplinary and pertinent to several sides of modern life, although they now lack a defined presence in most curricula.

Most listings of 21st CSs do not just form disciplinary skills; instead, they encompass several dimensions of abilities, comprehension, and perception. Many emphasize qualities such as curiosity, creativity, and teamwork, which are not technically classified as skills.

Certain abilities emphasize technology, while others prioritize attitudes and values. Saavedra and Opfer (2012) indicate that, in recent years, education systems in several nations have enhanced their curriculum and frameworks to prioritize the cultivation of the skills, knowledge, and attitudes essential for success in the 21stcentury. Larson & Miller (2011) indicate that there are various descriptions of the 21st CSs; yet they all primarily stress the application of knowledge in practice and the ability to apply communication skills in real-life situations. The other skills include working in a team, technical proficiency, innovative thinking, and problem solving.

Various conceptualizations of 21st CSs have been delineated. The term's varied applications have been emphasized, along with the consensus among prominent organizations. The interdisciplinary abilities deemed crucial for the21st CSs include problem-solving, information and communication technology operations and concepts,

communication, cooperation, and information literacy. Certain individuals contend that these talents are as old as Socratic philosophy, while others assert their prevalence in education, and yet others claim they are mysterious due to their resistance to objective evaluation.

Firmly, instructing 21st-century skills is not centered on imparting a particular model or its tactics, but rather on educating pupils in a process or methodology for contemplating their learning. The objective is to assist students in cultivating the ability to think autonomously regarding the material and to seek solutions to their inquiries via research. Train them to communicate and interact proficiently while utilizing technology appropriately.

2.2.3. Classifications of 21st-Century Competencies

The evaluation and instruction of skills pertinent to the 21stCentury (ATC 21). The organization provided a framework for categorizing several types of 21st CSs. This framework comprises four categories of skills: Binkley et al. (2012) Ways of Thinking includes creativity and innovation, critical thinking, problem solving, decision-making, and metacognition, or the process of learning to learn. Methods of operation encompass interaction, cooperation, and teamwork.

Coalitions of scholars and governmental bodies have collaborated to ascertain and advocate for the essential skills and competencies required to equip the workforce for the future. Skills may be encapsulated within the paradigm of 21st-century learning and the necessity to align with educational advancements (Beers, 2011), serving as a metric for the extent of the digital gap, as delineated (Trilling and Fadel, 2009):

Cognitive Skills: These are the abilities employed to analyze and convey information. This encompasses involvement and creativity, critical thinking, collaboration, and communication skills (Trilling and Fadel, 2009). By contrast, Lamb et al. (2017) cite these skills as key skills, not grouped under cognitive skills, adding metacognition as primary skills of the21st CSs, defining in terms of merging skills of self-knowledge and self-monitoring and self-directing, "subsumed under the broader term of self-regulated learning" (Lamb et al., 2017, P. 21).

Literacy Skills: These are the competencies required to cultivate proficient and informed researchers and thinkers. According to Pilgrim & Martinez (2013) literacy previously

referred to reading and writing, but in the context of the 21st century, the term has broadened to cite the use of technology in educational contexts and for learning purposes, accordingly, the 21stCentury literacy skills encompass information literacy, media literacy, and technological literacy, all of which concentrate on assessing and digesting new information, particularly that obtained via the Internet (Trilling and Fadel, 2009).

Life Skills: These are the competencies required for individuals to thrive in their personal and professional endeavors. This encompasses flexibility, adaptability, leadership, initiative, competency, and interpersonal skills (Trilling and Fadel, 2009, Kivunja, 2015). These skills as stated by Kivunja (2015) are not newfound in communities, yet their representation and integration in curricula is scarce, and with the admission of the21st CSs requirements, these skills gained superior significance, topping the prerequisites for the new century higher education and workplace.

The Pacific Policy Research Center (2010) defines it as the ability of individuals to work effectively and responsibly with diverse groups, with an open mind to many ideas, to accomplish goals and projects effectively. It has three sub-skills: the **first** is leadership and responsibility, which includes the ability of individuals to work for the greater good of society, inspire others, and partner with them to accomplish and achieve a common goal. The **second** is productivity and accountability, which includes setting and achieving goals, identifying needs, managing time, working in accordance with values, and sharing and collaborating with colleagues. The **third** includes social and cultural skills, which represent the ability to work productively with colleagues, present oneself professionally and respectfully, and embrace the cultural and social differences of others.

The21st CSs encompass several domains, and as per Slyter (2019), the perspectives of scholars and practitioners have been aggregated to identify the most critical competencies for employees, which are confined to the following:

Creativity is seen as essential for success in several industries and corporate organizations in the twenty-first century. Organizations and sectors require innovation; hence they seek individuals with exceptional creative capabilities. The capacity for unconventional thinking enables firms to adjust to evolving markets, discover novel solutions, and address challenges (Slyter, 2019).

Piitro (2011) propose three core components to creativity as 21st CSs. The components involve creative thinking which includes utilizing "idea creation techniques", thinking out of the box, "elaborate, refine, analyze and evaluate" the originated ideas. Communicating effectively with others, having the ability to communicate the ideas clearly and efficiently, alongside being open-minded to others' perspectives and feedback regarding these ideas, and positive attitudes towards failure, criticism and rejection viewing it as opportunities for improvement and refinement (Piirto, 2011, P. 1).

Critical thinking facilitates the attainment of logical conclusions by humans. Advanced critical thinking abilities facilitate the objective analysis of various circumstances, the evaluation of alternatives, and the assessment of potential outcomes of decisions (Slyter, 2019). Critical thinking is the objective analysis of facts to formulate a judgment. The term has countless definitions, all of which agree that it is a rational, skeptical, unbiased analysis, or the evaluation of evidence and facts. Critical thinking is a directed, organized, self-monitored, and self-correcting process. It assumes agreement on certain standards and careful use of them (Moore, 2013).

Critical thinking is associated with many actions. The most prominent of which are: slowing down, reasoning, open-mindedness, asking questions, clarifying, verifying, referring to sources, evaluating sources, collecting evidence and proof of the validity of something, evaluating evidence, building standards for judgment, reasoning, inference, knowing assumptions, deduction, analyzing ideas, searching for reasons, scientific integrity, following evidence, considering all possibilities, relying on reason more than emotion, also considering the views and interpretations of others, being interested in finding the truth, evaluating, and issuing judgments (Santos, 2022).

Collaboration is one of the important educational competencies in the twenty-first century, which has a strong impact on academic and professional activities. Collaboration means being prepared for listening, learning, participating, and cooperating with others to achieve goals. This does not mean that the student must do all the work; however, it is beneficial to effectively collaborate with these others to achieve success (Slyter, 2019).

The teacher's role in the collaboration process, which is a joint activity after all, is setting the environment essential for its realization. These roles include students grouping, defining the roles of these students, providing scaffolding, and demonstrating collaborative

skills as role models for the students to follow or simulate. The advantages the students gain from collaborative tasks are immense as well. The students directly and indirectly are expected to acquire diverse cognitive and non-cognitive skills, develop communicative and critical thinking skills, share, critique thinking, as well as develop and enhance their elaboration and explanation abilities (Evans, 2020).

Communication is a particularly important skill because it makes interaction with people possible and oversees most aspects of life in an effective manner. However, no matter how much a person knows, or how competent they are in their field, if they cannot express themselves clearly, logically, and strategically to achieve what they want, then the skill they possess has less value (Slyter, 2019).

Communication in the educational context is the ability of students to communicate clearly using their written and oral verbal language and to participate effectively and responsibly with diverse communities. It can be taught through various strategies such as project-based learning, problem-based learning, and design-based learning (Pacific Policy Research Center, 2010). Trilling & Fadel (2009) believe that the student can communicate ideas and beliefs in different contexts, listen effectively, employ technology and various media and know how to judge their effectiveness, demonstrate the ability to communicate with different groups in multilingual environments, cooperate with others, and exercise flexibility in order to achieve goals.

Information Literacy: a solid understanding of material is critical to various activities, most especially in academic research, report writing, and professional presentations. Information literacy is an important skill that allows people to understand and interpret information effectively. People with this skill will be able to discern true information from fake or misleading information found online (Slyter, 2019). Researchers in the field of education and the21st CSs use the term information literacy to refer to the students' technological abilities.

Information literacy is the individual's ability to use digital technology, communication instruments and networks to access, manage, integrate, evaluate, and create bodies of knowledge. It also enables learners to employ technological instruments and programs in their learning processes. For example, young students need the skill of using PowerPoint and Excel programs to present the results of their educational projects (Chu et al., 2017).

Conclusively, the term is associated and used interchangeably with other terms such as digital literacy, ICT literacy, and media literacy (Park et al., 2021).

Adaptability is one of the important qualities that may not be explicitly mentioned in job descriptions. Still, in today's modern and dynamic labor market, having adaptability could make all the difference in the career path of an individual. Adaptable professionals have an extremely useful ability to work effectively in different environments and locations and to show proficiency in working independently as well as being part of a team that works harmoniously. Their openness allows individuals to embrace innovative ideas, concepts, and methods. Furthermore, their readiness to take on new roles and challenges attests to their proactive attitude and sense of personal and professional development. Adaptability, hence, is an important trait that separates people and guarantees prosperity in the flexible and ever-changing professional world (Slyter, 2019).

Dishon & Gilead (2021) perceive adaptability negatively, suggesting it "undermines the cultivation of skills heralded by 21st-century skills frameworks", based on the intense discussion of the future unpredictability as propulsive of adaptability. In the same token, an influential relationship between adaptability, perseverance, curiosity, and academic achievement was reported (Feraco et al., 2023), establishing its vitality to students' academic accomplishment.

2.2.4. Twenty first century skills representation in the curriculum

Integrating the 21st century skills in current curriculum is mandatory, to ensure the educational outcomes meet the workforce needs. The following sub-sections focus on the 21st century skills representation in the curriculum.

2.2.4.1.Critical Thinking Skills

Critical thinking is identified as one of the four essential skills for the 21stcentury. However, its definition and manifestation are often perceived as problematic. It involves learners transcending lower order thinking to engage in deeper, applicable thought processes that can be utilized in real-world contexts (Saavedra and Opfer, 2012). This elevated level of cognition requires the teacher to change their strategies in teaching to develop learners' ability for self–directed learning. Teaching critical thinking requires teaching learners how to practice self–directed learning (Saavedra and Opfer, 2012).

Recent work in cognition points out the importance of developing critical thinking and problem-solving skills as an integral part of the learning process rather than a focus initially on content mastery. Lauren Resnick and Megan Hall (1998) argue that facts alone are not knowledge; the thinking processes themselves are crucial. This has questioned the traditional linear model of learning with the results that skills like remembering, understanding, applying, analyzing, evaluating, and creating can be developed simultaneously or in an un-sequential way (Trilling & Fadel, 2009).

Dweikat and Abu Hasan (2022) found that higher order thinking skills (HOTs) suffer shortage in the 12th grade English curriculum. Similarly, eighth grade English textbooks were found to involve low levels of reflective thinking (Jarbou & Abu Moummar, 2021, Harzallah, 2018), constituting a core component of critical thinking skills. The low levels of integration of critical thinking in EFL curricula is not limited to the Palestinian context, it is further reported in other Arab EFL curricula such as Omani English curriculum (Al-Rahbi et al., 2022).

The implications of insufficient integration and the lack of emphasis on critical thinking within school curriculum textbooks extend to higher education and the professional environment. Khalili et al. (2022) conducted an evaluation of university students' critical and creative thinking levels, which indicated low levels of proficiency. According to Jouppila (2021) early childhood educators play essential role in critical thinking skills development through a combination of skills and characteristics and utilizing the proper approaches to facilitate the process of equipping children of these skills.

2.2.4.2.Collaboration skills

Collaboration is one of the most important and most versatile skills of the 21stcentury. Collaboration between learners with a view to achieving the same goal promotes social interaction and emphasizes teamwork and mutual responsibilities. Collaboration integrates the three skills, as learners must employ their communicative abilities to achieve a shared objective, transcend basic cognitive processes that lack definitive solutions, and recognize both their own creativity and that of others to complete a task effectively. Collaboration enables students to acquire essential skills in productive communication, respect for others, and teamwork while collectively generating ideas (Bell, 2010). Advancements in technology enable learners to collaborate not only face-to-face within their classrooms but

also to connect with peers worldwide, facilitating interactions that would otherwise be unattainable. The degree of accountability fostered by collaboration among learners is a crucial factor for its success.

As it was put by Bell (2010), collaborative student work comes with the expectation that every participant in the project contributes equally. This group dynamic leads to an interdependent team where every student is expected to pull their weight. What occurs, therefore, comes quite naturally; students who cannot be relied on to be accountable find that others do not want to work with them. Peer pressure helps complete group tasks in the process of learning and results in a successful product.

When learners are held accountable for their work, understanding that the success of the group depends on their contributions, motivation increases and allows learners to share their thoughts and ideas on a project or task. Smaldino et al. (2019) asserts that the utilization of collaborative learning instruments, including classroom blogs, wikis, social networking resources, and learning management systems, enables educators to assist 21st-century learners in progressing through the various levels of learning aligned with their goals and expected outcomes.

2.2.4.3.Communication Skills

Communication is the process of exchanging information, ideas, or feelings between two or more people or groups. It takes many forms: verbal, non-verbal, written, and visual. In most situations, effective communication is necessary for understanding and co-operation to take place.

Communication skills in the 21stCentury have changed significantly, largely because of social media, mobile phones and the evolution of the web. Communication takes many forms, and one of the most critical areas is writing and composition, such as grammar and punctuation (Breslow, 2015).

Communication skills have undergone substantial changes due to the rapid advancement of recent technologies. Geisinger (2016) notes that the curricula of the previous century were unable to foresee the swift progress of cellular technology, its widespread capacity, and proliferation within the global community, nor could they predict that the Internet would enable global communications to become instantaneous and cost-effective.

Students' communication formats and styles must change in tandem with their learning and thought processes. Today's students have rapid access to knowledge because technology, and the abundance of social media platforms and instant connectivity are drastically changing how they communicate (Sivakumar et al., 2023). As a result, teachers are responsible for creating communication classes.

The substantial rise in accessible technologies calls for fresh adjustments to student communication development initiatives. Teachers of English and Language Arts are not the only ones who need to be proficient in communication. Regardless of the subject matter, teachers have a duty to help students develop their communication skills so that they may acquire abilities beyond simple syntax and punctuation.

2.2.4.4.Initiative and self-direction

In literature, reflection and awareness are equivalent to initiative and self-direction, which is the ability to reflect critically on their past experiences to guide their future progress, the ability to set measurable goals, and develop work through initiatives and choosing priorities. Individuals go beyond mastering basic skills to explore and expand personal learning and capitalize on opportunities to gain new experiences.

The 21st-century abilities of initiative and self-direction align with self-regulated learning, since the capacity to establish learning objectives and oversee their attainment is characteristic of a self-regulated learner. The adaptive skill of the 21stcentury, particularly the capacity to respond effectively to feedback, closely parallels the actions of a learner throughout the monitoring and reflecting phases of self-regulated learning. Individuals proficient in self-regulated learning are regarded as particularly skilled in utilizing diverse feedback mechanisms to persist in and finalize learning tasks. Acquiring competence involves both rigorous practice and constructive feedback. Consequently, cultivating self-regulated learning abilities should facilitate the acquisition of competence in a certain topic (Hilton & Pellegrino, 2012).

Wolters (2010) found a moderate link between being able to control your own learning and the social skills of conversation and teamwork. He notices that studies on self-regulated learning have started to investigate the "internal" parts of this ability in humans and have found that the skills and beliefs that are at the heart of self-regulated learning develop

through relationships with others. Self-regulated learners are also great at asking for help from teachers or peers, working together in groups, and doing other things that require cooperation (Newman, 2012). Wolters (2010) found that the conceptual similarities between the21st CSs and parts of self-regulated learning show how important skills like self-direction, adaptability, flexibility, and collaboration are. He also suggested that studying self-regulated learning could help people better understand the21st CSs.

2.2.4.5.Using Technology as A Tool for Learning

Binkley et al. (2012) developed a model outlining the ICT skills that students are expected to acquire. The model comprised three categories: knowledge, skills, and attitudes/values/ethics, highlighting the subskills of accessing and evaluating, using, and managing information, and applying technology efficiently. These skills are essential for future workplace demands. Mgfori (2022) noted critical skills development in SSSs, she informed that there is a need to focus the attention of students in the use of computers and other important 21st-century aspects like self-direction and productivity. Equipping students with advanced ICT skills can facilitate their success in future careers; however, technical difficulties and issues are often undervalued in terms of their contribution to professional advancement (Qaddumi et al., 2023).

Sabbah et al. (2020) measured e-learning and ICT in the schools of Palestine. Hence, it was established that there was a radical change in the behavior of both the teachers and the students since active learning improved classroom instruction and made learning fun. In addition, the involvement of shy and low-achieving learners in teaching practices was improved.

2.2.4.6. Creativity

Saavedra and Opfer (2012) assert that creativity is valued across economic, civic, and global domains due to its role in fostering innovations that generate employment, tackle challenges, and drive social and individual advancement. The responsibility of the 21st-century educator is to teach learners to recognize their creative abilities and their potential for self-development. It facilitates opportunities for students as they begin their professional pursuits (Saavedra and Opfer, 2012).

The emphasis on rejuvenating creativity in the classroom can be attributed to the rise of standardized testing. Standardized testing has caused educators to adopt "drill and practice" methods, thus limiting students' opportunities for creative learning (Henriksen et al., 2016). Allowing the incentive of creativity within a classroom provides an avenue for students to produce ideas and solutions for problems in a real-world context, thus increasing their potential to become contributing members of society as adults.

2.2.5. The importance of the 21st Century Competencies

The possession and development of skills is especially important since it leads to work mastery characterized by precision and originality. Skill denotes the ability and efficiency attained through coordinated, systematic, and organized efforts to perfectly handle tasks and move through all activities with ease (AlHariri, 2020) posited that these competencies may be categorized into three primary types: cognitive skills, technical and technology abilities, and interpersonal skills, which empower individuals to navigate life with assurance and stability while securing suitable employment that ensures a dignified existence. Thus, educational institutions in industrialized nations have been forced to review their curriculum and objectives accordingly to equip graduates with the continuously occurring innovations and changes relevant to the globalized or local society. This will further enable students to interact with them and challenge the myriads of issues brought about by globalization and its subsequent changes.

In response to the increasing demands on graduate competencies, especially in the face of digital transformation and changing economies, more institutions of education integrate 21st-century skills in their strategic plans in ways that will better equip students for university and the emerging workforce. In 2007, the International Society for Technology in Education recognized the growing global need for development due tocompetencies in creativity, communication, investigation, critical thinking, digital citizenship, and information technology. 21st-century skills are important for five reasons, according to Buckle (2021) as follows:

1. Leaders in higher education and industry acknowledge that 21st-century skills are the paramount factor influencing student performance in both educational settings and the workforce.

2. Educational institutions are now equipping students for future occupations that may not yet exist.
3. Social media has transformed human contact and introduced new obstacles in managing social settings.
4. The Internet age has significantly enhanced access to information. Students and staff must acquire the skills to process and evaluate substantial volumes of information.
5. A robust understanding of fundamental scientific concepts is insufficient; students must also acquire the ability to apply information through critical thinking and problem-solving skills.

Kan & Murat (2018) recapped further aspects of importance of the 21st Century acquisition indicating that it paves the way for students to acquire abilities in learning and creativity in several domains of life, augment self-assurance by active engagement in many life activities, aid in formulating innovative answers to diverse challenges, facilitate the acquisition of various information and cultural understanding, equip the student for employment and achievement in the twenty-first century, encourage the learner to engage in productive conversation with others, and assist the student in utilizing technology throughout diverse living activities.

The researcher asserts that twenty-first century skills should be purposefully integrated into curricula, as their acquisition necessitates practical application. It demands that the teacher create opportunities for the students to observe, infer, interpret, experiment, innovate, and communicate effectively and with use of technology, insisting that more than memorization, mastering these skills depends on active participation.

2.2.6. Competencies necessary for high school students in the 21st Century

According to the Partnership for the21st CSs, the competencies anticipated for twenty-first century learners may be derived as outlined by Al-Zahrani and Ibrahim (2012) are the following:

- Responsibility and compatibility pertain to an individual's capacity to evolve in alignment with the workplace and the surrounding context.

- Creativity and intellectual curiosity denote an individual's capacity to engage with knowledge unconventionally, subsequently establishing logical connections to generate ideas marked by innovation and originality.
- Communication skills: denotes an individual's capacity to convey information effectively to oneself and others.
- Critical thinking and systems thinking denote an individual's capacity to assess truth via logical premises and thereafter make informed judgments by accessing information and considering other perspectives.
- Information and media literacy abilities pertain to an individual's capacity to obtain diverse information from credible sources across multiple technologies, as well as their proficiency in utilizing this information effectively within the knowledge economy.
- Social and cooperative skills encompass an individual's capacity for effective communication within work teams, social intelligence, acceptance of diversity, conflict resolution, emotional intelligence, and adaptability to tasks and responsibilities.
- Problem identification and solution formulation pertains to an individual's capacity to precisely recognize issues, articulate them scientifically, explore potential alternatives, conduct experiments, pick the most suitable options, and discern exceptional solutions.
- Self-direction: denotes the individual's capacity to evaluate their comprehension of unique educational requirements, discover necessary learning resources, and adapt learning styles and methods to align with the learner's distinct objectives.

2.2.7. Twenty first century skills integration in high school English curriculum (English for Palestine)

The current issues and developments, such as the explosion of information and communication technologies, the massive expansion in knowledge, and growing need for education, the education system has stayed behind the ideals set forth for the twenty-first century. This has led to reliance on traditional methods of education and a mismatch between the curriculum output and the labour market's demand that has created a large gap between academic institutions and the external realities over which the students face. Fandino (2013) asserted that contemporary educational curricula fail to fulfill the demands

of the twenty-first century for both individuals and society, as evidenced by the subpar outcomes of the educational process, reflected in the inadequate proficiency of graduates, which is misaligned with the current scientific and technological advancements.

limited studies have been assessing and evaluating the presence, inclusion, and integration of the21st CSs in the EFL Palestinian curriculum. The research targeted and covered all the divisions of scholastic levels. An analytical study assessing the level of inclusion of the21st CSs in English textbooks of 11th and 12th graders, Hen (2023) uncovered inconsistent levels of incorporation on the main skills forming the21st CSs, revealing that learning and innovation skills were the most represented skills in both grades' textbooks. Nassar (2022) study evaluating the incorporation of the21st CSs in upper elementary level EFL textbooks, reported low levels of integration of these crucial skills, with communication skills topping the list of skills mostly woven in the textbooks. By contrast, Amr (2020) reported varying degrees of inclusion and incorporation of the21st CSs in the GCSE (Tawjihi) EFL curriculum, where collaboration skills top the list.

Convincingly, the EFL Palestinian curriculum integration of the21st CSs are unsatisfactory and lacks the necessary levels that prepare the students for the upcoming levels of education and workforce. These studies' outcomes reflect the necessity for deeper exploration of these skills in the curriculum and classroom.

Ekizer& Yildirim (2023) took a different turn exploring the significance and acquisition of the twenty first century skills, exploring ELT students' perceptions on the relationship between these skills and the learning environment. The students' responses ranked critical thinking on top of the most vital skills, followed respectively by problem-solving, collaboration, creativity, and effective communication. Similarly, Vietnamese high schoolers reflected positive perceptions and reported practicing the key 21stCentury Learning Skills known as the 4Cs: communication, collaboration, creativity, and critical thinking.

Students and scholars recognize the significance of 21st-century skills, which have been acknowledged by curriculum developers and education ministries. This is exemplified by two Indonesian English curricula that encompass critical thinking, problem-solving, communication, collaboration, creativity, innovation, information literacy, media literacy, initiative and self-direction, social and cross-cultural skills, leadership, and responsibility.

Nevertheless, these curricula inadequately reflected ICT abilities, as well as flexibility, adaptability, productivity, and accountability skills, which are essential for meeting the demands of the digital age (Wulandari & Hidayat, 2020).

2.2.8. Literature review

The section offers a review of the studies carried out regionally and internationally in two sub-sections.

2.2.8.1. Regional studies

Moray & Ali (2024) sought to assess the extent of 21st-century skills within the competencies of educational curricula in theGulf Cooperation Council (GCC) region. The study employed a descriptive analytical approach, specifically content analysis, resulting in the identification of eight fundamental skills and fifty-six associated sub-skills. The analysis revealed the following competency levels within the educational curricula: creativity and problem-solving scored high (3.5), language mastery medium (3.3), communication and teamwork medium (2.8), critical thinking low (2.4), leadership and initiative low (2.2), technological culture low (2), and leadership and decision-making very low (1.3). The proportions among these competencies were closely aligned. The UAE and the Kingdom of Bahrain exhibit medium scores, whereas the Kingdom of Saudi Arabia reflects a low score. Consequently, the researcher recommends a reevaluation of competencies across all academic stages to encompass essential 21st-century skills. It is imperative to establish a clear framework for these skills at the GCC level and to define criteria for their integration into educational competencies across various subjects.

Alowayyid (2023) In the 21stcentury, success required improving social and intellectual skills like communication, cooperation, critical thinking, problem-solving, creativity, and invention. Working, engaging, cooperating, and working in teams to promote 21st-century skills including reading, information technology, and digital networks are also covered. Thus, this study seeks to understand how Saudi Arabian middle school (intermediate) students use 21st CSs. The descriptive survey method was used to survey a random sample of female middle school (intermediate) teachers in Al-Qassim. Some notable study findings: The study participants responded well to intermediate female students' efficient and effective use of technology. Intermediate students' information, media, and technology culture, health and safety abilities, and self-leadership skills received an average response

rate from study participants. The study found statistically significant differences between college education and "skills of the 21st century" training courses, but not between years of experience.

Al-Rawadiah (2021) sought to determine the level of teachers' skills in the twenty-first century and its correlation with students' acquisition levels. The study sample comprised ninety-four teachers and 198 teachers from Ma'an Governorate, with two instruments developed for the research. In a total of fifty-nine paragraphs, the remaining sections assess the extent of students' acquisition of these skills across sixteen paragraphs. The study's results indicated a prominent level of teachers possessing twenty-first-century skills, while students' acquisition of these skills was at a medium level. Moreover, a strong positive relation was observed between the skills of teachers and students' acquisition of these skills through the study manifested by the correlation coefficients. The study recommends conducting more research to investigate the relationship between century skills and its variables in an in-depth manner in the Hashemite Kingdom of Jordan.

Amr (2020) research examined how the Palestinian 12th Grade curriculum incorporates the21st CSs. The interpretivist research paradigm analyzes and interprets questionnaire data to investigate 21st-century competencies in teaching and learning. The study included 40 Palestinian government high school EFLTs. The questionnaire results shows that English for Palestine 12 incorporates 21st-century abilities at varied frequency and intensities. Collaboration ranks highest with a mean of (2.281), followed by critical thinking, communication, problem solving, creativity, and innovation. The data also shows that the textbook integrates ICT skills least. Due to the nature and format of the final national examination, these skills are rarely used in class activities and assessment. Secondly, teachers agree that class size and time constraint limit the implementation of skills. Finally, this study reveals that respondents were not sufficiently trained to infuse these skills into education.

2.2.8.2. International studies

Sricharoen&Adipat (2024) explored Thai SSSs' views on 21st-century skills, notably the 4Cs: creativity, critical thinking, communication, and collaboration. The 2024 study used a Google Forms-administered 68-item online questionnaire to poll 146 Thai ninth graders. The data analysis used descriptive statistics including percentages, means, and SDs. The

data show that over 72% of students value all skills of the 4Cs. The mean score for the 4Cs was highest for communication skills (M=3.62). Strong importance on communication would suggest secondary school focus on these skills with an expectation of further academic progression. Collaboration, albeit still valued, had a mean score of 3.60, compared to 3.61 for creativity and critical thinking. This calls for more research in collaborative learning environments in education. The results can be translated into better educational practices by creating curricula that enhance communication and collaboration to better prepare students for academic and professional challenges.

Bolat & Deneme-Gençoglu (2024) examined secondary school English language instructors' usage of 21st-century skills and how their background affects them. This study examines teachers' difficulties integrating these abilities into their lessons. The study used surveys and interviews to achieve its goals. Data was obtained using Hixson, Ravitz, and Whisman (2012)'s 21stCentury Teaching and Learning scale and semi-structured interviews. The convenience and snowball sampling approaches reached 119 instructors, twenty-six of whom were interviewed. The study's quantitative findings showed that teachers used 21st-century abilities once to three times each month, with technology as a learning tool being the most used and local connections the least. The t-test shows that private school teachers use skills more than public school teachers. Additionally, teachers who received 21st-century skills training used these skills more often in their lessons. Years of experience also affected skill implementation. The post-hoc test shows that less experienced teachers used 21st-century skills more. Teachers of different educational backgrounds applied these skills similarly. Teacher problems included inadequate in-service training on the21st CSs, bad curricula, insufficient materials and infrastructure, and unhelpful administrators, according to interview content analysis.

Hursen, Paşa& Keser (2023) This study aimed to assess high school students' information, media, and technology skills and their use of multidimensional 21st-century skills in Northern Cyprus. Data was collected from 612 students and teachers, and the study found that students' use of these skills was moderate. However, they had inadequate programming and problem-solving skills. The study also found that students' use of information and data literacy, communication, and collaboration skills were adequate. The results also revealed that the mathematics curriculum had the highest number of outcomes due to these skills, while the Turkish language and literature curriculum had the least.

Glover (2023) qualitative descriptive study examined how K-2 schoolteachers use digital resources to improve student learning. This study followed Vygotsky's Zone of Proximal Development(ZPD)* and the Partnership for the21st CSs. Sixteen participants answered open-ended interview questions about the study's two research questions in detail. How do K-2 teachers describe their technology use? Research question one found a lack of consistent training, technological training, and electronic device training. Research question two asked: how do K-2 instructors use digital instruments to improve student learning? Lack of digital resources for instructors and inconsistent internet connection were issues. This qualitative study found that K-2 teachers needed continuing professional training in technology integration to stay current with educational technology developments and proper instruction on how to use electronic devices in the classroom to maximize learning. School administrators should evaluate the lack of professional development to increase K-2 teachers' technology integration and stay current with educational trends. Future research could benefit from extending the case study beyond K-2 teachers and adopting a quantitative way to correlate technology use and classroom utilization.

Özeren (2023) examined how secondary school pupils' digital literacy predicts 21st-century problem-solving. This study uses correlational surveying. Elazig SSSs are the research population. The research sample includes 490 SSSs selected using disproportionate cluster sampling. The research uses demographic information form, digital literacy scale, primary school problem-solving inventory, and 21st-century skill scale. Parametric tests are used to analyze normal distribution data in the study. Findings show that secondary school pupils have low digital literacy and 21st-century capabilities but good problem-solving skills. Based on gender and parental education, secondary school kids' problem-solving and 21st-century skills varied significantly. Digital literacy skills of these youngsters are not significantly different from their father's education level. A favorable and significant link was found between secondary school pupils' problem-solving skills and digital literacy. The findings show a significant correlation between SSSs' 21st-century skills' communication sub-dimension, digital literacy, and "confidence in problem-solving skills" and "avoidance" sub-dimensions. The avoidance sub-dimension has negative significant correlations, while other dimensions have positive ones. Digital

*The space between what a learner can do without assistance and what the learner can do with guidance or collaboration with teachers or peers.

literacy and problem-solving skills do not predict secondary school pupils' 21st-century skills. Secondary school pupils' 21st-century and problem-solving skills predict their digital literacy.

Muyambo-Goto, Naidoo & Kennedy (2023) study looked at how pupils in four different Zimbabwean schools saw education in the twenty-first century. The complexity theory and the powerful theory serve as the framework for the investigation. Four secondary schools, three of which adhere to the Zimbabwe School Examinations Council (ZIMSEC) syllabus and one of which is a private school that uses the Cambridge curriculum, were surveyed using a quantitative non-experimental correlation design. To meet the Zimbabwean context, the questionnaire was modified from the Partnership for the 21stCentury framework (P21) and Ravitz (2014). There were 236 pupils in all, and ninety-three participated. The data was analyzed using ANOVA and exploratory and confirmatory factor analyses. The findings demonstrated three elements: self-management, learning skills and values, and learning process-define students' conceptions of the 21stCentury competencies. Self-management received the strongest support from students. In order to realign present teaching to meet the 21stCentury curriculum, theory, policymakers, head teachers, teachers, and teacher education colleges are expected to use the suggested model of Zimbabwean students' ideas of the 21stCentury abilities as a baseline.

Kocaman (2022)study investigated SSSs' 21st-century competencies by gender, grade level, parent education, and Internet use. Surveys were employed for study. The research group includes 421 SSSs from six schools in Salihli district, Manisa, in 2021–2022. Data was collected using the "SSSs' the21st CSs Scale" and analyzed using descriptive statistics, Mann Whitney U Test, and Kruskal Wallis H-Test. The survey found that SSSs have good 21st-century competencies. Secondary school pupils' 21st-century skills did not differ statistically by gender or parental education, but grade level and internet connection did. Gender and parents' education did not affect secondary school pupils' 21st-century skills, but grade level and home internet access did.

Hadiyanto, Failasofah, Armiwati, Abrar &Thabran (2021) study examined the differences in the learning process over one semester, utilizing a quasi-experimental design without a pre-test, specifically focusing on conventional and blended learning classes. Self-evaluation questionnaires on the21st CSs were distributed, and the results indicated that students in blended learning classes demonstrated significantly greater skill practice than

their counterparts in conventional programs. This learning method was evaluated for its incorporation of both soft and hard skills, alongside an improvement in GPA.

Eisenmenger (2020) examined the district's teachers' viewpoints on the value of integrating and assessing the 21stCentury abilities and examined assessment results to gauge students' progress in acquiring these skills. The first three hypotheses were assessed using a two-tailed t-test. Two findings were found to be statistically significant. Compared to core content teachers, encore teachers reported more instances of their pupils solving complex issues, which was the first statistically significant finding. The second noteworthy finding was that, in comparison to core topic instructors, core teachers reported teaching social skills to their students more frequently. The fourth hypothesis was evaluated using a one-tailed z-test and found statistically significant. Between the fall semester of 2018 and the spring semester of 2019, the district's pupils have shown an increase in their 21st-century skill set.

Koçak & Göksu (2020) assessed the skill levels of 21st-century learners and the interrelationship among these skills. The sample for this study, conducted using a correlational research design, was selected through the convenience sampling method. The study involved a total of 183 students enrolled at Atatürk University. Data analysis employed correlational and descriptive techniques, utilizing the Computational Thinking Scale, Digital Literacy Scale, and Effective Communication Skills Scale for data collection. The examination of the descriptive findings revealed that students possessed most skills yet exhibited ambivalence regarding their algorithmic thinking abilities. The correlation analysis revealed significant relationships between critical thinking, problem solving, creativity, empathy, and active-participative listening with all variables examined. Conversely, digital literacy skills exhibited a significant correlation with all variables analyzed in the study, except for I-language. The analysis revealed that the correlation between ego supportive language, active-participative listening, self-recognition/self-disclosure, I-language skills, and algorithmic thinking was not significant. The variables exhibiting the highest correlation coefficient were identified as creativity and critical thinking.

Baran-Łucarz& Klimas (2020) EFL student teachers' perspectives, ideas, and self-awareness of developing the 21stCentury abilities, notably the 4Cs (critical thinking, creativity, communication, cooperation), in Polish education are examined in this study.

This study's questionnaire was given to 53 English student instructors in bachelor's and master's degree programs. The study found that most participants had a limited awareness of 21st CSs but were supportive about incorporating them into foreign language classrooms. Meanwhile, teacher trainees overestimated their ability to teach their prospective pupils the 4Cs. These findings imply FL instructors need more training on 21stcentury abilities in the classroom. It is also believed that 21st CSs-oriented pedagogy requires student teachers to develop such abilities throughout training.

2.2.8.3. Teachers' perceptions of the21st CSs

Kapkır (2024)EFLTs, preparatory school students, and Curriculum Development, Measurement & Evaluation, and Professional Development stakeholders' opinions on 4C skill training in EFL classrooms were examined using exploratory case study. Three groups were interviewed and documents analyzed to get data. Teachers were educated about the 4C skills and optimistic about incorporating them into language lessons, whereas students knew little but felt they might help their personal, academic, and professional life. Communication and critical thinking were more essential to students than collaboration and creativity. Communication and critical thinking were most regularly taught, according to instructors and students. Students and teachers struggled most with curriculum constraints, learner motivation and competence, and exam-oriented procedures. The 4C talents were crucial to schooling, but they need more explicit integration. Future recommendations include curriculum modifications, more engaging activities, greater pre- and in-service teacher training, and formative evaluation.

Şahin & Han (2020) investigated EFLTs' attitudes toward 21st-century skills in a city in Türkiye. This study examines the professional development of EFLTs in the implementation of 21stcentury competencies within classroom settings. The study involved 56 EFLTs from distinct types of schools. The research employed mixed methods sequential explanatory design. Quantitative data were collected through a questionnaire to analyze differences due toEFLTs' teaching experience, working environment, and the use of technological instruments in EFL instruction. The data were analyzed using a one-way ANOVA test. A semi-structured interview was conducted with eight EFLTs to validate the quantitative results in the qualitative data. The findings indicate that EFLTs possess favorable attitudes regarding P21 skills and the integration of technological instruments in

EFL classrooms. The implications were outlined for a broader investigation into additional dimensions of the 21st CSs.

Alamri (2020) descriptive research method investigated how Saudi EFL female students perceive their teachers' the21st CSs and how they develop their language skills. Two hundred forty-six EFL female students in the Preparatory Year Programme at Taibah University, Saudi Arabia participated in data collection through answering two closed-item questionnaires: 548 in stage one and 226 in stage two. Participants demonstrated high satisfaction with their teachers' 21st CSs, given that all items in the questionnaire were rated as outstanding. It was found that Life and Career Skills and its sub-dimension Social and Cross-Cultural Skills had the highest means. The students improved in language skills, specifically vocabulary, and speaking, therefore helping EFLTs develop 21st CSs.

2.2.9. Commentary on the related literature

The current study explores teachers' perceptions towards the DP of the21st CSs for the SSSs in Palestine. The study aligns with most of the studies as both explore the21st CSs, the difference lies in the aspect of investigation. The current study and Amr (2020) and Alowayyid (2023) assess the students' masterfulness of the21st CSs, however, they target different students' groups; high school students in the case of the present study, and middle school students in Alowayyid (2023). Also, the present study shares a common goal with Sricharoen&Adipat (2024) and Hursen, Paşa& Keser (2023) which is examining the perceptions of EFLTs of their students' level of possession of the21st CSs, but the two studies targeted diverse cultures.

All the studies focused on the twenty first century skills as their core topic, however, the approach and related topics covered are diverse, yet interconnected. The common topic the studies of Moray & Ali (2024), Alowayyid (2023), Sricharoen&Adipat (2024), and Bolat & Deneme-Gençoglu (2024) shared is their emphasis on the significance and integration of the21st CSs in addition to recommending founding a homogenous and consistent framework to systematically monitor and guide the process of these skills' integration that these studies also shared with Glover (2023) who also highlighted the necessity of teacher training.

Subtopics in relation to the twenty first century skills dealt in these studies included the role of digital literacy, ICT use, and problem-solving skills that were researched by Özeren (2023) and Kocaman (2022) whose works delved into the role of ICT and digital literacy in enhancing problem-solving skills. Muyambo-Goto, Naidoo & Kennedy (2023) and Hadiyanto et al. (2021) focused on the educational practices and contextual challenges, investigating how contextual factors, and learning environments influence the acquisition of the21st CSs, pointing up the necessity to align education with local needs and context. Furthermore, the interrelationships among the21st CSs and teachers' perspectives were investigated by Koçak & Göksu (2020) and Baran-Łucarz& Klimas (2020), stressing the importance of a comprehensive approach of integrating these skills in the curriculum.

The gaps identified in these studies can grouped in terms of levels of integration and acquisition or proficiency of use of these skills, variation of integration and representation of some the skills, occurrence and efficiency of teaching the21st CSs, in addition to some teaching aspects and the challenges entailed with the21st CSs education in the EFL curriculum. The present study seeks to cover the gap due to the level of high schoolers possession of the21st CSs from the perspective of their teachers.

On the methodology level, the studies utilized a wide range of approaches and employed diverse instruments. Some of these studies relied on the descriptive content analysis of textbooks (Moray & Ali, 2024), descriptive quantitative approaches using a questionnaire completed by either teachers or students or both of them (Alowayyid, 2023, Hursen, Paşa& Keser, 2023, Özeren, 2023, Muyambo-Goto, Naidoo & Kennedy, 2023, Kocaman, 2022, Al-Rawadiah, 2021, Amr, 2020, Koçak & Göksu, 2020, Baran-Łucarz& Klimas, 2020), same design was adopted by Sricharoen&Adipat (2024) but targeted 9th graders. The mixed method approach utilizing questionnaires and interviews was followed by Bolat & Deneme-Gençoglu (2024) and Eisenmenger (2020) and targeted instructors. Only one study conducted by Hadiyanto et al. (2021) conducted a quasi-experimental approach and used self-evaluation questionnaire completed by the participating students. The current study is following a descriptive quantitative approach employing the questionnaire as data collection tool from the population of Palestinian high school EFLTs.

This vast array of methodologies offers a distinctive perception of the21st CSs integration, perception, strengths and weaknesses across the varied educational contexts and environments.

The reviewed studies in sum raise an alarm for change in learning systems across the world to incorporate 21st CSs. They point out successes and challenges that are yet to be resolved; the fronts revolve around teacher training, curriculum design, and digital literacy in preparing students for the challenges ahead. The recurring themes of inadequate resources, inconsistent training, and varying skill levels suggest that, yet there is a fair journey to travel to realize the full potential of 21stcentury education.

These studies thus provide a number of lessons that could form the core of educational improvement initiatives for educators, policy operatives, and researchers who would endeavor to make education of better quality and relevance for the 21stcentury. In this way, educational systems will be in a better position to prepare students for the challenges and opportunities of life by working on identified shortcomings and capitalizing on identified strengths.

Chapter Three

Methodology and Procedures

3.1.Introduction

The chapter outlines the study methodology. The research design was explained, the population of the study and its sample wereclarified, the instruments development, construction, validity and reliabilitywere also described, in addition to defining the variables, and illustrating the steps and procedures carried out to gather data. Finally, the data analysis was detailed.

3.2. Methodology

The research adopted a mixed methodology. Mixed methods according to Creswell (2021, P. 2) is

> "An approach to research in the social, behavioral, and health sciences in which the investigator gathers both quantitative (closed-ended) and qualitative (open-ended) data, integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems. A core assumption of this approach is that when an investigator combines statistical trends (quantitative data) with stories and personal experiences (qualitative data), this collective strength provides a better understanding of the research problem than either form of data alone".

An explanatory sequential design was adopted to accomplish the study goals. The design is based on two phases of data collection, the initial phase is collecting quantitative data and analyzing it. The second phase entails collecting qualitative data, then analyzing it. The approach sequential enables the researchers to gradually build up the qualitative approach tool that is aimed to expand the outcomes obtained through the quantitative tool, thus making it straightforward for readers to follow-up with the results presentation and elaboration (Creswell& Clark, 2011).

The quantitative approach implemented in the study is the descriptive approach, while the qualitative approach adopted is the structured interview.

3.3. Study population and sample

The section illustrates the study population and sample selected for data collection, along with the characteristics of the participants.

3.3.1.The study population

The population of EFL high school teachers in Palestine consisted of (587) teachers during the first academic semester 2024/2025 distributed to the West bank governorates.

3.3.2. The study sample

The study recruited (264) teachers teaching EFL to secondary schools' students in the schools of the West Bank. A convenient sampling method was adopted. Convenient samples are participants accessible and willing to participate (Johnson& Christensen, 2024). In the case of the study, the specific characteristic is being EFL secondary school teacher, while the convenient characteristic is being Palestinian teacher in-service in one the secondary schools in the West Bank. The characteristics of the sample are presented in the following table.

Table (3.1.) The study sample characteristics

Characteristic		No.	Percent
Gender	Male	71	26.9%
	Female	193	73.1%
Years of experience	1-5 years	136	51.5%
	6-10 years	64	24.2%
	11-15 years	50	18.9%
	over 15 years	14	5.3%
Qualifications	BA	210	79.5%
	MA	49	18.6%
	PhD	5	1.9%
Governorate	Northern governorates	103	39.0%
	Southern governorates	97	36.7%
	Central governorates	64	24.2%

As table (3.1.) illustrates, most of the sample forming 73.1%(n=193) are female EFLTs, 51.5%(n=136) have been in secondary school teaching field between 1-5 years, 79.5%(n=210) hold bachelor's degrees, and the majority of them 39%(n=36.7) are teachers in the northern governorates' secondary schools.

3.4. Instrument of the study

The study deployed two instruments parallel to the adopted two approaches. These instruments are the questionnaire and the structured interview.

3.4.1. The questionnaire

The questionnaire was developed by the researcher under the guidance of the supervisor. The questionnaire benefited from multiple research papers to structure its dimensions and items. The instrument encompassed two parts in addition to a consent form.The first part gathers demographic information about the respondents, and the second part had the questionnaire dimensions and items.

The tool had five dimensions, 10 items each, comprising 50 items, developed in light of Rice (2017) thesis. The **first** dimension consisted of 10 items assessing critical thinking skills developed in view of Rice (2017) and Rabaia (2015) studies. The **second** dimension evaluated collaboration skills through 10 items formulated in light of Wang et al. (2009) besides Rice (2017) works.The **third** dimension measured communication skills and included 10 items, developed in light of Al-Balawi (2023), Demir & Sad (2021) in addition to Rice's (2017) papers.The reflection and awareness dimension, consisting of 10 items, being **fourth** dimension, benefited from the study of Natsheh (2015) and Rice (2017) studies to create its items. The **fifth** and final dimension was assigned to value the use of technology as a learning tool through 10 items crafted benefiting from the studies of Hursen et al. (2023), Delita et al. (2022) and Rice (2017).

The response to the questionnaire items were evaluated following Five-points Likert scale, ranging from (1) very low to (5) very high.

3.4.1.1. Validity of the questionnaire

The validity of the questionnaire was established through presenting it in addition to the study objectives and questions to clarify the referees' perceptions of the instrument. The referee's committee is comprised of professors, instructors and schoolteachers of EFL and Education. The committee participants each received a copy of the questionnaire in English and Arabic. Most of the emailed referees replied with minimal modifications. Nonetheless, their suggestions and recommendations were taken into consideration, combined and performed to guarantee the utmost feasibility of responses by the final participants in the study.

3.4.1.2. Reliability of the questionnaire

Pilot study

The reliability of the questionnaire was ensured through piloting it to a sample of teachers. The pilot study is an initial step towards confirming the quality, comprehensiveness, and appropriateness of the content of the instrument to the study objectives and its capacity to provide insights into the study subject matter.

The pilot study was performed electronically using google forms as medium of data collection. The initial questionnaireused the snowball method of sample recruitment, benefiting from the teachers' personal connections to other EFL high school teachers.

Primary recruitment following snowball technique was adopted to carry out the pilot study. The pilot study sample included (30) EFLTs reached out through network of teachers, where each teacher was requested to send the questionnaire to fellow teachers.

Table (3.2.) The Pilot study participants' characteristics

Characteristic		No.	Percent
Gender	Male	7	23.3%
	Female	23	76.7%
Years of experience	1-5 years	13	43.3%
	6-10 yrs	8	26.7%
	11-15 years	7	23.3%
	over 15 years	2	6.7%
Qualifications	BA	25	83.3%
	MA	4	13.3%
	PhD	1	3.3%
Governorate	Southern governorates	7	23.3%
	Northern governorates	12	40.0%
	Central governorates	11	36.7%

The above table (3.2.) shows that the pilot study recruited 76.7% (n=23) female teachers compared to 23.3% (n=7) male teachers. The EFL sample of teachers reported 1-5 years of work experience formed 43.3%(n=13) of the participants, 26.7%(n=8) stated they have been working between 6-10 years, while 23.3%(n=7) and 6.7%(n=2) said they have work experience ranging between 11-15 years and more. On the educational level, 83.3%(n=25) of the EFLTs have bachelor's degrees, whereas 13.3%(n=4) and 3.3%(n=1) have master's and PhD degrees, respectively. 40%(n=12) of the participants are teachers in the northern governorates, 36.7%(n=11) teach in the central governorates' schools, and 23.3%(n=7) are teachers in the southern governorates.

The responses were gathered and analyzed using SPSS (v. 23). Cronbach Alpha,Pearson correlation, and the internal consistency tests were performed to examine the reliability of the tool.

Table (3.3.) The initial questionnaire Cronbach alpha analysis outcomes of the total score and dimensions scores

Dimension	No. of items	Cronbach alpha
Critical thinking skills	10	.822
Collaboration skills	10	.873
Communication skills	10	.813
Reflection and awareness	10	.731
Using technology as a tool of learning	10	.735
Total score	50	.913

The table above, (3.3.) shows that the reliability of the questionnaire applied in the pilot phase is notably high, exceeding 70% (0.70) for all dimensions and is very high providing further credibility to the tool.

The consistency of the questionnaire was firsttested using Pearson correlation for the dimensions in relation to the total score.

Table (3.4) The correlation matrix between the total score and the tool dimensions

Dimension		Collaboration skills	Communication skills	Reflection and awareness skills	Using technology skills	Totalscore
Criticalthinking skills	Pearson Correlation	.795**	.759**	.049	.036	.859**
	Sig. (2-tailed)	.000	.000	.796	.849	.000
Collaboration skills	Pearson Correlation	1	.848**	.139	.032	.899**
	Sig. (2-tailed)		.000	.464	.867	.000
Communication skills	Pearson Correlation	.848**	1	.075	-.015-	.870**
	Sig. (2-tailed)	.000		.693	.939	.000
Reflection and awareness skills	Pearson Correlation	.139	.075	1	.608**	.373*
	Sig. (2-tailed)	.464	.693		.000	.042
Using technology skills	Pearson Correlation	.032	-.015-	.608**	1	.336
	Sig. (2-tailed)	.867	.939	.000		.069

The correlation matrix shown in the above table indicates the presence of a positively moderate to strong correlation between the dimensions and the total score, and among the dimensions as well, thus extending the reliability of the questionnaire.

The internal consistency of the questionnaire was tested using inter-item correlations through Cronbach alpha.

Table (3.5.) The internal consistency of the questionnaire

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.913	.903	50

Table (3.3) above provides the reliability of the questionnaire as an indicator of the internal consistency where CronbachAlpha value is 0.913.

Table (3.6., a)The questionnaire inter-item consistency

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ct1	.592	.910
ct2	.458	.911
ct3	.581	.910
ct4	.712	.908
ct5	.576	.909
ct6	.639	.909
ct7	.557	.910
ct8	.170	.915
ct9	.543	.910
ct10	.228	.914
cs1	.519	.910
cs2	.597	.909

Table (3.6., b) The questionnaire inter-item consistency

cs3	.603	.909
cs4	.629	.909
cs5	.647	.909
cs6	.618	.909
cs7	.516	.910
cs8	.665	.909
cs9	.405	.912
cs10	.685	.908
com1	.510	.910
com2	.447	.911
com3	.623	.909
com4	.562	.910
com5	.578	.909
com6	.628	.909
com7	.312	.912
com8	.367	.912
com9	.582	.909
com10	.351	.912
ra1	.228	.913
ra2	.280	.913
ra3	-.041-	.915
ra4	.394	.912
ra5	.234	.913
ra6	.117	.914
ra7	-.169-	.915
ra8	.016	.914
ra9	.287	.913
ra10	.342	.912
tech1	.448	.911
tech2	.039	.915
tech3	.149	.914
tech4	.191	.913
tech5	.095	.915
tech6	-.081-	.916
tech7	.141	.913
tech8	-.121-	.915
tech9	.338	.912
tech10	.100	.914

Table (3.6.) presents the inter-item consistency if any item removed, and whether the

removal of any item can affect the reliability of the questionnaire. As shown in the table, some of the items have negative value, asserting that their removal affects negativequestionnaire reliability. Overall, the values in the table indicate that the items are internally consistent, and the deletion of any low correlated item has a minimal impact on its reliability.

3.4.1.3.The final questionnaire reliability

The final version of the questionnaire reliability was verified using Cronbach alpha as in the following table.

Table (3.7) The final questionnaire version reliability of the total score anddimensions

Dimension	No. of items	Cronbach alpha
Critical thinking skills	10	.823
Collaboration skills	10	.839
Communication skills	10	.891
Reflection and awareness	10	.941
Using technology as a tool of learning	10	.916
Total score	**50**	**.919**

The Cronbach alpha outcomes shown in table (3.7.) assert the credibility of the questionnaire as the values of the Cronbach alpha are relatively high.

3.4.2. The interview

The interview questions were shaped based on the content of the questionnaire, considering the previous literature. The interview involved 6 questions to explore further SSSs' possession of the21st CSs from the perspective of their EFLTs.

3.4.2.1. The validity of the interview

The interview questions were appended in the questionnaire validation process. The interview was evaluated by the same referees, who reviewed and commented on the inquiries, proposing to broaden some of the questions while preserving others as they are. The referees' suggestions were considered and followed by the researcher and approved by the supervisor.

3.4.2.2. The reliability of the interview

The questions of the interview were rewritten following the directions of the referees, expanded and refined.The reliability of the interview was calculated using Holsti's equation.

$$Holsti\ Index = \frac{2 \times number\ of\ agreements}{number\ of\ units\ coded\ by\ coder1 + number\ of\ units\ coded\ by\ coder2} \times 100\%$$

$$\frac{2 \times 6}{7 + 7} \times 100\% = \frac{12}{14} \times 100\% = 0.857 \times 100\% = 85.7\%$$

Following Holsti's interpretation of the equation results, the instrument is reliable if passed 0.85 (85%), therefore, the study interview gained the reliability needed to ensure the appropriateness of its questions to meet the study goals and objectives.

3.5.The study variables

The study variables are two types:

Independent variables: gender, qualification, years of experience, governorates.

The dependent Variable: DP of the 21st CSs for the SSSs from their EFLTPs (EFLTPs) in Palestine

3.6. Procedures of the study

The procedures taken to gather the data necessary for the study started with choosing the proper instruments for the study objectives, taking into consideration the essentiality of gathering adequate and comprehensive data to provide satisfactory insights into the21st CSs possessed by the higher schoolers from the perspective of their EFLTs.

The instruments chosen were the questionnaire and the structured interview.The instruments were developed based on the previous literature both in Arabic and English that addressed the 21st CSs in EFL context. The instruments were reviewed primarily by the supervisor, subsequently by a committee of esteemed academic staff in the Palestinian universities in the fields of EFL, curriculum and teacher development, and Education.

The field work of data collection was set to commence personally by the researcher, however, it was disrupted by the difficulties of the current unstable situation in the West Bank, Palestine, and the MoE rejection to allow direct contact with school staff and teachers, so, the researcher followed the electronic path as route of instrument distribution and data collection.

A pilot study was commenced to further affirm reliability and inspect the content validity through gathering data from 30 teachers, whom the researcher excluded from the final data collection. The pilot study data were analyzed using SPSS.

The closingdistribution of the questionnaire was performed electronically using Google forms. The teachers' groups on Facebook, Telegram, and WhatsApp were recruited to complete the questionnaire following the share of the tool shortform link.The data collected was analyzed using SPSS.

The interview was then conducted with teachers from the northern, southern and central West Bank to provide deeper insights and interpretations of the questionnaire outcomes.The interview responses were analyzed thematically.

3.7.Data analysis

The quantitative data was analyzed using SPSS (v. 23). Cronbach Alpha and inter-item correlation were performed to assert the reliability of the questionnaire in addition to Pearson correlation. The descriptive analysis, i.e. means and standard deviations, were calculated for the questionnaire items and dimensions. Independent sample T-test, one way ANOVA and LSD, were carried out to examine the differences in perspective between the participants in relation to specific demographic variations.

The interview was thematically analyzed where the subjects'replies were transcribed, coded, categorized into themes, and interpreted.The analysis process started with reading and rereading the textual data, then writing the initial codes. Systematic data analysis begins with coding the data into codes, which are the building blocks of analysis. Coding involves carefully reading the passage or sentence and then summarizing it in one or two words. The next stage involves identifying the main themes based on the main topic of each question. This is followed by identifying the main answers provided by each interviewee. The themes are then reviewed, the answers are aligned, and the important and essential answers are coded. This is followed by writing an analysis report of the responses by linking the participants' answers to each other and comparing them for consistency, disagreement, and the interpretations provided by the participants in both cases.

Chapter Four

Results of the study

4.1.Introduction

Chapter four presents the results generated from the analysis of the study instruments, the questionnaire in the first section which displays the outcomes due tothe study questions and outcomes of hypotheses examination. The second section is an elaboration of the interview results.

4.2.Results of the Study Questions

The section shows the results of the study tools analysis in sub-sections. Each sub-section is constructed to display outcomes following the main and supporting tools.

4.2.1. Results of the questionnaire

The section shows the results obtained from the analysis of the questionnaire presented in two sub-sections, namely the results related to the study questions and the hypotheses testing results.

4.2.1.1.Results due to the study questions

The First Question: What is the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine?

The question was broken down to sub questions to facilitate the process of providing comprehensive response, since the21st CSs involve multiple skills combined under the umbrella of the term twenty first century skills. Taking everything into account, descriptive

analysis was performed generating the means and standard deviation of the responses to the items and mean response to the total dimension.

Interpreting the values of the responses means is performed following five-points Likert scale in the following table.

Table (4.1.) Five-Points Likert scale interpretation

Mean	1-1.80	1.81-2.60	2.61-3.40	3.41-4.20	4.20-5
Degree	Very low	Low	Moderate	High	Very high

The first sub question:What is the degree of SSSs' possession of the (critical thinking skills) from the perspective of EFLTs in Palestine?

Table (4.2.) The means and standard deviations of the participants' responses to the degree of SSSs' possession of the (critical thinking skills) from the perspective of EFLTs in Palestine

Item	**Mean**	**Std. Deviation**	**DP**
The students compare information from different sources before completing a task or assignment.	3.37	.930	Moderate
The students draw their own conclusions based on analysis of numbers, facts, or relevant information.	3.30	.997	Moderate
The students summarize or create their own interpretation of what they have read or been taught.	3.31	.999	Moderate
The students analyze competing arguments, perspectives or solutions to a problem.	3.36	.985	Moderate
The students develop a persuasive argument based on supporting evidence or reasoning.	3.23	1.062	Moderate
The students try to solve complex problems or answer open questions.	3.09	1.088	Moderate
The students develop the ability to learn, acquire, produce and exchange knowledge.	2.93	1.000	Moderate
The students follow evidence-based approach to substantiate their argument.	3.21	.949	Moderate
The students do not hesitate or shy to inquire and probe any illogical information they receive.	3.21	.908	Moderate
The students differentiate between attitude, personal opinion and factual information.	3.17	.929	Moderate
Critical thinking skills	**3.22**	**.612**	**Moderate**

Table (4.2.) results quantified the participants' responses to the degree of SSSs' possession of the (critical thinking skills) from the perspective of EFLTs in Palestine showing that the students moderately possess critical thinking skills with mean score (3.22) and standard deviation (0.612). According to the EFL secondary school teachers, the highest skills the students possess is comparing information from different sources before completing a task or assignment scoring the highest mean (3.37) with standard deviation (0.930). On the other hand, the skills that students possess moderately but less than the other skills

aredeveloping the ability to learn, acquire, produce and exchange knowledgewith mean score (2.93) and standard deviation (1.00).

The second sub question:What is the degree of SSSs' possession of the (collaboration skills) from the perspective of EFLTs in Palestine?

Table (4.3.) The means and standard deviations of the participants' responses to the degree of SSSs' possession of the (collaborations skills) from the perspective of EFLTs in Palestine

Item	Mean	Std. Deviation	DP
The students work in pairs or small groups to complete a task together.	3.63	.892	High
The students work with other students to set goals and create a plan for their team.	3.53	.978	High
The students present their group work to the class, teacher or others.	3.45	1.063	High
The students work as a team to integrate feedback on group tasks or products.	3.49	.974	High
The students' give feedback to peers or assess other students' work.	3.31	1.014	Moderate
The students adopt attentive persuasive techniques to enhance teamwork.	3.44	.945	High
The students have flexibility and positive attitudes towards disagreements and criticism.	3.60	.896	High
The students prioritize team interest over individual achievements.	3.54	.946	High
The students understand team member differences	3.42	.932	High
The students work collaboratively to help others grasp their notions.	3.46	.934	High
Collaboration skills	**3.49**	**.613**	**High**

The results shown in table (4.3.) indicate that the degree of SSSs' possession of the (collaborations skills) from the perspective of EFLTs in Palestine is high, having a mean score (3.49) and standard deviation (0.613). The highest skills possessed by the students areworking in pairs or small groups to complete a task togetherwith mean score of (3.63) and standard deviation of (0.892), while the skills with lowest mean score and moderately possessed is giving feedback to peers or assessing other students' work scoring (3.31) and standard deviation (1.01).

The third sub question:What is the degree of SSSs' possession of the (communication skills) from the perspective of EFLTs in Palestine?

Table (4.4.) The means and standard deviations of the participants' responses to the degree of SSSs' possession of the (communication skills) from the perspective of EFLTs in Palestine

Item	Mean	Std. Deviation	DP
The students structure data for use in written or oral presentations (e.g., creating charts, tables or graphs).	3.31	.979	Moderate
The students convey their ideas using media other than written paper (e.g., posters, video, blogs, etc.)	3.72	.694	High
The students prepare and deliver an oral presentation to the teacher or others.	3.60	.763	High
The students answer questions in front of an audience.	3.70	.828	High
The students possess good oral and written communication skills.	3.51	.836	High
The students can effectively communicate their ideas and persuade others of their opinions.	3.40	.849	Moderate
The students communicate effectively in teams.	3.51	.871	High
The students communicate their ideas and opinions clearly and directly.	3.70	.834	High
The students have good listening and non-verbal communication skills.	3.62	.858	High
The students show willingness to communicate when necessary.	3.68	.823	High
Communication skills	**3.57**	**.595**	**High**

As table (4.4.) presents, the degree of SSSs' possession of the (communication skills) from the perspective of EFLTs in Palestine is high having mean score of (3.57) and standard deviation of (0.59). The skill mostly practiced by the students is conveying their ideas using media other than a written paper (e.g., posters, video, blogs, etc.) with mean score (3.72) and standard deviation of (0.694). The skill that is least embraced by the students isstructuring data for use in written or oral presentations (e.g., creating charts, tables or graphs) with a mean score of (3.31) and standard deviation score of (0.979).

The fourth sub question:What is the degree of SSSs' possession of the (reflection and awareness skills) from the perspective of EFLTs in Palestine?

Table (4.5.) The means and standard deviations of the participants' responses to the degree of SSSs' possession of the (reflection and awareness skills) from the perspective of EFLTs in Palestine

Item	Mean	Std. Deviation	DP
The students plan the steps they will take to accomplish a complex task.	3.65	.798	High
The students choose for themselves what resources to use for additional learning.	3.81	.867	High
The students monitor their own progress towards completion of a complex task and modify their work accordingly.	3.71	.938	High
The students use specific criteria to assess the quality of their work before it is completed.	3.76	.942	High
The students use peer, teacher or expert feedback to revise their work.	3.69	.954	High
The students are able to discover what they are good at and work to achieve it.	3.60	.920	High
The students reflect on the new knowledge they gained and improve it.	3.64	.903	High
The students learn from their experiences to advance their skills.	3.72	.869	High
The students use their knowledge and information to contemplate their decisions.	3.60	.949	High
The students apply their reflective skills to their learning process and everyday life.	3.65	1.004	High
Reflection and awareness skills	**3.68**	**.741**	**High**

Remarkably, table (4.5.) demonstrating the degree of SSSs' possession of the (reflection and awareness skills) from the perspective of EFLTs in Palestine is high scoring mean (3.68) and standard deviation of (0.741). The highest reflective and awareness skill mastered by the students is choosing for themselves what resources to use for additional learningwith a mean score of (3.81) and a standard deviation (0.867). By contrast, two skills scored lowest mean score of (3.60), these skills are students'ability to discover what they are good at and work to achieve it with standard deviation of (0.920) andusing their knowledge and information to contemplate their decisions with a standard deviation of (0.949).

The fifth sub question:What is the degree of SSSs' possession of the (using technology as learning tool skills) from the perspective of EFLTs in Palestine?

Table (4.6.) The means and standard deviations of the participants' responses to the degree of SSSs' possession of the (using technology as learning tool skills) from the perspective of EFLTs in Palestine

Item	Mean	Std. Deviation	DP
The students use technology or the Internet for self-instruction (e.g., Khan Academy or other videos, tutorials, self-instructional websites, etc.).	3.10	.910	Moderate
The students select appropriate technology instruments or resources for completing a task.	3.25	1.032	Moderate
The students use technology to help them share information (e.g., multi-media presentations using sound or video, presentation software, blogs, podcasts, etc.).	3.10	.926	Moderate
The students use technology to support teamwork or collaboration (e.g., shared workspaces, email exchanges, giving and receiving feedback, etc.).	3.42	.976	High
The students use digital learning resources efficiently.	3.33	.976	Moderate
The students use novel technological apps for learning purposes.	3.20	1.034	Moderate
The students evaluate information, data and digital content to take wise decisions and improve their learning.	3.33	1.007	Moderate
The students use technology to engage their peers in the process of learning and collaborative teamwork and share knowledge.	3.30	.982	Moderate
The students use technology as problem solving tool to do their tasks.	3.37	.827	Moderate
The students using the web as a learning media (including learning materials, tutorials, practice, and online quizzes) assisted them mastering the material and enhancing their learning outcomes.	3.20	.930	Moderate
Using technology as learning tool skills	**3.26**	**.618**	**Moderate**

Table (4.6.) above indicates that the degree of SSSs' possession of the (using technology as learning tool skills) from the perspective of EFLTs in Palestine is moderate, where the mean score is (3.26) and the standard deviation is (0.618).The skill that is mostly performed by the students is using technology to support teamwork or collaboration (e.g., shared workspaces, email exchanges, giving and receiving feedback, etc.)with mean score of (3.42) and standard deviation of (0.976), while the skills least exercised by the students are two with same mean score of (3.10), the first is using technology or the Internet for self- instruction (e.g., Khan Academy or other videos, tutorials, self-instructional websites, etc.) with standard deviation of (0.910) and using technology to help them share information (e.g., multi-media presentations using sound or video, presentation software, blogs, podcasts, etc.)with standard deviation of (0.926).

The main question: What is the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine?

Table (4.7.) The means and standard deviations of the participants' responses to the degree of SSSs' possession of the21st CSs from the perspective of EFLTs in Palestine

Dimension	Mean	Std. Deviation	DP
Critical thinking	3.22	.612	Moderate
Collaboration skills	3.49	.613	High
Communication skills	3.57	.595	High
Reflection and awareness skills	3.68	.741	High
Using technology skills	3.26	.618	Moderate
SSSs' DP of the21st CSs	3.44	.396	High

Table (4.7.) displaysthe participants' responses to the degree of SSSs' possession of the21st CSs from the perspective of EFLTs in Palestineis high with mean score of (3.44) and standard deviation of (0.396). The sub-skills possession range between moderate for the skills of critical thinking and using technology as learning tool, and high for the skills of collaboration, communication, and reflection and awareness skills.

4.2.1.2. The hypotheses results

There are no statisticallysignificant differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due togender.

The hypothesis was tested through performing the independent sample T-test to find out the possibility of differences in perspective of EFLTs in their students' possession of the21st CSs between male and female teachers.

Table (4.8., a) The independent sample T-test results due to differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due togender.

Dimension	Gender	N	Mean	Std. Deviation	T value	Sig.
Critical thinking	Male	71	3.30	.481	1.399	0.163
	Female	193	3.19	.652		

Table (4.8., b) The independent sample T-test results due to differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to gender.

Collaboration skills	Male	71	3.40	.567	-1.362-	0.174
	Female	193	3.52	.627		
Communication skills	Male	71	3.59	.572	.298	0.766
	Female	193	3.57	.604		
Reflection and awareness skills	Male	71	3.65	.740	-.437-	0.662
	Female	193	3.70	.743		
Using technology skills	Male	71	3.27	.561	.082	0.935
	Female	193	3.26	.639		
SSSs' DP of the 21st CSs	Male	71	3.44	.380	-.038-	0.970
	Female	193	3.45	.403		

Table (4.8.) shown above, asserts thatthere are no statistically significant differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to gender in the total dimension. Nonetheless, the mean scores for both genders in all dimensions and the total score dimension show the differences are in favor of male teachers.

There are no statistically significant differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due toyears of experience.

The one-way ANOVA was utilized to examine the hypothesis to underscore any differences between the teachers' evaluations of their students' level of possession of the21st CSs in relation to their cumulative experiences of teaching.

Table (4.9., a) Means and standard deviations of the teachers' responses to thedegree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to years of experience

Dimension		N	Mean	Std. Deviation
Critical thinking	1-5 years	136	3.17	.67
	6-10 yrs	64	3.25	.54
	11-15 years	50	3.25	.50
	over 15 years	14	3.47	.62
	Total	264	3.22	.61
Collaboration skills	1-5 years	136	3.59	.66
	6-10 yrs	64	3.33	.51
	11-15 years	50	3.41	.55
	over 15 years	14	3.50	.59
	Total	264	3.49	.61

Table (4.9., b) Means and standard deviations of the teachers' responses to the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to years of experience

Communication skills	1-5 years	136	3.66	.59
	6-10 yrs	64	3.49	.59
	11-15 years	50	3.48	.50
	over 15 years	14	3.51	.77
	Total	264	3.57	.59
Reflection and awareness skills	1-5 years	136	3.81	.74
	6-10 yrs	64	3.56	.79
	11-15 years	50	3.51	.60
	over 15 years	14	3.67	.72
	Total	264	3.68	.74
Using technology skills	1-5 years	136	3.24	.67
	6-10 yrs	64	3.25	.60
	11-15 years	50	3.25	.53
	over 15 years	14	3.55	.38
	Total	264	3.26	.61
SSSs' DP of the 21st CSs	1-5 years	136	3.49	.40
	6-10 yrs	64	3.38	.38
	11-15 years	50	3.38	.35
	over 15 years	14	3.54	.47
	Total	264	3.44	.39

Table (4.9.) illustrates the teachers' mean views of their students' level of possession of the21st CSs from the perspective of EFLTs in Palestine related their years of teaching experience, where the differences are visibly observed. Identifying the possibility of existing differences among the teachers due to discrepancies in their teaching experiences is tested using One-Way Anova as shown in the following table.

Table (4.10., a) Theone-way ANOVA test results of the differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to years of experience

Dimension		Sum of Squares	Df	Mean Square	F	Sig.
Critical thinking	Between Groups	1.384	3	.461	1.234	.298
	Within Groups	97.245	260	.374		
	Total	98.629	263			
Collaboration skills	Between Groups	3.155	3	1.052	2.857	.038
	Within Groups	95.707	260	.368		
	Total	98.862	263			
Communication skills	Between Groups	1.929	3	.643	1.831	.142
	Within Groups	91.267	260	.351		
	Total	93.195	263			
Reflection and awareness skills	Between Groups	4.656	3	1.552	2.883	.036
	Within Groups	139.985	260	.538		
	Total	144.641	263			

Table (4.10.b) The one-way ANOVA test results of the differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to years of experience

Using technology skills	Between Groups	1.195	3	.398	1.040	.375
	Within Groups	99.552	260	.383		
	Total	100.747	263			
SSSs' DP of the21st CSs	Between Groups	.941	3	.314	2.020	.112
	Within Groups	40.402	260	.155		
	Total	41.343	263			

The table above, (4.10.) shows one-way ANOVA test results ofthe differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to years of experience indicating the inexistence of such differences in the overall DP of the21st CSs and its sub dimensions of critical thinking, communication, and using technology for learning skills. However, the differences are observable in the dimensions of collaboration, and reflection and awareness skills where the significance level value is over 0.05, so, to adequately identify the source of differences, the LSD test was performed.

Table (4.11.) Least significance differences (LSD) test to locate the differences due to years of experience of teachers in the dimensions of collaboration, and reflection and awareness skills

Dimension	Years of experience	1-5years	6-10 yrs	11-15 years	over 15 years
Collaboration skills	1-5years		.25368*	.17518	.09118
	6-10 yrs	-.25368-*		-.07850-	-.16250-
	11-15 years	-.17518-	.07850		-.08400-
	over 15 years	-.09118-	.16250	.08400	
Reflection and awareness skills	1-5years		.25156*	.29850*	.13393
	6-10 yrs	-.25156-*		.04694	-.11763-
	11-15 years	-.29850-*	-.04694-		-.16457-
	over 15 years	-.13393-	.11763	.16457	

Table (4.11.) exhibits the differences between the years of experience of the EFLTs in comparison to each other in both skills in favor of teachers with experience between 1-5 years and 6-10years.

There are no statistically significant differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to the academic qualification.

One-way ANOVA was operated to assess the hypothesis and highlight the presence of differences between the teachers' assessments of their students' DP of the21st CSs in relation to their academic qualifications.

Table (4.12.) Means and standard deviations of the teachers' responses to thedegree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to qualifications

Dimension		N	Mean	Std. Deviation
Critical thinking	BA	210	3.21	.59
	MA	49	3.21	.64
	PhD	5	3.64	.91
	Total	264	3.22	.61
Collaboration skills	BA	210	3.45	.60
	MA	49	3.58	.63
	PhD	5	4.22	.33
	Total	264	3.49	.61
Communication skills	BA	210	3.54	.60
	MA	49	3.68	.55
	PhD	5	3.90	.50
	Total	264	3.57	.59
Reflection and awareness skills	BA	210	3.65	.72
	MA	49	3.81	.82
	PhD	5	3.94	.66
	Total	264	3.68	.74
Using technology skills	BA	210	3.26	.59
	MA	49	3.25	.71
	PhD	5	3.32	.72
	Total	264	3.26	.61
SSSs' DP of the 21st CSs	BA	210	3.42	.39
	MA	49	3.50	.38
	PhD	5	3.80	.51
	Total	264	3.44	.39

Table (4.12.) shows the teachers' means and standard deviations assessment of their SSSs' possession of the 21st CSs based on their academic qualifications, the descriptives shown in the above table reflect minor differences in the teachers' perceptions. The source of these differences is examined using One-way ANOVA analysis presented in table (4.13.).

Table (4.13.) One-way ANOVA test results of the differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due toacademic qualifications

		Sum of Squares	Df	Mean Square	F	Sig.
Critical thinking	Between Groups	.886	2	.443	1.183	.308
	Within Groups	97.743	261	.374		
	Total	98.629	263			
Collaboration skills	Between Groups	3.383	2	1.692	4.625	.011
	Within Groups	95.478	261	.366		
	Total	98.862	263			
Communication skills	Between Groups	1.238	2	.619	1.757	.175
	Within Groups	91.957	261	.352		
	Total	93.195	263			
Reflection and awareness skills	Between Groups	1.431	2	.716	1.304	.273
	Within Groups	143.210	261	.549		
	Total	144.641	263			
Using technology skills	Between Groups	.024	2	.012	.031	.969
	Within Groups	100.723	261	.386		
	Total	100.747	263			
SSSs' DP of the21st CSs	Between Groups	.911	2	.455	2.939	.055
	Within Groups	40.433	261	.155		
	Total	41.343	263			

Table (4.13.) shows that there areno statistically significant differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to the (academic qualification)in the total score dimension and sub-dimensions but for collaboration skills dimension. The LSD test was employed to identify the source of differences.

Table (4.14.) Least significance differences (LSD) test to locate the differences due toyears of experience of teachers in the dimension of collaboration skills

Qualification	BA	MA	PhD
BA		-.13082-	-.76714-*
MA	.13082		-.63633-*
PhD	.76714*	.63633*	

The comparison between the different levels of qualifications shown in table (4.14.) demonstrates that the higher the qualifications of the teachers are, the higher their discrepancies of evaluation of their students' DP of the21st CSs. The table indicates the differences in favor of PhD holders.

There are no statistically significant differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due toGovernorates.

One-way ANOVA was employed to inspect the hypothesis and investigate the occurrence of differences between the teachers' assessments of their students' DP of the21st CSs in relation to governorates.

Table (4.15.) Means and standard deviations of the teachers' responses to the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to governorates

Dimension		N	Mean	Std. Deviation
Critical thinking	Northern governorates	103	3.20	.58
	Southern governorates	97	3.32	.67
	Central governorates	64	3.08	.52
	Total	264	3.22	.61
Collaboration skills	Northern governorates	103	3.45	.60
	Southern governorates	97	3.53	.57
	Central governorates	64	3.47	.69
	Total	264	3.49	.61
Communication skills	Northern governorates	103	3.53	.55
	Southern governorates	97	3.57	.63
	Central governorates	64	3.66	.59
	Total	264	3.57	.59
Reflection and awareness skills	Northern governorates	103	3.63	.67
	Southern governorates	97	3.69	.77
	Central governorates	64	3.77	.79
	Total	264	3.68	.74
Using technology skills	Northern governorates	103	3.23	.60
	Southern governorates	97	3.29	.64
	Central governorates	64	3.26	.60
	Total	264	3.26	.61
SSSs' DP of the 21st CSs	Northern governorates	103	3.41	.37
	Southern governorates	97	3.48	.41
	Central governorates	64	3.45	.39
	Total	264	3.44	.39

Table (4.15.) presented the descriptive outcomes thatexplain the means and standard deviations of teachers' perceptions of their SSSs' possession of the 21st CSs due to their governorates, where the results point minor to significant differences. However, the exact differences are explored using One-Way ANOVA test shown in the following table.

Table (4.16.) One-way ANOVA test results of the differences at the level of (α≤0.05) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due togovernorates

		Sum of Squares	Df	Mean Square	F	Sig.
Critical thinking	Between Groups	2.335	2	1.167	3.164	.044
	Within Groups	96.294	261	.369		
	Total	98.629	263			
Collaboration skills	Between Groups	.346	2	.173	.458	.633
	Within Groups	98.516	261	.377		
	Total	98.862	263			
Communication skills	Between Groups	.685	2	.343	.967	.382
	Within Groups	92.510	261	.354		
	Total	93.195	263			
Reflection and awareness skills	Between Groups	.783	2	.392	.711	.492
	Within Groups	143.858	261	.551		
	Total	144.641	263			
Using technology skills	Between Groups	.163	2	.082	.212	.809
	Within Groups	100.583	261	.385		
	Total	100.747	263			
SSSs' DP of the21st CSs	Between Groups	.265	2	.133	.843	.432
	Within Groups	41.078	261	.157		
	Total	41.343	263			

Table (4.11.) hypothesis analysis results assert that there are no statistically significant differences at the level of (α≤0.05) sin the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to Governorates in the total score dimension and sub-dimensions but for the critical thinking dimension.So as to identify the source of differences, the LSD test was performed for the dimension of critical thinking.

Table (4.17.) Least significance differences (LSD) test to reveal the source of differences due to governorates in the dimension of critical thinking skills

Governorates	Northern governorates	Southern governorates	Central governorates
Northern governorates		-.12213-	.12183
Southern governorates	.12213		.24396*
Central governorates	-.12183-	-.24396-*	

Table (4.17.) showsthe least significant differences (LSD) test utilized to reveal the source differencedue to governorates in the dimension of critical thinking skills that illustrate the differenceare in favor of the central governorates.

4.2.2. The interviews analysis

The researcher contacted ten teachers to conduct interviews. Only five teachers communicated and agreed to respond. The interviewees were asked seven questions.

Following the transcription of the interviews, a thematic analysis was performed.The analysis resulted in 7 major themes thathighlight the importance of 21st CSs, methods to foster and assess skills, student dependency and autonomous learning, impact of educational instability, motivation and engagement, and the role of technology in learning.

According to the first interviewee teacher, the Palestinian students need 21st CSs to adapt to the rapidly changing world and contribute to their communities. The teacher uses project-based activities, group work, and AI instruments to develop these skills. While some students work independently, others require guidance due to past educational disruptions. The teacher focuses on improving language skills, motivation, and guiding students' use of technology.

The second interviewee teacher asserted that the 21st CSs are crucial for Palestinian students, fostering critical thinking and problem-solving. The teacher uses methods like critical thinking activities to assess these skills. Communication skills are often reflected in students' interactions. The teacher promotes autonomous learning through effective feedback and assessments of listening and communication skills.

The third interviewee teacher maintained that 21st CSs are vital for Palestinian students, shaping their personalities and future success. The teacher uses cooperative work and assessment techniques to foster these skills, with a focus on communication and collaboration. While some students possess independent learning skills, others need guidance to develop autonomy in learning.

The 21st CSs enhance students' abilities in communication, creativity, and problem-solving as indicated by the fourth interviewee. The teacher assesses these skills during group work and promotes autonomous learning through research-based assignments. Observation is used to evaluate listening skills, while technology aids in learning and information retrieval.

The last interviewee teacher underscored the essentiality of the 21st CSs for Palestinian students to navigate a changing world and improve employability. The teacher uses various methods and technology to foster skills like critical thinking and communication. Collaboration is a prominent skill among students, and independent learning is encouraged through diverse resources and guidance. Students utilize technology for learning, collaboration, and knowledge sharing.

Key themes analysis

The themes emerged from the interviews aligned with the subjects tackled in the questionnaire. The teacherswere asked about their perspective on the significance of the 21st CSs, the assessments and development methods they implement to enhance these skills among students, the degree these skills are practiced by the students, the students' use of technology as a learning means, and the challenges entailed with using it in educational contexts.

The interviews consistently highlight the critical importance of 21st CSs for secondary students in Palestine. These skills, including critical thinking, problem-solving, creativity, communication, and digital literacy, are deemed essential for students to navigate a rapidly changing world and to enhance their employability in both local and global markets.

Educators employ various methods to assess and foster these skills. Common strategies include**Project-Based Learning**, where the teachersengage students in real-life problem-solving scenarios. Also, the teachers frequently use **Group Work and Peer Assessment**, to encourage collaboration and communication among students. The teachers use **Formative Assessments**, including utilizing self-assessment, peer assessment, and reflective journals to help students track their progress.

The interviews reveal a mixed picture regarding students' skills, asserting that **Collaboration and Communication**are the primary experienced skills,many students demonstrate strong skills in these areas, particularly during group activities. Also, **Independent Learning** is observed among these students. According to the teachers, while some students show the ability to learn autonomously, others require more guidance, emphasizing the need for strategies to promote self-directed learning.

Technology is recognized as a vital tool for enhancing learning. The teachers encourage their students to use technology for research and collaboration, although there is a noted inconsistency in how effectively different students utilize these instruments. As these teachers note,some students excel in using technology productively, others struggle and need more training.

A recurring theme is the challenge students face in **applying new knowledge outside the classroom**. Teachers express the need for more time and effort from teachers, schools, and the community to help students connect classroom learning with real-world applications.

Overall, the interviews provide valuable insights into the current state of education in Palestine, particularly regarding the development of 21st CSs. There is a clear recognition of the importance of these skills, along with a commitment from educators to foster them through various innovative teaching methods. However, challenges remain, particularly in promoting independent learning and effectively integrating technology into the learning process.

Chapter Five

Discussion and conclusion

5.1.Introduction

The chapter offers an interpretation of the study results through the discussion section. The interpretation follows the study questions as cursor of outcomes justifications. The outcomes are further clarified in comparison to the previous literature. The chapter concludes with conclusion, recommendation, and suggestions extended in light of the results and discussion.

5.2.Discussion of the study results

The first question discussion: What is the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine?

The study outcomes found that the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine is high (M=3.44, SD=0.396).This outcome shows that the teachers believe that their students do possess very good degrees of the 21st CSs, indicating that both the curriculum and teachers have succeeded,supporting the students' efforts in possessing and developing the 21st CSs, reflecting secondary students' awareness of the importance of possessing and mastering these skills for both life and work.

The UAE and Bahraincurricula showed moderate level of competence in the 21st CSs, but low in KSA (Moray & Ali, 2024). Similarly, Al-Rawadiah (2021) reported moderate levels of possession of the 21st CSs among Jordanian students. Turkish secondary students as per Özeren (2023) study showed low levels of 21st CSs, while other study reported good

competence of the 21st CSs among Turkish secondary students in Manisa (Kocaman, 2022).

The differences in evaluation of possession of the 21st century between Palestine and previous studies is related to various factors such as the differences in the curriculum implemented in the schools, the level of integration of the 21st CSs in the curriculum, the teachers' contribution and encouragement of their students to possess these skills, the interest of the students to possess and develop these skills among other factors.

The students' possession of the sub-skills of the 21st CSs varied between moderate for the **critical thinking** (M=3.22, SD=0.612) and **using technology as learning tool** (M=3.26, SD=0.618), contrast to Moray & Ali (2024), which reflected low levels of competence in some of the GCC countries curricula. The degree was high for the sub-skills of **collaboration skills** (M=3.49, SD=0.613), **communication skills** (M=3.57, SD=0.595), **reflection and awareness** (M=3.68, SD=0.741), but the ratings were low in the GCC countries curricula as reported by Moray & Ali (2024). By contrast, Alowayyid (2023) reported moderate levels of mastery of technology utilization by middle school Saudistudents. Thai students, on the other hand, value communication skills the most. Northern Cyprus students also were found to use technology as learning tool moderately as indicated by Hursen, Paşa& Keser (2023), and their level of usage of information and data literacy, communication, and collaboration skills was sufficient. By comparison, Turkish secondary students demonstrated low level of digital literacy (Özeren, 2023).

The prominent level of possession of the collaboration and communication skills is not surprising considering the outcomes reported by Amr (2020), who found that the 12th grade English for Palestine curriculum integrates mostly collaboration skills compared to other skills. Another factor contributing to the level of possession of any of the 21st CSs, is the teachers' skills, where Al-Rawadiah (2021) founda strong positive relation between the skills of teachers and students' acquisition of these skills through the study manifested by the correlation coefficients.

The sub-skills constructing the 21st CSs were analyzed independently to identify the core skills each sub-skills involves and their level of possession by the Palestinian EFL students using means and standard deviations.

The **critical thinking** sub-skillmostly adopted by the students is comparing information from different sources before completing a task or assignment (M=3.37, SD=0.930), while the skills least implemented is developing the ability to learn, acquire, produce and exchange knowledge (M=2.93, SD=1.00). The **collaborations skills** highly applied by the Palestinian EFL students is working in pairs or small groups to complete a task together (M=3.63, SD=0.892), while the skills with least practiced by the students is giving feedback to peers or assess other students' work (M=3.31, SD=1.01).

Communication skills enlisted sub-skills mostly practiced by the students is conveying their ideas using media other than a written paper (e.g., posters, video, blogs, etc.) (M=3.72, SD=0.694), and the lowest skill personalized by the students is structuring data for use in written or oral presentations (e.g., creating charts, tables or graphs) (M=3.31, SD=0.979). The **reflection and awareness** sub-skill acquired by the students is choosing for themselves what resources to use for additional learning (M=3.81, SD=0.867), but the ones least assumed are students' ability to discover what they are good at and work to achieve it (M=3.60, SD=0.920) and using their knowledge and information to contemplate their decisions (M=3.60, SD=0.949).Likewise, Zimbabwean SSSsidentify largely with the learning self-management, learning skills values, and learning process as their critical concepts of the 21st CSs (Muyambo-Goto, Naidoo & Kennedy, 2023). These skills are also greatly respected by SSSs in Palestine revealed their teachers' rating of their reflection and self-awareness evaluations.

A possible explanation of these outcomes can be related to the fact that English in Palestine is not central language in both life and work, thus it is adopted as foreign language, where the principal concentration is communication skills, aiming to enable learners to communicate with others and understand of context, not aiming to use the language as primary one for daily or routine practice, which is stressed across the curriculum levels. Moreover, communication and collaboration skills are thought of as core skills of daily living and workplace requirement, establishing their significance for the future development of these students and preparing them for their future roles.

The skill of**using technology as a learning tool**mostly executed by the students is using technology to support teamwork or collaboration (e.g., shared workspaces, email exchanges, giving and receiving feedback, etc.) (M=3.42, SD=0.976), but the skills to the lowest degreeexerted by the students are using technology or the Internet for self-

instruction (e.g., Khan Academy or other videos, tutorials, self-instructional websites, etc.) (M=3.10, SD=0.910) and using technology to help them share information (e.g., multi-media presentations using sound or video, presentation software, blogs, podcasts, etc.) (M=3.10, SD=0.926).

The use of technology as a learning tool is not familiar or used wisely and guided by the teaching staff so as to motivate and encourage students to adopt it. Also, limited access to technology for most of the students due to lack of resources is another crucial affective factor hindering the use of technology as learning tool, besides the insufficient efforts and initiatives of the ministries to integrate and provide resources for technology use as learning tool in the classroom.Another possible factor is related to the teachers who may not have the skills required to guide and implement a strategy of using technology to enhance learning in the classroom.

The second question discussion: Does the degree of SSSs' possession of the 21st CSs differ from the perspective of EFLTs in Palestine according to the variables (gender, years of experience, academic qualification, governorates)?

The hypotheses analysis found no statistically significant differences at the level of ($\alpha \leq 0.05$) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to gender but mean scores of the respondents presented differences in favor of male teachers.

Generally, female teachers seem show strict attitude when evaluating students compared to males who seem to have more flexibility in the matter of assessing students. This also applies to the study outcomewhere male teachers assessed the students' possession of the 21st CSs higher than female teachers, who tend to have higher expectations of their students, thus having higher criteria of measurement affecting their overall assessment of their students' possession of these skills.

Also, no statistically significant differences at the level of ($\alpha \leq 0.05$) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due toteachers' years of experience in the dimensions the critical thinking, communication, using technology as learning tool and total score of the 21st CSs DP, but there are differences in the dimensions of collaboration, and reflection and awareness skills in favor of the lesser years of

experience, i. e., the least the years of the experience the more the differences are observed, as it is also stated by Bolat & Deneme-Gençoglu (2024)that the less experienced the teacher, the more they tend to integrate 21st CSs in their classrooms, consequently, promoting and encouraging their students' to personalize, adopt and exercise these skills as part of their educational development and growth. By contrast,Alowayyid (2023)found that experience had no impact on the Saudi students'application of the 21st CSs.

Teachers with low years of experience show less belief in their students' possession of high degrees of the 21st CSs, their short experience in teaching contributes greatly to their judgment on their students. Furthermore, the teachers' years of experience impact their ability to implement a strategy that assists them to integrate the 21st CSs in their classroom, guide and encourage the students to possess and develop these skills.

There areno statistically significant differences at the level of ($\alpha \leq 0.05$) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to the academic qualification in the total score dimension and sub-dimensions but for collaboration skills dimension, wherethe differences are in favor PhD holders.Kapkır (2024) maintained that foreign language teaching focus should be on communication and critical thinking skills as these skills are most vital to the students rather than collaboration and creativity, noting that the later skills are the ones mostly taught.

The possession of higher education for teachers improves their teaching as they acquire deeper knowledge in the strategies and approaches best implemented in the classroom to assist studentspossessing the 21st CSs.Higher qualifications also reflect positively on the students inspiring them to take the steps of their teachers and promote an innovative environment in the classroom paving the road for the teacher to implement 21st century teaching strategies, consequently helping the students possess and develop it.

There are no statistically significant differences at the level of ($\alpha \leq 0.05$) in the degree of SSSs' possession of the 21st CSs from the perspective of EFLTs in Palestine due to(governorates) in the total score dimension and sub-dimensions but for the critical thinking dimension, where the differences due togovernorates in the dimension of critical thinking skills are in favor of the central governorates.

The central governorates teachers and students have access to diverse resources and opportunities that improve their possession and development of the 21st CSs compared to the northern and southern governorates that face marginalization. Also, the central governorates are considered the political and commercial heart of the West Bank.

5.3.Conclusion

The basic skills required in the last century were reading, writing and arithmetic, and they are still the skills necessary for individual success today. While the term 21st CSs refers to the set of skills necessary for success and work in the 21stcentury, such as learning and innovation skills, information and media literacy and technology, and life and work skills. According to Binkley et al, 2012, they are ways of thinking, working, and living in connected worlds rich in media.

In light of the continuous changes witnessed by the global community, especially those that occurred at the beginning of the 21stcentury and are still occurring; the task of identifying the skills required of a person, his full awareness of them, and his acquisition of them has become essential; in order to reach individuals capable of dealing with the requirements of the era and subsequent stages, and capable of supporting academic and life skills, and able to adapt, compete and face various challenges; especially since technology plays a major role in building these skills, and that many of them are directly or indirectly due to safety on the Internet.

5.4. Recommendations

The outcomes of the study provided insight into the educational needs, requirements and improvements in the process of EFL teaching/learning, based on this, the study recommends the following:

1. Reevaluating the distribution of the 21st CSs in the English for Palestine curriculum for the secondary level to meet the needs tertiary education and future workplace requirements.
2. The dimensions of critical thinking and technology use for learning purposes should be enhanced by curriculum developers through effective integration in the EFL curriculum and teaching/learning practices.

3. The Ministry of Education should invest in teacher training on the 21st CSs implementation in the classroom as path of student equipment of these skills.
4. The level of possession of the 21st CSs should be measured among tertiary education students, to improve their skills in their field of specialization to meet the workplace requirements.
5. Future research should be conducted to explore the knowledge of SSSs regarding the 21st CSs.
6. Additional research should be conducted in the form of self-reported assessments to quantify the students' self-evaluation of their possession of the 21st CSs.
7. Further research should be conducted to investigate the needs and requirements of the teachers to ease their implementation of the 21st CSs.

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Appendices

Appendix (1) The questionnaire

Al Quds University – Jerusalem

Faculty of Graduate Studies

A Questionnaire

Dear teachers,

The researcher has been conducting a master'sthesis titled, "**The DP of the 21st CSs for the SSSs from their Teachers' Perspectives in Palestine**". You are kindly requested to fill in this questionnaire by checking out the cell you feel compatible with what you think using the mark (√). Please be informed also that the data you provide will only be used for this study purposes.

Thanks for your cooperation,

The researcher

Part One: The participants' personal information

Gender Male □ Female □

Years of experience 1-5 years□ 6-10 years□ 11-15 years□ over 15 years□

Qualifications BA□ MA□ PhD□

Governorate

Southern governorates (Jenin, Nablus, Tulkarm, Tubas, Qalqiliya)□

Northern governorates (Bethlehem, Hebron) □

Central governorates (Jerusalem, Salfit, Jericho, Ramallah & Al-Beirah)□

Part Two: Teachers' perceptions of their students' possession of 21st CSs

Item	Level of possession				
	Very high	**High**	**Moderate**	**Low**	**Very low**
Critical Thinking Skills					
1. The students compareinformationfromdifferentsources before completing a task or assignment.					
2. The students drawtheirownconclusionsbasedonanalysisof numbers, facts, or relevant information.					
3. The students summarizeorcreatetheirowninterpretationof what they have read or been taught.					
4. The students analyzecompetingarguments,perspectivesor solutions to a problem.					
5. The students developapersuasiveargumentbasedon supporting evidence or reasoning.					
6. The students try to solve complex problems or answer open questions.					
7. The students develop the ability to learn, acquire, produce and exchange knowledge.					
8. The students follow evidence-based approach to substantiate their argument.					
9. The students do not hesitate or shy to inquire and probe any illogical information they receive.					
10. The students differentiate between attitude, personal opinion and factual information.					
Collaboration Skills					
1. The students workinpairsorsmall groupsto complete atask together.					
2. The students workwithotherstudentstosetgoals andcreateaplanfortheir team.					
3. The students presenttheirgroupworktothe class,teacheror others.					
4. The students workasateamtointegratefeedbackon					

group tasks or products.					
5. The students'givefeedbacktopeersorassessother students' work.					
6. The students adopt attentive persuasive techniques to enhance teamwork.					
7. The students have flexibility and positive attitudes towards disagreements and criticism.					
8. The students prioritize team interest over individual achievements.					
9. The students understand team member differences.					
10. The students work collaboratively to help others grasp their notions.					
Communication Skills					
1. The students structuredataforuseinwrittenor oral presentations (e.g., creating charts, tables or graphs).					
2. The students conveytheirideasusingmediaotherthan a written paper (e.g., posters, video, blogs, etc.)					
3. The students prepareanddeliveranoralpresentationto the teacher or others.					
4. The students answerquestionsinfrontofan audience.					
5. The students possess good oral and written communication skills.					
6. The students can effectively communicate their ideas and persuade others of their opinions.					
7. The students communicate effectively in teams.					
8. The students communicate their ideas and opinions clearly and directly.					
9. The students have good listening and non-verbal communication skills					
10. The students show willingness to communicate when necessary.					
Reflection And Awareness					
1. The students planthestepstheywilltaketoaccomplisha complex task.					
2. The students chooseforthemselveswhatresources to use for additional learning.					

3. The students monitor their own progress towards completionofacomplextaskandmodifyth eir work accordingly.					
4. The students usespecificcriteriatoassessthequalityof their work before it is completed.					
5. The students usepeer,teacherorexpertfeedbacktorevise their work.					
6. The students are able to discover what they are good at and work to achieve it.					
7. The students reflect on the new knowledge they gained and improve it.					
8. The students learn from their experiences to advance their skills.					
9. The students use their knowledge and information to contemplate their decisions.					
10. The students apply their reflective skills to their learning process and everyday life.					
Using Technology AsA Tool For Learning					
1. The students use technology or the Internet for self- instruction (e.g., Khan Academy or other videos,tutorials,self-instructionalwebsites, etc.).					
2. The students selectappropriatetechnologyinstruments or resources for completing a task.					
3. The students use technology to help them share information(e.g.,multi-mediapresentations usingsoundorvideo,presentationsoftware , blogs, podcasts, etc.).					
4. The students usetechnologytosupportteamwork or collaboration (e.g., shared workspaces, email exchanges, giving and receiving feedback, etc.).					
5. The students use digital learning resources efficiently.					
6. The students use novel technological apps for learning purposes.					
7. The students evaluate information, data and digital content to take wise decisions and improve their learning.					
8. The students use technology to engage their peers in the process of learning and collaborative teamwork and share					

knowledge.					
9. The students use technology as problem solving tool to do their tasks.					
10. The students using the web as a learning media (including learning materials, tutorials, practice, and online quizzes) assisted them mastering the material and enhancing their learning outcomes.					

Appendix (2) The interview

The interview questions

1. How important are 21st-century skills for secondary students in Palestine?
2. What methods do you use to assess and foster the development of 21st CSs in your students?
3. Which skill is reflected more in the students' responses, behavior and interaction?
4. Do your students possess independent learning skills (can they seek knowledge by themselves)? How do you think you can promote autonomous learning among the students?
5. How do you evaluate your students' effective listening skills? Do the students have effective communication skills within teams and among them as individual students?
6. How do you think the students deal with the new knowledge they gain? Do they revise it, utilize it to better their knowledge?
7. How do you think the students use the new tech as a learning tool? Do they wisely employ it to improve their learning and search for learning resources? Do they use it as a medium of collective learning/team learning/knowledge sharing? Why?

Appendix (3) List of Arbitrators

No.	Name	Workplace	Specialization
1.	Prof. Afif Zeidan	Al-Quds University	Science Education
2.	Prof. Ibrahim Arman	Al-Quds University	Educational Technology
3.	Prof. Mohsen Adas	Al-Quds University	Curriculum and Instruction
4.	Prof. Enas Naser	Al-Quds University	Curriculum and Instruction
5.	Inst. Faten Nassar	Al-Quds University	Methods of English Language Teaching
6.	Dr. Khalid Dwikat	Al-Quds Open University	Methods of English Language Teaching
7.	Dr. Hazem Bader	Hebron University	EFL Methodology & Curricula
8.	Dr. Tahani Bsharat	USIM	Methods of English Language Teaching
9.	Inst. Maysar Al-Ghalassi	Palestine Polytechnic University	Methods of English Language Teaching
10.	Br. Alejandro González Cerna	Bethlehem university	Education
11.	Dr. Naim Salah	Palestine Ahliya University	Education

Appendix (4) Facilitation letter

Al-Quds University
Faculty of Educational Sciences

بسم الله الرحمن الرحيم

جامعة القدس
كلية العلوم التربوية

التاريخ: 2024/10/15

حضرة مدير التربية والتعليم– بيت لحم/ المحترم

الموضوع : تسهيل مهمة

تحية طيبة وبعد،،

تقوم الطالبة بشرى إبراهيم سامي هريمي ورقمها الجامعي (22220047) بإجراء دراسة بعنوان

The Degree of Possession of the 21st Century Skills for the Secondary School Students from their EFL Teachers' Perspectives in Palestine

لذا نرجو من حضرتكم تسهيل مهمة الطالبة المذكورة أعلاه، وذلك لتطبيق الدراسة خلال الفصل الدراسي الحالي.

شاكرين لكم حسن تعاونك

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List of abbreviations

Abbreviation	Full term
EFL	English as Foreign Language
ATC	Assessment and Teaching of the 21st CSs (ATC) Foundation
ICT	Information and Communication Technology
OECD	Organisation for Economic Co-operation and Development
NCREL	The North Central Regional Education Laboratory
APEC	The Asia-Pacific Economic Cooperation
ISTE-NETSS	International Society for Technology in Education
NETS-S	National Educational Technology Standards for Students
GCC	Gulf Cooperation Council
ZPD	Zone of Proximal Development
ZIMSEC	The Zimbabwe School Examinations Council
21st CSs	21st century skills
SSSs	Secondary School Students
EFLTs	English as foreign language teachers
EFLTPs	English as Foreign Language teachers' perspectives
DP	degree of possession

Listof Appendices

List of tables

Table of Contents