

# Investigating Higher- Order Thinking Skills (HOTs) in English for Palestine 12<sup>th</sup> Grade Textbook and EFL Teachers' Perspectives towards HOTs

## استقصاء مهارات التفكير العليا في كتاب اللغة الانجليزية للصف الثاني عشر وفحص اتجاهات معلمي اللغة الإنجليزية كلفة أجنبية نحو مدى احتواء الكتاب على هذه المهارات

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## المخلص:

هدفت الدراسة الحالية إلى تفصي مدى احتواء كتاب اللغة الإنجليزية للصف الثاني عشر على مهارات التفكير العليا من خلال تحليل التمارين والأنشطة في هذا الكتاب كما هدفت الدراسة إلى فحص وجهات نظر معلمي اللغة الإنجليزية نحو مدى احتواء الكتاب على هذه المهارات. لتحقيق هذه الأهداف تم استخدام أسلوب تحليل المحتوى لجمع البيانات بالإضافة توزيع استبيان ضم 27 فقرة على 32 معلمًا من معلمي اللغة الإنجليزية الذين يدرسون الكتاب. أظهرت النتائج احتواء الكتاب على 248 تمرينًا ونشاطًا تغطي ثلاثة أنواع من مهارات التفكير العليا وهي التحليل والتركيب والتقييم. وفيما يتعلق بكتاب الطالب فقد سجلت مهارة التحليل أعلى تكرار (72) بينما سجلت مهارة التقييم أدنى تكرار (42). من جهة ثانية، في كتاب القراءة سجلت مهارة التقييم أعلى تكرار (29) بينما سجلت مهارة التحليل (21) تكرارًا. أظهرت النتائج أيضًا أن وجهات نظر معلمي اللغة الإنجليزية نحو مدى احتواء الكتاب على هذه المهارات حصلت على تقديرات عالية على الرغم من أن ما نسبته 68.2% من المعلمين أشاروا إلى نقص هذه المهارات في الكتاب المدرسي. وعليه من المأمول أن تفتح نتائج هذه الدراسة آفاقًا جديدة لمعلمي اللغة الإنجليزية للاستفادة من تحليل المحتوى للتعرف على أهمية مهارات التفكير العليا في ممارسات التدريس الخاصة بهم حتى عندما لا يتم تقديمها بشكل كبير في المناهج الدراسية. علاوة على ذلك، قد تشجع النتائج المشرفين على تنظيم دورات تدريبية حول فعالية تعزيز هذه المهارات في الصف ومسؤولية المعلمين لاستخدام أفضل الأساليب التي يمكن أن تحسّن مهارات التفكير العليا لدى الطلاب من خلال استخدام مواد وأنشطة اثرائية داعمة لمهارات التفكير العليا.

كلمات مفتاحية: المنهاج الفلسطيني. مهارات التفكير العليا. تضمين المنهاج لمهارات التفكير العليا. تصورات معلمي اللغة الانجليزية.

## Abstract:

The current study aimed to examine the extent of HOTs inclusion in the exercises and activities of English for Palestine 12<sup>th</sup> grade textbook used in Palestinian schools. Moreover, the study aimed

to investigate the perspectives of EFL teachers towards the extent of this inclusion. To achieve the study objectives, content analysis approach was used to collect the required data in addition to a 27-item questionnaire distributed among 32 EFL teachers who teach this textbook. The questionnaire was used to investigate teachers' perspectives towards the extent of HOTs inclusion. Findings showed that English for Palestine textbook for 12<sup>th</sup> graders with its two components includes 248 exercises and activities that cover the three types of HOTs: analysis, synthesis and evaluation. The highest frequency in the Pupil's Book was given to the analysis skill which scored 72 while the lowest frequency was scored by evaluation with a total of 42 frequencies. On the other hand, in the Reading Plus, the highest was scored by evaluation 29 compared to the lowest score of analysis 21. Findings also revealed that EFL teachers' perspectives towards the inclusion of HOTs in English for Palestine 12<sup>th</sup> grade textbook scored a high level of estimation although 68.2 % of the teachers pointed out to a lack of HOTs in the textbook. It is hoped that the findings of this study will open new horizons for EFL teachers to benefit from the content analysis process to get acquainted with the importance of emphasizing HOTs in their teaching practices even when they are not highly presented in the curriculum. Furthermore, the findings might encourage supervisors to organize training courses on the effectiveness of enhancing HOTs in the classroom and promoting teachers' responsibility to use the best methods and approaches that can improve students' HOTs through using enrichment materials and activities.

**Keywords:** English for Palestine curriculum, HOTs, HOTs inclusion, EFL teachers' perspectives.

## Introduction and theoretical background

As the 21<sup>st</sup> century is characterized by the spread of globalization and the digital revolution, English occupies its prominent position as the first international language that involves three types of speakers: native speakers, English as a second language speakers (ESL), and speakers of English as a foreign language (EFL). According to the

latest statistics, the number of English language speakers has reached around 1.121 billion (Ethnologue, 2010). Palestine belongs to those developing countries where English is learned and taught as a foreign language without holding any official status (Rilling and Miller, 2020-a: 4). Thus, language learning in the Palestinian context officially starts from the first grade (around 6 year's age) with a centralized curriculum entitled English for Palestine (E4P) which was introduced in 2011.

Before 2004, the Palestinian pupils used to start learning English in the fifth grade and sometimes before in kindergartens. In planning the first English Curriculum for Palestinian Schools, the Ministry of Education (MoE) worked effectively in teams of specialists led by the Palestinian Curriculum Development Centre and national teams to initiate a unified national curriculum for the first time in the Palestinian history. The design of this centralized curriculum was guided by current research and theory about the nature of language, language learning, human development, and pedagogy drawn freely on the work of other national and international curricular projects in the region, in Europe and in the USA and consultation with local and international ELT experts (PMOF, 2015).

For these particular reasons and others, curriculum evaluation becomes a necessity to identify the strengths and weaknesses to improve and develop the curriculum in light of previously planned educational aims (Afana, 1996). Such curriculum development is hoped to improve the performance of EFL learners (PMOF, 2015), to collect data that enables curriculum designers to change, adjust or develop the curriculum according to the degree of achieving the drawn aims (Hamdan, 2000), to make a judgment on the validity of the curriculum through collecting data and analyzing and interpreting it in the light of objective criteria.

Going back to the early days of the E4P curriculum, the Palestinian Ministry of Education highlighted the importance of initiating a curriculum that meets the challenges of contemporary education and contributes to students' ability to live in increasingly diverse

local communities. The Ministry believes that effective education in the 21st century must provide first-hand opportunities for students to learn about the cultural diversity around them and to learn world languages (PMOF, 2015). In this case, the PMOE asserted that the E4P curriculum aims to develop higher-order thinking skills that will help students to become better independent learners such as analysis skills, problem-solving skills, inferencing, synthesizing, and information integration skills (PMOF, 2015).

## Textbooks and HOTS

Textbooks regardless of the type of curriculum belong to constitute one major component of any educational system in addition to the teacher and the students. The textbook is not the only tool for the teaching-learning process; however, it is still of a significant impact on achieving the language learning objectives (Abu-Tailakh, 2015). A good textbook is essential for instructional purposes (Matos, 2000), provides a reliable source for teachers to teach and for students to learn how to be higher-order thinkers (Tarman & Kuran, 2015), and provides scientific material and different experience (Abdul- Gader, 1989: 79).

Thus, under these conditions, the textbook still retains a prestigious position in all educational systems as one of the most important tools to achieve educational objectives. To this end, the Palestinian English textbooks are meant to include a variety of skills such as the four major skills: listening, speaking, reading, and writing, in addition to the thinking skills whether lower - order thinking skills (LOTS) or higher-order thinking skills (HOTS) as thinking skills provide the necessary tools to address this flood of renewable knowledge that has been witnessed in our modern world (Jarwan, 2007). Examples of HOTS can be found in analysis, synthesis, and evaluation. Furthermore, HOTS cover transfer, critical thinking, and problem-solving (Brookhart, 2010), creative thinking (Conklin, 2012) and closely linked to Bloom's revised taxonomy (Brookhart, 2010; Conklin ,2012) which is considered as a reference point to HOTS (Mishra & Kotecha, 2016).

Integrating HOTS in education is crucial

since it is one of the basic skills in the 21st century that help students to cope with the global challenges (Soulé & Warrick, 2015) and also become a demand for the latest senior high school curriculum (Tyas et al., 2020). In this respect, Edwards (2016) maintained that the connection between learning and thinking is based on the students' ability or skill to promote their ability to be critical thinkers since critical thinking skills are closely linked with HOTs and deeper levels of learning in addition to the fact that critical thinking is a key component of education (Friesen, cited in Edward, 2016).

Abu Tailakh (2015) stated that the Palestinian English textbooks should include various skills to improve the presentation and the impact of the content included and refresh the linguistic ideas and skills and replacing some others to make them more appealing.

What is needed then is to examine the suitability and validity of these textbooks to achieve the desired objectives which could be done through content analysis approach. Thus, the content of English textbooks needs to be evaluated regularly to tackle the gaps, and provide remedy to the points of weakness as indicated by Abu Tailakh (2015) who added that English textbooks should undergo evaluation every five years to cope with the different and new methods of teaching.

## English for Palestine 12<sup>th</sup> Grade Textbook

English for Palestine for 12<sup>th</sup> graders was introduced by the Ministry of Education (MoE) in 2011-2012 to be used in teaching English to 12<sup>th</sup> graders who learn English as a foreign language from the first grade and their ages range between 16-17 years. This new edition of E4P is a new communicative curriculum especially written for the Palestinian schools in the West Bank and Gaza Strip. The book has two major components: Pupil's Book and Reading Plus. The Pupil's Book is divided into twelve units with topics and themes chosen skillfully to meet the interests and needs of the students at this stage. For example, we can find titles like Making friends, Who am I, A funny thing happened, Only a game and so forth. Each unit, except units 6 and 12 which are

meant for revision, covers the following areas: reading comprehension passages and exercises, vocabulary exercises, pair and small group activities, grammar exercises, sentence building exercises, listening exercises and writing tasks.

With regard to Reading Plus, it is divided into six units in addition to a literary part which is Shakespeare's *Romeo & Juliet*. Each unit involves writing activities that require the students to write different types of writing genres such as writing a notice, a letter (formal and informal), a paragraph, a welcome page for a community website, completing an essay or a proposal, and writing short biographies. In addition to these writing tasks, the book offers reading passages that talk about different topics such as New Year Customs in Different Countries, Importance of Belonging and Fitting in, Online Communities, Effects of Globalization, Positives and Negatives of Money, Attitudes to Winning and Losing, the Palestinian Nakba and Diaspora, and the Work of President Yasser Arafat and Palestinian Intellectuals. Furthermore, each unit offers a variety of exercises and activities that deal with unfamiliar vocabulary, compound adjectives and verbs, fixed phrases, noun phrases, idioms and proverbs, sentence linking phrases, and figurative language.

## Literature review

Upon the significance of analyzing the content of EFL textbooks as a means of improving their effectiveness and usefulness, a great deal of research has been carried out locally, regionally, and worldwide. At the global level, to explore teachers' and textbooks' roles to promote HOTs in EFL classes, (Tyas et al., 2020) conducted a study at a senior Indonesian high school. Findings indicated that English language teachers who were dependent on the materials and exercises in the textbooks had an adequate understanding of HOTs. Besides, the students' low level of English language proficiency was a challenge to understand explanations or exercises developed for promoting HOTs.

Within the Palestinian context, Hamdan (2019) analyzed E4P textbooks for the grades 1- 4 and concluded that adding enrichment

materials can provide broadening of learning experiences, and promoting a higher level of thinking. Qasrawi & BeniAndelrahman (2020) aimed at analyzing Unlock English Reading, Writing and Critical Thinking Skills Textbooks in terms of the inclusion of the lower and the higher order thinking skills. Results showed that 23 % of the learning objectives were from “Synthesis level, (20%) was for the analysis level, 10% for application (writing), and 3 % was for evaluation.

Evaluating EFL curriculum is not limited to English for Palestine textbooks which, according to Abbas (2011), was designed to meet the needs of the Palestinian students to study English through the latest theories and applications in the field of language teaching. Rather, evaluation has targeted a variety of EFL textbooks used in Palestine, Arab countries, and in the West (Alfahadi, 2016; Alfaki, 2014; Cassandra & Leiliyanti, 2018; Dweikat & Shbeita, 2013; Tibenská, 2015).

Concerning “thinking” which is mostly restricted to human beings, Gamal (2001) considers it as an activity exerted by the individual to solve a problem while Mostafa (2002) believes that thinking is a process of mental activity which is carried out by the individual to obtain permanent or temporary solution for a problem. Effective thinking depends on the best available information using different methods and strategies (Obeid & Afana, 2002). To achieve the educational objectives in one situation, teaching the thinking skills is necessary because of the breadth of the available knowledge, problems, ideas, curricula, and teaching methods. Saadeh (2011) argues that the thinking skills help students to acquire and produce knowledge through the procedures of analyzing, planning, and evaluating to make decisions, to obtain reinforcement of learning process, and to prepare students for life after school as good citizens. Meanwhile, Abu Tailakh (2015) argues that the development of thinking is considered one of the main objectives that educators seek to achieve which requires providing the Palestinian curriculum especially English textbooks with skills and techniques that enhance their creative thinking skills to enable students to face expected challenge and to prepare them for the future.

The ability to be a critical thinker requires students and teachers to work hand in hand with the help of a well- designed curriculum that includes critical thinking skills in addition to other HOTS. However, the problem is that English teachers do not have adequate knowledge of higher-order thinking skills (Yusoff and Seman, 2018) which seems to contradict what was revealed by Yuliana & Tungka (2018) who found that HOTS – based exercises in the English textbook for Indonesian eleventh grades were more than LOTS – based exercises. By the same token, what seems promising these days is that, as reported by Edwards (2016) the 21st century students are immersed in social media communication and mobile technologies that enable them to be connected at all times with precision, skill, and dexterity. This claim might be inconsistent with Mojica (2010) who found that technology did not have a statistically significant effect on students’ higher-order critical thinking skills, nor did the effects vary by gender, age, or the learner’s academic ability.

To examine ESL teachers’ strategies for fostering HOTS, Singh et al. (2020) found that teachers of ESL used strategies and procedures to integrate HOTS when teaching the writing skills. On the other hand, Cassandra & Leiliyanti (2018) investigated the level of HOTS in English Education Study Program (EESP) and English Literature Study Program (ELSP). Findings revealed that 27.5% of learning outcomes statements represents HOTS in EESP and 36.6% in ELSP. This result demonstrated that both study programs have not yet prepared students to develop their HOTS in language skills courses. Similarly, Retnawati et al. (2018) found that teachers’ knowledge about HOTS and their ability to improve students’ HOTS are still low. Students’ ability to develop and apply HOTS alongside technology use was found to be correlated with teachers’ skills as revealed by Edwards (2016).

Alfaki (2014) who examined Sudan Practical Integrated National English found that the comprehension questions do not cover the range of thinking skills according to Bloom’s taxonomy. It was also found that 89% of the questions refer to LOTS, 59% represent remembering and 30% represent understanding while none are directed to HOTS.

Seif (2012), meanwhile, aimed to explore the availability of HOTs in the reading exercises of English for Palestine Grade 8 to find out to what extent the reading exercises match the suggested criteria. It was revealed that analysis got 51.92 %, synthesis got 41.35%, while evaluation scored the least 6.73 %. Teachers also pointed to a shortage of HOTs in the reading exercises.

Dweikat (2013) who analyzed the exercises and activities of English for Palestine Grade 10 found that the exercises and activities encourage critical thinking. Another EFL textbook was analyzed by Abu Humos (2012) who targeted the reading comprehension in the 12<sup>th</sup> grade English textbook according to Barrets' reading comprehension higher- thinking skills Taxonomy. Results revealed that the largest proportion of the questions were literal level questions represented with around 60% of the textbook. The reorganization, inferential, and appreciation questions were underrepresented compared to the syllabus objectives percentages. Only the evaluation questions are compatible with higher thinking skills Taxonomy. The syllabus reading comprehension objective was found to be reasonably compatible with higher thinking skills.

Similarly, the content analysis of the reading texts and exercises in English for Palestine Grade 9 attracted Ali (2010) who found a shortage of exercises that require students to infer the author's attitude, distinguish between fact and opinion, recognize pronoun references, find meanings of new vocabulary in contexts, relate the text to their personal experience, and to work out answers in pairs and groups. Moreover, Saleh and Mahboob (2003) found a positive relationship between problem-solving as a skill and the ability of creative thinking whereas Al-Bakr (2008) found out that the level of exercises for developing the students' creative thinking skills included in the literary textbooks in the intermediate stage in the Kingdom of Saudi Arabia was weak.

The aforementioned review of related literature presented several studies conducted locally, regionally and globally for the purpose of analyzing the content of EFL textbooks as a means for improving their effectiveness and usefulness (Hamdan, 2019; Qasrawi & BeniAndelrahman,

2020; Cassandra & Leiliyanti ,2018; Alfaki, 2014; Seif, 2012; Dweikat, 2013; Abu Humos, 2012; Ali , 2010). Most of these studies found that EFL textbooks included either low levels of HOTs or moderate levels (Qasrawi and BeniAndelrahman, 2020; Alfaki ,2014). Other studies opted to investigate teachers' perceptions and attitudes towards HOTs inclusion in EFL textbooks (Cassandra & Leiliyanti, 2018; Retnawati et al.,2018; Singh et al., 2020; Tyas et al., 2020).

What distinguishes the current study from other previous studies is that it employed two approaches to achieve its objectives, namely; content analysis and a questionnaire. Moreover, it targeted the two components of the 12<sup>th</sup> grade textbook while focusing on all exercises and activities covered in these components.

## Objectives of the study

### *The current study aimed to:*

1. analyze the exercises and activities in English for Palestine 12<sup>th</sup> grade textbook.
2. determine the extent of HOTs inclusion in this specific textbook.
3. investigate EFL teachers' perspectives towards the extent of this inclusion.

## Significance of the study

Evaluating EFL textbooks is a necessary process in today's education due to the rapid changes and challenges that all educational institutions are witnessing all over the world. To the researchers' best knowledge, this study is the first one in Palestine that aims to identify the extent of HOTs inclusion in the new textbook prepared for the 12<sup>th</sup> graders using content analysis approach. Thus, the results of this content analysis are hoped to provide the curriculum designers with more insights aiming for developing the EFL textbooks in accordance with students' needs and interests in the 21st century since HOTs occupy a prominent position in today's life. The results are also hoped to add to the literature review of content analysis in Palestine so as to encourage other researchers to analyze the content of other EFL textbooks. EFL teachers might benefit from the results in terms of planning for extra-curricular activities and

exercises that could enhance students' thinking skills.

## Limitations of the study

The present study was limited to the analysis of English for Palestine 12<sup>th</sup> grade textbook which was prepared by the Ministry of Education in 2011-2012. This textbook has two components: Pupil's Book and Reading Plus. The sample of EFL teachers was limited to 32 teachers who taught this textbook between 2012 -2020 in Jenin Directorate of Education.

## Operational definitions

Higher-order thinking skills (HOTS): One type of thinking skills that aim to enhance students' ability to think creatively and critically. In this study, they are restricted to analysis, synthesis and evaluation.

English for Palestine textbook for the 12<sup>th</sup> grade: An EFL textbook prepared by the Ministry of Education in Palestine in 2011-2012. It has two components: Pupil's Book and Reading Plus.

Teachers' perspectives: represent how the random sample of EFL teachers (n=32) view the inclusion of HOTS in the target textbook according to their teaching experience.

Content analysis: identifying the extent to which higher-order thinking skills are included in the English for Palestine textbook for 12<sup>th</sup> graders.

Analysis: refers to students' ability to break knowledge and the teaching material into smaller and more comprehensible components that can be effectively understood. Verbs that represent this skill include: Analyze, Arrange, Combine, Design, Detect, Develop, Diagram, Differentiate, Discriminate, Illustrate, Infer, Outline, point out, Relate, Select, Separate, Subdivide, Utilize.

Synthesis: represents the students' ability to assemble or put together parts of the material to produce a new form. Verbs that represent this skill include: Categorize, Combine, Compile, Compose, Create, Design, Devise, Explain, Generate, Group, Integrate, Modify, Order, Organize, Plan, Propose, Rearrange, Reconstruct, Relate, Reorganize, Revise, Rewrite, Summarize,

Transform, Specify.

Evaluation: refers to students' ability to judge and take decisions. Verbs that represent this skill include: Appraise, Assess, Compare, Conclude, Contrast, Criticize, Critique, Determine, Grade, Interpret, Judge, Justify, Measure, Rank, Rate, Support, Test.

## Statement of the Problem and questions of the study

EFL textbooks play a significant role in English language learning especially in the school education. Hence, English language curricula badly need to be analyzed, evaluated and developed in order to maintain their role in achieving the intended objectives. Regarding the Palestinian experience in producing the first EFL curricula entitled English for Palestine, continuous development and enrichment are essential so as to investigate the inclusion of certain skills namely the 21st century skills and most importantly the higher-order thinking skills (HOTS). However, regardless of the pronounced efforts devoted to initiate an English language curriculum with a Palestinian identity, several complaints and criticisms are heard frequently about the suitability and value of some components of the new curriculum. Such dissatisfaction has encouraged educators and researchers to evaluate EFP textbooks to shed some light on their weaknesses and strengths as well (Abu Tailakh, 2015; Ali, 2010; Dweikat, 2011; Hamdan, 2019; Itmeizeh & Khalil;2017; Seif; 2012). Accordingly, *this scientific endeavor aimed to answer the following questions:*

1. To what extent are HOTS included in English for Palestine 12<sup>th</sup> grade textbook?
2. To what extent does E4P 12<sup>th</sup> grade textbook enhance HOTS from EFL teachers' perspectives?

## Methodology

### Study Design

The descriptive - analytical method was used to analyze the content of E4P textbook for 12<sup>th</sup> grade students. Besides, a 27-item questionnaire was constructed and sent electronically to 32 EFL

teachers via Google Form.

## Sample of the study

To achieve the objectives of the study, a purposeful sample comprised the E4P textbook for 12<sup>th</sup> graders with its two components: Pupil's Book and Reading Plus. Besides, a random sample of EFL teachers involved 32 teachers (18 females and 14 males) from Jenin Directorate of Education who completed the questionnaire.

## Instruments of the study

The current study utilized two instruments: the content analysis which targeted all exercises, activities, questions, tasks, and instructions found in both the Pupil's Book and Reading Plus. This step involved constructing the analysis card which covered three HOTs: analysis, synthesis, and evaluation. *Building the analysis card went through several steps as follows:*

1. Choosing categories of analysis: three major HOTs were chosen to be the focus of analysis: analysis, synthesis, and evaluation.
2. Choosing the unit of analysis: this unit was decided in relation to the title and objectives of the study. The unit of analysis included all exercises, activities, tasks and questions involved in the two components of the 12<sup>th</sup> grade textbook. The wording of each exercise or question was taken to be the unit of analysis taking into account the verbs used for each skill and other possible synonyms.
3. To ensure the validity of the card of analysis, the card was presented to a jury of five experts in the field of content analysis and EFL curriculum designers at the Ministry of Education, An-Najah National University and Al-Quds Open University. These included 2 English language supervisors, two EFL instructors and one researcher who is experienced in conducting content-analysis studies. Their comments and suggestions focused mainly on the verbs used in the textbook that represent each category of the chosen HOTs.
4. To ensure the reliability of analysis, the two

researchers and two EFL teachers participated in two ZOOM meetings lasted for two hours. The meeting which targeted the procedure of the content analysis process, types of HOTs, and examples of the key words used for the different types of HOTs was considered a means to contribute to the reliability of analysis based on a coder training procedure. Additionally, the content of the first unit of 12<sup>th</sup> grade textbook was analyzed as a sample unit (pilot testing) by the two teachers and the two researchers. This sampling was followed by a Zoom discussion to illustrate critical points and challenges.

5. To ensure interrater reliability of the analysis, the two teachers conducted the analysis using the same card of analysis. This step took two weeks and involved deep analysis accompanied by continuous communication and inquiry between the two teachers and the researchers. For the purpose of determining the extent of agreement between the two independent coders, Holsti's formula was used and results of this key stage are presented in Tables 1 and 2 below:

**Table (1)**

Reliability of analysis in terms of frequencies and percentages in Pupil's Book

HOTs	Frequency of coder 1	Frequency of coder 2	Total	%
Analysis	64	69	133	42.24
Synthesis	52	52	104	33
Evaluation	40	38	78	24.76
Total	156	159	315	100%

**Table (2)**

Reliability of analysis in terms of frequencies and percentages in Reading Plus Book

HOTs	Frequency of coder 1	Frequency of coder 2	Total	%
Analysis	18	20	38	27
Synthesis	24	23	47	33.33
Evaluation	26	30	56	39.7
Total	68	73	141	100

Holsti's formula for reliability =  $2 \times \text{number of agreements} / \text{number of units coded by coder}$

1+ coder 2

Reliability of Pupil's Book:  $2 \times 156 / 315 = 99\%$ . Reliability of Reading Plus:  $2 \times 68 / 141 = 96\%$

Total reliability:  $99 + 96 / 2 = 97.5\%$ . The high percentage of reliability can be attributed to the steps that preceded the content analysis including the Zoom meeting, the training of the coders and the sample analysis.

- The second instrument was a questionnaire. To ensure the validity of the questionnaire, it was given to a jury of experts to verify its suitability to achieve the study objectives. They provided some comments which were taken into consideration when preparing the final version of the questionnaire.

## Data analysis

In addition to the content analysis of the EFL

textbook, the quantitative data analysis involved frequencies, percentages, means, standard deviations, Pearson's Correlation Coefficients, Cronbach's Alpha Coefficient, ANOVA test, and T-Tests.

## Results and discussion

The current study aimed at identifying the extent of HOTs inclusion in the 12<sup>th</sup> Grade textbook in addition to exploring the perspectives of EFL teachers towards the extent of HOTs inclusion. To achieve these objectives, two questions were raised and the results are as follows:

Results related to the first question: To what extent are HOTs included in English for Palestine 12<sup>th</sup> grade textbook? To answer this question, the content of the 12<sup>th</sup> grade textbook was analyzed based on the exercises, questions and activities. Table (3) shows the frequency of HOTs in the Pupil's Book component and Table (4) shows the frequency of HOTs in Reader Plus.

**Table (3)**

Frequency of HOTs in English for Palestine 12<sup>th</sup> grade Pupil's book.

HOTs	Un1	Un2	Un3	Un4	Un5	Un6	Un7	Un8	Un9	Un10	Un11	Un12	Total
Analysis	7	7	9	8	12	5	3	5	4	2	5	5	72
Synthesis	5	6	6	6	7	5	5	3	5	2	3	5	58
Evaluation	3	6	2	5	3	4	4	2	4	2	3	4	42
Total													172

**Table (4)**

Frequency of HOTs in English for Palestine 12<sup>th</sup> grade Reading Plus book

HOTs	Un1	Un2	Un3	Un4	Un5	Un6	Total
Analysis	3	4	3	4	3	4	21
Synthesis	5	5	5	4	3	4	26
Evaluation	6	4	6	4	4	6	30
Total							77

Table 3 reveals 172 HOTs in the Pupils' Book of 12<sup>th</sup> grade. The highest frequency was given to the analysis skill which scored 72 while the lowest frequency was scored by evaluation with a total of 42 frequencies. On the other hand, Table 4 shows that the Reading Plus includes 77 HOTs and the

highest was scored by evaluation 30 compared to the lowest score of analysis 21. All in all, the Pupil's Book includes 386 exercises and activities while Reading Plus includes 150 exercises and activities.

Results of the second question: To what extent does E4P 12<sup>th</sup> grade textbook enhance HOTs from the EFL teachers' perspectives?

To answer this question, the questionnaire was sent to 32 EFL teachers who teach 12<sup>th</sup> grade students in Jenin Directorate of Education. The background of the teachers varied in terms of gender, experience and the training courses to attended during their work as shown in Table 5 below.

**Table (5)**

**Distribution of the teachers according to the independent variables**

Variable	Class	Frequency	Percentage
Gender	Male	14	43.7
	Female	18	56.3
	Total	32	100
Experience	1-5y	7	21.9
	6-10y	5	15.6
	11-20y	20	62.5
	Total	32	100
	Nothing	12	37.5
Training courses	1-3 months	12	37.5
	more than three months	8	25.0

Variable	Class	Frequency	Percentage
	Total	32	100.0

The following scale was used to represent the estimation level of the teachers' responses.

Mean	Estimation level
4.0 and more	Very High
3.5- 3.99	High
3.00-3.49	Moderate
2.50 -2.99	Low

Furthermore, means, standard deviations and estimation level were used as shown in Table 6.

**Table (6)**

**Means, standard deviations, percentages and estimation level of EFL teachers' responses**

No .	Item	Mean	standard deviations	Percentage	Estimation Level
1.	The exercises & activities enhances students' HOTs.	4.09	0.73	81.8	Very High
2.	The textbook is a reliable source for teachers to teach HOTs.	3.75	0.84	75.0	High
3.	The textbook is a reliable source for students to learn how to be higher-order thinkers.	3.72	0.95	74.4	High
4.	The exercises & activities promote problem-solving skills.	3.84	0.84	76.8	High
5.	The exercises & activities develop students' creative thinking.	3.59	1.01	71.8	High
6.	The exercises & activities develop students' critical thinking	3.75	0.71	75.0	High
7.	The exercises & activities develop students' analytic thinking.	3.81	0.78	76.2	High
8.	The exercises & activities help students to categorize information.	3.81	0.89	76.2	High
9.	The exercises & activities help students to break down materials and concepts into smaller elements or parts.	3.53	1.04	70.6	High
10.	The exercises & activities help students to make correct judgments based on logic and standards.	3.69	0.82	73.8	High
11.	The exercises & activities provide students with the skill to make judgments about the value of ideas or materials.	3.59	0.71	71.8	High
12.	The exercises & activities provide students with the skill to reorganize elements into a new pattern or structure.	3.81	0.73	76.2	High
13.	The exercises & activities help students to express their thoughts.	3.88	0.60	77.6	High
14.	The exercises & activities help students to synthesize new elements from separate parts.	3.63	0.83	72.6	High
15.	The exercises & activities help students to generate information related to the materials covered.	3.78	0.75	75.6	High

No .	Item	Mean	standard deviations	Percentage	Estimation Level
16.	The exercises &activities help students to put several parts together to form a whole.	3.56	1.04	71.2	High
17.	The exercises &activities emphasize students' skills to create a new meaning or structure.	3.53	1.04	70.6	High
18	The exercises &activities enhance students' deep learning.	3.66	0.93	72.2	High
19	The textbook prepares students to develop their HOTS in language learning in an integrated form.	3.63	0.94	72.6	High
20	The exercises &activities facilitate students' acquisition of HOTS.	3.69	0.73	73.8	High
21	The instructions of the exercises &activities stimulate students' HOTS.	3.87	0.83	77.4	High
22.	The exercises &activities provide students with more learning opportunities.	3.69	0.85	73.8	High
23.	The exercises &activities enable students to practice 'in-depth thinking,	3.66	0.74	73.2	High
24.	I am satisfied with the HOTS inclusion in the textbook.	3.78	0.83	75.6	High
25.	The textbook includes a variety of tasks to promote reasoning.	3.72	0.85	74.4	High
26.	I have adequate knowledge of higher-order thinking skills.	4.00	0.62	80.0	Very High
27.	I can say that there is a shortage in the HOTS in the textbook.	3.41	1.10	68.2	Moderate
	Total	3.72	0.54	74.4	High

Table 6 shows that EFL teachers' perspectives towards the inclusion of HOTS in the 12<sup>th</sup> grade textbook scored 3.72 which reveals a high level of estimation especially when the teachers expressed their adequate knowledge of HOTS as revealed in item 26 "I have adequate knowledge of higher-order thinking skills" which scored a very high level of estimation (4.00). Moreover, the highest score (4.09) was given to the first item "The exercises & activities empower students' HOTS" while the items from 2 to 25 scored a high level of estimation revealing that the 12<sup>th</sup> grade textbook enhances the higher thinking skills of the students. What seems surprising is that 68.2 % of the teachers pointed to a shortage in the HOTS in the textbook as revealed in item 27 which might be in contradiction to the overall results which reflected a high level of estimation among the sample of the teachers.

As mentioned above, the results indicated that the 12<sup>th</sup> grade textbook included 249 exercises and activities covering the skills of analysis, synthesis and evaluation. These results also indicated that the Pupil's Book (The core) included the largest number of HOTS (172) while the Reading Plus included (76). This variation is due to the fact that the Reading Plus includes six units whereas the

Pupil's Book includes 12 units since it is the main book whereas the Reading Plus is a supplementary book. Furthermore, the Pupil's book gives priority to the four skills in addition to grammar and vocabulary while the Reading Plus emphasizes the reading skill in addition to vocabulary with some emphasis on writing. Examining the types of HOTS and their frequencies in the two components of the 12<sup>th</sup> grade textbook shows that the highest frequency of HOTS in the Pupil's Book was given to the analysis skill (72) while the evaluation skill got the lowest frequency (42) and synthesis got (58) frequencies. This result is in consistent with Seif (2012) who targeted the availability of HOTS in the reading exercises of English for Palestine Grade 8 and found that analysis got the highest percentage 51.92 %, synthesis got 41.35%, while evaluation scored the least 6.73 %. This result also seems to be in line with Qasrawi and BeniAbdelrahman (2020) who found that analyzing Unlock English Reading, Writing and Critical Thinking Skills Textbooks revealed the lowest percentage of HOTS (3%) was given for evaluation. Nevertheless, the result seems to be in inconsistent with Cassandra & Leiliyanti (2018) who found that both English Education Study Program (EESP) and English Literature Study Program (ELSP) have not yet prepared students

to develop their HOTs in language skills courses. Furthermore, the result seems to be inconsistent with Abu Humos (2012) who found that inferential, and appreciation questions were underrepresented compared to the syllabus objectives.

On the other hand, the content analysis of The Reader Plus book revealed that the highest frequency was given to the evaluation skill (29) while the analysis skill got the lowest frequency (21) and synthesis got (26) frequencies. This result seems to disagree with Alfaki (2014) who found that 89% of the questions are LOTs, while none are geared to HOTs. The result is also inconsistent with Ali (2010) who found no employment of exercises that require students to infer the author's attitude, distinguish between fact and opinion, find meanings of new vocabulary in contexts, and relate the text to their personal experience,

With regard to the teachers' responses on the questionnaire, 24 items revealed a high level of estimation and one item revealed a very high level of estimation. Such results indicated that the teachers think that the 12<sup>th</sup> grade textbook enhances the higher thinking order skills of the students. The teachers' responses on item 26 "I have adequate knowledge of higher-order thinking skills" got high estimation indicating the teachers' awareness and knowledge of the nature and importance of including HOTs in EFL textbooks. Such knowledge of HOTs is essential since the understanding and perception of the teacher towards HOTs will affect the successfulness of HOTs cultivation (Tyas et al., 2020) and generally equip them with the skills required to face the challenges of the 21<sup>st</sup> century. This result seems to be in line with (Tyas et al., 2020) who found that English language teachers in their study had an adequate understanding of HOTs.

Regardless of the previous results, 68.2 % of the teachers pointed to a shortage in the HOTs in the textbook as revealed in item 27. This result is in line with Seif (2012) who analyzed the reading exercises of English for Palestine Grade 8 and found an agreement among the 8th grade English language teachers that there is a shortage in the HOTs in the reading exercises. This means that the teachers still hope to find more HOTs in this EFL textbook since it represents the last stage of

school education before moving to university life where they need a great deal of HOTs in many courses and in their daily life later. Such result seems to agree with Hamdan (2019) who called for adding enrichment materials and learning experiences to promote higher levels of thinking skills. At the same time, this result might be partially inconsistent with Tyas, et al. (2020) who claimed that the students' low level of English language proficiency was a challenge to understand exercises developed for promoting HOTs. Meanwhile, the results seem to reveal a kind of inconsistency between the content analysis output and the teachers' responses since the teachers pointed to a shortage of HOTs in the two components while the content analysis revealed 248 HOTs covering analysis, synthesis and evaluation. This inconsistency might be due to the difficulty of differentiating between the type or the objectives of HOTs in the given exercises which was expressed by the two teachers who participated in the Zoom meeting.

## Conclusion and implications

The results of this content analysis study that targeted English for Palestine textbook for 12<sup>th</sup> graders provide evidence that this textbook takes into consideration the importance of HOTs inclusion in this national centralized curriculum which was introduced in 2011 for the first time in the Palestinian history. These results support the claims of the Palestinian Ministry of Education when stating that the E4P curriculum was designed to develop higher-order thinking skills such as analysis skills, problem-solving skills, inferencing, synthesizing, and information integration skills that help students to become better independent learners. The results also support one of the objectives of Grade 12 as stated on page 4 "developing the analytical, critical and evaluative skills of the pupils". Teachers' responses also pointed out that HOTs can help students in their future to learn how to solve any expected problems.

Such findings contribute to previous studies that aimed to analyze the content of E4P curriculum especially when emphasizing adequate distribution of HOTs in the E4P textbook for 12<sup>th</sup> graders. The results also highlight the significant

role of the teachers of this particular textbook who should work hard to infuse their teaching with in-class and out-of-class activities and tasks that can compensate for the shortage of some types of HOTS in the textbook. Hence, the findings pointed to a pressing need to evaluate and update EFL curricula frequently to meet the needs of the new generations of students and to cope with the ever-increasing changes in the fields of teaching methods and technology integration as well. The fact that the E4P curriculum was designed by Palestinian specialists in EFL in consultation with international experts does not secure that this curriculum is the optimal end-product for the Palestinians. This might be due to the fact that the Palestinians did not have national curricula before 2005 since Palestine has not been a country until 1995.

## Recommendations

In light of the study results, the researchers recommend the following:

1. Curriculum designers at MoE are recommended to carry out sustainable evaluation of the EFL textbooks to ensure that they involve a good percentage of HOTS.
2. EFL teachers are recommended to supplement the EFL textbooks with more activities and tasks that enhance students' higher-order thinking skills.
3. Other researchers are recommended to conduct similar studies to examine the inclusion of HOTS in other EFL textbooks used in Palestine.

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