

## **Positive verbal reinforcement in mathematics education**

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### **Abstract:**

The Current Study Aimed To Reveal The Most Important Process In Educational Processes Represented In Positive Verbal Reinforcement And Its Impact On Mathematics Education That Is, What The Teacher Uses To Ask Questions And The Diversity In Types Of Reinforcement, As Well As The Use Of Types Of Communication, Whether Verbal Or Non-Verbal, That Stimulate Students' Motivation Towards Learning, And Works To Form Positive Attitudes Towards The Subject. Mathematics Was Chosen Because It Is A Subject That Many Students Struggle To Understand, And This Is Due To Its Degree Of Difficulty, And Sometimes To The Poor Relationship Between Mathematics Teachers And Students. Does Positive Verbal Reinforcement Affect The Formation Of The Learner's Personality And Identify Positive Attitudes Towards Learning?

**Keywords:** Positive Verbal Reinforcement, Mathematics Education

## 1. Introduction

Teaching is a profession and a great responsibility on the shoulders of the teacher. It is the main pillar in the formation and construction of the learner, and it is a task that the teacher performs towards his students and is keen to know their strengths and weaknesses during the education process, and to memorize their inner thoughts and opinions, and the student can only identify them with the view of the second party, which is the teacher.

Maximizing student achievement is the ultimate goal of a successful teacher. Effective teaching of all students is an important link to improving student achievement in any classroom, and for maximum educational gain, teachers have to approach the learning process flexibly. So achievement gains can only be achieved if teachers themselves engage in a continuous process of "learning" about their students.

The teacher is expected to have good teaching skills in order to conduct an effective teaching and learning process. The researchers mentioned, including **Uzer Usman ... etc.** There are eight basic teaching skills that a teacher must master: questioning, reinforcement, disagreement, explanation, closure and induction, small group discussion training, class management, small group and individual teaching. The eight core teaching skills play an important role in successful teaching and learning.

Reinforcement is one of the essential basic teaching skills. The researchers mentioned, including Slavin, Uzer Usman, etc. Reinforcement is any result that strengthens behavior. Defined as a teacher's positive response to students' behavior. Simply reinforcement is a skill to respond to students' behavior while teaching, and learning needs to know a reinforcement skill that can be a motivator for students to improve their performance. In the teaching and learning process, reinforcement is presented as an appreciation or positive response from the teacher towards students' intended behavior, participation, and achievement.

As the researchers divided among them **Uzer Usman** Reinforcement into two parts is called verbal and nonverbal reinforcement. Verbal reinforcement is provided through words or sentences such as complementing or congratulating students for what they have done and this is what is meant in this current study.

Nonverbal reinforcement is provided by gesture, proximity, activity, symbol/symbol, and communication.

Male **Irawan** That the teacher should possess the skill of reinforcement because reinforcement provides support for students to improve their performance. In addition, the skill of reinforcement is important for teachers, as it can increase students' motivation and active participation in learning which can help them to have an effective education. This is what he agreed to **More** Which made it clear that reinforcement has long been recognized in the classroom and a core skill of the classroom teacher. This means that reinforcement is an important aspect of supporting the learning process to function well. (Ali Mas'ud. Di Adha Wulandari.2019)

In order to form professional teachers, the College of Teacher Training and Education Indonesia has conducted a program known as peer education, practice teaching or micro-teaching. This program has been proposed as a program to train candidate teachers in basic teaching skills and teaching competencies including reinforcement skills. Based on preliminary data, during the Teaching Practice Program for the academic year 2017/2018 in the UIN Sunan Ample Surabaya micro-teaching class it was found that most student teachers have strengthened their teaching practices. This can be seen by the performance of the teaching practices that the student teachers performed during the teaching practice in the micro-teaching class. For example: Student teachers praised them as “you are very smart”, “good” and the like as word of mouth reinforcement. Similarly, teachers gave students reward, clapping, smiling, and the like as nonverbal reinforcement. However, some of the student teachers who played the role of teacher were not able to deliver the reinforcement optimally. It can be seen by performing the teaching practice. For example, the student teacher did not mention the student's name while praising the correct answer. As a result, the students were confused and felt underappreciated especially for the student who gave a correct answer. Furthermore, if the same situation occurs in a real classroom, it may cause ineffective teaching and learning and discourage students. Therefore proper provision of reinforcement is very important especially for student teachers as future teachers. Furthermore, if the same situation occurs in a real classroom, it may cause ineffective

teaching and learning and discourage students. Therefore proper provision of reinforcement is very important especially for student teachers as future teachers.

(same as previous reference)

With the emergence of the problem mentioned in the aforementioned study, it became necessary to conduct more research on the types of verbal and non-verbal reinforcement along with how reinforcement is provided to student teachers. For this reason, the researcher that In this qualitative study to study and discuss the effects of positive verbal reinforcement, which is what is meant in this current study on the mathematical performance of the subjects. Generally Positive reinforcement is defined as the reinforcement of a particular behavior by providing a positive reward for that behavior (Skimmer. 1938). Opinions about positive verbal reinforcement can vary from seeing it as a natural aspect of human decency to unnecessary pampering.

Reward versus punishment as a means of motivation is a psychological and biological issue with varying results, however depending on the subject . In one study reactions and performance were different, even between very close age groups. The researchers studied "social comparison," the process by which a person finds his place compared to those around him. Positive social comparison led to greater success than negative social comparison, and the study reported greater self-reinforcement after positive comparisons, regardless of age, gender, or reward (Applefield, 1975). These positive influences can support the idea of optimism and performance through compliments. It also found Another study found that participants had better academic success after seeing their previous work on flourishing projects, which can serve as positive reinforcement (Boyer, 2006). However in another study, neural activity in three parts of the brain in the reward or loss condition was very similar. Additionally, this neural activity did not change with the magnitude of the reinforcement (Weis, T. 2013). This is a surprising finding given the frequent findings that positive and negative reinforcements have at least marginally different effects on performance. Unfortunately with conflicting data, a solid conclusion has yet to be reached. These previous studies suggested that positive reinforcement in groups has a positive effect on people, and that brain activity, as detected by fMRI, shows little difference (ibid.). Negative reinforcement may also have a positive effect on people compared to control therapy, but it is not fully understood why it is less successful than reward tactics. As a result, researchers are still searching for a

more specific and comprehensive understanding of how different forms of reinforcement affect performance, and why each one does so. These previous studies suggested that positive reinforcement in groups has a positive effect on people, and that brain activity, as detected by fMRI, shows little difference (ibid.). Negative reinforcement may also have a positive effect on people compared to control therapy, but it is not fully understood why it is less successful than reward tactics. As a result, researchers are still searching for a more specific and comprehensive understanding of how different forms of reinforcement affect performance, and why each one does so. These previous studies suggested that positive reinforcement in groups has a positive effect on people, and that brain activity, as detected by fMRI, shows little difference (ibid.). Negative reinforcement may also have a positive effect on people compared to control therapy, but it is not fully understood why it is less successful than reward tactics. As a result, researchers are still searching for a more specific and comprehensive understanding of how different forms of reinforcement affect performance, and why each one does so.

This study attempted to find out how positive verbal reinforcement affects the mental performance of students in mathematics education. This can help teachers plan class style and motivation techniques, as well as how to deal with student achievement or failure. How students learn is a key component of the learning process, and finding ways to increase student success is an investment in the next generation.

And since positive verbal reinforcement is the main focus and pillar in stimulating interaction within the classroom, and it has a role and great importance for motivation and activation within the classroom in teaching mathematics, and it is a dynamic interactive daily living process between the teacher and his students, and this is what the educational educational system seeks in Its achievement in the classroom, which is termed classroom interaction, and based on this role that positive verbal reinforcement plays in mathematics education, the two researchers chose this study, which was about (positive verbal reinforcement in mathematics education).

## **2. Study problem**

Many psychologists, educators, and sociologists have been interested in the theoretical study and practical procedures of the principles of psychology, focusing in particular on the processes of learning, teaching and training the psychological foundations of the work of the teacher, Kbandura**Pandora, Paviov, John Dewey, John Piaget, Al-**

**Farabi, Ibn Khaldun ... etc.** In several studies, including learning and teaching, they considered the latter to be the core and basis of all knowledge, and in order for this learning to succeed and be more effective, everyone who carried out this process must take into account several successful and multiple methods and methods starting from the first stages of learning to the end, where the student moves From one stage to another, and here the student faces several study problems in teaching different subjects, including mathematics, and the latter is the subject of the current study of mathematics education. No nation can achieve any technological breakthrough without a well-planned and effective implementation of mathematics education, because mathematics plays a leading and service role in all aspects of human endeavour. Therefore, teaching and learning mathematics requires a lot of space for presentations and self-learning activities to form an educated man. This was confirmed by Griffiths and Howson (1974) when they affirmed that “the educated man is the informed man, trained to deal with the affairs of his daily life with some detachment and objectivity and to think about them rationally and spiritually correctly.”

Mathematics is a means of sharpening one's mind, shaping his ability to think and developing his personality, and hence its enormous contribution to the general and basic education of the peoples of the world (Asiedu-Addo and Yidana, 2000). Therefore a mathematics teacher should provide students with a wide range of stimulating mathematical learning experiences that will develop their skills and knowledge. This will enable them to act as useful citizens.

confirmed **n and Howson Wilso (1990)** That a teacher who lacks a workspace cannot develop far enough as a reflexology practitioner. This was supported by Franke and Carey (1997) when they commented that the nature of the classroom environment in which mathematics is taught strongly influences how children perceive a subject, how it should be done and what they consider appropriate responses to mathematical questions. For example: a teacher who has to teach many classes in a day has little time to think about the method

of teaching and/or prepare teaching materials for alternative approaches.

In short, sustainable development in nation building is essential and technological progress for the masses can lead to its achievement in Ghana and in other developing countries. In Ghana for example: Mathematics is a compulsory subject in both the primary and secondary school curricula.

The prescriptive nature of mathematics versus the concept of a mathematics teacher would go a long way to demystifying the phobia surrounding the teaching and learning of mathematics. This was confirmed by **Thomson (1984)** When he asserted that "the observed consistency between teachers' stated concepts of mathematics and the way they typically present content strongly suggests that teachers' opinions, beliefs, and preferences about mathematics influence their lives and educational practices."

This is what Sophie Naima (2011) indicated (In her study: as "in line with the process of scientific and urban development, that is, it is effective in the hands of man in keeping pace with his daily life in order to solve the problems that confront him." The different educational stages, and accordingly, mathematics falls between easy and difficult, and it is an abstract subject by nature that depends on the ideas and creativity of the student according to his abilities, and it has witnessed a great development in our time, but the student does not accept it easily at the beginning and becomes an intellectual obsession with the mathematics teacher It is a subject that requires activation and interaction of the student with the teacher and his colleagues, so the teacher uses some stimuli to attract attention, such as reinforcement.

Salih Muhammad Ali Jadwa pointed out in his book Educational Psychology (1998) Effective learning is learning that responds to the student's thinking patterns. It is meaningful learning that is based on experience and practice and is usable, applicable and transferable. It leads to the development of students' creative thinking, makes the learner the focus of it, develops cooperative relationships among students, and targets Achieving the integrated development of the

learner and linking the theoretical and scientific aspects in an integrated manner that can be measured and evaluated and is in itself a reinforcer and a trigger for motivation, because it gives the learner a sense of achievement and satisfaction. This is what the Newby study came up with **Neobay(1991)** Where this study included 30 teachers from the first grade of primary school to the existence of a fundamental relationship between the motivation strategies used by the teacher, such as paying attention and focusing the learner, linking the material to the needs of students, building trust, using reward and punishment on the one hand, and the student's behavior in terms of their preoccupation and interest in performing school work or tasks.

The study of Hamed Abdullah (2004), which talked about the teacher's possession of social skills in the classroom leads to reducing behavioral problems and improving the student's relations with the teacher and with classmates. The study sample included primary school teachers. The change in the student's behavior in the classroom is due to the professor's treatment of him, so his work is considered a mirror in the student's interaction, and what highlights and increases the relationship between the teacher and the learner (Nawal Al-Ashi, 2008) and this was confirmed by the study of Halima Qadri (2012), the study aimed to know the elements of Class interaction of students in the secondary stage and the study was a field study, its study used the correlative approach and the study sample included students and professors, which aimed to know the classroom interaction of students in the secondary stage, and to know the possibility of a link between the student's behavior and the teacher's treatment of the student and the general atmosphere of the department's management of teachers for him. The results of the study found:

In order to bring about this interaction, each teacher must use several motivating methods, including positive verbal reinforcement for students. He also considers those positive words and expressions that the teacher uses towards his students in order to encourage and motivate them in the classroom as saying: Well done, good, excellent, continue, you are smart... Etc., with the aim of achieving an appropriate atmosphere that emanates from the teacher and his



students in an interactive and competitive atmosphere, which in turn contributes to achieving the effectiveness of interaction in the classroom.

As indicated by Dave's study **Dave (1997)**: It aimed that the student's participation in the educational process, positive response to her questions, praise and praise, encourage mastery learning, provide stimuli that create a kind of challenge for the learner, and evaluate the student's work, are all methods that enhance self-motivation among primary and secondary school students even with Students who suffer from learning difficulties or disabilities and with regard to the nature of the goals presented to the student, the teacher who provides the student with a set of goals that challenge his abilities improves the development of skills and supports the achievement of selective goals, in contrast to the traditional methods of approaching students and strict control over Separation, which in turn develops and supports performance objectives only. (Khawla Mustafa Al-Harbawi, 2011)

Just as motivation has the advantage of generating a communicative relationship between the teacher and the student that is appropriate according to the positive words and the nature of the material, and this is what a good study (1998) went for, and the subject of its study was: Modern entrances and strategies in classroom management, and this study reached the following results. The firm style in classroom management is preferred, and appropriate communication and communication between teacher and student achieves high results, and social acceptance achieves class affiliation and its absence leads to undesirable behaviors, and psychiatry approaches achieve desirable results. (Same previous reference)

The use of positive verbal reinforcement varies according to the teacher's view and appreciation of the appropriate time, and this differs from one teacher to another, through which interaction takes place. This is what Mings' study indicated **Minguez (1982)** Which aimed at the extent of the impact of feedback and the control center on the behavior of the teacher and students is clear considering that the negative reinforcement and the time of the task, on a sample of 12 teachers representing the internal and external control center patterns. They were internal or external, whether they overestimated the amount of reinforcement they used and their view of student behavior

and the time of the profession more accurate than what they do in their reinforcement behavior. (Youssef Qatami, 1998)

From the foregoing, every topic has reasons and reasons from which the researcher starts, through which his topic is chosen, by opening a small field that helps him to remove the ambiguity And Disclosure of the causes and aspects afor a topic. Mn studies ynote It She talks about behavior and its problems without taking into account the methods of treatment for it, especially the method of reinforcement and positive words that increase the mental performance of mathematics, which is an important element in daily life and in acquiring skills and abilities that cover the difficulties of learning. The emergence of the phenomenon of declining participation and academic achievement in mathematics is a source of concern to researchers for more For a decade, researchers have always believed that the teacher is the key to determining the quality of learning in the classroom. Hence, the researchers' sense of the problem of the study arose through: The definite need to show why verbal reinforcement has a more positive impact on students' success on mental mathematics performance.

**More specifically, the problem of the current study was represented by the following research question:**

How does positive verbal reinforcement affect mathematics education?

### **3. Objectives of the study**

This current study aimed to:

Show why verbal reinforcement has a more positive impact on students' success in teaching mathematics.

### **4. Importance of the study**

The importance of the current study is as follows:

-Assist teachers in planning teaching style and motivation techniques.

A study added to the new studies in understanding the development and new trends in mathematics education.

Encouraging new teaching methods and strategies in mathematics education.

Enabling teachers of verbal behaviors of the pedagogical factor to provide socially supportive phrases for re-engagement as the student moves through the learning task.

Helping teachers eliminate boredom and improve attention, participation and motivation to learn because it is a critical component of education and is often linked to a student's academic achievement. Show the positive effects of positive verbal reinforcement in mathematics education.

### **5. Procedural definition of the study variable**

**positive verbal reinforcement** By it we mean a set of positive words and expressions that the teacher uses towards his students, in order to encourage and motivate them that the teacher uses during mathematics education, in the classroom. Such as saying: Well done, Saeed, good, Muhammad, well done, good, blessed, you are smart...etc. , with the aim of achieving an appropriate climate that emanates from the teacher and his students, in an interactive and competitive atmosphere.

### **6. Discussion**

#### **1- Presenting previous Arab and foreign studies related to the subject of the study:**

##### **A- Presentation of previous studies in Arabic:**

**Benign study (1998):** Modern approaches and strategies in classroom management and this study reached the following results: The firm style in classroom management is preferred, appropriate communication and communication between teacher and student achieves high results, and social acceptance achieves class affiliation and its absence leads to undesirable behaviors, and entrances Psychiatry achieves desirable results.

- **Study of Hamed Abdullah (2004)** The teacher's possession of social skills in the classroom leads to reducing behavioral problems, and improving the student's relations with the teacher and with classmates, and the study sample included primary school teachers.

##### **B- Presentation of previous studies in foreign languages:**

- **Study MingsMinguez(1982):** This study aimed at the extent to which the effect of feedback and the control center on the behavior of the teacher and students is clear in considering the negative reinforcement and the time of the task, on a sample of 12 teachers representing the internal and external control center patterns. They were intrinsic or extrinsic whether they overestimated the amount of

reinforcement they were using and their view of pupils' behavior and task time was more accurate than what they did in their reinforcement behaviour.

**- Study NewbyNeobay (1991):**Where this study included 30 teachers from the first grade of primary school to the existence of a fundamental relationship between the motivation strategies used by the teacher, such as paying attention and focusing the learner, linking the material to the needs of students, building confidence, using reward and punishment on the one hand, and the student's behavior in terms of their preoccupation and interest in performing school work or tasks.

**- Study Dave Dave (1997):**It aimed that the student's participation in the educational process, positive response to her questions, praise and praise, encourage mastery learning, provide stimuli that create a kind of challenge for the learner, and evaluate the student's work, are all methods that would enhance the self-motivation of primary and secondary school students even with Students who have difficulties or disabilities in learning, and with regard to the nature of the goals presented to the student, the teacher who provides the student with a set of goals that challenge his abilities improves the growth of skills and supports the achievement of selective goals, in contrast to the traditional methods of approaching students and strict control On the classroom, which in turn develops and supports the performance objectives only.

**-Kyun and Jian Xue-Seong-kong's studykoyun&JuanshuiSeungkong (2008):**This study dealt with the subject of body language during exercise in universities and colleges in China. The study showed that body language is a constructive behavior and that the effective use of body language in teaching exercise leads to creating a positive metaphor for students and helps in strengthening students' sense of self and accelerating the development of their capabilities and improve them.

**-study Tess M. Greene<sup>1</sup>and Amber Todd (2015)**

They examined the relationship between different forms of reinforcement and subjects' athletic performance. Thirty-sixth graders

were asked to mentally calculate answers to fracture problems, while holding a heart rate monitor, after receiving a positive, negative, or neutral form of reinforcement. While the results indicate that any motivation, positive or negative, may lead to higher scores, the positive reinforcement group showed the largest gain. However, the results were not statistically significant, although the trend was consistent with previous research. The heart rates of the positively reinforced group were significantly lower than those of the negative reinforcement group and the control groups. These results suggest that motivation is through reward rather than punishment.

## **2.analysis and criticism Previous studies:**

### **A- Analysis and critique of studies Previous in Arabic:**

**Benign study (1998):** Which revolved around modern approaches and strategies in classroom management, but some other groups may be compatible with old strategies with the presence of modern ones, and therefore this is due to the good behavior of the professor in teaching situations in the classroom, and the extent of his use of the method of reinforcement, especially verbal positive, and this is what We used it in our current study.

### **b- Analyze and critique studies Previous in foreign:**

**- Study Minguez(1982):**Where this study focused on the feedback and the control center, and the extent of their impact on the behavior of the teacher and students considering the negative reinforcement and the time of the task, as there are other studies that are not limited to these two considerations only, where we see that the topic would be very exciting if it was given the positive verbal reinforcement , which increases the interactive process inside the classroom during the task, and in addition to that in this study there is an absence of the study subject, i.e. the Arabic language or, for example, mathematics, which is the subject of our study.

As this study found, there are no statistical differences between the teachers and the control center, but this is not at all. There may be statistical differences if they are used in other samples or with different tools and methods, and this is what we want to know through the current study.

**Newby's study**Neobay(1991)It is noted through this study that it focused on the existence of a fundamental relationship between the motivational strategies used by the professor, but this is not always true because there are some strategies that do not move a resident if they are placed in the wrong place and in the wrong time, especially the positive verbal reinforcement.

- **Study Dave**Dave(1997)The study focused on the interaction of the student by himself, which has a role in encouraging learning, but this may lead the professor to delay in performing his educational task in the absence or lack of use of reinforcement methods, and thus distances the relationship and communication between the teacher and the student as this study denied the traditional methods that have no role In interaction, but we can develop in the traditional methods so that they are more efficient than others and this is due to the ability of the teacher to use the method.

**-Kyun and Jian Xue-Seong-kong's study(2008)**  
**koyun&JuanshuiSeungkong**

This study relied on physical language, which she said is the reason for building behavior and that the most effective method in creating a positive metaphor for students, improving and strengthening self-sense and accelerating skills. The body is expressed through features, and the following are considered exercises, as well as there are materials that do not need physical exercises, but need mental exercises, such as mathematics, which is the subject of our current study.

### **3. The location of the current study from previous studies:**

The studies that were presented with different samples, place and time raised integrated topics whose results serve each other and each of them covers one of the angles of the subject of our study. Through criticism and analysis of previous studies, it becomes clear that there are similarities and differences between previous studies and the current study, which are illustrated in the following points:

- The current study agreed with a number of studies, including: the study of Hamed Abd (2004) and the study of Neobay(1991) And the study of Halima Qadri (2012) and study Tess M. Greene1and

**Amber Todd (2015 .) ): Its role is to reveal that the more positive incentives, the more positive the result, and this was the basis for our study, through which we want to highlight its role in the effectiveness of students behind what the teacher presents in the classroom, but they differed with each other in the nature of the places in which the study was applied.**

- The educational environment of each community differs from one region to another, as our current study and the study of **kyun and jian xiusongkongkoyun&JuanshuiSeungkong(2008)**
- The current study differed from previous studies in the nature of the objectives and results according to the independent variable, and somewhat corresponds to the general view of the goals and results according to the dependent variable.

Finally, we conclude that the previous studies, in different places and times, focused on interaction and behavior, but they did not take into account the methods that lead to interaction and desired behavior.

This is what made us focus on this aspect in our study, where the method of positive reinforcement was determined, specifically the positive words, which are credited with obtaining positive results. When we find the majority of students suffer from understanding and assimilation, and this stage is a basic transitional stage for the student, which in turn makes him develop his abilities and seek to form his mental skills, as well as the age and educational stage of the student and the subject concerned here is mathematics, and the latter has been neglected by the majority of studies. This is confirmed by our current study.

#### **4. Expectations of the results of the current study**

As the use of positive verbal reinforcement increases, the interaction of students within the class increases, especially in mathematics, which is an interactive subject that needs the mathematics teacher and his selection of appropriate words that help the student to understand and comprehend, especially at this age, which in turn leads to Instilling trust between him and the student.

This prediction is consistent with the Newby study **Neobay(1991)** Where this study included 30 teachers from the first grade of primary school to the existence of a fundamental relationship between the motivation strategies used by the teacher, such as paying attention and focusing the learner, linking the material to the needs of students, building trust, using reward and punishment on the one hand, and the student's behavior in terms of their preoccupation and interest in performing school work or tasks.

Among the studies that reached similar results to this current study is a study: **Dave (1997)**It aimed that the student's participation in the educational process, positive response to her questions, praise and praise, encourage mastery learning, provide stimuli that create a kind of challenge for the learner, and evaluate the student's work, are all methods that enhance the self-motivation of primary and secondary school students even with Students who have learning difficulties or disabilities, and with regard to the nature of the goals presented to the student, the teacher who provides the student with a set of goals that challenge his abilities improves skills development and supports the achievement of selective goals, in contrast to the traditional methods of approaching students and strict control over Separation, which in turn develops and supports performance objectives only.

Through our discussion of these studies, it becomes clear to us that positive verbal reinforcement in the classroom is of paramount importance in the mental performance of mathematics and then in his academic achievement of the subject. For the learner and helps to understand and clarify complex mathematical problems.

Positive verbal reinforcement is also one of the primary methods used to participate in the classroom environment in the use of verbal cues, which can be used to encourage students, provide instructions and give positive praise. The current study focused on verbal cues in teaching mathematics in the classroom environment, by changing the characteristics Phonics such as rhythm, tone, intensity, sound quality, expression, verbal cues or behaviors can be used to evoke a range of emotions that lead to student engagement and learning. Example There is a need to select age-appropriate vocabulary in positive verbal



reinforcement to maintain student participation. Previous studies have found that positive reinforcement in groups has a positive effect on people. Brain activity, as detected by fry, shows little difference.

(Weis, T., Puschmann, S., Brechmann, A., & Thiel, 2013)

Verbal behaviors enable the educator to provide socially supportive phrases for reengagement as the student moves through the learning task. While uttering verbal phrases, the teacher turns his or her gaze toward the student; The goal of verbal statements is to encourage the student based on their current learning performance (ie answering the question correctly/incorrectly; quick to answer; takes a long time to answer). It is very important that the statements are socially supportive and convey the message that the student and teacher are working together as a team.

The teacher also applies the teaching aids well while interacting in the classroom. For example: Use pictures of his family when explaining the topic of family relationships. The use of teaching aids may increase interaction in the classroom, especially when teaching aids are associated with real life. Making the content relevant to real life can increase the student Stimulus. (KC Williams, CC Williams.2011) Additionally (D. Palmer.2007) it is suggested that teachers should emphasize connections between real-life and school subject matter through the design of tasks and experiments. that are relevant to the students' daily lives. in addition to(N. Frey, D. Fisher.2010) adds Those tasks that have a meaningful relationship To motivate them for real life.

The practice of awarding rewards to students was very well implemented by the teacher. When the students completed their task and gave the correct answer to the questions, the teacher used positive verbal statements to praise the students as encouragement. Positive statements can strongly influence students' motivation and self-improvement-trust. (Williams.2011)

A positive teacher-student relationship has implications for both sides. This means that when teachers have a positive relationship with their students, this will increase their job satisfaction and prevent burnout(D. Ben-Chaim, U. Zoller.2001). On the other hand, when

Students encountered positive behavior from teachers, This will lead to positive Motivation and performance in all subjects(P. Den Brok, M. Brekelmans, T. Wubbels. 2004) It is therefore necessary to have a positive connection between the teacher-student relationship and learning activities in the classroom. In addition, it is agreed that a healthy interpersonal relationship will create better outcomes for students to participate in learning activities. (M.Brekelmans,P. Sleegers, B.J. Fraser2000)

Because many researchers believe that good and strong relationships between teachers and students are essential components for achieving healthy academic development for students in the school environment. (BK Hamre, RC Pianta.2001/ JS Eccles, A. Wigfield.2002)

In addition, several studies have shown that the nature of Quality of teacher interaction Children who have children have major influences on their learning.

(D. Dickinson, J. Brady.2006/ RC Pianta, WS Barnett, M. Burchinal.2009)

Hence, the teacher's involvement in the classroom's interaction with Students are necessary to make the learning process occur actively. It also provides a unique entry point for educators to improve the social and educational environments of schools and classrooms.( B. K. Hamre, R. C. Pianta.2001)

Therefore, teachers must be empowered to form and maintain positive and supportive relationships with their students so that they grow and develop into successful and contributing members of the adult community because it positively affects their behavior and academic success.

## **7. Conclusion**

In conclusion, the trend of previous studies that came in this current study indicates that the Nob achievement Better performance in mathematics education, with the teacher using positive verbal reinforcement because it affects the mental mathematics performance of students, because positive verbal reinforcement helps to respond with greater motivation for success when a reward is given in return for reaching a certain mark. as his The positive impact on forming the learner's personality and identifying positive attitudes towards learning mathematics.

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