

Using Phenomenology To Solve Educational Problems In Egypt In The 21st Century

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Abstract – Egypt plays a pivotal role in the field of education in the Middle East due to its unique geographical location that connects three continents. However, the education system in Egypt faces significant challenges in the 21st century, such as overcrowded classrooms, lack of educational resources, and disparity between urban and rural areas. The increasing number of refugees has also increased the pressure on educational institutions. This study aims to use the phenomenological approach to understand the educational experiences of students and teachers and analyze the problems in depth. By focusing on subjective experiences, the research seeks to provide customized educational solutions that suit the needs of different individuals and to connect educational institutions with the individuals associated with them, including students, teachers, and parents.

Keywords – Education in Egypt, Phenomenology, Subjective experiences, Quality of education, Phenomenological approach

I. Introduction

Egypt's geographic location at the crossroads of Africa, Asia, and Europe has been a crucial factor in its strategic importance. This unique location has made Egypt not only a cultural and political hub but also a distinguished educational center. Historically, Egypt has played a significant role in the exchange of knowledge and ideas between East and West, and between the Arab world and Africa. Over the centuries, Egypt has been home to several prestigious educational institutions, such as Cairo University, Al-Azhar University, and the American University in Cairo, which continue to attract students from the Middle East, Africa, and even Europe. These institutions have made Egypt a beacon of knowledge, contributing to the development of modern education in the region and fostering an environment rich in cultural diversity and intellectual exchange. Egypt's role as an educational leader in the Arab world is evident in its pioneering efforts in curriculum development and education reform. Historically, it has led the region in establishing modern schools and universities, providing a model for other countries to follow [1].

Education in Egypt is one of the most important axes for achieving social and economic development, due to its unique geographical location linking Africa, Asia, and Europe, making it a historical center for the exchange of knowledge and cultures. Throughout the ages, Egypt has played a pivotal role in spreading and developing education in the Arab region and Africa. Through established educational institutions such as Cairo University, Al-Azhar University, and the American University in Cairo, Egypt has contributed to enhancing educational and intellectual mobility between the East and the West, in addition to its leadership in educational reform and the development of modern curricula in the Arab region [2]. Despite this long history, the educational system in Egypt faces major challenges in the twenty-first century, which hinder its progress and the achievement of its goals. One of the most prominent of these challenges is overcrowding in classrooms, especially in densely populated urban areas. Reports indicate

that overcrowding in classrooms negatively affects the quality of teaching, leading to a deterioration in the level of education and reducing the opportunities available to students to receive personalized education that suits their needs [3].

The gap between rural and urban education is also a major challenge, with rural schools suffering from a severe shortage of basic resources, including books and qualified teachers [4]. The challenge of poverty is also a critical factor affecting the education system in Egypt. Poverty not only affects students' ability to enroll in schools, but also the quality of education they receive. In rural areas, poverty reduces students' opportunities to receive a good education due to the lack of resources and educational infrastructure [5].

In addition, the lack of professional development for teachers is a major obstacle to improving the quality of education. Teachers in Egypt do not have sufficient opportunities to develop their skills or adopt modern teaching methods, leading to reliance on traditional methods based on memorization and rote learning [6]. In addressing these challenges, the phenomenological approach can provide a deeper understanding of educational experiences in Egypt. Phenomenology is a research method that focuses on understanding the lived experiences of individuals and how they perceive the world around them. This approach allows for an in-depth analysis of the challenges faced by students and teachers in the education system by addressing their personal experiences [7]. For example, this approach can help understand how teachers deal with overcrowding in classrooms on a daily basis, and how this impacts their learning experience, which helps identify solutions that can be implemented to support them [8].

The individual experiences of students and teachers in the Egyptian education system are a rich source of information that can be exploited to improve education. Using the phenomenological approach, researchers can gain deep insights into the factors affecting the quality of education, such as poverty, lack of resources, and language and cultural challenges faced by refugee students. These insights enable the development of customized solutions that more accurately and effectively address the needs of these individuals [9].

although education in Egypt faces many major challenges such as the rural-urban gap, lack of resources, and overcrowding in classrooms, applying the phenomenological approach can play a significant role in improving the quality of education. By understanding individuals' experiences more deeply, more efficient educational strategies can be developed that meet the needs of all participants in the educational process and contribute to reducing the gaps and challenges facing the Egyptian education system [10].

Based on the above, the questions that are being studied in this research are:

1. What is the experience of students about scientific research in Egyptian schools?
2. What are the differences between the experiences of students from different economic backgrounds in the classroom?
3. What are the reasons that prevent some students from completing their education after the primary stage?
4. What are the challenges facing schools in organizing study trips?
5. What resources do students need to use school libraries regularly?

II. Materials and Methods

The phenomenological approach is one of the most important research methods that focuses on understanding and analyzing the subjective experiences of individuals in a deep and comprehensive way. This approach is mainly based on studying phenomena as individuals perceive them in their natural environment, which makes it very suitable for application in the field of education, which includes many complex human interactions [11]. In education, students and teachers face a variety of daily challenges that cannot be fully understood through quantitative or statistical methods alone. For example, overcrowding in classrooms, lack of educational resources, gaps between education in urban and rural areas, and the cultural and linguistic challenges faced by refugee students all require in-depth examination based on human experience. This is where the phenomenological approach comes in, allowing us to understand these challenges from the perspective of individuals who experience them on a daily basis [12]. One of the biggest benefits of the phenomenological approach is its ability to understand and analyze the personal

experiences of individuals through their feelings and thoughts. In the field of education, this means that the researcher can delve deeply to understand how daily challenges affect students and teachers. For example, if a student is experiencing stress due to exams or has difficulty communicating due to a language barrier, a phenomenological approach can be used to understand how this stress affects the learning experience and academic achievement [13]. This deeper understanding allows educational researchers and planners to identify tailored solutions that fit the needs of individuals [14]. By using a phenomenological approach in education, effective communication can be enhanced between all stakeholders in the education system. By deeply understanding the experiences of students and teachers, administrators and planners can make wiser decisions that meet the needs of all. This mutual empathy creates a healthy learning environment that encourages learning and development [15].

Learning does not occur in a vacuum; the surrounding cultural and social aspects greatly influence the learning experience. A phenomenological approach allows for the analysis of these aspects and how they affect the learning experience. In Egypt, for example, students in rural areas may face different learning challenges than students in large cities. Analyzing these differences helps in developing educational strategies that fit each social and cultural environment, which improves the quality of education overall [16].

Despite the many benefits of using the phenomenological approach, it is not without challenges. One of the most prominent of these challenges is the difficulty of generalizing the findings from individual experiences on a large scale. In addition, collecting and analyzing qualitative data can be time-consuming and resource-intensive, which can be a challenge in environments that need quick solutions [17, 18]. The phenomenological approach is a powerful tool for improving the quality of education by focusing on deeply understanding the personal experiences of individuals. This approach can contribute to solving many educational issues by providing customized and sustainable solutions based on a realistic and objective understanding of the challenges faced by students and teachers [19, 20].

The workflow in this research was divided into several stages, as it relies on using the phenomenological approach to understand and analyze educational problems in Egypt. The first stage begins with collecting data related to the challenges facing the educational system through personal interviews and observations with students and teachers in different schools and geographical areas. The research in this stage focuses on documenting personal experiences and feelings related to education, especially in areas that suffer from overcrowding and lack of resources [21].

The second stage includes the analysis of qualitative data using phenomenological methods, which aims to reveal the basic aspects of the educational experience, such as students' and teachers' understanding of the learning process, and the social and economic pressures that affect education. This stage also seeks to identify the root causes of problems based on participants' descriptions of their experiences [22]. The third stage deals with the implementation of the proposed solutions, where educational interventions are designed based on the results extracted from the phenomenological analysis. These solutions aim to improve the quality of education and increase the effectiveness of the educational process, taking into account the cultural and social differences between different regions in Egypt [23].

Table 1. Detailed structure of the research process from data collection to final evaluation.

Stage	Description	Tools and methods used
Defining the research problem	Define the main problems of basic education in Egypt such as low level of education, overcrowded classrooms, and lack of teacher qualification.	Review previous research, and analyze the current status of education in Egypt.
Research design	Develop a research plan and choose methods for collecting and analyzing data using the phenomenological approach to understand and interpret data.	Design a research plan, select participants, and determine data collection tools such as interviews and questionnaires.

Data collection	Collect data through personal interviews, field observations, and analysis of educational documents such as curricula and official reports.	-In-depth personal interviews with students, teachers, and parents. - Field observations of the educational environment. -Document analysis.
Data analysis	Analyzing data using phenomenological approaches to understand and interpret participants' life experiences.	- Transcribing and analyzing interviews. - Coding to extract patterns. - Describing and interpreting experiences within the social and cultural context.
Verifying the results	Ensure analysis is validated with participants to ensure that the analysis accurately reflects their results.	-Review results with participants.
Discussion and conclusion	Linking the results to the existing literature and clarifying the implications of the research on understanding the problems of basic education in Egypt.	-Writing the conclusion and linking the results to modern educational trends.

After collecting data, analyzing the data is the next step in phenomenological research. At this stage, the data collected from interviews, observations, and questionnaires are dealt with. The goal of analyzing the data is to understand the meanings and subjective experiences of the participants and identify patterns and issues that affect the educational process.

Table 2. Detailing the steps followed after collecting the data and how to analyze it within the phenomenological approach.

Step	Description	Objective
Data organization	Arrange the collected data, such as transcribed interviews, observations, and questionnaires, to be ready for analysis.	Prepare data for analysis in an organized and understandable format.
Recognize key themes	Careful reading of data to identify common themes and experiences that emerge in participants' learning experiences.	Identify key aspects that influence the learning process.
Coding	Break down texts into small symbols or chunks that represent specific concepts and experiences such as language difficulties or crowded classrooms.	Categorize and simplify data into analyzable patterns.
Pattern analysis	Analyze recurring and common patterns among participants such as educational issues or cultural and linguistic challenges.	Discover common patterns and issues in the learning process.
Phenomenological interpretation	They are using a phenomenological approach to interpret participants' subjective experiences and how these experiences affect learning.	Understand more deeply the impact of personal experiences on the learning process.
Drawing conclusions	Conclude the analysis, such as identifying the root causes of issues and possible opportunities to improve the educational system.	Draw conclusions and recommendations based on analyzing the personal experiences of students and teachers.

III. Result and Discussion

The **results** of this research constitute a preliminary analysis of the extent to which poverty and lack of resources affect education and scientific research in Egyptian schools, whether in rural or urban areas. The data were collected through a questionnaire that included 15 students from different urban and rural primary schools, in addition to 10 teachers from different schools, to analyze their responses and highlight the challenges facing students and teachers in developing their research capabilities and benefiting from school activities, such as scientific trips and libraries.

Table 3. Showing the results sorted by question and answers of 15 students from different schools between urban and rural areas.

NUM	Question	Result
1	Do you feel there is a lack of research capabilities at your school?	75% yes 25% no
2	What challenges do you face in conducting research in your school?	37% lack of time, 33% lack of resources, 20% lack of technology.
3	What sources do you rely on for information to conduct scientific research?	70% internet, 18% books, 12% teachers' explanations.
4	Have you participated in educational field trips organized by your school?	57% No, 43% Yes
5	What benefits do you think you get from educational field trips?	70% Change of routine, 15% Skill development, 15% Learning outside the classroom.
6	Do you think the lack of trips affects your learning experience?	68% Yes a lot, 32% Yes a little.
7	How do you think poverty affects your educational experience?	57% not paying fees, 30% not participating, 13% difficulty getting to school.
8	Do you think there is a difference in the quality of education between rural and urban areas?	83% yes, 17% no
9	What kind of support do you think would be helpful for you and your peers to improve your study experience?	45% Improved infrastructure, 37% scholarships, 18% psychological support.
10	Do you use the school library regularly?	70% very much not, 20% no, 10% yes
11	Why don't you use the school library regularly?	38% Lack of books, 31% Lack of guidance, 31% Lack of time.
12	What kind of books or resources would you like the school library to have?	38% stories and magazines, 31% e-learning materials, 31% science books.
13	Do you know students who haven't completed their education beyond elementary school?	83% No, 17% Yes
14	What are the main reasons why students do not complete their education after elementary school?	70% working to help the family, 18% early marriage, 12% after school.
15	What are the potential implications of not completing education after elementary school?	44% lack of awareness, 44% social and psychological impact, 12% lower income.

Discussion of the results from the point of view of 15 students from different schools between rural and urban areas in Egypt in the 21st century:

1. What is the experience of students about scientific research in Egyptian schools?

Problem: Students face a significant lack of research capacity.

Why: Schools lack essential resources such as libraries and laboratories, limiting their ability to engage in scientific research.

When: This problem arises when students are asked to conduct research. Where: Rural schools are particularly affected due to their underfunding. How: The lack of funding prevents schools from providing the necessary tools and facilities for students to effectively conduct research.

2. What are the differences between the experiences of students from different economic backgrounds in the classroom?

Problem: Students from rural areas experience greater educational challenges than urban students. Why: Rural schools suffer from a lack of resources, infrastructure, and qualified teachers compared to urban schools. When: These disparities manifest in academic performance.

****Where:**** Rural schools are most affected, widening the gap between students of different economic backgrounds. How: The lack of resources, equipment, and qualified staff in rural areas contributes to poor performance compared to students in better-funded urban schools.

3. What are the reasons that prevent some students from completing their education after the primary stage?

Problem: Many students do not complete their education after primary school. Why: The need to work and earn an income, or early marriage, is a significant reason for dropping out, particularly in rural areas. When: This issue arises after students complete the primary stage of their education. Where: It is more prevalent in rural communities. How: Economic pressures, such as poverty, push students into work or early marriage, preventing them from continuing their education.

4. What are the challenges facing schools in organizing study trips?

Problem: Schools face difficulties organizing study trips. Why: The main reason is financial constraints and lack of proper organization. When: This problem persists throughout the school year, with trips being reduced or canceled. Where: Underfunded schools are most affected. How: The limited budgets lead to a focus on entertainment rather than educational benefits during the few trips that are organized.

5. What resources do students need to use school libraries regularly?

Problem: Most students do not use the school library regularly. Why: The lack of books and guidance from teachers or staff discourages students from utilizing the library. When: This issue arises during scientific research or other class-related activities. Where: Schools that do not have well-equipped libraries face this problem. How: Students rely on the Internet as a primary source of information because of the limited resources available in school libraries.

Table 4. Showing the results arranged by question and answer for 10 teachers from different schools between urban and rural areas.

NUM	Question	Result
1	How would you rate the level of research capabilities available to students at your school?	Average 45%, Poor 30%, Good 25%
2	What challenges do you face in encouraging student research?	Curriculum pressure and insufficient time allocated for research activities 75%, Lack of research resources, equipment, and financial support 15%, Both options 10%
3	What kinds of support do you need to promote scientific research among students?	Increasing time allocated for research activities and reducing the size of the curriculum 60%, Improving technological infrastructure 13%, Providing research resources, equipment, and financial support 13%, All options 14%
4	What reasons do you think contribute to reducing the number of study trips?	Lack of interest from school management 60%, Lack of organization and funding 30%, All options 10%
5	Do you think the decrease in study trips affects the educational experience of students?	Yes 95%, Not very much 5%
6	What challenges do you face when organizing study trips?	Financial support, awareness of the importance of trips, good organization, and lack of sufficient time due to the pressure of curricula.
7	How does poverty affect the academic experience of students?	Inability to pay tuition fees even if they are symbolic 50%, Inability to participate in school activities 40%, Difficulty in reaching school 10%
8	Do you think there is a difference in the quality of education between rural and urban areas?	Yes 85%, No 15%
9	What types of support do you think would be useful for students from poor families to improve their academic experience?	Providing scholarships 35%, Providing psychosocial support 26%, Improving school infrastructure 26%, All options 13%
10	Is there a library in your school?	Yes 90%, No 10%
11	Do you feel that the school library has enough resources to support education?	No 65%, Yes 35%
12	Do you think that supporting the role of school libraries can contribute to improving the quality of education?	Yes 75%, No 25%
13	Have you noticed that there are students who have not completed their education after primary school?	Yes 90%, No 10%
14	What is the impact of not completing education after primary school on the local community?	The spread of illiteracy, unemployment, and crime in the future, and the decline in the educational and moral level of the state.
15	What suggestions do you think might help reduce the problem of not completing education after primary school?	We are providing scholarships to the needy, improving the educational level in the countryside, increasing opportunities for psychological and behavioral counseling for parents and students, and increasing awareness of the importance of completing all stages of education.

Discussion of the results from the point of view of 10 teachers from different schools between rural and urban Egypt in the 21 century:

1. What is the experience of students about scientific research in Egyptian schools (from teachers' perspective)?

Problem: Teachers observe that students lack sufficient research capabilities. Why: Teachers note that schools do not provide enough resources such as libraries, laboratories, and research tools. When: This becomes evident when students are assigned research tasks. Where: Teachers report that rural schools suffer more due to insufficient funding. How: The lack of essential resources and inadequate infrastructure severely limits students' ability to conduct effective research.

2. What are the differences between the experiences of students from different economic backgrounds in the classroom (from teachers' perspective)?

Problem: Teachers see a clear divide between the academic experiences of rural and urban students. Why: According to teachers, rural schools often lack critical resources, infrastructure, and qualified educators compared to urban schools. When: Teachers notice these challenges affect students' performance during tests and research assignments. Where: Teachers point out that rural schools, especially underfunded ones, are more impacted by these issues. How: The lack of qualified staff and modern teaching tools in rural areas leads to lower academic achievement compared to students from wealthier, urban schools.

3. What are the reasons that prevent some students from completing their education after the primary stage (from teachers' perspective)?

Problem: Teachers report high dropout rates after the primary stage. Why: Teachers believe the need to support families financially or early marriages are major reasons for this dropout, especially in rural areas. When: This often happens when students finish primary school and feel pressured to work or marry. Where: Teachers note that rural communities are most affected by this trend. How: Economic pressures, combined with social expectations, pull students away from continuing their education.

4. What are the challenges facing schools in organizing study trips (from teachers' perspective)?

Problem: Teachers find it difficult to organize study trips due to logistical and financial challenges. Why: According to teachers, insufficient budgets and poor organization are the main obstacles. When: Teachers face these difficulties throughout the school year when attempting to plan trips. Where: Schools that are underfunded are particularly affected by these constraints. How: Budget limitations and administrative challenges result in fewer or less meaningful trips, often prioritizing entertainment over educational value.

5. What resources do students need to use school libraries regularly (from teachers' perspective)?

Problem: Teachers observe that students rarely use the library. Why: They attribute this to the lack of books, inadequate guidance, and insufficient library resources. When: This issue arises particularly when students need to conduct research for class assignments. Where: Teachers note that most schools, especially those without modern or well-equipped libraries, face this problem. How: Students prefer using the Internet over libraries because of the limited availability of relevant books and poor library conditions.

This research adopted phenomenology as its main methodology because it provides the ability to explore human experiences that cannot be measured quantitatively or superficially. Education is one of the most influenced by social, cultural, and personal factors [24, 25], making it necessary to adopt research methodologies that allow for a deeper understanding of these overlapping aspects. This research was chosen to go beyond traditional solutions and offer new insights based on the real-life experiences of individuals directly affected by educational issues. This approach helps to formulate customized solutions that fit individual and collective needs, both for students and teachers. Education is one of the social systems, ultimately also experiences the impact of cultural currents (globalization), one of these impacts is the change in educational logic [26]. As a system of knowledge and ideas, the culture possessed by a society is an invisible power, which is able to guide and direct the people who support that culture to act and behave in accordance with the knowledge and ideas that belong to that society [27, 28].

Drawing on the findings of this research can help educational policy and decision-makers improve the quality of education through a deeper understanding of the real issues plaguing the education system. Rather than just analyzing the surface symptoms of the issues, the research provides a root cause understanding through the perspective of the individuals involved. This can contribute to the development of more effective and inclusive educational strategies that take into account socio-economic and geographical differences and improve the overall learning experience. The research findings can form the basis for new educational policies that promote communication between educational institutions and stakeholders, including students, teachers, and parents, creating a healthier and more equitable learning environment. In the end, this research not only contributes to identifying issues but also provides a knowledge base that can be built upon to develop viable and sustainable educational solutions, taking into account the cultural and social challenges facing Egypt in this area.

The conclusion Education in Egypt is a fundamental pillar for achieving sustainable development, as it plays a vital role in building the future of individuals and societies alike. With its long history as a beacon of science and culture, education is a major means of transferring knowledge and exchanging ideas between generations, contributing to shaping the cultural and social identity of the Egyptian people.

However, the education system in Egypt faces many major challenges that hinder its progress and limit its effectiveness, such as overcrowding in classrooms, the large gap between education in urban and rural areas, and the lack of basic resources and qualified cadres. These obstacles are not merely technical problems, but rather require a deep understanding of the experiences of students and teachers alike, as the psychological and social impact of these challenges is reflected in the quality of education and the efficiency of the educational process in general.

Adopting the phenomenological approach provides us with an integrated framework for understanding human experiences related to education, allowing us to explore the depth of the challenges facing the Egyptian education system. With this deep understanding, officials and policy makers can develop educational strategies that are in line with the actual needs of students, which contributes to improving the quality of education and providing a stimulating learning environment.

Moreover, using the phenomenological approach can contribute to enhancing the role of education as a tool for social change, by drawing on individual experiences to create innovative and sustainable solutions. Understanding the obstacles facing students and teachers will allow us to think about how to overcome them collectively, leading to improving the quality of education in Egypt and increasing students' chances of success. Therefore, the commitment to reform education in Egypt is not just a goal, but an urgent necessity to ensure a bright future for future generations, and to drive the country's economic and social development..

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