



## **The Quality of Blended Education and Its Relationship to Flexible Thinking among Male and Female Teachers of the Arabic Language**

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### **Abstract**

The aim of the current research is to identify: Correlational relationship between the quality of blended education and flexible thinking for male and female Arabic language teachers in the preparatory stage. In order to achieve the goal of the current research, it required the availability of two tools to measure the quality of blended learning and to think flexibly. The researcher built a scale of blended learning quality, as the scale consisted of (45) items, and the response to the scale items consisted of five alternatives: (always, often, sometimes, rarely), never), and the highest degree of the scale reached (225) degrees and the lowest degree reached (45) degrees, with a hypothetical average of (135) degrees. The correction is (1,2,3,4,5), as the lowest score obtained by the respondent is (24) and the highest score obtained by the respondent is (120). After verifying the psychometric properties of the two research tools and their paragraphs, they were applied to the basic research sample of (330) teachers of Arabic language in the preparatory stage, they were selected in a simple random way, to represent the original research community in a real way and after analyzing the data statistically using the Statistical Package for Social Sciences (SPSS), produced the following result: There is a correlative relationship between the quality of blended education and flexible thinking among male and female Arabic language teachers in the preparatory stage.

### **Keywords**

Flexible Thinking, Blended Education, Male, Female

**JEL Classifications:** J11, F43

## **1. Introduction**

### **Chapter One**

#### **Introduction to the Research**

##### **Research Problem**

We find that educational institutions of all kinds and names face many educational problems, which impede the process of education and its completion in the required manner. Many universities and educational institutions suffer from some problems, including the insufficiency and expertise of the human resources they work with, and the problem of lack of interest in the continuous development of infrastructure, and the existence of some problems in the curricula, as it contains useless parts, and some parts of the curricula are not related to each other, and technological tools and modern devices necessary for the educational process are not provided. In addition, there are problems for students and graduates in that what they studied throughout the years of study has nothing to do with it. The needs of the labor market do not keep pace with the challenges and problems of the labor market, and from here the developed countries and the countries of the Renaissance realized the importance of quality in education, and these countries began to search seriously for appropriate solutions for them, and from here the concept of quality in education arose and its transmission to various Arab countries, where there are many countries Educational institutions have obligated to implement it at the level of many countries of the world (Abu Musa, 2011).

As these and other problems are among the obstacles that have negatively affected the educational process, especially in countries that have a lack of preparation, training and rehabilitation programs and the allocation of funds to support education and its growth. Mistakes of believing in the correctness of one idea and delusion of neutrality in relation to other ideas, intellectual closing-down and thinking about the correctness of personal opinions, rigidity and avoiding thinking with flexibility, which leads to stagnation of thought and unconsciously abandoning opportunities to overcome minor difficulties at work. The perpetrator, as we note that most people who fall into the trap of error do not admit their mistakes, but rather find procrastination to defend what they have done from a mistake as a correct and not wrong behavior.

From this standpoint, the problem of the current research came to answer the following question:

"Is there a relationship between the quality of blended education and the flexible thinking of male and female Arabic language teachers in the preparatory stage?"

##### **Second: The Importance of The Research**

Blended education is one of the most effective and modern methods of education, as this type of education appeared as a reaction to e-learning. Here

was the need for a new approach that combines the advantages of both traditional education and e-learning and overcoming the shortcomings in both of them, so the so-called blended education appeared, which means the integration of both traditional education in its various forms and e-learning with its various patterns to increase the effectiveness of the educational situation and opportunities for social interaction and others (John, 2012).

Therefore, the quality of blended education is of paramount importance in achieving the highest outcomes of effective teaching and learning, which serves as the connecting line between traditional and electronic education.

It is hoped that blended education will lead to the formation of a set of mental operations, starting with simple mental operations, leading to sophisticated and complex mental operations, which will enable the teacher to develop his intellectual output and give him mental flexibility to use in various aspects of his practical and academic life (Mufleh, 1998).

Flexible thinking is an evolutionary process with a sequence that hopes eventually will lead the individual to produce ideas and solve problems, as it is the individual's tendency to act in a smart way when facing a problem or when the answer or solution is not available in his knowledge structures. Therefore, thinking flexibly is the key to success in Many areas of life, whether in school, work or social relationships, it is by way that we give the ability to face difficult situations and crises, so psychologists advise avoiding rigidity in the thinking pattern, as flexibility is the art of processing the data set in a different way than before and placing it in a new relationship system between Each other by putting them in different frames, and also means the ability to think of alternatives, options, solutions and different perspectives with the ability to adapt in difficult situations and different from what is familiar (Saleh, 2012).

## **2. Research Objectives**

The current research aims to identify:

The correlative relationship between the quality of blended education and flexible thinking among male and female Arabic language teachers in the preparatory stage.

## **3. Research Limits**

The current research is limited to Arabic language teachers and female teachers in the preparatory stage. In governmental middle and secondary schools affiliated to the General Directorate of Education, Babil Governorate (Hilla Center). For the academic year (2021-2022).

## **4. Define Terms**

### **The Quality of Blended Education: Define It**

**Makhlouf:** It is "the process of adjusting in-person and electronic learning and teaching according to the necessary work procedures, by setting the developed

standards for integrated courses, virtual classes, video broadcasts, preparing electronic templates, computerized media, and all the necessary requirements that must be provided in order to achieve the desired goal" (Makhlouf, 2010).

**Theoretical definition:** it is a process of controlling the teaching methods and characteristics used in the methods of teaching Arabic, which mix between e-learning and its tools on the one hand, and traditional education and its tools on the other hand, with a focus on avoiding the shortcomings in both types in order to achieve educational goals.

**Procedural definition:** It is the total score obtained by male and female Arabic language teachers in middle schools after their answers to the paragraphs of the scale prepared for the purposes of the current research.

## **5. Thinking Flexibly**

define it:

**Al-Taher:** "It is the ability to think about various ideas that are not of the kind expected or usually accepted, and to direct or divert the course of thinking while changing the stimulus or the requirements of the situation, or it is that skill in which things are done or understood in different ways" (Al-Taher, 2008).

## **6. Theoretical Definition**

The researcher adopted the definition of (Costa, 2003) in order to adopt the theoretical framework of flexible thinking for their theory.

Procedural definition: the total score obtained by the respondent on the Flexible Thinking Scale adopted in the current research and prepared by the researcher.

## **The Second Chapter**

### **The Theoretical Framework**

#### **First: The Quality of Blended Education**

Foundations and principles of blended learning:

The follower of the concept of blended education sees that this education has its tools and methods and that it is not random education, but rather education based on foundations and principles with tight rules. These foundations and principles are:

**1.** Live learning events: the teacher presents simultaneous activities in which all learners participate at the same time,

**2.** Self-paced learning: This is to provide educational experiences that the learner can accomplish on his own and in proportion to his own pace of learning and in the appropriate time.

**3.** Cooperation and sharing: by providing educational environments in which the learner can communicate with others through e-mail or online chat,

**4.** Continuous evaluation: by working on evaluating the learners' knowledge at each step of learning, whether those that he had before passing through learning experiences through the tribal evaluation of those knowledge before starting the educational program or those that he acquired as a result of passing through educational experiences through the post-evaluation after the end of educational programs.

**5.** Performance support materials: This is done by supporting teachers with educational materials, programs, summaries, graphs, geometric shapes.... etc.

### • **Blended Learning Requirements**

For blended education, there are several requirements that must be met for the success of such a type of education. These requirements are:

#### **1. Technical Requirements**

- ❖ Classes need to be provided with a computer and a projector connected to the Internet.
- ❖ Providing an electronic course for each subject.
- ❖ Providing an education management system.
- ❖ Providing a content management system.
- ❖ Providing electronic calendar programs.
- ❖ Determine contactable sites.
- ❖ Providing electronic dialogue sites for dialogue with experts in the field.

#### **2. Human Requirements**

Human requirements represent the two poles of the educational process, namely the student and the teacher, and each of them has a special nature in light of blended learning, and everyone has a role that is no less important than the other for the success of this type of education.

### **Theories That Explain the Quality of Blended Education, Including**

#### **Cognitive Theories**

Cognitive theories are concerned with the processes that occur within the individual, such as: thinking, planning, decision-making, expectations, etc., rather than paying attention to the external manifestations of behavior, and their main focus is on the thinking process involved in behavior. The apparent mental processes responsible for the behavior of the learner. And you view knowledge as a mental construct that takes place in the mind of the individual, and learning is

the process of sending knowledge to memory and the ability to retrieve that knowledge for use in the future.

The most important characteristics of learning according to cognitive theory:

**A.** Learners learn and memorize information in mental structures during the acquisition process in order to retrieve it quickly.

**B.** Developing links between information helps to retrieve it.

**T.** The selective retrieval of information shapes the response.

**D.** It is possible to influence information retrieval processes and shape the response.

**C.** Learning is an effective process that takes place within the learner and can be influenced by the learner as an active participant in the learning process.

**H.** Learning outcomes depend not only on what the teacher provides, but also on what the learner does to process this information.

According to the cognitive theory, learning occurs within the learner and can be affected by the learner, and therefore its focus remains on how learners remember, retrieve and preserve information in memory. We point out here that the strategies that focus on structuring, organizing and sequencing information in order to treat it optimally, such as defining the general scheme and advanced organizers, summarizing, synthesising, and raising the information presented in advance, all of these strategies are based on cognitive theory (Al-Ghamdi, 2013).

## **Second, Think Flexible**

The importance of developing flexible thinking:

**1. Self-benefit of the learner:** After possessing this skill, the learner becomes able to compete in the areas of competition in this accelerated era, in which success and excellence are linked to the extent of the ability to think well and skill in it.

**2. General social benefit:** community members acquire good thinking skills, and there are good citizens with a positive role in serving their community.

**3. Mental health:** The ability to think well helps a person to have psychological comfort and enables him to adapt to events and changes around him more than people who do not think well.

**4. Thinking:** It is the first basis in production and reliance on it comes before relying on knowledge. It is a renewable force that benefits the teacher and the learner alike.

## **Flexible Thinking and Its Relationship to Creative Thinking**

Creative thinking is "the process that leads us to invent new solutions to the tools, ideas, and approaches that make up any problem," or it is "a mental activity characterized by flexibility and multiple thinking paths that leads to new production characterized by innovations and modernity." Through the concept of creative thinking, we note that creativity is an inherent state. For flexibility, we find that

there is a concomitant relationship between them through the conclusion of creative ideas in thinking (Jarwan, 2005).

### **Theories Explaining Flexible Thinking**

**Costa and Calic Theory:** Habits of the mind were developed through the work of the two scholars Arthur Costa and Pina Calic, as well as through the work of Marzano's work with the innovation of learning dimensions. He wants to use thinking flexibly to reach the finest patterns of thinking and to stay away from fanaticism and intellectual rigidity. Flexible-thinking individuals are distinguished by the ability to change their opinions when additional data is available in their cognitive structure. They also rely on a cognitive repertoire stored in their mental structures and can solve problems through the use of thinking methods. Flexibly (Costa, 2003).

**Kuhn and Thompson's theory:** This theory defined flexibility as the individual's tendency to be open to multiple ways of solving problems. Flexibility is also a characteristic of response that includes all aspects of an individual's behavior that is characterized by abundant productivity, strength of imagination, abundance of resourcefulness, and the ability for emotional expression in the creative field. And the tendency not to leave the field when things get tough, the multiple range of interests, the wide range of performance, and compatibility with society (Khazal, 1998).

**Sternberg's theory:** This theory showed through its definition of flexible thinking as an adaptation to the situation, modification of monotony, routine, expectations and ideas, and changing them. and updating them to be in line with the new conditions, by using appropriate thinking methods with the emerging situations (Habib, 1995).

Chapter Three: Research Methodology and Procedures:

First: Research Methodology: The descriptive correlative method was used to suit the nature of the current research, as this method "is considered one of the most sufficient means in reaching reliable knowledge" (Mahjoub, 1990).

### **Second: The Research Community**

The current research community consisted of (492) teachers, who continued to teach during the academic year (2021-2022) distributed in the different areas of the city of Hilla and the center of Babil Governorate.

### **Third: The Research Sample**

It is a group of individuals withdrawn from the original community to be researched and selected according to special rules in order to properly represent the community (Daoud, 1990). The researcher chose the research sample according to stages and as follows:

**A sample of schools:** The school sample was chosen from the original research community by random method, and the number of schools reached (50) schools, including (25) schools for boys and (25) schools for girls.

**B - The basic research sample:** The sample size was (330) teachers and schools from middle and secondary school teachers, from the original community, and by (155) teachers representing (47%) of the total research community, and (175) schools representing (53%) of the research community. Entire community research.

#### **Fourth: The Two Research Tools**

Achieving the goal of the current research requires the availability of two tools to measure the quality of blended education and its relationship to flexible thinking among teachers of Arabic language. Below is a description of the two search tools.

##### **First: A Measure of the Quality of Blended Education**

After reviewing the literature and previous studies related to the research variable, the researcher built a built-in education quality scale, because he did not get a local or Arab scale that fits the current research sample, in addition to the fact that foreign standards are complex and do not fit the Iraqi environment, which required the researcher to build a scale that fits with my teachers. The Arabic language and its teachers in the preparatory stage, and the researcher has adopted the constructivist theory because it is one of the theories advocated by educators in the modern era. 2,3,4,5), as the highest degree of the scale reached (225) degrees and the lowest degree reached (45) degrees, with a hypothetical average of (135) degrees.

**Second: The Flexible Thinking Scale:** After the researcher reviewed the literature and a number of theories, tests and previous studies that examined the subject of flexibly thinking, the researcher adopted a flexibly thinking scale consisting of (24) paragraphs and containing five alternatives, and the key to correction is (1,2,3,4). 5) The lowest score a respondent gets is (24) and the highest score a respondent gets is (120).

##### **Logical Analysis of the Paragraphs of My Tool (Apparent Honesty)**

For the purpose of verifying the validity of the paragraphs of the two research tools in their initial form, they were presented to a group of arbitrators in educational and psychological sciences and teaching methods and were asked to express their observations and opinions in order to pass a judgment on the validity of the paragraph or not or to make an amendment to it, and after collecting the opinions of the arbitrators, if the researcher used the chi-square test. For good matching for the purpose of identifying the validity of the paragraphs of the two

search tools, as all paragraphs were significant, as the values of the calculated paragraphs were greater than the value of the tabular chi-square of (3,84) at the significance level (0.05) and the degree of freedom (1), and thus the paragraphs were accepted. The two tools are all with some minor modifications in the formula of some paragraphs according to the opinions of some arbitrators.

### **The Exploratory Sample**

for the purpose of identifying the clarity of the instructions for the validity of the paragraphs of the two research tools and the extent to which the paragraphs are understood and the appropriateness of the proposed alternatives to them, and to calculate the average time required to answer them, the two scales were applied to a survey sample of (40) teachers and schools who were chosen randomly in equal numbers and from non-members of the basic research sample by (20) teachers and (20) schools from the middle and high schools of the total research community in the center of Babil Governorate, it was found that its instructions and paragraphs were clear and understandable to teachers, and the average time taken to answer the integrated education quality scale was (21) minutes, and the scale of thinking flexible (15) ) minute.

### **Statistical Analysis of the Items of the Two Research Tools**

The researcher considered that the sample of the statistical analysis of the items should be (330) teachers, who were chosen by random method, and the following is an explanation of the steps of the statistical analysis procedures:

#### **A- The Discriminatory Powers of the Two Search Tools**

It is necessary to calculate the discriminatory power for the purpose of excluding the paragraphs that do not distinguish between individuals and to keep the ones that distinguish them, because there is a strong relationship between the accuracy of the scale and the discriminatory powers of its paragraphs, (Odeh, 1988). The method of the two end groups is an appropriate procedure in the process of analyzing the paragraphs, using the (t-test) test for two independent samples to calculate the significance of the differences between the averages of the upper and lower groups for each of the two tools' paragraphs, and they were all distinct, as all the calculated (t-test) values were greater than the value. The tabular amount of (1.96) at the level of statistical significance (0.05) and the degree of freedom (176).

#### **B. Relationship of the Paragraph's Degree to the Total Degree of the Two Search Tools**

The correlation of the paragraph's degree with the total degree of the scale means that the paragraph measures the same concept that the total degree of the

scale measures (Anastasi, 2010). Statistically significant because the values of all correlation coefficients were greater than the tabular value of (0,113) at the level of statistical significance (0.05) and the degree of freedom (328), and the degrees of the Pearson correlation coefficient of the integrated education quality scale ranged between (0.22-0.69). And the degrees of Pearson's correlation coefficient of the Flexible Thinking Scale (0.35- 0.68). And based on the Ebel criterion, which was specified (0,19) or more as a criterion for the validity of the paragraph, and therefore no paragraph was deleted from the paragraphs of the two search tools.

### **C. The Relationship of the Degree of the Paragraph with the Degree of the Field to Which It Belongs**

As the method of relationship degree of paragraph with the total degree of the domain to which the paragraph belongs was used, after applying the scale to the sample of statistical analysis of (330) respondents, and when calculating the correlation coefficient between the degree of each paragraph and the total degree of the domain to which the paragraph belongs using the Pearson correlation coefficient All of them are statistically significant because the values of the correlation coefficients were all greater than the tabular value of (0,113) at the level of statistical significance (0.05) and the degree of freedom (328), and the degrees of the Pearson correlation coefficient of the integrated education quality scale ranged between (0.29-0.59).

### **Psychometric Properties of the Two Search Tools**

**A- Apparent honesty:** The degree of confidence in the scale depends if the scale carries an indicator of honesty, because honesty gives quality to the scale and depends on measuring the attribute to be measured (Aiken, 1979, P. 63). This type of honesty was achieved by presenting the two tools to (29) specialized arbitrators in education, psychology and teaching methods of the Arabic language, whose opinions were used in determining the validity of the paragraphs.

**B- Stability:** There are many ways to calculate the stability, and the researcher used the following method to extract the stability of the two research tools.

#### **Alpha Cronbach Method**

The Alpha Cronbach equation has been applied to the sample of the statistical analysis of the blended education quality scale, and the stability value for them in this way is (0.78), and the mentioned stability indicators are good and acceptable indicators.

#### **Test-Retest Method**

The researcher applied the thinking scale flexibly to a random sample of (40) teachers and after 15 days, the same test was re-applied on the same group,

and the researcher calculated the Pearson correlation coefficient between the first and second applications, which amounted to (0,88) This means that the current scale is good and has an acceptable degree of stability over time, and it is a reliable and good stability coefficient.

## **Chapter Four**

### **Presentation And Interpretation of the Results**

#### **First, Show the Results**

The aim of the research: (the correlative relationship between the quality of blended education and the flexible thinking of male and female Arabic language teachers in the preparatory stage).

In order to achieve this goal, the researcher used the Pearson correlation coefficient to find the correlation between the quality of blended learning and flexible thinking, and then used the Pearson correlation coefficient (t) test to find out the significance of those differences in the correlational relationship. The results were as shown in the following table:

Table 1. The Value of the Pearson Correlation Coefficient and the Differences in the Correlation between the Quality of Blended Learning and Flexible Thinking

Sample volume	The value of the Pearson correlation coefficient	Correlation coefficient value square	Freedom Degree	The value of the Pearson correlation coefficient (t) test		Indication level stats
				Calculated	Tabular	
330	0,46	0,211	328	10,45	1,96	0,05

It is clear from the above table that the value of the Pearson correlation coefficient has reached (0.46), which is a good and medium value, and the relationship is direct. The tabular value of (1.96) at the level of statistical significance (0.05) and the degree of freedom (328), which indicates the existence of differences in the correlation relationship. The researcher attributes this result to the fact that male and female teachers have a level of quality of blended learning and flexible thinking, which led to the emergence of a direct correlation between the two variables, meaning that any increase that occurs in the first variable is accompanied by an increase in the second variable and vice versa.

#### **Second: Recommendations**

1. Changing the plans and objectives of the outputs of the faculties of education in line with what is required by the integrated education quality system.
2. The introduction of educational aids, computers, equipment and electronic programs by the Ministry of Education and its general directorates.

### **Third: Suggestions**

The researcher suggests conducting several studies:

- 1.** Conducting a study entitled (The quality of blended education and its relationship to language skills among students of Arabic language departments in the Colleges of Education and Basic Education).
- 2.** Conducting a study entitled (Literary skills and their relationship to flexible thinking among students of Arabic language departments in Iraqi universities).

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