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EVALUATION OF TEACHING PERFORMANCE FOR SECONDARY SCHOOL ISLAMIC EDUCATION TEACHERS IN THE LIGHT OF TEACHING PRACTICES THAT ARE COMPATIBLE WITH BRAIN- BASED LEARNING

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ABSTRACT

The current research aims to evaluate the Teaching Performance for Islamic Education Teachers in the Light of Teaching Practices that are Compatible with Brain- Based Learning in the Secondary School. This is by constructing a list of the most important teaching practices in Compatible with the mental processes involved in the (right and left) sides of the brain, verifying the performance level of Islamic education teachers in the secondary stage in the light of teaching practices in Compatible with brain-based learning, then constructing a proposed conception to develop the performance of Islamic education teachers in the secondary stage in light of teaching practices that are compatible with brain-based learning. A descriptive approach was adopted in this research , The research sample consisted of (40) Islamic education teachers from the secondary stage The teaching performance observation card was used as a research tool. The research reached the following results: The presence of a number of teaching practices distributed into (5) main areas that represent the dimensions of teaching performance: educational and learning procedures and activities, developing a stimulating classroom environment for learning, supporting thinking and reflection, enhancing classroom communication and supporting evaluation processes. The level of the research sample in teaching practices was varied in light of the dimensions included in the card, but it reflects a weak level of practices, which means the need for Islamic education teachers to be trained on these practices. Finally, presenting a proposed conception for developing the performance of Islamic education teachers at the secondary level in light of teaching practices that are compatible with brain-based learning. The research also presented a set of recommendations and suggestions.

Keywords: Evaluation of Teaching Performance - Teaching Practices that are Compatible with Brain-Based Learning - Brain-Based Learning.

Introduction

Education is considered a tool for changing societies, shaping the behavior of its members, a tool of transformation, and a tool for change to achieve the goal that the society aspires to. The importance of education in Islam is evident through the commands of God (Almighty) in the Holy Qur'an, which calls for good education and preparing children in accordance with God's obedience. Islamic education has received a great attention in building the Muslim personality in a

uniquely balanced way that combines the energy of the body and the energy of the soul. It contains a balance between human material and morals. Its goal and purpose is to develop human thought, and to regulate his behavior and emotions, on the basis of the Islamic religion (El-Nahlawy, 1990).

Islamic education subjects are among the most important and most needed subjects in the life of the individual and society, which the education in the Kingdom of Saudi Arabia is built. its importance derives from the timeless message of Islam represented in a correct and integrated understanding of Islam, instilling the Islamic faith in the hearts of the students, and providing them with Islamic values and teachings (Al-Saif, 2013).

The secondary stage is also one of the most important stages in education, as it is the main basis for preparing students for an educational preparation that qualifies them to keep pace with the rapid changes and transformations in different developmental fields, as these changes and transformations include the biological aspect, which is represented in maturity, the cognitive aspect, and the social aspect. At this stage, the learner's thinking pattern is varied and he will have the ability to abstract, infer, deduce, analyze, and synthesize, and have the ability to understand and develop abstract and creative thinking. As well as his awareness of the concepts of good and evil, beauty and ugliness, justice and injustice, and his thinking is affected by the experiences gained. The more the experiences was varied and increased, the more his thinking was grow up and expanded (El-sayed; 2003).

In light of this, the importance of Islamic education teacher appears in instilling high values and virtuous morals that enhance the cohesion of social ties within societies. Hence, the Islamic education teacher and what he provides is the decisive factor in the effectiveness of the teaching process. As he organizes, manages, and implements experiences in the direction of the specific objectives for each of them. Its role is no longer limited to provide the student with different types of knowledge, but he has become a guide, monitor and facilitator to provide student with skills and experiences and to develop tendencies and attitudes that help students change their behaviors and build their personality in an integrated manner (Al-Ajeez, 2007).

Therefore, effective teaching requires patterns of teachers who have some effective teaching performances; to achieve the educational goals that help them do their work inside and outside the classroom with an appropriate level of mastery, which contributes to achieve their desired learning patterns (El-Tanawi, 2013). Al-Khatib and Al-Khatib (2003) pointed out the necessity to pay attention to the performance of the Islamic sciences teacher because it is the most important factor in the success of the educational process. Therefore, evaluation of the teacher's teaching performance is one of the most important elements for developing the education process in general, and the teacher in particular. Evaluation is an integral part of the educational process; it is linked to other components and elements, and negatively or positively affects the results of the educational process (Al-Kaltham, 2013).

The process of evaluating the teaching performance is considered an important stage and a prerequisite for the professional growth of the teacher. It gives an accurate and clear image of the educational system and what prevails in it. Because the process of evaluating teacher performance is closely related to plan, implement and evaluating teacher preparation programs, which in turn is reflected in achieving professional growth for the teacher. The objectives of evaluating educational performance is to provide teachers with accurate information that the teacher preparation programs can be developed in the light of it, and to determine the basic competencies that can be included in teacher preparation programs and in-service training programs (Al-Kaltham, 2013).

The brain-based theory is one of the theories that have a reflection on the teacher's performance, as it is concerned with how the brain works, and information processing. According to this theory the human brain consists of two sides, each one of them specializes in specific mental processes, and processes

knowledge in a specific way, the right side is concerned with the synthesizing of images Thoughts, imagination, intuition, and enhances sensation, while the left side is concerned with analysis, logic, language, arrangement, organization and accuracy. Although each of the two sides has specific patterns of thinking, this does not cancel the work of the brain in an integrated manner (Mohammed, 2011).

This theory indicated that the teacher can enhance the thinking processes associated with the hemispheres of the students' brain through using teaching strategies in line with the nature of the work of the brain, providing experiences related to the learner's environments, and allowing him to experiment and practice thinking, and to be involved in a variety of educational activities in order to build deep understanding, and form correlation between prior knowledge and current knowledge (Youssef, 2011).

The teacher should strive to have the teaching practices related to (planning, implementation and evaluation) that enhance the efficient functioning of the brain, activate the mental processes involved in the two hemispheres of the brain, and working together in an integrated manner, and enhance the use of questions with different patterns of thinking that activate the thinking processes in the brain as a whole, and the teaching activities that stimulate those processes.

Research problem

Many educational studies confirm that knowing the mechanism of the brain's work facilitates the ways for learners to acquire knowledge, create psychological and social stability, and achieve educational tasks accurately and easily. Each teacher should study the mechanism of the brain work, the brain- based learning theory and the active teaching strategies; in order to raise the level of learners' performance, activate and evoke their thinking. (Afana, and El-gesh, 2009). From this point, a shift must be done **from** how the learner can be helped to learn **to** how to improve brain stimuli in order to grow, increase its connections and strength, and to keep learning in a long-term memory (Al-Filmbany, 2014).

On the other hand, by reviewing previous studies, some studies that dealt with improving the teaching performance of Islamic education teachers, such as the study of (Al-Sahli, 2012; Al-Maliki, 2012), confirmed that it is important to evaluate the teaching performance of Islamic education teachers. Accordingly, it becomes clear that it is important to evaluate the teaching performance of Islamic education teachers in the light of teaching practices that are Compatible with brain-based learning at the secondary stage.

The research problem can be summarized in the following main question:

What is the level of teaching performance of Islamic education teachers in light of teaching practices that are Compatible with brain-based learning at the secondary stage?

And from the main question we can exclude those subsidiary questions:

1- . What are the necessary teaching practices for Islamic education teachers at the secondary stage in light of brain-based learning?

2- What is the performance level of Islamic education teachers at the secondary stage in light of teaching practices that are Compatible with brain-based learning?

Research Objectives

The current research aimed at constructing a list of the dimensions of teaching performance in the light of teaching practices **that are Compatible** with the mental processes involved in the (right and left) sides of the brain, to determine the level of Islamic education teachers performance at the secondary stage in the light of teaching practices that are Compatible with brain-based learning, and to verify the level of performance of Islamic education teachers at the secondary stage in the light of teaching practices that are Compatible with brain-based learning.

Literature Review

Evaluating Teaching Performance of Islamic Education Teachers, and Teaching Practices:

Teaching Performance Evaluation Concept:

Evaluation is one of the activities that characterizes the school system, and the learners in the school system are usually the main focus in the evaluation process (Joshua et al., 2006). The usual goal of this evaluation is to determine the quality of the learning process among students. The research literature agrees that evaluation is a diagnostic and remedial process that aims to identify the weaknesses to remove them, or to reduce their negative effects, identify strengths to enhance them, and it is used to make judgments that lead to taking some decisions (Shola, 2005; Abd, 2017).

Teaching performance is seen as "the set of activities carried out by the teacher in an educational situation to help his students reach specific educational goals," and it is a functional aspect of the interaction between ability and motivation, opportunity, attitude, and a state of satisfaction (Gewasari et al., 2017), or it is A set of organized processes for measuring or making an appropriate and relevant judgment about performance that allow decision-making and taking the needed procedures (Gálvez and Milla, 2018) , It also refers to the formal process that the school uses to review and assess teacher performance, their effectiveness in the classroom, and the use of the results to guide their professional development (Sawchuk, 2015). Bichi (2017) emphasized that evaluation of the teacher performance requires accurate assessment to the effectiveness of teaching , and to do his role as a facilitator of the learning process in the classroom and identify his strengths and progress towards the required skills and abilities.

The evaluation of the teaching performance of Islamic education teacher defines procedurally as: "That planned process that is carried out to measure what the teacher actually accomplishes in the classroom (tasks that represented in many procedures that enable secondary school students to learn), in order to reveal their strengths and weaknesses, and to develop his performance in a manner that serves the objectives of the educational process, according to the objective of the observation card prepared for this purpose, which includes a set of dimensions that include a set of teaching practices that are Compatible with brain-based learning which the evaluation of performance is carried out on its basis."

***Practices* of Teaching**

Practices of Teaching are among the main pillars in the success of the teaching and the learning processes, in which experiences, knowledge and skills are transferred and exchanged between the teacher and the learner. Practices of teaching are defined as the practical procedures or actual behavior that the teacher performs according to the different stages of the lesson plan in order to achieve the goals set in the plan (Tayyab, 2015), it is also the different methods, techniques and performances that the teacher performs inside the classroom to carry out and evaluate the lesson in order to achieve the curriculum objectives (Al-Ahmari, 2020).

Islamic education teacher should be familiar with the teaching performance skills beside the basic skills in teaching all branches of Islamic education, whether in the Holly Qur'an, the Sunnah, hadith, or jurisprudence, as this ensures his success and excellence in his teaching performance, and achieves the educational goals that he seeks through teaching Islamic education (Atta, 2005). Teaching performance skills are not innate skills, but they are acquired skills that should be trained and acquired, including planning skills, preparation skills for teaching, teaching implementation skills, and teaching evaluation skills. (Al-Sahli, 2012).

Teaching performance skills are divided into: **Planning skills**, where the teacher in this step sets the general plan for teaching, its components, teaching objectives, activities, methods, and teaching aids, as well as evaluation and feedback processes. These elements control the teacher's teaching performance, and ensure his success in the Teaching process (Al-Zunaidi, 2014). **Implementation skill**, which is a real translation of what has been planned, and a transfer of

knowledge and skills included in the course to the students, and it includes a set of sub-skills such as classroom management skill, motivation skill, verbal and non-verbal communication skill, and using educational aids skill, taking into account individual differences skill, and inquiry and exploration skill (Al-Sahli, 2012). **Evaluation skill:** It is used to ensure the integrity of the teaching process and the teaching performance carried out by the teacher, and to ensure that he was able to achieve the planned goals, as well as providing feedback, reconsidering his method of work if he can not achieve the goals, modifying plans, and studying the reasons for not achieving objectives (Al-Khatib and Al-Khatib, 2003, p. 233).

Brain- Based Learning Theory

With the emergence of this theory, educators began researching how to make the most use of this brain-based knowledge in the teaching and learning processes, including a change in content, objectives, methods, teaching strategies and techniques, and evaluation methods, in order for the learner to acquire knowledge (Mahmoud et al., 2016). Brain-based learning is based on the idea that learning opportunities are achievable if the learning takes place in an educational environment that is in compatible with the work of the brain and responds to the ways in which it works (Shahrouri and Jabara, 2015).

Jensen (2005) defines brain-based learning theory generally as "the learning based on the full understanding of the human brain, and it drives from several branches of science, such as: chemistry, psychology, and neuroscience, and by using what we know about the brain, we make better decisions and we reach a largest number of learners without losing anyone's attention." It is described most effectively in three words: **participation, strategies, and principles**. Brain-based learning is the use of various strategies based on teaching and learning, which in turn are based on how our brains work, and the teachers should understand the principles of brain- based learning, and the importance of integrating learners in an active learning process.

Duman (2010) also argues that brain- based learning is a way of thinking about the learning process, and it includes accepting the rules of how the brain processes the learning process in a meaningful way. Mahmoud et al, (2016) define it as " the learning that is consistent with the natural way in which the brain learns, and it is cope up with the main principles of the brain. Abu Latifa et al (2017) define it as a method or an approach to learning based on a set of planned activities and strategies, which takes into account brain functions to guide students for better learning. According to Karolina (2018) it is a learning method that is compatible with the brain's natural design for learning, and Al-Dakhil and Metwally (2019) define it as " the learning based on stimulating the creative side of the brain through various sensory stimuli, and activating the neural bushes responsible for that so that learning becomes long-term".

Factors Affecting Brain- Based Learning

Erlauer (2003) argues that there are a range of factors affecting brain-based learning; they represent the seven foundations of learning, which are: **Emotional Wellness and Safe Environment**, Emotions are related to memory and learning; It affects students' learning, and the teacher can build an enjoyable and safe classroom environment to be highly compatible with brain learning. **The Body, Movement, and the Brain**, Oxygen, water, sleep, food pattern, and movement affect the learner's brain and learning. The teacher can make adjustments to school classes, teaching methods, and school activity to help students learn. **Relevant Content and Student Choices**, The brain remembers some information more easily than others, and the teacher can employ and engage emotions, linking new information with prior knowledge to arrive at a more meaningful construction for students. **Time, time, and more time:** these three components of time greatly influence when and how Students learn well, and the teacher can use the three elements of time (time on task, time to understand, and matching time slots) in the classroom to increase learning. **Enrichment for the Brain: which** allows the teacher to increase learning for all students, through the use of many enriching practices during the teaching process. **Assessment and Feedback:** It is necessary to

identify forms of assessment that are compatible with those that are incompatible with the brain, and the teacher can use forms of assessment that enhance the learning process. **Collaboration**: Students learn effectively by cooperating with others. To improve the learning process in the classroom, the teacher can apply the fact that the human mind is **a social brain**.

Sharif, Al-Filmbany, and Mabrouk (2014); Yandow (2007); Jack (2010) Indicate to a group of factors affecting brain-based learning, such as: **Attention**: the learner should not pay attention for a long period of time, but should be given appropriate time for stability and rest, this process is related to the degree of attention of the learner towards Learning topic, the novelty of the educational content, its complexity, and previous experience; The more prior knowledge of the content the learner has, the less time will be for processing and acquiring information. The novelty of the content is related to its ability to expand and apply knowledge. The process of designing the learning experience should be based on the prior knowledge to stimulate the functioning of the brain. Although the students share the same DNA, each brain is unique as a result of environmental experiences, and genetic factors to which it is exposed. **Movement**: the integration of mind and body is a characteristic that affects brain-based learning, the body affects the brain and vice versa. Physical activities increase the strength of the brain and improve the utilization of knowledge. Physical experiences and activities allow the learner to strengthen the interlocking links between neurons, paying an attention to the emotional aspect as it activates all aspects, whether cognitive, motor, value and moral. Knowledge and emotions overlap greatly; Emotions signal the brain to go on its way to learning, and it plays a key role in increasing and maintaining attention during the learning process. **Providing activities that give the learner opportunities to confirm their learning;** Current brain research indicates that providing students with many opportunities for hands-on activities, and applying real-life examples, enhances learning.

Identification of Teaching Practices That Are Compatible With Brain-Based Learning:

Teaching practices that are compatible with Brain-Based Learning necessary for Islamic education teachers at the secondary stage were identified through the main dimensions of teaching performance:

The first dimension: educational and learning procedures and activities: It is defined procedurally as: "All the teaching practices done by the teacher that are compatible with brain-based learning and planned in an effective, organized and coordinated manner, represented in (formulation of goals, application of strategies and various teaching models in learning topics" such as Visual maps, implementing purposeful activities, linking new experiences with previously learned experiences to develop secondary school students in the fields of learning (cognitive, skill, emotional) in Islamic education branches, and it is measured by the objective of the observation card prepared for this purpose.

The second dimension: Developing a classroom environment that stimulates **learning**: It is procedurally defined as: "All the teaching practices done by the teacher that are compatible with brain-based learning, represented in (controlling the physical environment, enriching the brain environment for secondary school students in terms of: providing various rich and enhanced experiences, presenting different religious concepts, problems and issues, organized integration into all learning activities, and the expression of ideas freely and safely), measured by the objective of the observation card prepared for this purpose.

The third dimension: Supporting thinking and reflection: It is defined procedurally as: "All the teaching practices done by the teacher that are compatible with brain-based learning, represented in (activating the dynamic ability of the brain of secondary school students in the opportunity to search for meaning, training in thinking and its skills, reflecting on the ideas embedded in Islamic concepts and various religious issues, discuss, analysis and criticize their validity, raise questions to develop these

ideas in the light of Islamic law), and it is measured by the objective of the observation card prepared for this purpose.

The fourth dimension: Enhancing classroom communication: It is defined procedurally as: "All the teaching practices done by the teacher that are compatible with brain-based learning, represented in (increasing synergy and social interaction among secondary school students: by raising questions for them, reading and reformulating content, translating, interpreting and summarizing the ideas included in it, and giving enough time to address those ideas) in the branches of Islamic education to bring about the physiological changes necessary for their brain development, and it is measured by the objective of the observation card prepared for this purpose.

The fifth dimension: Supporting evaluation processes: It is defined procedurally as: "All the teaching practices done by the teacher that are compatible with brain-based learning, represented in (employing various assessment tools and means, designing appropriate questions with the learning styles of the students in the secondary stage, giving various reflective tasks, and participating with the teacher in decision-making), during or after the course, for the purpose of achieving educational and learning goals.

Methodology

Research Methodology: The research used the descriptive survey method, which depends on the study of reality, or the phenomenon as it exists in reality. It is concerned with describing it accurately, and expressing it qualitatively or quantitatively (Obaidat et al., 2011), It is one of the forms of organized scientific analysis and interpretation; to describe the phenomenon, and depict it quantitatively by collecting data and codified information about the phenomenon or problem, classifying it and studying it carefully (Mutawa,& Al-Khalifa, 2014).

Research population and sample: The research **population** consisted of all Islamic education female teachers at the secondary stage in government schools in Dammam and Jubail in the academic year 2020-2021, and their number was (1010) female teachers. According to the statistical guide for the Department of Education in the (Dammam) region for the year 2020-2021, the sample was determined in light of the current research method as is known in the scientific research - especially descriptive ones - with a percentage of no less than 10% from the original population; It included a group of Islamic education teachers at the secondary stage who study Islamic education curricula in the cities of Dammam and Jubail, and their number reached (100) female teachers, who were chosen randomly; "because of the appropriateness of this method to select the sample from the large population spread in several and scattered places, which each member of the original population has a natural and similar opportunity to be entered and chosen."

Research Tools:

(1) A list of the dimensions of teaching performance of Islamic education teachers at the secondary stage in the light of teaching practices that are compatible with brain-based learning:

A list of the dimensions of teaching performance of Islamic education teachers at the secondary stage was built in the light of a number of teaching practices that are compatible with brain-based learning according to the following steps:

(A) Determining the goal of the list of the teaching performance: It is to determine the dimensions of the teaching performance of Islamic education teachers in the secondary stage in the light of teaching practices that are compatible with brain-based learning, in the light of it the level of teaching performance of Islamic education teachers in the secondary stage will be revealed.

(B) Determining the sources of building the list of the teaching performance: by reviewing the studies related to evaluating teachers' teaching performance, evaluating teachers' teaching practices, and brain-based learning, and

reviewing literature related to teaching performance, teaching practices, brain-based learning, and the objectives of teaching Islamic education at the Secondary stage, and the opinions of some experts.

(C) Determining the initial form of the list of teaching performance: In light of what had mentioned before, the researcher reaches to a number of teaching practices that were initially distributed on (five) main dimensions that represent the dimensions of teaching performance: education and learning activities, Developing a classroom environment that motivates learning, Supporting thinking and reflection, Enhancing classroom communication, and Supporting evaluation processes. Each major dimension included a number of teaching practices.

The list was administered to a panel of jury members to determine the consistency of the teaching practice with the dimension of the teaching performance to which it belongs, and to determine the importance of the teaching practice of Islamic education teachers in the light of brain-based learning in the secondary stage, and to determine the accuracy of the linguistic formulation of the teaching practice. In light of the opinions and observations of the jury members, The practices that obtained an agreement rate more than 85.1% were editing, deleted and added, so that the list in its final form addresses the main dimensions of teaching performance are: educational and learning procedures and activities, Developing a classroom environment that motivates learning, Supporting thinking and reflection, Enhancing classroom communication, and Supporting evaluation processes.

(2) Teaching performance observation card according to the list of the dimensions of teaching performance for Islamic education teachers at the secondary stage in the light of teaching practices that are compatible with brain-based learning:

The observation card is defined as "a research tool by which information is collected, which enables the researcher to answer research questions and test hypotheses" (Al-Assaf, 2010), as it was prepared according to the following steps:

- Transforming the list of the teaching performance of Islamic education teachers in the secondary stage in the light of teaching practices that are compatible with brain-based learning into an observation card, in order to reveal the level of the teaching performance of Islamic education teachers in the secondary stage in light of a number of teaching practices that are compatible with brain-based learning.
- Determining the objective of the observation card: it was to reveal the level of the teaching performance of Islamic education teachers in the secondary stage in light of a number of teaching practices that are compatible with brain-based learning.
- Description of the observation card: The initial form of the teaching performance observation card is formulated according to the final form of the list of teaching performance dimensions, consisted of two main parts: Part One: It is the first page of the card, and it includes data related to the teacher: the name, the educational qualification, the type of qualification, Specialization, number of the years of experience, and number of training courses. Part Two: The initial card included (five) main dimensions, which included (57) teaching practices.
- Determining the card grading method: a quadruple Likert grading scale has been developed; To estimate the level of the teacher's ability to perform teaching practices during direct observation of her performance, as (4) indicates high performance, (3) average performance, (2) low performance, (1) performance is not achieved
- The Validity of the observation card: the card was administered to a panel of jury members to ensure the content validity of the card. The internal consistency of the card was calculated by applying it to a pilot sample consisting of (40) female Islamic education teachers at the secondary stage in a number of public education schools affiliated to the Education Department in the Eastern region. Pearson correlation coefficient was calculated between the score of

each statement or practice of the card and the total sum of the dimension to which the statement or practice belongs. Also, Pearson's correlation coefficients were calculated between the dimensions of the observation card with the total score of the card; in addition, Pearson's correlation coefficients were calculated between each dimension of the observation card and other dimensions with the total score of the card. The correlation coefficients ranged between (0.325, 0.832), that mean a statistical significance at the Level (0.05), which indicates that the observation card has a high degree of internal consistency validity.

- The reliability of the observation card was calculated using the Alpha Cronbach coefficient. The reliability coefficients ranged between (0.78-0.85) for the dimensions of the card, and the reliability value was (0.86) for the card as a whole, which are indicates high values of reliability.

How to extract The Data of The Search Tool:

The cut –off point is the point at which the examinee will pass the scale. Determining this degree is one of the basic elements in building educational scales. In the light of it, the degree of verification of the teaching performance is judged based on the Mean value, and through it the criterion based on the real limits of the degrees of verification levels (relative weights) used or what is known as the level of teaching practices is determined through the following equation:

$$\text{Class length} = \frac{\text{(the greatest value- the least value)}}{\text{Number of scale alternatives}} = \frac{\textbf{(4-1)}}{\textbf{4}} = \textbf{0.75}$$

Table (1) the cut – off point score for each level of the teaching practice levels and the actual limits of the response levels scores (relative weights) according to the Likeart quadrilateral scale

No.	Mean value	Percentage	Performance level
1	4-3.25	100- 81.25%	High
2	3.25 ≥ 2.5	81.24 – 62.5 %	Intermediate
3	2.5 ≤ 1.75	62.4 – 43.75 %	Low
4	1.75 ≥ 1	34.75 – 25 %	Doesn't achieved

In this table, the means and their percentages are considered to be the boundary between the levels of teaching practice in the research tool "observation card"; this is for the mean of the dimension or the total degree.

Research Results

The Teaching practices necessary for Islamic education teachers at the secondary stage in the light of brain-based learning:

A list of the most important teaching practices that are compatible with brain-based learning (in its primary form) that must be available to Islamic education teachers in the secondary stage has been prepared in light of the books written in the field of curricula and teaching methods in general, and curricula and methods of teaching forensic sciences in particular, and in the light of reviewing previous Arabic and foreign research and studies which related to the current research, modern attitudes in the teaching forensic sciences, the opinions of some experts and specialists in the field of curricula and methods of teaching forensic sciences, studying the content of forensic science for the academic year, and the objectives of teaching forensic sciences at the secondary level. Then the researcher monitored their observations

and suggestions, took their opinions, and reached the final list of teaching practices that are compatible with brain-based learning, which included (57) sub-practices distributed over (5) main dimensions, which are: educational and learning procedures and activities, which included (18) teaching practices, Developing a classroom environment that stimulates learning (11) teaching practice, supporting thinking and reflection (9) teaching practices, enhancing classroom communication (7) teaching practices, and Supporting evaluation processes (12) teaching practices. Thus, the research has answered the first question of the research questions, and the following table shows the most important dimensions of the main teaching performance and teaching practices related to them:

Table (2) The Most Important Dimensions of The Main Teaching Performance And Teaching Practices Related To Them:

No	Main teaching performance dimensions	Sub- teaching practices
	Educational and learning procedures and activities	**18**
	Developing a classroom environment that stimulates learning	**11**
	Supporting thinking and reflection	**9**
	Enhancing classroom communication	**7**
	Supporting evaluation processes	**12**
	Total	**57**

This result agrees with the study of Al-Ruwaili and Al-Harbi (2018), which aimed to identify the dimensions of the teaching performance and the most important teaching practices related to them. Although It differs from most of these studies in terms of the field of study (Mathematics - Arabic), it differs from them in deriving the main dimensions of teaching performance (educational and learning procedures and activities, Developing a classroom environment that stimulates learning, supporting thinking and reflection, enhancing classroom communication, and supporting Evaluation processes, and identify the most important sub-teaching practices related to these dimensions), It also included what Al-Sahli (2012) dealt with in terms of the dimensions of the teaching performance in the field of planning, implementation, and evaluation. It also included what the study of Essa & Alshahopi (2019) dealt with in terms of the dimensions such as personality traits, human relations, lecture preparation and implementation, and activities and evaluation. It also included what the study of Mohammad; and Osman (2019) dealt with in terms of the dimensions of teaching performance represented in the educational field and the general culture of the teacher, personal traits and human relations between teachers, planning and management of the educational environment, and teaching strategies. In addition to the study of Mahgoub, (2014) which dealt with the dimensions of the teaching performance of the teacher represented in the use of teaching aids and the necessary teaching methods that help in learning such as managing discussion and dialogue, communication skills, motivation, simulation, use of activities, problem solving, role playing, observation, discovery, self-learning, cooperative learning, and the use of 3D teaching aids. All of these dimensions that were addressed in the previous studies were taken into account when determining the teaching dimensions related to brain-based learning, which are educational and learning procedures and activities, developing a classroom environment that stimulates learning, Supporting thinking and reflection, Enhancing classroom communication, and Supporting evaluation processes.

This result differs from the study of Al-Kaltham (2013) which identified the skills of the learning dimensions that must be available in Islamic education teacher in the light of Marzano's learning dimensions model and its use as a tool for evaluating the performance of Islamic education teacher and judging the level of his performance and practical skills. These skills were determined in the teaching performance skill, it includes two themes: the positive attitude towards learning, and the productive habits of mind. It also differed in its objective with Mansy (2014) study which aimed to determine teachers' perceptions towards brain-based learning, along with the extent to which they practice such learning strategies in teaching science, and with Fratangelo's (2015) study which aimed to identify teachers' perceptions about brain based knowledge, and to identify their performance, experiences and actions. It also differed with many studies that focused on knowing the impact of brain-based learning on some cognitive and mental variables, such as (Abu Latifa et al., 2017), (Mohammed, 2017), (Ghazala et. Al, 2018), (Uzezi & Jonah, 2017), (Tafti and Kadkhodaie, 2016), (Shabatat & Al-Tarawneh, 2016).

The Level of The Performance of Islamic Education Teachers at The Secondary Stage in The Light of The Teaching Practices That are Compatible With Brain-Based Learning:

The Mean and the percentage weight were calculated for the card dimensions statements, as the gradient is a quadrilateral on the scale (4-3-2-1), so the cut-off point is represented by the value (2.5) with a percentage weight (62.50%), and then the statements whose mean reaches this value or more reflects an actual and available teaching practice, and if it is less than this value, it reflects teaching practices that are not available and necessary for Islamic education teachers at the secondary stage in the light of brain-based learning. The following table shows the level of teaching practices in each dimension of teaching performance.

The First Dimension: Educational and Learning Procedures, and Activities

Table (3) Educational and Learning Procedures and Activities

No.	The dimensions of the teaching practices that are compatible with brain based learning	Performance level according to each practice from the teaching practices				Mean	Percentage weight	Rank	Availability level	Performance level
		High	intermediate	Low	Unachieved performance					
	Establishes procedural objectives of the learning topic (religious concepts and issues), that are compatible with brain-based learning.	**30**	**30**	**20**	**20**	**2.70**	**67.50**	**1**	*****	**intermediate**
	Create a brainstorming activities (questions, a factual issue, a situation, …) To make connections between the new learning topic and previous experiences.	**20**	**40**	**20**	**20**	**2.60**	**65.00**	**2**	*****	**intermediate**

	Using one of the teaching strategies that are compatible with brain-based learning, such as: (multiple intelligences, formal organizer, projects, advanced organizations, ...) when presenting religious concepts and issues.	**10**	**10**	**40**	**40**	**1.90**	**47.50**	**11**		**Low**
	Evoke the students' brain with new tasks related to the subject of learning (religious concepts and issues).	**20**	**30**	**30**	**20**	**2.50**	**62.50**	**4**	*****	**Intermediate**
	Allow the time for the students to build mental images about the religious concepts and issues.	**10**	**20**	**40**	**30**	**2.10**	**52.50**	**9**		**Low**
	Initiate the students' search to express mental images related to the religious concepts and issues.	**10**	**40**	**30**	**20**	**2.40**	**60.00**	**6**		**Low**
	Designing a variety of educational activities are that link past experiences with new experiences of the religious concepts and issues.	**10**	**40**	**35**	**15**	**2.45**	**61.25**	**5**		**Low**
	Students cooperate to prepare educational tasks related to religious concepts and issues.	**20**	**40**	**20**	**20**	**2.60**	**65.00**	**2**	*****	**Intermediate**
	Choose different presentation tools (audio, visual, audio-visual) to help imagine some abstract religious concepts	**25**	**25**	**30**	**20**	**2.55**	**63.75**	**3**	*****	**Intermediate**
	Allow mental curiosity opportunities when raising religious concepts and issues.	**20**	**20**	**30**	**30**	**2.30**	**57.50**	**7**		**Low**
	Use the activities and environmental and societal examples related to religious concepts and issues.	**20**	**40**	**20**	**20**	**2.60**	**57.50**	**2**	*****	**Intermediate**

	Evoke students' brain with the varied educational situations to ask more open ended questions related to religious concepts and issues.	**10**	**20**	**40**	**30**	**2.10**	**52.50**	**9**		**Low**
	Direct students to search for different types of knowledge sources (transformational, mental, and sensory); To answer the posed questions related to religious concepts and issues.	**5**	**5**	**30**	**60**	**1.55**	**38.75**	**13**		**Unachieved performanc e**
	Evoke students to summarize the ideas included in the learning topic of religious concepts and issues with varied methods and techniques.	**20**	**20**	**20**	**40**	**2.20**	**55.00**	**8**		**Low**
	Connect religious concepts and issues with one of the Islamic branches (Recitation, Tajweed, Tafsir, Creed, Fiqh and Behavior, Hadith, and Islamic Culture) .	**10**	**20**	**30**	**40**	**2.00**	**50.00**	**10**		**Low**
	Give the students the opportunity to learn new religious concepts in new situations or in a meaningful produc (article, report, problem solving).	**5**	**15**	**30**	**50**	**1.75**	**43.75**	**12**		**Low**
	Organize students' participation in processing mental information during discussion, and questioning related to religious concepts and issues.	**5**	**15**	**30**	**50**	**1.75**	**43.75**	**12**		**Low**
	Activate evaluation styles (pre- summative and formative) when learning religious concepts and issues.	**25**	**25**	**30**	**20**	**2.55**	**63.75**	**3**	*****	**Intermediat e**
Total		**275**	**455**	**525**	**545**	**2.26**	**56.39**			**Low**

The analysis of the practices of the first dimension (educational and learning procedures and activities) showed that this dimension ranked the second in relation to the rest of the dimensions, and the result of this dimension agrees with the study of Al-Ruwaili and Al-Harbi (2018) in the weakness of Islamic education teachers' possession and practice of the teaching dimensions in the light of teaching practices that are compatible with brain based learning, as only (7) out of (18) teaching practices are available, the mean values reached (2.5) or more, and the percentage of teaching practices availability in this dimension (38.89%), which is a low percentage, which indicates that the sample needs training on those practices included in this dimension. It is also clear that the mean of the dimension as a whole is (2.26), and this value is less than the cut-off point (2.5), which means that the practice of the dimension as a whole tends to be declined or weakened.

The reasons for the low availability of the teaching practices in this dimension can be attributed to a lack of training of the teachers on how to apply teaching strategies based on the brain-based learning theory, such as (mind maps, modeling, etc.), and how to design educational activities according to this in order to keep pace with the developments of the age that contribute in improving the educational process, and the inability of the teachers to design or prepare educational situations that motivates the right and left brain hemispheres, especially in the field of Islamic education. The belief of some teachers that the concepts of Islamic education are abstract concepts that have legal judgments, so it is not necessary to handle them by research or investigation, and the presence of a number of non-pedagogical teachers who do not have the scientific competence in applying teaching strategies based on brain-based learning.

The Second Dimension: Developing A Classroom Environment That stimulates Learning:

Table (4) Developing a Classroom Environment That stimulates Learning

No.	The dimensions of the teaching practices that are compatible with brain based learning	Performance level according to each practice from the teaching practices				Mean	Percentage weight	Rank	Availability level	Performance level
		High	intermediate	Low	Unachieved performance					
).	**Design a motivated classroom environment (techniques of calm, seating, appropriate lighting and temperature, presenting and discussing real problems, self-learning, ...).**	**60**	**25**	**10**	**5**	**3.40**	**85.00**	**1**	*	**high**
).	**Plan a classroom environment with an atmosphere of purposeful challenge (vigilance), leaving threat and fear while learning religious concepts and issues.**	**50**	**20**	**15**	**15**	**3.05**	**76.25**	**2**	*	**intermediate**

.	**Provide The classroom environment with rich and diverse experiences, such as (reading, organized movement, thinking, problem solving, paintings, performing arts, posters, ...); To evoke the nerve connections in the brain when learning.**	**15**	**25**	**40**	**20**	**2.35**	**58.75**	**6**		**Low**
.	**Observe that the students benefit from modern technology (computers, the Internet, electronic platforms, ...) in developing their knowledge structures on religious concepts and issues.**	**20**	**30**	**30**	**20**	**2.50**	**62.50**	**5**	*	**Interm ediate**
.	**Divide the students into heterogeneous groups; To perform educational tasks related to religious concepts and issues.**	**10**	**20**	**40**	**30**	**2.10**	**52.50**	**8**		**Low**
.	**Divide the individual and group educational tasks on the students**.	**20**	**30**	**30**	**20**	**2.50**	**62.50**	**5**	*	**Interm ediate**
.	**Observe students' performance while learning religious concepts and issues in small interactive collaborative groups.**	**10**	**30**	**40**	**20**	**2.30**	**57.50**	**7**		**Low**
.	**Accommodate all students' responses when carrying out educational tasks related to introducing religious concepts and issues.**	**30**	**20**	**30**	**20**	**2.60**	**65.00**	**4**	*	**Interm ediate**

7.	**Give the students the opportunity to express their ideas related to religious concepts and issues freely and with a great deal of psychological and social security.**	**30**	**20**	**40**	**10**	**2.70**	**67.50**	**3**	*	**Intermediate**
8.	**Refute evidence from sources of legislation related to religious concepts and issues.**	**20**	**35**	**40**	**5**	**2.70**	**67.50**	**3**	*	**Intermediate**
9.	**Provide fair opportunities for students when participating in activities to learn religious concepts and issues.**	**20**	**30**	**30**	**20**	**2.50**	**62.50**	**5**	*	**Intermediate**
Total		**285**	**285**	**345**	**185**	**2.61**	**65.23**			**Intermediate**

The analysis of the practices of the second dimension (developing a classroom environment that stimulates learning) showed that this dimension ranked the first, and the result of this dimension agrees with the study of Mohammad; and Osman (2019), and differs with the study of Al-Ruwaili and Al-Harbi (2018), as only (8) out of (11) teaching practices are available, where the mean values are (2.5) or more, and the percentage of teaching practices availability in this dimension is (72.73). %), which is an Intermediate percentage; which indicates the availability of the practices included in this dimension, with the exception of (3) practices only. It is also clear that the mean of the dimension as a whole is (2.61), and this value is greater than the cut-off point (2.5); Which means that the practices of the dimension as a whole tends to be Intermediate.

The reasons for the availability of teaching practices in this dimension can be attributed in an Intermediate percentage to the state's interest in constructing educational buildings appropriate to the nature of the climate and weather fluctuations in terms of (ventilation and lighting, availability of safety conditions, availability of seats,...) and this in turn contributes in improving the educational process. Teachers use methods of evaluating students via electronic platforms, and give students the opportunity to express freely and safety the ideas related to the presented religious concepts.

The Third Dimension: Supporting Thinking and Reflection:

Table (5) Supporting Thinking and Reflection

No.	**The dimensions of the teaching practices that are compatible with brain**	**Performance level according to each practice from the teaching practices**	**Mean**	**Percentage weight**	**Rank**	**Availability level**	**Performance level**

	based learning	High	intermediate	Low	Unachieved performance					
30.	**Link the functions of the left and right brain hemispheres by presenting one of the different strategies for teaching thinking, such as: (reciprocal teaching, the harmony of the scatterers, ...), when presenting religious concepts and issues.**	**5**	**10**	**20**	**65**	**1.55**	**38.75**	**8**		**Unachieved performance**
31.	**Activate One of the students' thinking skills (reflective, critical, creative, intuitive, ...) is when presenting religious concepts and issues.**	**5**	**10**	**25**	**60**	**1.60**	**40.00**	**7**		**Unachieved performance**
32.	**Make with the students creative activities that related to religious concepts and issues that require mental challenge.**	**5**	**10**	**60**	**25**	**1.95**	**48.75**	**5**		**Low**
33.	**Discuss students ideas related to presenting religious concepts and issues.**	**25**	**23**	**30**	**10**	**2.75**	**68.75**	**1**	*****	**Intermediate**
34.	**Support reorganize the learning content ideas in Islamic education branches and its connection to students**	**10**	**30**	**40**	**20**	**2.30**	**57.50**	**3**		**Low**
35.	**Enhance students active engagement in the meaningful educational tasks**	**10**	**10**	**20**	**60**	**1.70**	**42.50**	**6**		**Unachieved performance**
36.	**Motivate students to construct accepted mental interpretation about different religious concepts and issues**	**5**	**10**	**20**	**65**	**1.55**	**38.75**	**8**		**Unachieved performance**

37.	**Ask questions that measure students higher order thinking while presenting religious concepts and issues**	**10**	**20**	**40**	**30**	**2.10**	**52.50**	**4**		**Low**
38.	**Analyze students answers related to religious concepts and issues**	**20**	**30**	**30**	**20**	**2.50**	**62.50**	**2**	*****	**Intermediate**
Total		**95**	**165**	**285**	**355**	**2.00**	**50.00**			**Low**

The analysis of the practices of the third dimension (supporting thinking and reflection) showed that this dimension ranked the fourth, and it is clear that only (2) out of (9) teaching practices are available; as the mean values reached (2.5) or more, and the percentage of teaching practices availability in this dimension was (22.22%), which is low percentage; Which indicates that the sample needs training on those practices included in this dimension. It is also clear that the mean of the dimension as a whole is (2.00), and this value is less than the cut-off point (2.5); which means that the practice of the dimension as a whole tends to be declined or weakened. This result agrees with the study of Abd (2017).

The reasons for the low availability of teaching practices in this dimension can be attributed to the lack of interest in preparing training courses for teachers, which show how to design different educational activities that help in develop thinking skills, and reflect on the religious issues, such as: thinking skills (critic, futurist, high-ranking. .....) among students, and some teachers were not care about the necessity of motivating students to use their minds to analyze the forensic evidence related to the issue presented, and deducing forensic judgments from those evidence and then interpreting them, as well as the lack of some teachers of the positive role in paying attention to the importance of reinforcing students during the learning process.

The Fourth Dimension: Enhancing Classroom Communication:

Table (6) Enhancing Classroom Communication

No.	**The dimensions of the teaching practices that are compatible with brain based learning**	**Performance level according to each practice from the teaching practices**				**Mean**	**Percentage weight**	**Rank**	**Availability level**	**performance level**
		High	**intermediate**	**Low**	**Unachieved performance**					
39.	**Support interaction and societal engagement between students in asking or searching for answer the presented religious issues**	**10**	**35**	**35**	**20**	**2.35**	**58.75**	**5**		**Low**

40.	**Support personal connection based on mutual respect, confidence and accepting the other between students while learning**	**40**	**30**	**20**	**10**	**3.00**	**75.00**	**1**	*****	**Intermediate**
41.	**Invite students to read new knowledge related to the religious issues and link it logically with the previous knowledge in order to search for meaning**	**15**	**30**	**35**	**20**	**2.40**	**60.00**	**4**		**Low**
42	**Give students enough time to discuss the included ideas about the presented religious issues**	**15**	**25**	**40**	**20**	**2.35**	**58.75**	**5**		**Low**
43	**Encourage students to present and clarify their ideas that related to religious concepts and contemporary issues and problems through various means**	**10**	**20**	**50**	**20**	**2.20**	**55.00**	**6**		**Low**
44	**Enable students to express in writing the ideas deduced from reading new knowledge related to the presented religious concepts and issues.**	**15**	**30**	**40**	**15**	**2.45**	**61.25**	**3**		**Low**
45	**Share with the students the translation and transmission of the ideas of religious concepts and issues related to others.**	**40**	**10**	**40**	**10**	**2.80**	**70.00**	**2**	*****	**Intermediate**
Total		**145**	**180**	**260**	**115**	**2.51**	**60.68**			**Intermediate**

The analysis of the practices of the fourth dimension (enhancing classroom communication) showed that this dimension ranked third, and it is clear that only (2) out of (7) teaching practices are available; as the mean values reached (2.5) or more, and the percentage of teaching practices

availability in this dimension was (28.57%), which is a weak percentage, Which indicates that the sample needs training on those practices included in this dimension. It is also clear that the mean of the dimension as a whole is (2.51), and this value is greater than the cut-off point (2.5); This means that the practice of the dimension as a whole tends to be strong, because the mean values of the statements are close to the value 2.5 even though they do not reach the value 2.5. The result of this dimension agrees with the study of Mahgoub (2014), which argues that the development of teaching performance of the teacher affects the quality of the educational process, and it also agrees with the study of Essa & Alshahopi (2019) that found the level of teaching performance in the dimension of personality traits and social relations, which corresponds to enhance classroom communication as one of the dimensions of the Teaching practices that are compatible with brain-based learning was intermediate.

The reasons for the low availability of the teaching practices in this dimension can be attributed to some teachers' lack of interest in creating a comfortable learning environment for the students and their feeling of safety, which leads them to escape away from the learning process, and the lack of some teachers of the importance in giving their students the opportunity to express in writing the ideas that were reached when introducing religious concepts , which may give them negative attitudes towards completing the class tasks assigned to them.

The Fifth Dimension: Supporting Evaluation Processes:

Table (7) Supporting Evaluation Processes

No.	The dimensions of the teaching practices that are compatible with brain based learning	Performance level according to each practice from the teaching practices				Mean	Percentage weight	Rank	Availability level	performance level
		High	intermediate	Low	Unachieved performance					
46.	**Measure Learning outcomes by using various evaluation tools, such as: (observations, lists, tests, ...)**	**40**	**20**	**30**	**10**	**2.90**	**72.50**	**1**	*****	**Intermediate**
47.	**Enhance the correct understanding of the presented religious concepts and issues.**	**20**	**25**	**30**	**25**	**2.40**	**60.00**	**3**		**Low**
48.	**Ask probing questions; to evaluate the different thinking skills (reflective, critical, intuitive, divergent, ...) among students.**	**5**	**20**	**50**	**25**	**2.05**	**51.25**	**6**		**Low**

49.	**Give the students reflective tasks such as (analysis of the text, writing reports, asking questions, ...) related to religious concepts and issues.**	**15**	**30**	**50**	**5**	**2.55**	**63.75**	**2**	*****	**intermediate**
50.	**Encourage Students to use self-evaluation when learning religious concepts and issues.**	**10**	**20**	**40**	**30**	**2.10**	**52.50**	**5**		**Low**
51.	**Guide students to make a decision when learning the presented religious concepts and issues.**	**10**	**40**	**30**	**20**	**2.40**	**60.00**	**3**		**Low**
52.	**Reinforce Students' positive criticism of the ideas presented on the religious issues.**	**10**	**20**	**40**	**30**	**2.10**	**52.50**	**5**		**Low**
53.	**Give students the opportunity; to provide immediate feedback to their colleagues.**	**5**	**10**	**50**	**35**	**1.85**	**46.25**	**7**		**Low**
54.	**Modify some students' misperceptions when learning religious concepts and issues based on the results of their evaluation.**	**10**	**30**	**40**	**20**	**2.30**	**57.50**	**4**		**Low**
55.	**Evaluate what has been learned in new learning situations.**	**10**	**30**	**50**	**10**	**2.40**	**60.00**	**3**		**Low**
56.	**Prepare remedial programs for each student; to get rid of the shortcomings in performance, so that they should base on learning outcomes.**	**5**	**5**	**20**	**70**	**1.45**	**36.25**	**8**		**Unachieved performance**
Total		**140**	**250**	**430**	**280**	**2.23**	**55.68**			**Low**

The analysis of the practices of the fifth dimension (supporting evaluation processes) showed that this dimension ranked fifth, and it is clear that only (2) out of (11) teaching practices are available; as the mean values reached (2.5) or more, and the percentage of teaching practices availability in this dimension was (18.18%), which is a low percentage; Which indicates that the sample needs training on those practices included in this dimension. It also clear that the mean of the dimension as a whole is (2.23),and this value is less than the cut-off point (2.5); This means that the practice of the dimension as a whole tends to be declined or weakened. This result differs from the study of Al-Sahli (2012), and the study of Al-Ruwaili and Al-Harbi (2018).

The reasons for the low availability of the teaching practices in this dimension can be attributed to some teachers' lack of interest in developing students' self-evaluation when learning, and some teachers' lack of designing educational situations based on the brain-based learning theory, which in turn helps raise questions and open-mindedness among students to learn everything that is new, and try to understand, deduce and explain the ambiguous Islamic concepts, and the lack of training programs offered to the teachers based on the brain-based learning theory in order to develop different skills among students, such as: (decision-making, and problem solving).

In general, the following table shows the percentage of the frequency of the availability of the practices for each dimension

Table (8) The Percentage of The Frequency of The Availability of the Practices for each Dimension

Dimensions	number of practices	Practices			Rank
		Available	Unavailable	Percentage of Teaching Practices Availability	
Educational and learning procedures and activities	**18**	**7**	**11**	**38.89**	**2**
Developing a classroom environment that stimulates learning	**11**	**8**	**3**	**72.73**	**1**
Supporting thinking and reflection	**9**	**2**	**7**	**22.22**	**4**
Enhancing classroom communication	**7**	**2**	**5**	**28.57**	**3**
Supporting evaluation processes	**11**	**2**	**9**	**18.18**	**5**

From the above table, it is clear that the level of the research sample in the performance of teaching practices varied in light of the dimensions included in the card; Where the level of those practices reached 72.73% in the second dimension (developing classroom environment that stimulates learning), which is a percentage that reflects an intermediate level of practices, and it ranked the first in availability, while the percentages came in the other four dimensions (38.89% or less), and these percentages reflect a low practices performance. Their arrangement came respectively: the first dimension ranked the second, the fourth dimension ranked the third, the third dimension ranked the fourth, and the fifth dimension ranked the fifth, which means that Islamic education teachers need training on these practices.

Research Recommendations and Suggestions:

In light of the results, this research recommends the necessity to make use of the list of the dimensions of the teaching performance for Islamic education teachers in the secondary stage in the light of teaching practices that are compatible with brain-based learning, to provide continuous and intensive training programs to raise the level of teaching performance for Islamic education teachers in the secondary stage in the light of teaching practices that are compatible with brain-based learning, and prepare remedial programs to avoid the deficiencies revealed by this research in the teaching practices that are compatible with brain-based learning.

The research suggests the necessity of studying the impact of a suggested program in teaching practices based on the human brain in developing cognitive achievement and teaching competencies for Islamic education teachers before graduation, and knowing the impact of a suggested program on teaching practices based on the human brain in developing self- efficiency and teaching effectiveness among Islamic education teachers, and studying the relationship between teaching practices that are compatible with brain-based learning and professional development for Islamic education teachers, as well as studying the relationship between the teaching engagement of Islamic education teachers when teaching Islamic education courses and its relationship to teaching practices that are compatible with brain-based learning.

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