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The Effectiveness of the POEE Strategy in Developing Life Skills among Second-Year Intermediate Female Students

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ABSTRACT: The present research aims to identify the effect of the POEE strategy on developing life skills among second-year intermediate female students. To achieve this aim, the researcher formulated the following null hypotheses:

1. There is no statistically significant difference at the significance level (0.05) between the mean scores of the experimental group, who study Social Studies according to the POEE strategy, on the pre- and post-administrations of the life skills scale.

2. There is no statistically significant difference at the significance level (0.05) between the mean scores of the control group, who study Social Studies by the conventional method, on the pre- and post-administrations of the life skills scale.

The researcher adopted the experimental method and selected a partial-control experimental design. She prepared a life skills scale. The research population was defined as second-year intermediate female students in the government day intermediate schools affiliated with the Directorate of Education of Babylon (city center). The experimental group, taught according to the POEE strategy, comprised (35) students, and the control group comprised (38) students.

The researcher equated the students of the two research groups in the following variables: chronological age calculated in months, fathers' educational attainment, mothers' educational attainment, intelligence test score, the pre-test of the life skills scale, and a prior-knowledge test.

The instructional material comprised the last four chapters of Part Two (Chapters Three, Four, Five and Six) of the Social Studies textbook for the second intermediate grade, prescribed for the 2025–2026 academic year under the official semester (course-based) system. In light of this material, the researcher formulated (120) behavioral objectives and prepared (48) daily lesson plans for the experimental and control groups, (24) plans for each group. The research instrument, the life skills scale, comprised six skills (self-esteem, critical thinking, communication, decision-making, planning and goal setting, and support), with (24) items distributed across the six skills. To arrive at the results, the data were collected and analyzed using several statistical methods with the aid of the Statistical Package (SPSS). The results showed the effectiveness of the POEE strategy in developing life skills, as statistically significant differences were found at the (0.05) level between the mean scores of the experimental and control groups, in favor of the experimental group.

In light of the results, the researcher concluded the following:

1. The effectiveness of the POEE strategy in developing life skills among the experimental group students compared with the control group.

The researcher recommended the following:

1. The necessity of organizing workshops to train Social Studies teachers in the use of modern teaching methods and strategies, including the POEE strategy, because of its effect on developing life skills.

2. The necessity of focusing on developing life skills appropriate for students at all educational stages.

The researcher proposed the following:

1. Conducting a study entitled "The Effect of the POEE Strategy on Developing Holistic Thinking among Second-Year Intermediate Female Students in Social Studies."

2. The effectiveness of a proposed program based on the POEE strategy in developing inferential thinking and awareness of some contemporary historical issues among student-teachers in the Department of History at the College of Basic Education.

3. Conducting field studies to identify students' general level of possession of life skills, and benefiting from workshops to develop them.

INTRODUCTION

Definition of the Research

First: The Research Problem

Education is a human, social and civilizational process that aims at achieving civilizational progress. It rests fundamentally on the processes of learning and teaching, which depend on the teacher's efforts in shaping the learner's personality and behavior. Within this framework, education seeks to develop the learner's personality so that the learner becomes able to contribute to building his or her homeland and serving society and humanity, in line with the aspirations and goals of society (Al-Tamimi, 2009: 273).

For this reason, the researcher prepared a questionnaire to survey the opinions of female Social Studies teachers in government day intermediate schools. The respondents represented (10%) of the Social Studies teachers in the schools of the center of Al-Hillah city, Babylon Governorate. The questionnaire included a number of questions on the reality of teaching Social Studies, to survey the teachers' views on the level of students' achievement in Social Studies at the intermediate stage (second intermediate grade); questions on the teaching methods and modern strategies they use in teaching Social Studies to the second intermediate grade; whether they have prior knowledge of the POEE strategy; and whether second intermediate female students possess good life skills that help them deal with the problems and needs they face in their daily lives.

The results showed that the response rate to the first question was (80%), indicating a marked weakness in the achievement level of second intermediate female students in Social Studies. The teachers attributed this weakness to the large number, difficulty and breadth of the Social Studies topics, as well as to the weak infrastructure of schools and the shortness of the class period. As for the second question, concerning the use of modern teaching strategies and methods, the response rate was (93%), as most of the teachers indicated that they rely on conventional methods in teaching Social Studies, justifying this by their suitability to the classroom and school reality. The response rate to the third question was (100%), indicating that none of them was familiar with the POEE strategy, and that they lacked any prior conception of it or of how to use and apply it. As for the fourth question, (87%) of second intermediate female students were reported to suffer from a lack of life skills.

Accordingly, the researcher defined the problem of the present study by answering the following question:

What is the effect of the POEE strategy on developing life skills among second intermediate female students?

Second: Significance of the Research

In light of the foregoing, the significance of the study can be summarized as follows:

- The POEE strategy is one of the modern and vital teaching strategies at present; its importance therefore lies in keeping pace with cognitive development.
- The possibility of benefiting from it in educational and instructional institutions, given the urgent need for such a study in dealing with the low level of life skills.
- Drawing the attention of those concerned in the Ministry of Education to benefit from the results of this research in identifying the effect of the POEE strategy on developing life skills.
- The results of the present research may contribute to finding solutions to the problem of the low level of life skills and the scarce use of modern strategies in teaching.
- The importance of education as a comprehensive, integrated system that addresses the learner in all aspects.
- Instruction is the effective tool for achieving the aims of education by providing the material and psychological conditions that enhance the learner's interaction with the educational process.
- The second intermediate grade is one of the important educational stages, as it plays a role in forming the student's personality and developing her skills, inclinations and abilities.

Third: Research Objective

To identify the effect of the POEE strategy on developing life skills among second intermediate female students.

Fourth: Research Hypotheses

1. There is no statistically significant difference at the level (0.05) between the mean scores of the experimental group students, who study Social Studies according to the POEE strategy, on the pre- and post-administrations of the life skills scale.
2. There is no statistically significant difference at the level (0.05) between the mean scores of the control group students, who study Social Studies by the conventional method, on the pre- and post-administrations of the life skills scale.

Fifth: Research Delimitations

The present research is limited to the following:

First, spatial delimitation: government day intermediate and secondary schools for girls in Iraq, Babylon Governorate / Babylon Directorate of Education / the center of Al-Hillah city, for the academic year 2025/2026.

Second, human delimitation: all second intermediate female students in government day intermediate and secondary schools for girls in the center of Al-Hillah city, affiliated with the Directorate of Education of Babylon Governorate.

Third, temporal delimitation: the second semester of the academic year 2025/2026.

Definition of Terms

First: Effect. Defined by Shehata and Zainab (2003) as: "the outcome of the desired or undesired change that appears through the educational process" (Shehata and Zainab, 2003: 22).

The researcher defines it operationally as: the extent of the change that the POEE strategy brought about among the students of the research sample in the achievement test that the researcher prepared for the Social Studies material taught to second intermediate female students, which was administered at the end of the experiment.

Second: The POEE strategy. It was defined by:

- Sadiq (2016): "an organized teaching plan consisting of four basic stages (observation, explanation, exploration or application) that aims to develop mental skills and thinking skills through the skills of attention, observation,

explanation, comparison, clarification, application and other skills in which students are trained and which they carry out during the lesson under the teacher's supervision" (Sadiq, 2016: 132).

- **The researcher defines it operationally as:** a teaching strategy comprising four stages, which the researcher adopted in teaching the experimental group students the topics of Social Studies (History and Geography) for the second intermediate grade. The strategy begins with prediction, which is anticipating the outcome of a topic. Next comes the observation stage, in which the students observe the teacher's explanation of the topic. This is followed by the explanation stage, in which the students explain their predictions and account for any conflict between them and the teacher's explanation. The final stage is application or exploration, in which the students apply what they have observed and explained.

Third: Development. It was defined by:

- Al-Zanfali (2012): "intentional processes that seek to bring about rapid growth within carefully designed plans and within a specific time frame" (Al-Zanfali, 2012: 19).
- **The researcher defines it operationally as:** the amount of change occurring in second intermediate female students' acquisition of life skills, through administering the pre- and post-tests of the scales to the research sample, represented by the scores obtained from applying the life skills scale.

Fourth: Life skills. They were defined by:

- Al-Rubaie (2016): "a set of behavioral and cognitive patterns that contribute to developing the individual's personality and enabling him or her to face various life situations effectively and in a balanced manner, and that help in positive social interaction" (Al-Rubaie, 2016: 22).
- **The researcher defines them operationally as:** a set of practical, cognitive and emotional behaviors and abilities that the student exercises inside and outside school, enabling her to communicate effectively with others, solve everyday problems and make appropriate decisions independently.

Section One: The Theoretical Framework

First: The Concept of the POEE Strategy

It is a learning approach based on stimulating thinking and developing its various skills. It is considered one of the constructivist learning strategies; it focuses on making the learner the center of the educational process, holds the learner responsible for learning, and makes the learner an active and positive participant. It is also characterized by organized steps that help the learner proceed in the learning process and enable him or her to achieve cognitive, affective and skill-related educational objectives (Al-Khalidi, 2020: 83).

Steps of the Strategy: Stages of the POEE Strategy

First: The Prediction Stage

Purpose of the stage: to identify the learners' prior knowledge and experiences, evaluate their ideas through group discussions, and elicit the alternative conceptions held by the learners.

Prediction as a skill can be defined as a mental process involving the learner's ability to use prior information or observation to predict the occurrence of a certain phenomenon or event in the future. Accordingly, when a learner discovers the relationship between heat and the expansion of metals, he or she becomes able to predict that railway tracks expand when a train passes over them, and that they would not expand if there were no gaps between the sections of the track (Zaitoun, 2010: 135).

Second: The Observation Stage

Purpose of the stage: to carry out practical activities and experiments to test the validity of the learners' predictions and expectations.

Observation is intentional, organized and disciplined attention to phenomena, events or matters with the aim of discovering their causes and laws. It requires conscious planning on the part of the learner and, consequently, needs practical training that

the learner must undergo; it also obliges the individual to use his or her various senses or to rely on other scientific tools and devices. For observation to fulfil its purpose in scientific research and inquiry, it must be organized, controlled, objective and accurate (Al-Najdi et al., 2003: 55).

Third: The Explanation (Interpretation) Stage

Purpose of the stage: to clarify and explain the concept to be learned, and to define the terms.

This stage is the core of the educational process, in which the learners' thinking is directed toward the concept under study so that it can be formulated and developed in an atmosphere of cooperation and communication among the learners. The concept should not be given by the teacher but should be presented by the learners. Attention should also be paid to their initial predictions by analyzing them and supporting them with evidence and proof, and the learners should record the observations they obtained during the practical activities stage and present them to the teacher (Al-Huwaidi, 2008: 71).

Fourth: The Exploration (Application) Stage

Purpose of the stage: to discover new applications of the concept, to clarify the relationship between the concept and other concepts, and to extend the concept to new topics in other school subjects.

In this stage the learners expand their thinking about the topic raised, dealing with it in greater detail from all its aspects, and all the learners take part in the thinking. This leads them to apply what they have learned in new situations, or provides them with additional experiences that stimulate other inquiry skills in them. It also helps the learner organize the new information and experiences obtained, together with similar experiences, within his or her cognitive structure, and helps confirm a correct scientific understanding of the concept (Al-Huwaidi, 2012: 244).

Learning strategies based on constructivist theory are distinguished by a number of characteristics that make them effective in teaching and learning concepts and developing certain skills. The POEE strategy also achieves the objectives of science education because it reflects the nature of science. Among its advantages are the following (Sadiq, 2016: 139):

- It increases learners' ability to acquire, understand and apply information.
- It links science to learners' lives through practical applications of theoretical information.
- It enables learners to benefit from the scientific concepts they learn at school in their practical lives, to link science with life, and to apply concepts and skills in new, similar situations.
- It reveals and treats learners' alternative conceptions and perceptions and provides them with correct concepts, so as to change learners' viewpoints to become more scientific, thereby deepening their correct understanding.
- It combines the inquiry method, multiple intelligences, and learner-centered individual learning.
- It encourages deep learning.
- It is simple to use and easy to assess.
- It contributes to increasing the level of social interaction and helps learners reflect on experiences and attain deep understanding, as discussion and scientific negotiation permeate its four stages.

Second: Life Skills

We must first understand the concept of skill, like other psychological concepts. Skill refers to quality and proficiency in performance; that is, a person performs any task with accuracy, speed and understanding, and accuracy and speed are measured by criteria or judgments set by specialists in each field (Abu Hatab and Sadiq, 2000: 47).

The Concept of Life Skills

Life skills are among the most important skills and are an absolute necessity for all individuals in any society. They are among the requirements that individuals need in order to adjust to themselves and to the society in which they live, which helps them solve their everyday problems and interact with different life situations (Abu Hammad, 2017: 20).

Life skills are defined as the personal and social behavior patterns that learners need in order to deal confidently and competently with themselves, with others and with society, by making appropriate and correct decisions, assuming personal and social responsibilities, understanding themselves and others, forming positive relationships with others, avoiding crises, and being able to think creatively (Shehata, 2011: 154).

The researcher considers life skills to be nothing other than the ability to deal with the demands of daily life, enabling the individual to integrate into his or her society and surrounding environment so as to live a dignified life. These skills differ from one society to another according to the requirements of that society, and some of them are important and necessary at all stages of an individual's life.

Aspects of Life Skills

A. The cognitive aspect: When a person learns a skill, he or she must be familiar with all the cognitive aspects related to that skill. If this is not available, the person cannot perform it accurately even if he or she has the physical ability to do so. This is because the levels of skill learning, the first of which is perception, fall within mental processes; consequently, a skill is not merely a motor activity, and this is confirmed by the fact that knowing that something has been done differs from knowing how to do it.

B. The performance aspect: This is the individual's knowledge of the cognitive aspects of life skills, having passed through the first level of skill learning, which is perception. The second aspect then follows, namely how these skills are performed in practice, and it ranges between:

- **Weak performance:** the level at which the learner is in the early stages.
- **Average performance:** performance higher than weak, through which the amount of learning can be identified.
- **Ordinary performance:** the minimum level of performance; this stage indicates that the learner has learned well.
- **Skilled performance:** higher than ordinary performance, represented by ideal performance in terms of speed and mastery.

C. The affective aspect: This is one of the most important guides of human behavior and one of the basic aspects of learning that cannot be neglected. This aspect relates to attitudes, appreciation, values and emotions.

Life skills are therefore compound skills that require a number of actual sub-skills for their completion, and these sub-skills comprise cognitive, performance and affective aspects (Abdul Latif, 2002: 34–35).

Kojak (1996: 76) indicates that acquiring life skills is of particular importance, represented in the following:

- They give the individual the ability to perform tasks with ease and facility; a person who possesses a skill is distinguished from one who does not by the latter's taking a long time that is out of proportion to the nature of the task and the time it requires.
- They give the learner an inclination toward science, since mastering the basic skills in science enables the learner to approach it and to use these skills to obtain a number of items of knowledge, which increases the student's interest in science and in delving into its study.
- Acquiring skills alongside acquiring information works to modify the behavior that curriculum designers seek.
- Acquiring life skills and linking them with knowledge leads to the development of the individual's health, social, spiritual and mental aspects.
- The individual's mastery of life skills and practice of them in various situations gives the individual a sense of pride and self-esteem; when he or she is asked to carry out a task and performs it competently, this makes others feel confident in him or her, which gives the individual further self-confidence (Abdul Fattah, 2003: 76).

Stages of Acquiring Life Skills

- Analyzing the skill into specific steps or stages.

- Arranging the steps of the skill in a specific sequence.
- Training on each of the arranged steps.
- Linking each step with the step preceding it and the step following it in integration and harmony (Abu Hammad, 2017: 16).

Factors Affecting the Development of Life Skills

A number of factors help an individual acquire life skills, including the following:

- **Supportive relationships:** that is, the presence of supportive relationships makes the individual persist in acquiring skills or neglect them.
- **Models:** that is, the strength or weakness of a skill is affected by the individual's observation of models performing that skill.
- **Instructions:** most skill instructions are acquired at home, but work, study and health-maintenance skills should be learned properly outside the home.
- **Sequence of reinforcement:** for example, receiving continuous encouragement helps develop the targeted skill.
- **Availability of opportunity:** when an individual depends on others to perform life skills, it becomes difficult for the individual to acquire those skills.
- **Peer interaction:** learning skills with peers is useful, depending on the nature of the skill and the peers.
- **Gender consideration:** gender affects the acquisition of certain kinds of skills.
- **Social and cultural level.**
- **The presence of challenges facing the individual.**
- **Thinking skills:** they contribute positively to the acquisition and development of life skills (Ibrahim, 2012).

Because human beings are social by nature, and their persistent search for self-realization and identity requires a set of life skills that facilitate communication and interaction with their surroundings and help them accomplish their aspirations and hopes (Abu Hammad, 2017: 17).

As a result of this importance, several classifications of life skills have appeared, regarded as important in building correct, sound and positive behavior patterns among learners. These classifications include:

First: the classification of Omran et al. (2004: 14–15).

Second: the classification of Hamed and Al-Baz (1999: 87–88).

Third: the World Health Organization classification.

The researcher chose the World Health Organization classification because it is consistent with the nature of the chosen sample, the community surrounding it, and the sample's age group and cognitive level. For all of this, the researcher relied on the skills classification presented by the World Health Organization as one of the classifications for identifying the basic skills that the learner needs. This classification included (12) skills that the organization considered essential in the life of the individual in general and the learner in particular. After the panel of experts agreed, at a rate of (80%) or more, on (6) of them to be the focus of the present study, because of their direct relevance to the study's aim, the cognitive and perceptual level of the sample, and the nature of Iraqi society.

The following is an explanation of the World Health Organization's classification of life skills.

In 2001–2002, the World Health Organization–UNICEF conducted a study aimed at discovering and describing what agencies and organizations in different regions of the world are doing to activate life skills. Fifty (50) organizations took part in the survey: (20) government ministries, (16) United Nations organizations and (14) non-governmental organizations. The most important life skills that were repeatedly raised were as follows:

- Coping with stress, emotions and tension.
- Communication skills.
- Interpersonal relationship skills.
- Decision-making.
- Problem solving.
- Self-esteem.
- Critical thinking.
- Safety at home and at school.
- Personal safety.
- Conflict resolution.
- Planning and goal setting.
- Support (Abu Hammad, 2017: 31).

The skills that were selected:

1. Self-esteem skill
2. Communication skills
3. Planning and goal-setting skills
4. Critical thinking skills
5. Decision-making skills
6. Support skills

Section Two: Previous Studies

The Effect of the POEE Strategy on Developing Life Skills among Second Intermediate Female Students

Researcher, year, country	Study aim	Independent variable	Dependent variable	Sample	Method	Instrument	Statistical methods	Results
Al-Agha, 2012, Palestine	The effectiveness of employing the 7E strategy in developing life skills in the Palestinian General Science subject among fifth-grade basic students.	7E strategy	Development of life skills	81 students	Experimental	Decision-making skill scale and observation card	T-test; Cronbach's alpha equation; Pearson correlation coefficient; equation (d) for effect size	Superiority of the experimental group, taught according to the 7E strategy, over the control group

Aspects of Benefiting from Previous Studies

1. Defining the research problem and its importance for the present research.

2. Adopting the experimental design appropriate to the circumstances of the present research.
3. Identifying the sample size appropriate for the present research.
4. Consulting sources related to the topic of the present research and benefiting from them.
5. Examining the tests used in preparing the dependent variable.
6. Choosing the statistical methods appropriate for conducting the present research.

Research Methodology and Procedures

First: Research Methodology

The researcher followed the experimental method because of its suitability for achieving the aims of the present research. The experimental method is an approach that involves conducting experiments to determine the relationship between two factors, one an independent experimental factor and the other a dependent one (Inayah, 2014: 48).

Second: Experimental Design

The researcher adopted an experimental design (a partial-control design with two groups, experimental and control, with pre- and post-tests) appropriate to the circumstances of the present research, as shown in the following figure.

Group	Pre-test	Independent variable	Dependent variable	Post-test
Experimental	Life skills scale; Life skills scale	POEE strategy	Achievement; Life skills	Post-achievement test; Life skills scale
Control		—		

Figure (6): The experimental design of the research

Third: Research Population

The population of the present research comprises all intermediate and secondary schools for girls affiliated with the center of the General Directorate of Education of Babylon for the academic year (2025–2026). To define this population, the researcher used a facilitation-of-task letter issued by the College of Basic Education / Postgraduate Studies, University of Babylon, addressed to the Babylon Directorate of Education. The researcher visited the Babylon Directorate of Education on the basis of the letter issued by the Directorate / Training and Preparation Division, and went to the Statistics Division in order to obtain the data. The size of the research population was (46) schools, intermediate and secondary, with (8,288) female students.

Fourth: Research Sample

A. School sample: The research required the selection of two intermediate girls' schools that include second intermediate grade classes within the boundaries of the center of Babylon Governorate. The schools sample was selected randomly so that the results of the experiment could be generalized to the research population.

B. Student sample: The researcher visited the two schools she had selected for conducting the experiment, accompanied by the facilitation-of-task letter issued by the General Directorate of Education in Babylon Governorate, to facilitate the conduct of the experiment. The sections were then selected by the random method[1], that is, by random drawing. Section (C) of Al-Siyada Girls' Intermediate School was selected as the experimental group, taught according to the POEE strategy, with (35)

[1]The random method: The researcher placed five paper slips, equal in number to the sections in Al-Siyada Girls' Intermediate School, where the experiment was conducted, each bearing a letter as follows: (A), (B), (C), (D), (E), in a small bag, and drew one slip at random to represent the research (experimental) group; the slip bore the letter (C). In the same way, the researcher at Al-I'timad Intermediate School selected the control group sample, and the slip bore the letter (D), representing the control group sample.

students. The control group sample was also selected randomly from Al-I'timad Intermediate School, with (38) students, and this sample represented Section (D). The total number of students in the two samples was thus (73).

Group	Section	Number of students before exclusion	Number of repeating students	Number of students after exclusion
Experimental	C	—	—	35
Control	A			38
Total				73

Fifth: Equivalence of the Two Research Groups

To ensure the soundness of the experiment before starting it, the researcher statistically equated the students of the two research groups (experimental and control) in some variables believed to be capable of affecting the results of the experiment. These variables are as follows:

A. Students' chronological age calculated in months.

B. Fathers' educational attainment.

C. Mothers' educational attainment.

D. Intelligence test scores.

E. The pre-test of the two research groups, control and experimental, on the life skills scale.

F. The prior-knowledge test.

A. Students' chronological age calculated in months

Group	N	Mean	SD	Variance	Calculated t-value	df	Tabulated t-value	Significance
Experimental	35	163.43	3.85	14.82	1.381	71	2	Not statistically significant
Control	38	164.71	4.06	16.48				

B. Fathers' educational attainment

Table (5): Educational attainment of the fathers of the two research groups, and calculated and tabulated chi-square (χ^2) values

Group	N	Reads and writes / Primary	Intermediate	Preparatory and institute	College and above	Calc. χ^2	Tab. χ^2	df	Significance
Experimental	35	8	14	7	6	4.374	7.815	3	Not statistically significant

Group	N	Reads and writes / Primary	Intermediate	Preparatory and institute	College and above	Calc. χ^2	Tab. χ^2	df	Significance
Control	38	13	7	11	7				

C. Mothers' educational attainment

Table (6): Frequencies of the educational attainment of the mothers of the students of the two research groups, and calculated and tabulated chi-square (χ^2) values

Group	N	Reads and writes / Primary	Intermediate	Preparatory and institute	College and above	Calc. χ^2	Tab. χ^2	df	Significance
Experimental	35	10	9	8	8	1.140	7.815	3	Not statistically significant
Control	38	12	13	6	7				

D. Raven's intelligence test

Intelligence is the individual's overall capacity for purposeful action and logical thinking (Kharabsheh, 2007: 182).

Table (7): The two research groups on the intelligence test

Group	N	Mean	SD	Variance	Calculated t-value	df	Tabulated t-value	Significance
Experimental	35	24.49	8.18	66.91	0.332	71	2	Not statistically significant
Control	38	25.13	8.42	70.90				

E. Prior-knowledge test

Table (8): Scores of the two research groups on the prior-knowledge test

Group	N	Mean	SD	Variance	Calculated t-value	df	Tabulated t-value	Significance
Experimental	35	11.8	3.98	15.84	0.433	71	2	Not statistically significant
Control	38	11.39	4.01	16.08				

F. Equivalence on the pre-test of the life skills scale

The importance of the pre-administration of the scale lies in ensuring the homogeneity of the sample and the equivalence between the two groups. The life skills scale was administered after its psychometric properties (validity and reliability) had been established. Once it was ready for administration, it was administered to the research sample on Sunday (22/2/2026) to both the experimental and control groups, under the researcher's direct supervision and with a full explanation of the nature and purpose of the scale. After the results were tabulated and statistically processed, it became clear that there was no difference between the two samples and that they were equivalent, as shown in Table (9).

Table (9): Scores of the two research groups on the pre-test scale

Group	N	Mean	SD	Variance	Calculated t-value	df	Tabulated t-value	Significance
Experimental	35	42.69	6.39	40.83	0.145	71	2	Not statistically significant
Control	38	42.97	9.99	99.80				

Sixth: The Research Instrument (Life Skills Scale)

After reviewing a number of educational works and relevant studies on the dependent variable (life skills), including the studies of Shinawa and Al-Agha, the researcher constructed the scale items so as to suit the aims of the present research and the cognitive level of the research sample (second intermediate female students).

The researcher prepared the life skills scale according to the following steps:

1. Determining the life skills

The researcher determined the life skills according to a study conducted by the World Health Organization–UNICEF in the period 2001–2002. These skills were presented to arbitrators and experts in order to select (6) of them that they considered suitable for the research sample in terms of cognitive level, age group and the sample's need for such skills. The skills are:

- Self-esteem skill.
- Communication skill.
- Planning and goal-setting skill.
- Critical thinking skill.
- Decision-making skill.
- Support skill.

2. Formulating the scale items

The scale consists of (6) main components: the self-esteem skill, comprising (4) items; the planning and goal-setting skill, comprising (4); the decision-making skill, comprising (4) items; the critical thinking skill, comprising (4) items; the communication skill, comprising (4) items; and the support skill, comprising (4) items. The total number of scale items thus became (24) items.

3. Validity of the scale

Face validity: The researcher applied the statistical method (chi-square, χ^2) to verify the validity of the items, as shown in Table (15), until the scale was produced in its final form.

Table (17): Percentage of agreement among experts and arbitrators on the scale items according to the chi-square test

No.	Items	Total number of arbitrators	Agreeing	Disagreeing	Percentage	df	Chi-square value	Tabulated value	Statistical significance
1	1, 3, 4, 8, 9, 12, 13, 14, 18, 20	20	20	0	100%	1	20	3.84	Significant
2	5, 6, 11, 15, 17, 19		19	1	95%	1	16.2	3.84	Significant
3	2, 7, 10, 16, 23		18	2	90%	1	12.8	3.84	Significant
4	21, 22, 24		17	3	85%	1	9.8	3.84	Significant

Pilot Administration of the Life Skills Scale

A. The first pilot sample (clarity of instructions and items): To verify the clarity of the items and to determine the time taken to answer all the test items, the researcher administered the scale to a pilot sample of (30) students at Al-Wa'ili Girls' Intermediate School on Wednesday (18/2/2026). Through her supervision of the administration, the researcher observed that the answering instructions and test items were clear, as evidenced by the students' few queries about how to answer. The response time was calculated by recording the time each student took, noted on her paper when she finished answering. The mean time taken to answer the test items was approximately (36) minutes, using the following equation to calculate response time:

Mean time = (sum of individual times) ÷ (number of students) (Obaidat, 2005: 108)

= 1084 ÷ 30 = 36 minutes

B. The second pilot sample (statistical analysis sample): The researcher administered the life skills scale to a sample of (100) students from Al-Nabʿ Al-Safi Girls' Intermediate School, one of the schools of the research population, on Thursday (19/2/2026). The researcher personally supervised the administration of the scale. After the data were tabulated, she ranked the scores in descending order from the highest score, which was (60), to the lowest, which was (29). The discriminating power and the reliability coefficient were then calculated, and the upper and lower extreme groups were selected at a rate of (27%) as the two best groups representing the whole sample, as clarified below.

Statistical Analysis Procedures for the Scale Items

Construct validity: The researcher verified the construct validity of the life skills scale despite having verified its face validity. To do so, she used the scores of the pilot sample employed in the statistical analysis of the scale to obtain the following:

A. Relationship of the item to the total score of the scale

Relationship of the item to the total score

Item	Correlation coefficient	Item	Correlation coefficient	Item	Correlation coefficient	Item	Correlation coefficient
1	0.55	7	0.48	13	0.54	19	0.55
2	0.43	8	0.55	14	0.44	20	0.46

Item	Correlation coefficient	Item	Correlation coefficient	Item	Correlation coefficient	Item	Correlation coefficient
3	0.41	9	0.64	15	0.58	21	0.53
4	0.47	10	0.63	16	0.55	22	0.55
5	0.47	11	0.57	17	0.63	23	0.56
6	0.47	12	0.59	18	0.60	24	0.58

B. Relationship of the item to the skill

Table (19): Relationship of the item to the skill

Item	First skill	Item	Second skill	Item	Third skill	Item	Fourth skill	Item	Fifth skill	Item	Sixth skill
1	0.64	1	0.64	1	0.71	1	0.75	1	0.72	1	0.65
2	0.64	2	0.61	2	0.74	2	0.61	2	0.61	2	0.69
3	0.65	3	0.69	3	0.74	3	0.64	3	0.71	3	0.63
4	0.53	4	0.69	4	0.69	4	0.68	4	0.71	4	0.64

C. Relationship of the skill to the total score

Table (20): Relationship of the skill to the total score

Skill	Correlation coefficient
Self-esteem	0.75
Communication	0.75
Planning and goal setting	0.85
Critical thinking	0.79
Decision-making	0.82
Support	0.86

D. Discriminating power of the items: The discriminating power of each item of the scale was calculated, and the researcher found that the t-values ranged between (4.013) and (8.191), which are greater than the tabulated value of (2) at the significance level (0.05) and with (52) degrees of freedom. All items were therefore considered valid.

Reliability of the scale: The researcher verified the reliability of the scale using Cronbach's alpha equation.

Tenth: Statistical Methods

The researcher used the Statistical Package for the Social Sciences (SPSS), version 26.

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Chapter Four: Presentation and Interpretation of the Results

First: Presentation of the Results

Results related to the first null hypothesis. To test the null hypothesis, which states: "There is no statistically significant difference at the significance level (0.05) between the mean scores of the experimental group, who study Social Studies according to the POEE strategy, on the pre- and post-administrations of the life skills scale."

The scores of the experimental group on the pre- and post-administrations of the scale, taught according to the POEE strategy, were calculated and statistically processed. The results showed statistically significant differences at the significance level (0.05) between the mean scores of the experimental group students who studied Social Studies according to the POEE strategy on the pre- and post-administrations of the life skills scale, and the result was in favor of the post-administration, as shown in Table (23).

Table (23): Mean, standard deviation, and calculated and tabulated t-values for the students of the experimental research group on the pre- and post-administrations of the scale

Test	Mean	Standard deviation	Variance	Calculated t	Tabulated t	df	Significance
Pre	42.69	6.39	40.83	−9.962	2.042	34	Significant
Post	53.97	8.99	80.82				

To show the effect size of the POEE strategy on the dependent variable (life skills), the researcher used the effect size equation (d) and found that the effect size was (3.42), which is large and appropriate for interpreting a large magnitude of effect according to Cohen's classification, in favor of the post-administration, as in the study of Shinawa (2022), as shown in the following table.

Table (24)

Independent variable	t-value	Effect size	Magnitude of effect
POEE strategy	−9.962	3.42	Large

Results related to the second null hypothesis. To test the null hypothesis, which states: "There is no statistically significant difference at the significance level (0.05) between the mean scores of the control group, who study Social Studies by the conventional method, on the pre- and post-administrations of the life skills scale."

The results of the statistical processing showed no statistically significant differences at the significance level (0.05) between the mean scores of the control group students who studied Social Studies by the conventional method on the life skills scale (pre- and post-administrations), as shown in the following table.

Table (25): Mean, standard deviation, and calculated and tabulated t-values for the students of the research control group on the pre- and post-administrations of the scale

Test	Mean	Standard deviation	Variance	Calculated t	Tabulated t	df	Significance
Pre	42.87	9.99	99.80	−1.706	2.021	37	Not significant
Post	44.16	10.84	117.51				

Second: Interpretation of the Results

- The results of the study related to the first hypothesis show a statistically significant difference at the (0.05) level between the mean scores of the experimental group on the pre- and post-administrations of the scale in developing life skills. This difference indicates that the post-administration mean is higher than the pre-administration mean, which reflects the expected contribution of the POEE strategy to developing life skills.
- The POEE strategy was effective in improving and developing the level of life skills (critical thinking, self-esteem, planning and goal setting, communication, decision-making, and support).
- The POEE strategy contributed to developing thinking skills in general and critical thinking in particular, through the students' participation in class by presenting their predictions and ideas about the lesson topic.
- The spirit of competition among the groups, imposed by the working steps of the POEE strategy, played a major role in each group's diligence in organizing its ideas and presenting and discussing inquiries and opinions, both among themselves and between the group and the teacher. This helped the students acquire the skills of communication, decision-making, planning, self-esteem, critical thinking, and mutual support and assistance among themselves.
- The results of skills development were all significant in the experimental group on the post-administration of the life skills scale, which demonstrates the effectiveness of the POEE strategy in developing life skills among second intermediate female students.

CONCLUSIONS, RECOMMENDATIONS AND PROPOSALS

First: Conclusions

1. The POEE strategy showed a positive effect in developing life skills among second intermediate female students in Social Studies.
2. Following the steps of the POEE strategy in teaching added vitality and energy to the lesson, stimulated the life skills the students already possessed, made them bolder in expressing opinions, and motivated them to continue interacting with the lesson.
3. The development of life skills is compatible with the POEE strategy when the learning environment is taken into account in preparing the lessons, and Social Studies becomes fertile ground for developing life skills.

Second: Recommendations

1. Using the POEE strategy starting from the primary stage of education, so that students become accustomed to this strategy while young, making it easier to understand and apply its steps in later stages.
2. The necessity for the Ministry of Education to issue a booklet or guide for teachers and instructors that includes various modern teaching strategies, including the POEE strategy, and how to use each strategy, to be available to every teacher and instructor.
3. The necessity of providing an engaging learning environment and climate in which freedom of expression, security, and attention to the student's affective side prevail, and which works to develop the life skills the student needs in daily life.

Third: Proposals

1. The effectiveness of a proposed program based on the effect of the POEE strategy in developing inferential thinking and awareness of some contemporary historical issues among student-teachers in the Department of History at the College of Basic Education.
2. Conducting field studies to identify students' general level of possession of life skills, and benefiting from workshops to develop them.

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