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**A Differentiated Sheltered Instruction
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Developing Language- Related Life Skills and
Motivation in a Primary Inclusive EFL
Classroom**

By

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A Differentiated Sheltered Instruction Observation Protocol (SIOP) Model for Developing Language- Related Life Skills and Motivation in a Primary Inclusive EFL Classroom

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Abstract:

The current research aimed at investigating the effect of implementing a differentiated SIOP model for developing language- related life skills and motivation of primary stage pupils in an inclusive EFL classroom. The UNICEF's Life Skills and Citizenship Education Conceptual and Programmatic Framework (2017) was adopted. Instruments of the study included: a language- related life skills checklist for determining the most necessary life skills for fourth year primary stage pupils, an illustrated situational test to assess pupils' conceptions of life skills in different situations, a life skills observation checklist to be administered by the teachers in the classroom, and a motivation towards learning life skills scale. Seven main language- related life skills were determined by experts as necessary for target participants. Research sample consisted of seventy-nine fourth- year primary stage pupils divided into a control group (n= 39) that was taught using the conventional method, and an experimental group (n= 40) that was taught using the proposed differentiated model. The content of three selected units presented with the differentiated SIOP model was taught to pupils throughout twelve sessions. Results revealed that the differentiated model had a great effect on enhancing the pupils' language- related life skills and motivation towards learning them as there were statistically significant differences between experimental group pupils' mean scores on the pre- and post- administrations of the instruments of the research. The research also proposed some recommendations and suggestions for further research.

Key Words: *Differentiated SIOP Model, Language- related life skills, motivation, Inclusive classroom, EFL, Primary stage pupils.*

Introduction:

We are living in an era when science and technology have indeed exploded into massive endeavor and achievement at a rapid pace. The new millennium has marked a great transition for the whole of mankind and witnessed greater discoveries and opened new perspectives of development

in the field of science and technology. Life skills are essentially those abilities that promote mental well-being and competence in young people as they face the realities of life.

The term ‘life skills’ covers a broad range of abilities, competencies and approaches. The realm of life skills is concerned with education, health, and social sectors and generally represents a set of skills for empowering cognitive, emotional, personal and interpersonal skills. These skills are essentially the abilities that promote mental and social well-being in situations encountered in the course of life (Wiedemann, 2013). Life skills are personal and social skills needed to all people to act with confidence and competence with themselves and within the community and society. Life skills are defined as “skills that help an individual to be successful in living a productive and satisfying life” (Hendricks, 1998, p.4).

Life skills have been defined in numerous ways. Bailey and Deen (2002) observed that, regardless of whether they are referred to as life skills, 21st-century skills, soft skills, or social skills, the term "life skills" encompasses a broad concept. These skills cannot be confined to one specific category because functioning effectively in society requires a multitude of abilities. Life skills are empowering skills that enable people to cope with the changes and challenges of life. Strengthening life skills helps students to meet the challenges and risks, maximize opportunities and solve problems in co-operative, non-violent ways. Life skills help to improve a person’s sense of self as an individual and member of a family, community, and society (Wiedemann, 2013). World Health Organization has defined the life skills as Self-awareness skill, Empathy, Interpersonal relationship, Effective communication, Critical thinking, Creative thinking, Decision Making, Problem solving, Coping with emotions and Coping with stress skills. These skills are classified into three categories which are- Cognitive skills, Social skills and Negotiating skills or Coping skills (Kumar, 2017). Nevertheless, The LSCE Framework (Life Skills and Citizenship Education) sets out 12 core life skills (thereafter known as ‘the 12 Life Skills’): creativity, critical thinking, problem solving, cooperation, negotiation, decision making, self-management, resilience, communication, respect for diversity, empathy and participation (UNICEF and partners, 2017; Hoskins& Liu, 2019).

The incorporation of life skills into curricula represents a paradigm shift, expanding competencies to not just knowledge and skills, but also encompassing behavior, attitudes, and values (UNICEF, 2012). Aligned with this perspective, Pishghadam and Zabihi (2012: 97) advocate shifting

the focus of EFL teaching from mere linguistic theories to a transformative perspective. Their proposition includes the integration of a "life curriculum" into the EFL framework, introducing what they termed "English for Life Purposes." This approach encompasses vital life skills, such as motivation to learn, emotional intelligence, critical thinking, creativity, learner anxiety, neuroticism, and burnout. Key features of this methodology included: discussing a broad range of topics from social to scientific; promoting pair work and group discussions; drawing cultural comparisons; immersing learners in the vocabulary and grammar of a foreign language; encouraging authentic self-expression in a foreign language; emphasizing the seriousness of language learning; and cultivating an enjoyable and friendly learning environment.

Empirical research on life skills has indicated a strong relationship between these skills and academic performance in particular for low attaining students (Amirian, 2012; Gutman and Schoon, 2013). Studies also proved that life skills play an important role in the well-being of children as well as young people. Anuradha (2012), for example, found a strong relation between life skills and self-concept, and Bardhan (2016) proved that with the training of life skills one can bring positive changes among the children with problem behavior. In addition, Bharath and Kumar (2010) found life skills education an effective way to improve mental health of adolescents through participatory method of games, debates, role play and group discussions with active participation of teachers. Finally, Malik et al. (2012) studied the effect of life skills training on academic anxiety, adjustment and self-esteem level in early adolescents and found a remarkable improvement in these all.

It is well verified that life skills are comprised of skills, attitudes, values, behaviors and domain- based knowledge which need to be applied in harmony with each other. Consequently, there appeared several challenges of measuring them. First, multi- dimensional characteristics of each single skill makes it necessary to capture the different components of each skill. Second, the distinction between cognitive and non- cognitive aspects of life skills implies the need to reconsider cognitive and non- cognitive test items as being distinct. Finally, there is little current evidence or guidance on expected proficiency levels of the different life skills in general or age specific. There is not enough research and development to classify the levels of life skills and to indicate an absolute level or benchmark on the levels of attainment (Hoskins& Liu, 2019).

Life skills is an essential component of education in the elementary stage. This type of education equips children with the necessary skills and knowledge to navigate through various challenges and obstacles they may encounter in their personal and professional lives. By teaching children essential life skills at an early age, they are better prepared to make informed decisions, solve problems effectively, communicate clearly, and manage their emotions. This lays a strong foundation for their future success and well-being. Children go through a critical developmental stage in elementary school when they are forming their attitudes, values, and ideas about the world and themselves. In order to support pupils in developing positive social and emotional skills, empathy, resilience, and self-esteem, life skills education must be included in the curriculum. These skills are critical for maintaining positive relationships, managing stress, and adjusting to novel circumstances. Children are being prepared for success in every area of their lives when they are equipped with the skills to overcome obstacles in life (Dange, 2016; Kumar, 2017; Rahman, Shah & Salam, 2023).

From the Latin root *movere*, motivation refers to a process that starts with a need and leads to a behavior that moves an individual towards achieving a goal (Melendy, 2008). It is a major factor in successful language acquisition that provides learners with an aim and direction to follow. Due to the lack of enough motivation, some difficulties may happen for learners. Without desire to learn, it is very difficult for learners to gain effective learning. It can be stated that teachers should be aware of the significance of motivation in learners' language learning and through some changes they can help learners increase their motivation (Lai, 2011). Further, the core of motivation is what might be called passion, which relates to a person's intrinsic goals and desires. Successful learners know their preferences, their strengths and weaknesses, and effectively utilize strengths and compensate for weaknesses.

In the zeal of learning, motivation is necessary, because someone who has no motivation in learning, will not be possible to implement learning activities. Motivation is needed in determining the intensity of the learning effort for the students. It is a crucial factor impacting learners' success in language learning, and various factors have been identified that can enhance learners' motivation. Gardner's Socio-Educational Model and Deci and Ryan's SDT Model are two prominent theories that have been widely implemented in language learning research. Additionally, cultural background, age, gender, rewards, feedback, and goal-setting are external

factors that have been shown to have a significant influence on learners' motivation. Therefore, language teachers must consider these theoretical perspectives and external factors to develop effective language learning programs that can raise learners' motivation and ultimately improve their language proficiency (Miao & Wang, 2023).

Inclusive classrooms are typically defined as classrooms designed so that students with special needs, disabilities, or impairments can learn among peers (who may or may not have certain needs) in age-appropriate, general education environments. While this is the most common use, inclusive classrooms are evolving to make sure that they are inclusive for different reasons, not just special education (Webster, 2014). Concerning identification and admission procedures for inclusion at Egyptian schools, they are ineffective. Students at the age of school admission take IQ tests to determine their intelligence ratio as an indicator of eligibility for admission in inclusive schools. No specific plan for teaching them inclusively is declared. Almost all the teachers are not qualified to deal with this disorder in regular classes. Most of them either segregate those students if they attend class or just let them do what they want. The most prevailing procedure relating to instruction in Egypt is just applying alternative assessment for those students at times of exams only. That's why they need to have specific attention through applying differentiated instruction.

In teaching, differentiation is the process of customizing instruction to each student's unique needs in the classroom. In order to guarantee that every student can access the curriculum and advance, it strives to offer a variety of learning opportunities. It acknowledges that pupils have varying learning styles, aptitudes, interests, and readiness levels.

Differentiated instruction is based on the assumptions that students differ in their learning styles, needs, strengths, and abilities, and that classroom activities should be adapted to meet these differences. It means tailoring the instruction to meet individual needs. The use of ongoing assessment and flexible grouping makes this a successful approach to instruction. Differentiation in primary education is a key component of an inclusive classroom. It allows each student to work within their unique zone of proximal development, fostering interest in learning and equipping them with the skills needed for future success. By implementing differentiated instruction, teachers can create a learning environment that is responsive to the needs of all students, thereby enhancing the overall quality of instruction.

The number of students with learning disabilities and advanced abilities in general education classrooms have increased. Given the national shortage of special educators, the general classroom teacher is often the main instructor for students with special needs (Stronsnider & Lyon, 1997). As a result, inclusive classrooms are the norm, "with general classroom teachers having primary, if not sole, educational responsibility for the full spectrum of learners, including students who have a range of learning problems and learners who are advanced" (Tomlinson et al., 1997, p. 269) .

The Sheltered Instruction Observation Protocol (SIOP) model was developed in the 1990s by Dr. Jana Echevarría, Dr. MaryEllen Vogt, and Dr. Deborah J. Short. They created the model as a response to the growing need for effective instructional strategies in classrooms, particularly those including English language learners (ELLs). They initially organized this model into an observation protocol, but the collaborating teachers suggested that the SIOP Model be used for lesson planning and lesson delivery (Short, 2017). It developed into an instructional approach that shows subject area teachers how to integrate academic language development into content instruction and how to use ESL techniques to make the concepts comprehensible. Then, the model shared many characteristics with other effective instructional methods, such as differentiated instruction, cooperative learning, and reading comprehension instruction (Echevarría, Vogt, et al., 2008).

The sheltered instruction model integrates functional teaching traits for learners (e.g., cooperative learning, reading strategies, differentiated instruction, and incorporating the four language skills). The SIOP Model became a framework for teachers to present curricular content concepts to English language learners through strategies and techniques that make new information comprehensible to the students. While doing so, teachers develop student academic language skills across the domains of reading, writing, listening, and speaking. The SIOP model includes eight specific components: Lesson Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice and Application, Lesson Delivery, and Review and Assessment. These eight components of SIOP Model and their thirty features take place in three phases, that are Focus, Practice, and Closure (Shivani& Kaur, 2020).

In essence, the SIOP Model serves as a comprehensive framework for professional development that not only enhances teachers' instructional practices but also significantly benefits students by improving their academic performance and language development skills (Piazza et al.,

2020). It is advantageous in that it is not driven by one single theory but exhibits influence from several theoretical perspectives. The SIOP model borrows elements from the humanistic, social interaction, cognitive, and behavioral learning theories as well as from theories of second-language acquisition including the works of Krashen, Cummins, and Vygotsky. In addition, the ideology of the SIOP model of teaching, wherein the teacher follows the learning styles of all the students would be a great appeal. More research studies need to be conducted to discover the effectiveness of SIOP Model in various subjects and variables. It is also significant to recommend that future research should involve more diverse learners and populations in various settings (Shivani& Kaur, 2020).

In conclusion, the SIOP model seems to be a flexible framework that can accommodate various learning styles and abilities in an inclusive classroom, in a systematic way that helps EFL teachers to inculcate language- related life skills necessary for those pupils at this stage. That's why the current research was an attempt to investigate the effectiveness of implementing the SIOP model for developing language- related life skills and motivation to learn them in inclusive EFL primary classroom.

Need for the research:

Developing life skills is an old idea with new approaches, however, it is not excessively manipulated in experimental studies. Reasons for the scarcity of studies in this area could be attributed to many reasons. First, most of the studies that handled the development of life skills dealt with adolescents (9- 15 years) and secondary stage students. Few studies experimented developing them in the childhood or elementary stage (Tan, 2018; Saputra, Sutarman& Syamsurrijal, 2020). Second, although significant advancements have been made in this area, life skills represent an often-targeted developmental domain still lacking in instrumentation standardization (Duerden& Witt, 2011). Almost all the instruments used for assessing life skills are privately owned and not available for public use. Further, an early Egyptian evaluative study by Mostafa, Dadour, and Al-Shafei (2016) concluded that life skills were not well- represented in the primary stage EFL textbooks and recommended that they should be integrated in the EFL curriculum.

Actually, life skills can be learnt in a wide variety of different environments and through diverse relationships. This includes learning life skills at home with parents, guardians and siblings, in education with teachers and peers, at work with colleagues and through participation in civil society. Nevertheless, currently not all young people have access to

structured teaching and learning of life skills. For equity reasons, it is critical to rethink and transform education systems to prepare all children with the life skills needed to thrive in today's challenging, fast changing and complex world. To equip all children and young people with life skills requires open education systems capable of targeting the most marginalized through multiple pathways (Hoskins& Liu, 2019). Teachers also need to be equipped with professional skills that enable them to make use of various available resources and integrate them in their instruction to inculcate life skills in their students (Nqabeni& Cishe, 2023).

In an attempt to cope up with new trends in education, *Connect 4*; the English textbook prescribed by the Egyptian Ministry of Education for Primary four pupils, builds on and supports the development of essential life skills within four dimensions of learning developed by the UNICEF for MENA region, and adopted by the English language curriculum framework: learning to know, learning to do, learning to live together, and learning to be. Moreover, concerning inclusion, seven categories of students with mild disabilities are integrated in the English language classroom. Specific considerations and teaching strategies are listed in the teacher's guide for teachers to keep in mind when dealing with these students to help them perform well, and to provide high quality education for all (Dutton, 2022). However, no specific procedures are being illustrated for teachers to apply inside the classroom while teaching the content of the lesson. Teachers as well are unaware of the suitable strategies for dealing with and teaching those pupils, especially in relation to language- related life skills.

Consequently, there was a need for a systematic procedural model for teaching language- related life skills in the context of primary inclusive EFL classrooms; a model that clarifies the exact procedures and steps for developing the targeted language- related life skills necessary for those pupils. In addition, the consequent need for motivating pupils to learn these skills and participate in the activities that would lead them to master these skills and enjoy learning them was also apparent. The SIOP model was hopefully expected to meet these needs.

Pilot study:

To substantiate the problem of the research, the researcher interviewed three EFL teachers about their observations concerning the fourth-grade pupils' mastery of language- related life skills, especially within the inclusive classrooms. Teachers expressed their concern about the integration of life skills within the textbook, as there is no suggested method for teaching them in the teacher's guide. In addition, they are provided with

separate techniques for dealing with special educational needs pupils without prescribing the appropriate procedures for applying them in the class. Consequently, pupils do not master the life skills as they do not get adequate instruction about them.

Statement of the problem:

Based on the researcher's observations, the results of the pilot study, and the review of related literature, the problem of the current research was stated as follows:

Primary stage pupils are in dire need to develop their language-related life skills, especially within the context of an inclusive EFL classroom. EFL teachers also need to have a systematic approach in planning and delivering their lessons to achieve this purpose. Therefore, a differentiated SIOP Model was developed and implemented for developing language-related life skills in a primary inclusive EFL classroom.

Questions of the research:

The current research sought to answer the following main question: What is the effectiveness of a differentiated SIOP model in developing language-related life skills and motivation in a primary inclusive EFL classroom?

The main question was divided into the following sub-questions:

- 1- What are the most suitable language-related life skills that should be developed in the fourth year primary stage, especially in the context of an inclusive EFL classroom?
- 2- What are the features of a differentiated SIOP Model for developing language-related life skills in the primary inclusive EFL classroom context?
- 3- What is the effectiveness of a differentiated SIOP Model in developing language-related life skills in a primary inclusive EFL classroom?
- 4- What is the effectiveness of a differentiated SIOP Model in developing motivation towards learning life skills in a primary inclusive EFL classroom?

Hypotheses:

- 1- There is a statistically significant difference between the mean scores of the experimental and control group pupils on the post-administration of the language-related life skills situational test in favor of the experimental group.
- 2- There is a statistically significant difference between the mean scores of the experimental group pupils on the pre- and post-

administrations of the language- related life skills situational test in favor of the post- administration.

- 3- There is a statistically significant difference between the mean scores of the experimental and control group pupils on the post-administration of the language- related life skills observation checklist in favor of the experimental group.
- 4- There is a statistically significant difference between the mean scores of the experimental group pupils on the pre- and post-administrations of the language- related life skills observation checklist in favor of the post- administration.
- 5- There is a statistically significant difference between the mean scores of the experimental and control group pupils on the post-administration of the motivation towards learning scale in favor of the experimental group.
- 6- There is a statistically significant difference between the mean scores of the experimental group pupils on the pre- and post-administrations of the motivation towards learning scale in favor of the post- administration.
- 7- There is a positive correlation between fourth- year primary pupils' language- related life skills and their motivation towards learning them.

Instruments:

The following instruments were designed and administered by the researcher:

- 1- A language- related life skills checklist: to specify the most important language- related life skills for fourth year primary school pupils, especially in an inclusive EFL classroom context.
- 2- An illustrated situational test for assessing pupils' conceptions of language- related life skills in various situations.
- 3- A language- related life skills observation checklist for teachers: to assess pupils' life skills mastery in the classroom by their EFL teachers.
- 4- A motivation towards learning scale to assess 4th year primary stage pupils' motivation towards learning life skills.

Purpose of the research:

The present research aimed at:

- 1- Specifying the language- related life skills that should be inculcated in primary stage pupils, especially that developing life skills has become a major objective in the primary stage.

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- 2- Determining the features of a differentiated SIOP Model that could be implemented in a primary inclusive EFL classroom context.
 - 3- Determining the effectiveness of using a differentiated SIOP model in enhancing primary stage pupils' language- related life skills.
 - 4- Determining the effectiveness of using a differentiated SIOP model in enhancing primary stage pupils' motivation towards learning.

Significance of the research:

It is hoped that the current research would contribute to:

1. Directing the attention of EFL curriculum planners towards the importance of integrating the SIOP model as a systematic instructional model in EFL teacher's guide of the primary stage.
2. Helping EFL teachers to adapt their teaching practices to suit the requirements of developing the 21st century skills; namely language-related life skills in their primary stage pupils through implementing the differentiated SIOP model in their teaching practices.
3. Helping the primary stage pupils to develop their language- related life skills in such a way that suites both mainstream and special educational needs pupils in an inclusive classroom.
4. Attracting the attention of researchers in the field of EFL to SIOP model as a practical approach for developing life skills and its suitability for developing language skills.
5. Enriching literature concerning life skills assessment by providing multiple instruments for assessing them: an observation checklist to be administered by teachers, and a situational test to be answered by the pupils.
6. Enriching literature concerning motivation development in primary schools, especially in an inclusive context.

Delimitations of the research:

The current research was delimited to the following delimitations:

- 1- A sample of fourth year primary stage pupils in an inclusive classroom that includes mainstream and special educational needs pupils.
- 2- Some language- related life skills suitable for primary stage pupils as determined by EFL specialists through the checklist administered for that purpose.
- 3- The content of Connect 4 textbook, three units of the first term.

Definition of terms:**Differentiated SIOP Model**

Differentiated instruction, by definition, is instruction that is designed to support individual students' learning in a classroom of students with varied backgrounds and needs.

Tomlinson (2000, p.68) defined differentiation as simply attending to the learning needs of a particular student or small group of students rather than the more typical pattern of teaching the class as though all individuals in it were basically alike. The goal of a differentiated classroom is maximum student growth and individual success.

Sheltered instruction, a form of differentiation for ELs, provides a structure that supports students in learning age- and grade-appropriate content while simultaneously gaining English language proficiency (Echevarría, Vogt, & Short, 2017; Marcos & Himmel, 2016). Sheltered instruction can be viewed as an on-ramp to promote language and literacy development while also making the content more accessible.

According to Echevarria, Vogt, and Short (2004; 2017), the Sheltered Instruction Observation Protocol (SIOP) Model is a research-based and instructional framework for teaching English language learners language and content subjects alongside with their classmates whose first language is English. It is an attempt to find an agreement concerning the definition of Sheltered Instruction.

The SIOP model is then a teaching approach that deals with the educational areas in general and the English language learners' performance in particular. It is a rigorous educational resource that provides teachers with well-designed lesson plans and well-selected strategies and best practices in such a way as to help them prepare their learners for a better academic achievement in terms of the learning of content knowledge and language skills (Echevarria, Vogt, and Short, 2004; 2017).

The differentiated SIOP Model is operationally defined in the current research as a teaching approach that provides teachers with well-designed lesson plans and well-selected strategies and best practices in such a systematic way as to help them prepare their learners for a better achievement of the learning of content knowledge, language skills, and language-related life skills with specific emphasis on differentiation techniques of either the content, process, product, or the environment.

Life skills

World Health Organization has defined life skills as – The living skills or abilities for adaptive and positive behavior that enable individuals

to deal effectively with demands and challenges of everyday life (W.H.O, 1997). These basic life skills prepare an individual to deal with different aspects of life.

According to UNESCO (2010), life skills refer to a group of cognitive, personal, and interpersonal abilities that help individuals make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathize with others, and cope with and manage their lives in a healthy and productive manner.

UNICEF (2012) perceived life skills as a sequence of capacities, behaviors, and socioemotional qualifications that empower learners to make decisions and execute actions leading to a constructive and prosperous life. These skills improve the development of basic abilities such as literacy, numeracy, and digital skills, and can also be employed in diverse fields like ecological education and developmental education.

Life skills are also defined as psychosocial abilities that enable individuals to translate knowledge, attitudes, and values into well-informed and healthy behaviors. Empowered with these skills, young people can make decisions based on a logical process of discerning “what to do, why to do it, how to do it, and when to do it” (Central Board of Secondary Education, 2013: 4).

With reference to the delimitations of the current research, seven life skills were determined as necessary for primary stage pupils to be developed. These skills are defined according to the LSCE Framework (UNICEF and partners, 2017) as follows:

Critical thinking is defined as the ability to think purposefully and identifies how this life skill can be performed when the learner has learned to think about thinking **Communication** is defined as “the sharing of meaning through the exchange of information and common understanding”; and as requiring both verbal and nonverbal skills, and learning throughout life (p. 76).

Self-management is defined as the ability to effectively regulate and monitor one’s emotions, feelings, thoughts, impulses, and behaviors in different situations.

Cooperation has been defined similarly as in other frameworks in the field as “the act or process of working together to get something done or to achieve a common purpose that is mutually beneficial”.

Decision making is understood both as a process and as a composite cognitive skill. As a skill, it “closely interrelates with critical thinking, cooperation and negotiation” but also with self-management, which is

“important to control impulsive reactions to a situation”. The process element of the LSCE definition demonstrates a recognition that decision making involves at least five stages: (a) defining objectives; (b) collecting information (for informed decision making); (c) developing options; (d) evaluating and deciding; and (e) implementing.

Empathy is defined according to Salovey and Mayer’s (1990) as: “...the ability to comprehend another’s feelings and to re-experience them oneself.” Importantly, UNICEF and partners (2017) complete the definition by adding that the concept of empathy is without moral judgment of the other person.

Respect for diversity is based on this moral philosophy that “diversity means understanding that each individual is unique and recognizing each other’s individual differences”.

Inclusive classroom

Inclusive Education means that all learners in a school, regardless of their weakness in any area, become part of the school community. They are included in the feelings of belonging among other learners (Kumar, 2021).

An inclusive classroom climate refers to an environment where all students feel supported intellectually and academically, and are extended a sense of belonging in the classroom regardless of identity, learning preferences, or education. Such environments are sustained when instructors and students work together for thoughtfulness, respect, and academic excellence, and are key to encouraging the academic success of all students (Kaplan& Miller, 2007).

Motivation:

Robert Gardner (1985, p.10) defines in his social-educational model of language learning that “motivation” is “the combination of effort plus desires to achieve the goal of learning the language plus favorable attitudes toward learning the language.” Similarly, Dornyei (1994) conceptualized language learning motivation as including three components: motivational intensity, desire to learn the language and an attitude towards the act of learning the language.

Brown (1994) gives the definition of motivation as “inner drive, impulse, emotion, or desire that moves one to a particular action” (p.152).

Harmer (1991) also states that motivation is some kind of “internal drive that encourages somebody to pursue a course of action” (p.3).

Motivation is operationally defined as a drive and a desire that moves fourth year primary pupils in an inclusive classroom context to participate in the classroom activities that lead them to learn language-related life skills within the framework of a differentiated SIOP Model.

Review of literature and related studies:

The following section sheds more light on the main variables of the current study which are life skills for primary stage pupils, inclusive EFL Classrooms, motivation for learning, and the differentiated SIOP Model.

Life skills are abilities for adaptive and positive behavior that enable us to deal effectively with the demands and challenges of everyday life. They are a set of human skills acquired via teaching or direct experience that are used to handle problems and questions commonly encountered in daily human life (Dage, 2016). Life skills are very useful for good adjustment in society. These are skills that motivate learners to behave in a healthy way if they wish to do so and have the scope or opportunity to do so. They form a link between self-help and self-discipline. These skills also help to improve interpersonal relationships with a sense of physical and mental well-being. They promote physical health, and positive mental and social attitudes. They also prevent mental disorders and behavior problems, as well as avoid health problems (Rani & Menka, 2019; Tan, 2018; Bardhan, 2016; Fitzpatrick, 2014).

Therefore, life skills are a large group of psycho-social and interpersonal skills, which can help people, to make informed decisions, communicate effectively and develop coping and self-management skills that may help an individual to lead a healthy and productive life. Life skills are essentially those abilities that help promote mental well-being and competence in young people as they face the realities of life.

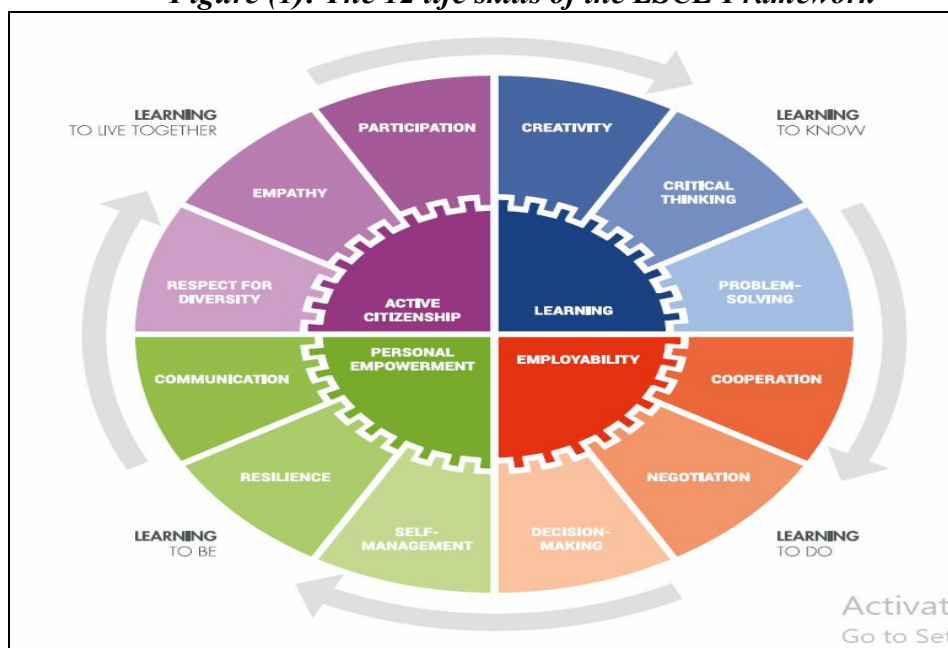
When reviewing various initiatives for classifying life skills, it becomes clear that there is no definitive list of life skills. They vary in importance and priority depending on specific life situations, culture, age, and position. According to the World Health Organization (2010), life skills are categorized into ten core skills including self-awareness, empathy, effective communication, interpersonal relationship, creative thinking, critical thinking, decision-making, problem solving, coping with emotions, coping with stress. Similarly, the UNICEF (2012) website on life skills categorized them into three broad categories including communication and interpersonal skills, decision making and problem-solving skills, coping and self-management skills.

According to the framework of the UNICEF (2019) concerning life skills in the Middle East and North Africa (MENA region), the four dimensions of learning reflecting a shared conceptual understanding of *life skills* included the following:

- **‘Learning to Know’** or the Cognitive Dimension: abilities underscoring the importance of curiosity, creativity and critical thinking for gaining a better understanding of the world and people.
- **‘Learning to Do’** or the Instrumental Dimension: abilities for applying of what has been learned into practice, and how to concretely navigate demanding situations while being efficient and productive.
- **‘Learning to Be’** or the Individual Dimension: abilities aiming at the development of the complete person, thus allowing the individual to act with ever greater autonomy, judgement and personal responsibility.
- **‘Learning to Live Together’** or the Social Dimension: abilities building inclusive identities consistent with democratic and social justice values and principles, adopting a human rights-based approach.

The twelve core life skills, as illustrated in figure (1), reflect the dynamic interplay between and contribute to the development of each of the four dimensions of learning (life outcomes). One life skill can contribute to being a more innovative learner, and at the same time to being a more productive worker, to feeling personally empowered and to being a more engaged citizenship – thus reinforcing other life skills and life outcomes (UNICEF and partners, 2017; Hoskins& Liu, 2019).

Figure (1): The 12 life skills of the LSCE Framework



(Source: Hoskins& Liu, 2019).

Richard and Rodgers (2001) asserted that intertwining English language instruction with the teaching of essential life skills is indispensable. This is because language acquisition in itself is a pivotal life skill of immense significance for everyone. Isolating English from the sphere of life skills might pose a considerable obstacle for a student's future prospects. A proficient English student should be able to effectively convey their thoughts to varied audiences, be it in a familial setting, among peers, or on a larger stage.

Mahender (2022) suggests that traditional language teaching methods are too rigid for today's evolving world. This view is supported by researchers like Nurbatra, Masyhud and Hartono (2022), Saputra, Sutarman and Syamsurrijal (2020), Mostafa, Dadour, and Al-Shafei (2016), O'dwyer (2013), and Kiran, Seshadri, & Thomas (2007), who advocated for dynamic teaching methods, such as group work, role-playing, and debates, to impart life skills effectively. Nivedita and Singh (2016) identified several teaching methods and strategies for fostering life skills such as discussions, brainstorming, role plays, working in pairs or groups, educational games, simulations, analysis and demonstration, case studies, storytelling, drama, debates, miming, poetry and chants.

A classroom that prioritizes life skills education should be a place that creates a friendly, supportive, stimulating, and structured learning environment. It's essential to cater to the diverse needs of all students, ensuring that everyone feels acknowledged and valued. A significant emphasis should be on promoting mutual respect and empowering individuals to believe in their capabilities. Collaborative efforts should be fostered, encouraging both teachers and students to work closely with each other. A classroom should serve as a mirror to the real world, reflecting real-life situations and contexts. This makes the learning experience relevant and enriching. Moreover, teachers should take responsibility for crafting ample learning opportunities (Central Board of Secondary Education, 2013).

Life skills education is the soul of education that can create the shield for human survival on this planet. Life skills education aims to provide students with strategies to make healthy choices that contribute to a meaningful life. It facilitates a complete and integrated development of young people to function effectively as social beings and make them socially more sensitive (Dange, 2016).

It is pivotal that the focus remains more on the learning process than on the final product or presentation. Expanding on the insights from UNICEF (2006), the success of life skills education is hinged on three

critical pillars. First, is the skills; life skills are a group of psychosocial and interpersonal abilities that enable individuals to deal effectively with the demands and challenges of everyday life. These are often divided into three interlinked categories: cognitive, personal, and inter-personal skills. The second pillar represents *content*, which provides context to the skills, and the third represents methods; as life skills cannot be taught in isolation; they need to be integrated into everyday lessons.

The basic elements of life skills education involve a wide range of diverse learning elements, which include knowledge and understanding of rules and laws, human rights, diversity, democratic process, sustainable development, and concepts like justice, equality, democracy, and freedom; skills and aptitudes like critical thinking, expressing opinions, analyzing information, participating in discussions, negotiating, dispute resolution and participating in community actions; and values and attitudes like respecting justice, democracy tolerance, courage and the rule of law, willingness to listen to others and work with others (Parry and Nomikou, 2014).

In summary, life skills education should not be viewed as an optional addition but rather as an integral part of everyday teaching. Through the right environment and methodology, teachers can mold students who are not just academically proficient but also equipped to handle real-world challenges. In addition, they need to motivate their students to learn in order for them to succeed in achieving learning goals.

In language acquisition, motivation is considered goal-directed and involves effort, desire, and favorable attitudes towards learning the language. It is important for language achievement and has a significant correlation with learners' language development. Teachers play a significant role in motivating students and creating a supportive and positive learning environment (Bower, 2017).

There are different classifications of types of motivation. First, according to Deci and Ryan's (1985) self-determination theory, the basic types of motivation in second/foreign language learning are intrinsic and extrinsic. Intrinsic motivation is essential and pushes learners to learn without rewards because the need is innate and depends on their desire to know something (Ryan & Deci, 2000; Abuhamdeh, Csikszentmihalyi & Jalal, 2015). Teachers have limited effects on learners' intrinsic motivation since they are from various backgrounds and the sole way to motivate learners is to make the class a supportive environment (Putra, Cho & Liu, 2017). On the other hand, extrinsic motivation is seen as motivation through rewards or factors to the task. An external goal influences one's behavior

towards a task. Thus, the task is instrumental in receiving or gaining access to the external reward (Dörnyei, 1994; Lai, 2011).

Second, according to Gardner's theory, motivation is classified into instrumental and integrative. According to Takahashi (2018), integrative motivation refers to when students want to learn a language to become part of a speech community. Learners with integrative motivation are also interested in the culture related to that language (Suryasa, Prayoga & Werdistira, 2017). Finally, in instrumental motivation, language is used as an instrument that allows achieving a goal or an aim, such as succeeding in an exam. Learners with an instrumental motivation want to learn a language because of a practical reason, such as getting a salary/bonus or getting into college (Unrau & Schlackman, 2016; Dörnyei, 2019). Actually, integrative and instrumental motivations are not opposite ends of a continuum (Dörnyei, 1994). Instead, they are positively related, and both are effectively loaded goals that can sustain learning. In conclusion, both integrative/instrumental motivations and intrinsic/extrinsic motivations contribute to learning a second/foreign language. Nevertheless, which one is more important varies from context to context. Likewise, students in different contexts may be motivated to learn a second/foreign language by different motivation type (Pham, 2021).

While researchers use different frameworks for thinking about motivation, it is more helpful to view classroom motivation through the "four dimensions" framework, which was used to articulate four major elements of motivation. Scholars like Murray (2011), Pintrich (2003) Ryan and Deci (2000) essentially agree on the major factors students need to have in order to be motivated, they comprise competence, autonomy/control, interest/value, and relatedness. The teacher may have students who display weak motivation and thus needs to use a variety of strategies within the classroom to engage and motivate them. Although all four dimensions of motivation are intertwined, depending on the student and the given activity or situation, one dimension of motivation may be more prominent than the others. Keeping this in mind, teachers should learn how to develop lessons and activities that activate all four dimensions of motivation to reach all the students, especially in an inclusive classroom context. The following table provides a summary of the factors, their indicators, and sample strategies for developing them.

**Table 1: Dimensions of motivation and ways of development
(Adapted from: Usher & Kober, 2012)**

Dimensions	Indicators The student:	Development Strategies/ techniques
Competence (<i>Am I capable?</i>)	believes he or she has the ability to complete the task.	- scaffolding instruction: graphic organizers, direct instruction, visual supports, cooperative group work, task analysis. - using language that conveys faith in students' abilities and intentions.
Control/ autonomy (<i>Can I control it?</i>)	feels in <i>control</i> by seeing a direct link between his or her actions and an outcome. retains <i>autonomy</i> by having some choice about whether or how to undertake the task.	Differentiation: - provide options for assignments - offer multiple ways to demonstrate knowledge: book reports, poster presentations, use of technology, choice boards, and dramatic interpretations.
Interest/value (<i>Does it interest me? Is it worth the effort?</i>)	has some <i>interest</i> in the task or sees the <i>value</i> of completing it.	create activities that embrace student interest, individuality, and various learning: the use of manipulatives, movement, and real-world relevance and application
Relatedness (<i>What do others think?</i>)	Completing the task brings the student social rewards, such as a sense of belonging to a classroom or other desired social group or approval from a person of social importance to him.	creating community through holding morning meetings, assigning cooperative group work, establishing roles and responsibilities, using open-ended questions, and facilitating group discussions/debates - Positive feedback: verbal praise, a smile, a high five, or a sticker.

Childhood is the prime time for developing healthy social-emotional skills. During their schooling years, children acquire a great portion of their formal education, so the schooling stage is very important and also the developmental phase of a learner's life. That's why life skills can be imparted at school level directly. It makes school a preferred place for introducing life skills training (Kumar, P. (2017).

In 1975, Congress passed the Individuals with Disabilities Education Act (IDEA), ensuring that children with disabilities had equal access to public education. To reach this student population, many educators used

differentiated instruction strategies. Then came the passage of “No Child Left Behind” in 2000, which further encouraged differentiated and skill-based instruction—and that’s because it works. Hence, the need for inclusive classrooms emerged. In inclusive classrooms, no discrimination is made between students who have disabilities and those without disabilities. Since each student contributes to the rich variety of ideas and actions in the classroom, all should be welcomed and appreciated, and the diversity that is reflected in the classroom should be valued. In turn, the students will feel appreciated rather than different, which will make them feel more comfortable and at ease. This feature is the nature of an inclusive classroom.

So far, many frameworks have been designed to create an inclusive learning atmosphere for the diverse learners and also to help them to identify their learning styles. Differentiated instruction is a framework in which the teacher constantly changes the *content* (i.e. the curriculum, materials and approaches used to teach the content), *processes* (i.e. the instructional activities or approaches used to help students to master the curriculum) and *products* (i.e. the assessment tools through which students demonstrate what they have learnt), according to the students’ level of ability and needs.

The idea of “One size fits all” is no longer effective in the current learning process. It is known that some students learn and grasp English language better or faster than others, even if they are participating or learning in one class. No effective method is suitable for all learners and the need to differentiate learning is a must among students to address their needs. Tomlinson and Imbeau (2010) announced that differentiation instruction strategies are a procedure followed in classroom that parallels students’ needs and syllabus content.

The theory of differentiated instruction (DI) emerged out of the necessity to further understand and accommodate individual learner differences (Tomlinson, 1999). The theory of DI mainly emerged from Vygotsky’s Social Constructivism Theory (1978). That theory emphasized the active participation of students in the learning process where the knowledge building appeared due to the interaction of students with their environment (Osuafor& Okigbo, 2013). Differentiated instruction was also supported with Gardner’s theory of multiple intelligences as another base for differentiation. Teachers can provide their students with various activities that match their different types of intelligence (Gregory& Chapman, 2013).

Differentiation is not a mere instructional strategy, but a new way of thinking about teaching and learning. It is based on the idea that there are differences among students in all classroom environments and that those differences need to be accommodated (Valiandes, 2015). DI is suggested to promote an inclusive classroom environment, by better addressing the needs of each student and by taking care of the social-emotional component of learning (Bondy, Ross, Galligane, & Hambacher, 2007; Simpkins, Mastropieri, & Scruggs, 2009). It is a student-centered approach that recognizes these differences and creates opportunities for all students to engage with the same ideas and to develop important skills, while enabling for multiple pathways to understanding (Tomlinson, 2000; Tobin & McInnes, 2008; Tomlinson & Jarvis, 2009; Dixon, Yssel, McConnell & Hardin, 2014).

Differentiated instruction is based on the assumptions that students differ in their learning styles, needs, strengths, and abilities, and that classroom activities should be adapted to meet these differences. Differentiation means tailoring the instruction to meet individual needs. The use of ongoing assessment and flexible grouping makes this a successful approach to instruction. Teachers can differentiate at least four classroom elements based on student readiness, interest, or learning profile:

Content- What we teach and how we give students access (accommodation) to the information and ideas that matter.

Process- How students come to understand and “own” the knowledge, understanding, and skills essential to a topic.

Products- How a student demonstrates what he or she has come to know, understand, and be able to do as a result of appropriate instruction.

Learning environment- The way the classroom feels and functions (Tomlinson, 2001; Tomlinson, 2005).

Teachers are successful at differentiating instruction for ELLs when they get to know as much as possible about each student, have high expectations for all students, have a variety of research-based instructional strategies at hand, use ongoing assessment to guide instruction, provide multiple types of assessment, differentiate homework, collaborate with other professionals, use flexible grouping, and make content comprehensible for all students through providing ELLs with alternative ways of accessing key content (e.g., charts, books written in their first language, simplified text written by the teacher, discussion, etc.) (Tomlinson, 2005; Echevarria, Vogt, & Short, 2008).

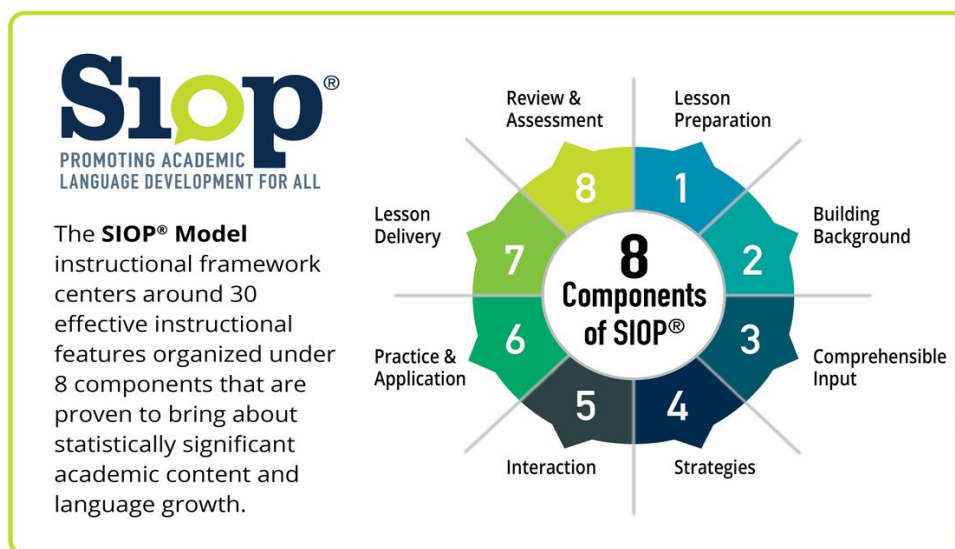
According to Short, Fidelman, & Louguit (2012), SIOP started as an observation tool so that researchers could measure the implementation of the sheltered instruction practices. It evolved over a seven- year period into a lesson planning and delivery approach. The SIOP model helps to provide a consistency that was initially missing as various teachers used a wide variety of techniques, causing inconsistency from class to class, teacher to teacher, and school to school. That’s why it was widely used for teachers’ professional development and proved to be very effective (Song, 2016; Koura& Zahran, 2017; Al Fadda, 2020; Walters, 2023).

The SIOP model combines features recommended for high quality instruction of all students, including cooperative learning and reading comprehension strategies. Its components and features demonstrate many aspects of effective teaching and learning methods (Echevarria & Short, 2000; McIntyre et al., 2010). Within each component, three to six features are embedded. The following are the descriptions of components and features embedded in SIOP as Echevarria et al. (2008) and Echevarria et al. (2017) pointed out:

1. The six features under **Lesson Preparation** initiate the lesson planning process, so teachers include content and language objectives, use supplementary materials, create meaningful activities, and more.
2. **Building background** focuses on making connections with students’ background experiences and prior learning and developing their academic vocabulary.
3. **Comprehensible input** considers how teachers should adjust their speech, model academic tasks, and use multimodal techniques to enhance comprehension.
4. The **Strategies** component emphasizes teaching learning strategies to students, scaffolding instruction, and promoting higher-order thinking skills.
5. **Interaction** prompts teachers to encourage students to elaborate their speech and to group students appropriately for language and content development.
6. **Practice & Application** provides activities to practices and extend language and content learning.
7. **Lesson Delivery** ensures that teachers present a lesson that meets the planned objectives and promotes student engagement.
8. The **Review & Assessment** component reminds teachers to review the key language and content concepts, assess student learning, and provide specific academic feedback to students on their output.

The fact of recognizing that the SIOP Model requires teachers to include the eight components and the thirty features does not mean that they are going to incorporate them all in one single lesson plan. In fact, the four different lesson plan templates provided by the authors of the model as guiding templates are designed in such a way as to guide teachers who are willing to implement the SIOP Model whether as professional or novice teachers. The components are illustrated in figure (2) as follows:

Figure 2: Components of the SIOP Model



(Source: Savvas Learning Company, 2020)

Actually, the authors of the model also elaborate on the scaffolding necessary to reinforce each lesson. Verbal scaffolding involves prompting, guiding, and supporting learners by using an assortment of questioning techniques that promote higher level of thinking so students gain independence. Procedural scaffolding refers to the use of grouping configurations that provide different levels of support to students as they gain greater levels of language proficiency and skills. These include whole class, small group, paired/partner, and independent work (Echevarria, Short, and Vogt, 2003).

Moreover, the differentiation component is being affirmed within the Lesson Preparation component which offers teachers multiple opportunities to meet the needs of students with different abilities or language proficiency levels in their classrooms. Although it takes time to prepare a lesson for

different groups of students, teachers discover its benefit when all the students in the classroom learn the material without having to reteach (Koc, 2016; Echevarría, Vogt & Short, 2017). Consequently, due to its various ideas and activities offered, the SIOP model has been recommended for English learners. Teachers develop the students' academic language proficiency consistently and regularly as part of the lessons and units they plan and deliver. The SIOP provides various pathways for students to understand the content based on their proficiency level (Short, 2003; Echevarría & Graves, 2007; Boughoulidi, 2020).

Various studies assured the benefits of using the SIOP Model in teaching. Nichols (2012), for example, compared the reading comprehension of two first grade classrooms, one classroom which received reading instruction with SIOP and one which received reading instruction without. The results showed that the classroom that received the reading instruction with SIOP had more growth in reading comprehension than the classroom without SIOP. Further, Short, Fidelman and Louguit (2012) conducted a study that assured the SIOP model as a promising approach to professional development that can improve the quality of instruction to English language learners and increase their English language achievement. There were statistically significant differences in the average mean scores in favor of the treatment student group on Writing, Oral Language, and Total English scores of the IDEA Language Proficiency Tests. In addition, Gates and Feng (2018) conducted a study to examine its effect on reading fluency of ELLs. Results show the ELL group had significant gains in reading fluency, and the SIOP model was effective in improving their reading performance.

To conclude, it is clear that developing language-related life skills and the motivation to learn them is a necessary requirement for children at early stage of education. This requirement becomes urgent specially for pupils within inclusive primary classroom contexts as it stems from the nature of pupils enrolled in these classes and how would they treat each other. Consequently, teachers could rely upon research-validated SIOP model to assist them in planning and implementing structured procedures that would eventually result in enhanced learning results and motivation for learning on the part of the pupils.

Methodology:

Participants:

Participants in the current research were seventy-nine pupils in the fourth grade primary stage at Monsha't Al-Salam Primary school, East

Mansoura Educational Directorate. They constituted two intact classes purposefully assigned to an experimental (n= 40) and a control group (n= 39). Both groups included special educational needs with mainstream pupils. Pupils' age ranged between 10 and 11 years old. They had the same experience of learning English as a foreign language; officially starting from the first year at the primary stage. The following table illustrates the specification of the participants according to gender and learning disabilities:

Table 2: specifications of participants of the research

Category		Exp. group	Control group	
Gender	Males	19	17	
	Females	21	22	
Special educational needs (8)	Learning disability	2	1	2 males+ 1 female
	Autism	1	1	2 males
	Mild intellectual disability	1	-	1 male
	ADHD	1	1	2 males
Total		40	39	

Design of the study:

The current study adopted the quasi-experimental approach using a pre- post administration to two independent groups design to investigate the effectiveness of using a differentiated SIOP model in developing the language- related life skills and motivation of primary stage pupils in an inclusive EFL classroom setting.

Procedures

First, designing the instruments and materials of the study

Instruments and materials used in the current research were as follows: (available with the researcher upon request)

1- The language- related life skills checklist:

The checklist was designed for identifying the language- related life skills necessary for fourth year primary stage pupils in an inclusive classroom context. The skills in the questionnaire were based on the UNICEF framework of Life Skills and Citizenship Education the Middle East and North Africa (MENA Region) which comprises four dimensions with twelve main life skills. Moreover, the teacher's guide was reviewed for checking the life skills prescribed for them. The checklist was presented to

EFL specialists (N= 5) to check its validity and select the most appropriate skills for the target pupils.

Based on the EFL specialists' comments, the final list of the language- related life skills necessary for fourth year primary stage pupils comprised the following seven skills:

Table 3: The most necessary language- related life skills for primary stage pupils

Category	Life skill
(A) Cognitive <i>Learning to know</i>	1- critical thinking
(B) Individual <i>Learning to be</i>	1- communication
	2- self- management
(C) Instrumental <i>Learning to do</i>	1- Cooperation
	2- Decision- making
(D) Social <i>Learning to live together</i>	1- empathy
	2- respect for diversity

These skills were the base for designing the rest of instruments of the research.

2- Illustrated Situational test for assessing pupils' language- related life skills:

The situational test aimed at assessing the ability of fourth primary grade pupils to apply language- related life skills in different situations. It assessed their conceptions and employability of the acquired life skills in these situations.

The test was designed in the light of the language- related life skills checklist agreed upon by specialists in the field. Initial version of the test included twenty-one situations- three situations per skill, illustrated with simple pictures. Each situation has three alternatives for the pupils to choose the suitable response among them. The researcher took the language level and the characteristics of the participants into consideration when structuring the situations and the responses, that's why it was simple and supported with illustrations or pictures to be clear for them. There is one response that was considered correct, where the mastered life skill applied.

To establish validity of the test, it was presented to a group of jurors (N= 5) to evaluate the questions in terms of coverage of the target skills, appropriateness to the participants and clarity of the language used, and to suggest any modifications to its questions. The jurors agreed upon the accuracy and suitability of the situations and the responses. They approved the idea that the test was illustrated with simple pictures that suited the

participating pupils. Two pictures were substituted with other clearer pictures according to the jurors' recommendations.

The internal consistency and reliability of the illustrated language-related life skills situational test were estimated through the test pilot administration to (30) fourth year pupils other than participants in the main research. Results of this pilot study were as follows:

First, the internal consistency was estimated through two procedures:

a) the correlation coefficient between the score of each question/ item and the total score of the skill being assessed was estimated, and the results are shown in the following table:

Table 4: The correlation between the score of each item and the total score of the skill

Skills	Items	Corr. Coeff.	Skills	Items	Corr. Coeff.
Critical thinking	1	0.899**	Decision-making	1	0.793**
	2	0.834**		2	0.776**
	3	0.752**		3	0.853**
communication	1	0.784**	Empathy	1	0.718**
	2	0.784**		2	0.754**
	3	0.726**		3	0.734**
self-management	1	0.742**	Respect of diversity	1	0.776**
	2	0.725**		2	0.746**
	3	0.845**		3	0.724**
Cooperation	1	0.828**			
	2	0.844**			
	3	0.675**			

** significant at 0.01 level

Table (4) illustrates that the correlation coefficients between the score of each item/ question and the total score of the skill are positive at 0.01 level which supports the valid internal consistency of the Illustrated Situational Language- Related Life Skills Test.

b) the correlation coefficient between the score of each skill and the total score of the test was estimated. Results are displayed in the following table:

Table 5: The correlation between the score of each skill and the total score of the situational test

Skills	Corr. Coeff.	Sig.
Critical thinking	0.884	0.01
communication	0.804	0.01
self- management	0.825	0.01
Cooperation	0.872	0.01
Decision- making	0.841	0.01
Empathy	0.886	0.01
Respect of diversity	0.901	0.01

Based on the results illustrated in table (5), it is clear that correlation coefficients were positive and statistically significant at (0.01) level, which means that the test has a high level of internal consistency.

Second, the reliability of the test was also assessed by getting the value of Cronbach- Alpha coefficient (α), through which the extent to which the test items are related to each other is shown, and the correlation of each item with the total score of the test. Results are displayed in the following table:

Table (6): Values of Cronbach- Alpha reliability coefficient for the situational test

Skills	No. of items	α
Critical thinking	3	0.773
Communication	3	0.646
Self- management	3	0.659
Cooperation	3	0.686
Decision- making	3	0.732
Empathy	3	0.603
Respect of diversity	3	0.608
Total	21	0.938

The reliability coefficient of the test as a whole was (0.938) which indicates that the illustrated language- related life skills test is reliable and can be administered as one of the research instruments.

The time of the test was also calculated by getting the sum of time spent by all the pupils of the pilot study to complete the test and dividing it by their number (30). Thus, 45 minutes would provide an appropriate time for the pupils to answer all the questions.

3- A language- related life skills observation checklist for teachers:

The observation checklist aimed at assessing pupils' mastery of language- related life skills in the classroom by their EFL teachers.

The observation checklist was designed in the light of the language- related life skills checklist. It consisted of 39 indicators, distributed to the seven language- related life skills; namely, critical thinking (5), communication (6), self- management (4), cooperation (5), and decision- making (5), empathy (5), and respect of diversity (4). Moreover, the checklist included a 4- rating Likert scale that reflects levels of pupils' performance or mastery of the skills: 4- Frequently demonstrates independently, 3- Occasionally demonstrates with minimum support, 2- Occasionally demonstrates with significant support, and 1- Does not demonstrate yet.

The checklist was designed in its initial form and submitted to a group of EFL specialists (N= 5) for validation. The jurors were asked to assess the checklist in terms of the following criteria: (a) suitability of indicators to the skill to which they belong, (b) accuracy and clarity of the wording, and (c) measurability and/or observability of these indicators. Jurors were also asked to give their comments and suggestions. Jurors agreed that the checklist was valid for use since the above-mentioned criteria were mostly met. They also mentioned that the checklist was comprehensive in covering the identified indicators that reflect the specified skills.

The observation checklist reliability coefficient was calculated using the method of multiple observers/ raters on the performance of one individual (inter- rater reliability coefficient). The coefficient of agreement between their estimates was calculated using Cooper's equation.

Percentage of agreement = (number of times of agreement/(number of times of agreement + number of times of disagreement))×100.

The researcher sought the help of the EFL teacher in the school after showing her the observation checklist and clarified its content and instructions. This was done by observing the performance of three pupils. The coefficient of agreement was calculated for each pupil, and the following table shows the coefficient of agreement on the performance of the three pupils.

Table 7: Percentages of agreement among the two observers on the checklist

First pupil	Second pupil	Third pupil	Average
88.24%	94.12%	91.18%	91.18%

Results in table (7) illustrate that the average percentage of agreement between the two observers was 91.18% which is considered a high percentage. Cooper determined the level of reliability as indicated by percentage of agreement as follows:

- An agreement percentage that is less than 70% reflects poor reliability of the observation tool.
- An agreement percentage that is 85% or more reflects high reliability.

Consequently, the language- related life skills observation checklist proved to be reliable and ready for administration to the main sample of the research.

4- The motivation towards learning scale:

The motivation scale was designed for assessing fourth-year primary pupils' motivation towards learning before and after conducting the

experimental treatment. The scale consisted of twenty items distributed to four dimensions proposed by Usher & Kober (2012). Each dimension included 4 positive statements and one negative statement. A 3-point Likert scale (☐ disagree, ☐ not sure, ☐ agree) was used with the aid of emoji faces to express feelings.

Likert scales have been used successfully with younger children; in such cases the number of the response options is often reduced to three and the options themselves are presented in a pictorial format instead of words. For example, in a three-point 'smile gram' children are asked to check the box under the face that best expresses how they feel (Dornyei, 2003).

To assess how valid the scale is, it was presented to a number of TEFL specialists and psychologists (N= 6) to evaluate the statements in terms of appropriateness and clarity. The jurors provided their points of view indicating that the scale was clear and appropriate to assess pupils' motivation towards learning life skills.

To estimate the construct validity of the scale, it was piloted to a sample of (30) fourth- year primary pupils other than participants in the main study. The internal consistency of the motivation scale was estimated through calculating both the correlation coefficient of the score of each item with the total score of each dimension to which it belongs, and the construct validity (hypothetical consistency) by estimating the correlation between the score of each dimension and the total score of the scale. The following tables display the values of the correlation coefficients and their significance levels.

Table (8): values of correlation coefficients between items of the scale and their correspondent dimensions

Dimensions	Items	Corr. Coeff.	Dimensions	Items	Corr. Coeff.
Competence	1	0.846**	Interest/value	11	0.716**
	2	0.834**		12	0.833**
	3	0.951**		13	0.773**
	4	0.867**		14	0.749**
	5	0.776**		15	0.725**
Control/ autonomy	6	0.862**	Relatedness	16	0.801**
	7	0.736**		17	0.783**
	8	0.794**		18	0.621**
	9	0.675**		19	0.464**
	10	0.855**		20	0.741**

Results in table (8) indicate that correlation coefficients between the items of the scale and their correspondent dimensions were positive and

statistically significant at 0.01 level of significance; and this indicates a strong correlation.

Table 9: internal consistency coefficients of the scale

Dimensions	Corr. Coeff.	Sig.
Competence	0.953	0.01
Control/autonomy	0.951	0.01
Interest/value	0.944	0.01
Relatedness	0.924	0.01

Statistics in table (9) indicate that correlation coefficients between the dimensions of the scale and the total score of the scale were positive and statistically significant at 0.01 level; and this indicates that the scale has a high level of internal consistency.

Reliability of the motivation scale was assessed through Cronbach's Alpha method. The values of Cronbach's Alpha coefficient calculated for the motivation scale are demonstrated in the following table:

Table 10: values of Alpha reliability coefficient for the motivation scale

Dimensions	No. of items	α
Competence	5	0.906
Control/ autonomy	5	0.844
Interest/value	5	0.814
Relatedness	5	0.725
Total	20	0.954

Results in table (10) indicate that reliability coefficient for the whole scale was 0.954 which reflects that the reliability of the scale was high, and the scale proved suitable for administration.

Second: Designing the framework of the differentiated SIOP model:

The SIOP model was adapted within a framework where differentiated activities were highlighted and implemented in order to suite both mainstream and special educational needs pupils within the inclusive primary EFL classroom setting. The same steps of the model were implemented with greater focus on the differentiation step, where various types of differentiated activities such as group work activities, storytelling, role plays, and discussions with the help of varied strategies and materials such as PowerPoint presentations, debates, case studies and short film shows. Differentiation was apparent in content, process, product or the learning environment itself.

A teacher's guide that clarifies the procedures of each lesson according to the differentiated SIOP framework was prepared by the researcher and presented to specialists in the field for revision and proposing any recommendations for improvement. It comprised the eight steps of the

model that were implemented throughout the lessons of the three units of Connect 4 English textbook. These steps are outlined as follows:

- 1- **Lesson Preparation:** gathering the necessary parts of the lesson before implementing it. It consists of the following:
 - ✓ Identify and display language-, content-, and life skills related objectives which are reviewed with the learners. Language objectives can be as simple as key vocabulary to grammar and language structures, functions, or skills.
 - ✓ Identify Content Concepts in a language that is appropriate for the student's age, background, and readiness levels. Life skills are being identified as well.
 - ✓ Provide supplementary materials, e.g. hands on manipulative, realia (real life objects), pictures, visuals, multimedia, demonstrations, related literature, varying levels of reading materials about the same content, and adapted text.
 - ✓ Adapt text so that all levels of pupils have access to the same information, e.g., graphic organizers, outlines, study guides, highlighted text, taped text, adapted text, jigsaw, marginal notes, and charts.
 - ✓ Meaningful activities that allow for practice using language in the content areas either through, reading, writing, listening, and speaking. **Differentiated activities** are highlighted here, as the teacher prepares various activities that suite various interests and abilities. There should be more than one activity wherever possible for pupils to choose from.
2. **Building Background:** concepts linked to student's background are taught: discuss links between previously learned and new concepts and ensure that key vocabulary is clearly emphasized and repeated throughout the learning of the content.
3. **Comprehensible input** is the use of teaching techniques that ensure each pupil, regardless of English Language Proficiency Level, will understand each part of the lesson. This means using speech appropriate for their levels, clear explanations of tasks, and techniques to make the lessons clear.
4. **Strategies-** Teachers use learning strategies that are best practice for ELLs and allow them to have enough time to use them. **Scaffolding** techniques are used to assist the pupils in their learning and questions should be varied so that pupils can use higher order and critical thinking skills.

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5. **Interaction:** the best way for pupils to learn is through constant oral participation. If they can say something and explain it, they have learned it. Therefore, they need to be given in class time to talk about their learning. This can be done through grouping strategies, wait- time for thinking, and time to clarify key concepts.
 6. **Practice and Application:** When a baby learns about their world, first they learn the names of objects they can touch and see. It is important to have hands- on materials for the pupils to learn concepts in context. They also need time to apply what they have learned through the 4 language skills (reading, writing, listening, and speaking).
 7. **Lesson Delivery:** As the lesson is delivered, the teacher needs to see that the content and language objectives are supported, the students are engaged 90 to 100% of the time, and the pacing of the lesson is appropriate for their proficiency levels.
 8. **Review and Assessment:** the teacher reviews key vocabulary and concepts, provides feedback, and makes sure that the assessments reflect what has been taught. Differentiation is apparent at this stage as well. Pupils can be given a choice to express what they have learned in several ways such as drawing, writing a paragraph or a story, making an outline of the lesson, etc.

A detailed menu of SIOP activities (Vogt& Echevarria, 2008), and differentiation activities was prepared by the researcher for teachers to select and adapt appropriate activities that aid them in differentiating either content, process, product, or the learning environment to achieve learning objectives related to language content and related life skills. In addition, materials needed in each activity were provided such as colored cards, sticky notes, PowerPoint presentations, videos and animations, clay sticks, sand, small colored balls, word cards, pictures and pens and pencils.

The experimental intervention:

An equivalent group design with one experimental group and one control group was used in the present research. The following steps were followed:

○ ***Pre- intervention***

The fourth-year primary stage pupils' language- related life skills and motivation were assessed before conducting the experimental treatment at the start of the first semester of the academic year 2023/ 2024. Homogeneity between participants of the control and the experimental groups was established through administering the illustrated situational test, the language- related life skills observation checklist, and the motivation scale to both groups before applying the experimental treatment. Tables (11),

(12), and (13) display whether there is any significant difference between the control and experimental groups concerning the pre-administration of the instruments of the research.

Table 11: comparing control and experimental groups on the pre-administration of the language- related life skills situational test

Skills	Groups	N	Mean	Std. D.	t Value	df	Sig.
Critical thinking	Experimental	40	0.58	0.501	0.119	77	Not Sig
	Control	39	0.59	0.595			
communication	Experimental	40	0.63	0.586	0.127	77	Not Sig
	Control	39	0.64	0.537			
self- management	Experimental	40	0.58	0.549	0.755	77	Not Sig
	Control	39	0.67	0.53			
Cooperation	Experimental	40	0.63	0.586	0.91	77	Not Sig
	Control	39	0.51	0.506			
Decision- making	Experimental	40	0.58	0.549	0.09	77	Not Sig
	Control	39	0.56	0.552			
Empathy	Experimental	40	0.73	0.679	0.138	77	Not Sig
	Control	39	0.74	0.498			
Respect of diversity	Experimental	40	0.65	0.622	0.674	77	Not Sig
	Control	39	0.56	0.502			
Total	Experimental	40	4.35	3.06	0.457	77	Not Sig
	Control	39	4.05	2.733			

Results in table (11) prove that there is no statistically significant difference between the mean scores of the control and experimental group pupils on the pre- administration of the language- related life skills situational test, as “t” values were insignificant at (0.05) level of significance.

Table 12: Comparing control and experimental groups on the pre-administration of the language- related life skills observation checklist

Skills	Groups	N	Mean	Std. D.	t Value	df	Sig
Critical thinking	Experimental	40	2.28	0.679	1.197	77	Not Sig
	Control	39	2.1	0.598			
communication	Experimental	40	2.15	0.7	0.152	77	Not Sig
	Control	39	2.13	0.57			
self- management	Experimental	40	2.40	0.672	0.105	77	Not Sig
	Control	39	2.38	0.633			
Cooperation	Experimental	40	2.33	0.764	0.05	77	Not Sig
	Control	39	2.33	0.701			
Decision- making	Experimental	40	2.38	0.705	0.718	77	Not Sig

Skills	Groups	N	Mean	Std. D.	t Value	df	Sig
	Control	39	2.49	0.683			
Empathy	Experimental	40	2.48	0.64	0.813	77	Not Sig
	Control	39	2.36	0.628			
Respect of diversity	Experimental	40	2.40	0.632	0.618	77	Not Sig
	Control	39	2.31	0.694			
Total	Experimental	40	16.4	2.994	0.444	77	Not Sig
	Control	39	16.1	2.954			

Results in table (12) prove that there is no statistically significant difference between the mean scores of the control and experimental group pupils on the pre- administration of the language- related life skills observation checklist, as “t” values were insignificant at (0.05) level of significance.

Table 13: Comparing control and experimental groups on the pre-administration of the motivation towards learning scale

Dimensions	Groups	N	Mean	Std. D.	t Value	df	Sig
Competence	Experimental	40	6.45	1.239	0.722	77	Not Sig
	Control	39	6.26	1.141			
Control/ autonomy	Experimental	40	7.05	1.449	1.519	77	Not Sig
	Control	39	6.56	1.392			
Interest/value	Experimental	40	6.75	1.296	0.862	77	Not Sig
	Control	39	6.49	1.412			
Relatedness	Experimental	40	6.58	1.196	0.05	77	Not Sig
	Control	39	6.59	1.409			
Total	Experimental	40	26.83	3.381	1.069	77	Not Sig
	Control	39	25.90	4.291			

Finally, results in table (13) prove that there is no statistically significant difference between the mean scores of the control and experimental group pupils on the pre- administration of motivation towards learning scale, as “t” values were insignificant at (0.05) level of significance.

Based on the results of the pre- administrations of the research instruments, the homogeneity of both the control and experimental groups was established, and any variance in performance could be attributed to the effect of the differentiated SIOP Model.

o **The intervention**

The content of the three specified units adapted within the proposed framework of the differentiated SIOP model was applied to the pupils in the experimental group. The control group studied the regular English units in

the pupil's book. The experimental treatment was conducted throughout the first semester of the academic year 2023/ 2024. Procedures of the experimental treatment were as follows:

- ✓ An orientation session was conducted for the EFL teacher at school who taught the experimental group. The researcher explained the philosophy of the model, its stages and features, and the nature of differentiated activities to match the learning styles and abilities of the pupils in the inclusive classroom. The researcher also presented the instruments of the research, especially the language- related life skills observation checklist in order to be fully acquainted with it and administer it the right way.
- ✓ The treatment included the implementation of twelve sessions in addition to the orientation session. pupils followed the same phases in all sessions, where the differentiated SIOP model was applied. However, the activity or task included in the differentiation phase was not the same in the twelve sessions.
- **Post- intervention**

The post-administration of the instruments (the situational life skills test, the language- related life skills checklist, and the motivation scale) was conducted after the experimental treatment to examine the improvement in the pupils' language- related life skills and motivation levels for both the control and experimental groups.

Results:

The results of the study are presented in terms of the research hypotheses as follows:

Testing the first hypothesis:

"t" test for independent groups was used to verify the first hypothesis which is "There is a statistically significant difference between the mean scores of the experimental and control group pupils on the post-administration of the Illustrated language- related life skills situational test in favor of the experimental group. The following table illustrates (t) values and their statistical significance.

Table 14: Comparing performance of the control and experimental groups on the post-administration of the life skills situational test

Skills	Groups	N	Mean	SD	t Value	Df	Sig.
Critical thinking	Experimental	40	2.90	0.304	15.39	77	0.01
	Control	39	1.46	0.505			
communication	Experimental	40	2.75	0.439	13.74	77	0.01
	Control	39	1.33	0.478			
self- management	Experimental	40	2.75	0.439	11.39	77	0.01
	Control	39	1.54	0.505			
Cooperation	Experimental	40	2.85	0.362	14.73	77	0.01
	Control	39	1.41	0.498			
Decision- making	Experimental	40	2.85	0.362	14.08	77	0.01
	Control	39	1.46	0.505			
Empathy	Experimental	40	2.88	0.335	14.14	77	0.01
	Control	39	1.51	0.506			
Respect of diversity	Experimental	40	2.88	0.335	13.9	77	0.01
	Control	39	1.54	0.505			
Total	Experimental	40	19.85	1.594	27.39	77	0.01
	Control	39	10.26	1.517			

Table (14) shows that the mean scores of the experimental group pupils in the seven language- related life skills and in the total are higher than those of the control group. In addition, all *t*-values are significant at (0.01) level which reflects that there is a statistically significant difference between the experimental and control groups in the individual skills and in the total score on the post-administration of the life skills situational test in favor of the experimental group. In other words, the experimental group pupils outperformed their counterparts of the control group in their language- related life skills as measured by the situational test. Consequently, the first hypothesis is verified and accepted.

Testing the second hypothesis:

t-test for dependent samples was used to test the second hypothesis which is “There is a statistically significant difference between the mean scores of the experimental group pupils on the pre- and post-administrations of the language- related life skills situational test in favor of the post- administration”. Results are illustrated in table (15).

Table 15: comparing performance of the experimental group on the pre- and post- administrations of the life skills situational test

Skills	Measurement	N	Mean	SD	t Value	Df	Sig.	(η^2)
Critical thinking	Pre	40	0.58	0.501	22.42	39	0.01	0.928
	Post		2.9	0.304				
communication	Pre	40	0.63	0.586	16.34			0.873
	Post		2.75	0.439				
self-management	Pre	40	0.58	0.549	19.32			0.905
	Post		2.75	0.439				
Cooperation	Pre	40	0.63	0.586	21.33			0.921
	Post		2.85	0.362				
Decision-making	Pre	40	0.58	0.549	20.11			0.912
	Post		2.85	0.362				
Empathy	Pre	40	0.73	0.679	18.49			0.898
	Post		2.88	0.335				
Respect of diversity	Pre	40	0.65	0.622	21.33	0.921		
	Post		2.88	0.335				
Total	Pre	40	4.35	3.06	26.49	0.947		
	Post		19.85	1.594				

Table (15) indicates that the t -value is significant at 0.01 level for each particular skill and the total score. This reflects the statistically significant difference between the mean scores of the experimental group pupils on the pre- and post-administrations of the life skills situational test in favor of the post-administration due to using the differentiated SIOP Model. Moreover, the table illustrates that the levels of the effect size of the differentiated SIOP Model on the specified life skills of the experimental group pupils were high. Accordingly, since t -values in addition to the effect size enhanced the positive effect of the differentiated SIOP model on pupils' language- related life skills, the second hypothesis of the research was proved and accepted.

Testing the third hypothesis:

Results of testing the third hypothesis which handled the difference between the mean scores of the control group and those of the experimental group on the post administration of the language- related life skills observation checklist are shown in the following table.

Table 16: Comparing performance of the control and experimental groups on the post-administration of the life skills observation checklist

Skills	Groups	N	Mean	SD.	t Value	Df	Sig.
Critical thinking	Experimental	40	18.05	0.714	53.67	77	0.01
	Control	39	6.59	1.141			
communication	Experimental	40	19.35	1.642	25.58	77	0.01
	Control	39	10.1	1.569			
self- management	Experimental	40	14.08	0.73	51.34	77	0.01
	Control	39	4.54	0.913			
Cooperation	Experimental	40	17.05	1.358	40.39	77	0.01
	Control	39	5.69	1.127			
Decision- making	Experimental	40	16.35	1.477	32.86	77	0.01
	Control	39	5.41	1.482			
Empathy	Experimental	40	16.6	1.374	39.09	77	0.01
	Control	39	5.28	1.191			
Respect of diversity	Experimental	40	13.65	1.122	40.36	77	0.01
	Control	39	4.46	0.884			
Total	Experimental	40	115.13	4.127	74.83	77	0.01
	Control	39	42.08	4.544			

Table (16) illustrates that the mean scores of the experimental group pupils in the seven language- related life skills and in the total are higher than those of the control group. In addition, all *t*-values are significant at (0.01) level which reflects that there is a statistically significant difference between the experimental and control groups in the individual skills and in the total score on the post-administration of the life skills observation checklist in favor of the experimental group. In other words, the experimental group pupils outperformed their counterparts of the control group in their language- related life skills as measured by the observation checklist. Consequently, the third hypothesis was verified and accepted.

The fourth hypothesis stated that “There is a statistically significant difference between the mean scores of the experimental group pupils on the pre- and post- administrations of the language- related life skills observation checklist in favor of the post- administration.”. In order to verify this hypothesis, the researcher used "**t**" test for dependent groups to identify the significance of differences between the mean scores of the experimental group pupils on the pre- and post- administrations of the observation checklist. The following table illustrates (t) values and their statistical significance.

Table 17: comparing performance of the experimental group on the pre- and post- administrations of the life skills observation checklist

Skills	Measurement	N	Mean	SD.	t Value	Df	Sig	(η^2)
Critical thinking	Pre	40	2.28	0.679	102.47	39	0.01	0.928
	Post		18.05	0.714				
communication	Pre	40	2.15	0.7	68.49	39	0.01	0.873
	Post		19.35	1.642				
self-management	Pre	40	2.4	0.672	76.04	39	0.01	0.905
	Post		14.08	0.73				
Cooperation	Pre	40	2.33	0.764	59.37	39	0.01	0.921
	Post		17.05	1.358				
Decision-making	Pre	40	2.38	0.705	55.48	39	0.01	0.912
	Post		16.35	1.477				
Empathy	Pre	40	2.48	0.64	59.35	39	0.01	0.898
	Post		16.6	1.374				
Respect of diversity	Pre	40	2.4	0.632	52.55	39	0.01	0.921
	Post		13.65	1.122				
Total	Pre	40	16.4	2.994	122.7	39	0.01	0.947
	Post		115.13	4.127				

Results in table (17) clarify that there is a statistically significant difference between the mean scores of the experimental group pupils on the pre- and post- administrations of the life skills observation checklist in favor of the post one. Mean score of the post- administration was (115.13) for the total score of the scale; which is a high value when compared to the Mean of the pre- administration (16.4). The values of "t" were statistically significant at (0.01) level; a result that indicates that the differentiated model was effective in developing language- related life skills for the targeted sample. Consequently, the fifth hypothesis was accepted.

To examine the impact of the treatment; i.e. the differentiated SIOP model on developing language- related life skills of primary stage pupils in an EFL inclusive classroom, the effect size using (η^2) was estimated. Statistics in table 18 illustrate that the effect size of the treatment as a whole was (0.947), which is a high ratio where the effect ratio should equal or surpass a value of (0.14). These statistics can be interpreted that (94.7%) of variance in performance of the students in their language- related life skills as a whole can be attributed to the effect of implementing the differentiated SIOP model. Concerning each of the seven life skills, the effect ratio ranged between (0.873 and 0.928) which is considered a high effect as well.

Hypothesis five stated that "There is a statistically significant difference between the mean scores of the experimental and control group pupils on the post- administration of the motivation towards learning scale

in favor of the experimental group”. In order to verify the fifth hypothesis, the researcher used "t" test for independent groups to identify the significance of differences between the mean scores of the experimental and control group pupils on the post- administration of the motivation scale. The following table illustrates (t) values and their statistical significance.

Table 18: Comparing performance of the control and experimental groups on the post-administration of the motivation scale

Dimensions	Groups	N	Mean	SD	t Value	Df	Sig
Competence	Experimental	40	13.68	0.656	26.78	77	0.01
	Control	39	8.51	1.023			
Control/autonomy	Experimental	40	13.65	0.662	22.2	77	0.01
	Control	39	8.08	1.44			
Interest/value	Experimental	40	13.40	0.841	21.19	77	0.01
	Control	39	8.23	1.287			
Relatedness	Experimental	40	13.38	0.979	20.7	77	0.01
	Control	39	7.85	1.368			
Total	Experimental	40	54.10	2.58	35.25	77	0.01
	Control	39	32.67	2.822			

It is clear that there is a statistically significant difference between the mean scores of the experimental and control groups pupils on the post-administration of the motivation scale in favor of the experimental group. The mean score for the scale was (54.1) for the experimental group and (32.67) for the control group. The values of "t" were statistically significant at (0.01) level of significance in favor of the experimental group, both for the total score of the scale and the scores of the four component dimensions. Thus, the fifth hypothesis was accepted.

The sixth hypothesis stated that “There is a statistically significant difference between the mean scores of the experimental group pupils on the pre- and post- administrations of the motivation scale in favor of the post one”. To verify this hypothesis, the researcher used "t" test for dependent groups to determine the significance of differences between the mean scores of the experimental group pupils on the pre- and post- administrations of the motivation scale. The following table illustrates these results.

Table 19: comparing performance of the experimental group on the pre- and post- administrations of the motivation scale

Dimensions	Measurement	N	Mean	SD	tValue	Df	Sig	η^2
Competence	Pre	40	6.45	1.239	31.71	39	0.01	0.963
	Post		13.68	0.656				
Control/ autonomy	Pre	40	7.05	1.449	28.18	39	0.01	0.953
	Post		13.65	0.662				
Interest/ value	Pre	40	6.75	1.296	28.14	39	0.01	0.953
	Post		13.4	0.841				
Relatedness	Pre	40	6.58	1.196	27.64	39	0.01	0.951
	Post		13.38	0.979				
Total	Pre	40	26.83	3.381	40.66	39	0.01	0.977
	Post		54.1	2.58				

Results in table (19) clarify that there is a statistically significant difference between the mean scores of the experimental group pupils on the pre- and post- administrations of the motivation scale in favor of the post one. Mean score of the post- administration was (54.1) for the total score of the scale; which is a high value when compared to the Mean of the pre-administration (26.83). The values of "t" were statistically significant at (0.01) level; a result that indicates that the model was effective in developing motivation towards learning life skills for the targeted sample. Consequently, the fifth hypothesis was accepted.

To examine the impact of the treatment; i.e. the differentiated SIOP model on developing motivation towards learning language- related life skills of primary stage pupils in an EFL inclusive classroom, the effect size using (η^2) was estimated. Statistics in table (20) illustrate that the effect size of the treatment as a whole was (0.977), which is a high ratio where the effect ratio should equal or surpass a value of (0.14). These statistics can be interpreted that (97.7%) of variance in the pupils' motivation of learning language- related life skills as a whole can be attributed to the effect of implementing the differentiated SIOP model. Concerning each of the four dimensions of motivation, the effect ratio ranged between (0.951 and 0.963) which is considered a high effect as well.

To verify **the seventh hypothesis** which states that "There is a positive correlation between fourth- year primary pupils' language- related life skills and their motivation towards learning them", the researcher used simple Pearson correlation coefficient to estimate the correlation coefficient between the scores of the experimental group pupils on the post-administrations of the situational test, the language- related life skills

observation checklist, and the motivation scale. The following table illustrates value of correlation coefficient of Pearson and its statistical significance:

Table 20: Pearson's correlation coefficients between language- related life skills and motivation towards learning them

r	Situational test	Observation checklist	Motivation scale
Situational test	1		
Observation checklist	0.947**	1	
Motivation scale	0.922**	0.955**	1

Statistics in table (20) indicate that there is a positive direct correlation between the experimental group's scores in the post-administrations of language- related life skills situational test, language-related life skills observation checklist, and motivation towards learning life skills motivation scale as values of (r) were statistically significant at 0.01 level. Consequently, the seventh hypothesis was accepted as there proved to be a positive correlation between language- related life skills and motivation towards learning them.

Discussion:

The current research attempted to investigate the effect of implementing a differentiated SIOP model for developing language- related life skills and motivation towards learning them of primary stage pupils in an inclusive EFL classroom. The results revealed a statistically significant difference at (0.01) level between the mean scores of the experimental and control groups pupils on the post- administration of the language- related life skills situational test and observation checklist in favor of the experimental group. Moreover, there was a statistically significant difference between the mean scores of the experimental group pupils on the pre- and post- administrations of the language- related life skills situational test and observation checklist in favor of the post one. This means that the language- related life skills of primary stage pupils in an inclusive EFL classroom improved as a result of applying the differentiated SIOP model. Further, the results indicated a statistically significant difference at (0.01) level between the mean scores of the experimental and control group pupils on the post- administration of the motivation towards learning scale in favor of the experimental group and a statistically significant difference between the mean scores of the experimental group pupils on the pre- and post-administrations of the motivation scale in favor of the post one. Finally, the study highlighted a positive correlation between language- related life skills

and motivation and that increased motivation can contribute much to enhancing language- related life skills and vice versa.

The present research provides evidence for the effectiveness of using a differentiated SIOP model as a framework for teaching and developing language- related life skills of primary pupils in an inclusive EFL classroom setting and their motivation towards learning them. The findings of the current research corroborate the previous relevant studies that investigated the effect of using SIOP model on developing various skills and learning dimensions such as developing reading comprehension (Nichols, 2012), improving teaching effectiveness and thus improving students' writing, oral language and total English scores (Short, Fidelman& Louguit, 2012; Koura& Zahran, 2017), and improving reading fluency (Gates& Feng, 2018).

The achieved results could be attributed to the benefits of incorporating the differentiated SIOP model as a research- validated model for developing professional development for teachers, and consequently leads to student learning improvement. It has very useful features that aid teachers to achieve high levels of performance in the targeted competence. Its systematic procedures and specific features help teachers identify and organize their work in the classroom, enable them to be aware of their objectives to be achieved in a very concise manner.

Generally speaking, pupils who participated in the research expressed their satisfaction with and enthusiasm about the way they have been taught life skills in the EFL classroom. They found it different, encouraging, interesting, and suitable for their abilities. They were especially interested in the idea of having the opportunity to choose the task they like to perform. Further, the various activities implemented in the class enabled them to interact together and understand language- related life skills and learn the value of implementing them in various situations. In addition, their motivation towards learning life skills increased as the integrated activities agitated their enthusiasm to participate and show their full potential in achieving high levels of thinking and learning.

The differentiated SIOP model was convenient and systematic which enabled the teacher to implement it easily and be able to achieve the lesson objectives that comprise language, content and life skills objectives. Once the teacher plans his lessons in accordance with the differentiated SIOP framework, it becomes easy for him to apply it. However, the teacher complained about the lengthy steps of the model and the features of each step where she became confused. The researcher prepared a teacher's guide

where every step was thoroughly explained and illustrated with examples and pictures to overcome that obstacle. Classroom and time management were challenging for the teacher. However, when pupils got engaged in the activities and got motivated to learn and participate in interesting activities as they match their abilities, the issue of classroom and time management become manageable for the teacher. Further, pupils with learning difficulties were engaged in learning and participating in every activity designed for them because these activities matched their abilities and interests as well. The atmosphere of the classroom reflected the life skills being developed; empathy, cooperation, respect, self- management and communication were apparent and prevailing throughout the experiment.

Conclusions:

In conclusion, language- related life skills are becoming essential field of study and mastery in all educational stages; they are being integrated within curricula. However, there is no specific plan or process for teaching them within the framework of everyday language lessons. Moreover, pupils may lack motivation for learning them as they do not recognize their value and relatedness to their study. In addition, primary stage classrooms in most of schools all over the republic of Egypt have inclusion pupils who are in dire need to get engaged within the teaching process and have activities and assignments that match their abilities and interests. The SIOP model represents a validated tool that can be utilized with the support of differentiated instruction to meet the needs of those pupils and aids the teachers in their hard task of designing inclusive and differentiated lessons at the same time.

Recommendations:

In the light of the results of the current research, the following recommendations are suggested:

- 1- There should be much attention directed to orienting students in general and primary stage pupils in particular in life skills as it is an inevitable demand in the current age and significant for those pupils in the childhood period when their characters are being formulated.
- 2- Curriculum planners and designers should provide teachers with specific procedures and multiple alternatives for planning and presenting their lessons with the availability of chances for creativity. Differentiated SIOP model is a great instrument for achieving this goal.
- 3- Professional development programs should be constantly provided for EFL teachers, especially those who teach special needs pupils within

the inclusive classroom context. They need specific procedures and techniques to achieve their teaching objectives and also achieve the utmost benefit for those pupils to learn through motivating and engaging them in learning.

- 4- Researchers should shed more light on differentiated instruction and systematic models of teaching that help teachers in their teaching and saving effort through concise and precise procedures with the availability of opportunities to show their creativity in teaching.

Suggestions for further research:

In the light of results reached and recommendations proposed by the current study, the following research topics are suggested:

- Investigating the impact of the SIOP model on developing various language skills in the primary stage.
- The impact of the SIOP model as a professional development approach on developing EFL teachers' creative teaching competence.
- Investigating the effect of AI applications on developing language skills in inclusive classrooms.
- Investigating the effect of other innovative approaches in teaching special educational needs students in various educational stages.

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