Increasing mathematical understanding ability using quantum teaching hypnoteaching-based in elementary school teacher education students

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Abstract. The absence of empirical understanding of the understudies is the product of less certainly applicable learning frameworks. Quantum Showing depending upon hypnoteaching is a finding that is focused on the advancement of understudies of scientific understanding because the information can be explained by means of this model in an effective and competent manner and also because the structures of hypnoteaching are anxious to learn while research. This thesis is an exploratory analysis. There are 50 semester understudies from ESTE in this study which have been haphazardly selected. A Quantum Display class is given based on hypnoteaching (QTH), and standard training (OL) is given in a control class. The methods used are: study, interpretation sheet and meeting guide. Knowledge analysis techniques in this study use t-test. The consequence of this research is that QTH testing has a better theoretical perception than OL analysis. Because of the degree of early (large, medium and small) numerical ability, medium and low capacities understudies have seen major differences, but not for high capability understudies. In view of the reaction that occurred during the study, understudies with QTH displayed a movement and stronger ability than OL.

1. Introduction

Advanced education learning centers for developing research and creativity and having academics or specialists who are advanced, fictional, humane, legitimate, have a good character and are dedicated to preserving the country’s truth. The word specialist implies that he is skilled in the fields of anonymity under which he serves in elementary school teacher training, an assessment program requiring at least two years\textsuperscript{3} teaching experience. To order to strengthen the skills of primary instructors, the basis of this research plan is focused on.

The topic of fundamental science learning is a course which includes arithmetic learning in the graduate schools similar to the educational program material used in primary schools, with the intention of enhancing undergraduate learning as expert mathematical educators in graduate schools. Despite the expectations of exams in the sector, there are so many understudies who have the foggiest understanding of the norms of primary school arithmetic while they are routinely performed. This is extremely risky because the instructor's slip in ingrained thinking during high school might also be taken to further qualification stages. It is also necessary for educators to figure out whether they can obtain expertise in order to make sure that their teaching is like they should be.
Developed based on the research site observations throughout the last three six months, as described in Table 1.

Table 1. The Science Training Class in Primary school

| No. | Year of enrollment       | The cumulative number of graduates (percent) |
|-----|--------------------------|--------------------------------------------|
| 1   | 2017-first round         | 94                                         |
| 2   | 2017-second round        | 92                                         |
| 3   | 2018-first round         | 70                                         |

Table 1 indicates that the undergraduate ratings of the three time frames are less than 70 of the most severe score of 100. Virtually all understudies earn fewer reviews. The above-mentioned low learning findings are typical of a basic study of UT, which had not been quite empirical, in addition to the age factor of the undergraduates, given the fact that the cycle of human education continued till the conclusion of the profoundly rooted (new techniques and approaches). Nevertheless, there is a negative relationship between the growing era and the ability to learn. Which implies that the more a person grows up, the more they need to learn (as any part of their physical skill declines). For starters, memory, physical strength, willingness to concentrate, capacity to reflect, etc. all have deteriorated age. The security vulnerabilities element of understudies may also give rise to low evaluations, because understudies had also eventually been trained to make sure that understudies can’t get emails properly.

Regular learning activities which only use the talk technique lead to understudies that don't understand the topic, which implies that the comprehension of scientific ideas is small, that quantitative problems can’t be solved whenever the scientific questions are rather complicated, and understudies are less prepared to think innovatively when answering numerical questions, Training by recalling results in the degree of neurological ability that is clearly formed at a low level. Understudies may usually get caught up in the idea of keeping the learning process in addresses because of mixtures. Understudies are based slowly on pre-test retention methods because they can’t contain significant recipes to answer problems.

Trying to recall learning doesn't take very much consideration and has horrible implications for inspired progress [1]. Undergraduates generally assume that learning is simple. Studies lack a sense of knowledge, propensities that isolate an adult or ignore those resources that offer an unknown person creative thinking. This learning cycle is the teaching feature of nations recalling Indonesia [2].

The presence of understudies in answering or describing numerical issues is always inevitable but never deliberate; science problems are not appropriate for mathematical models and it is therefore necessary to note numerical (arithmetic) mathematical efficiency. Since the research analysis can arrange and blend the numerical reasoning directly or eventually, it will lead students to a greater comprehension of the mathematical principles scholarly. One goal of science learning in Arithmetic: frameworks and Connection is to have the best opportunities practicable for developing and coordinating the capacity to grasp the study by means of oral and written correspondence, translating, translating, drawing and reporting the results[3].There has been something quite close in the goals identified by the National Assembly of Arithmetic Educators (2000) and the Educational Program of 2004 [4].

The explanation for the analysis was to establish differences between the numerical ability development of understudies, which learned through QTH, and individuals who examined OL through (1) the entire research, and (2) the early analytical potential of understudies (high, medium, low).

2. Method
The experimental approach is the form utilized in this analysis. Experimental work seeks to determine the causal association, under which the effects of our evaluation of the independent variable are reflected In Variable Dependent [5]. This study, with an unconventional methodology, is a process with a hypnotechnical methodology (QTH) as well as a strategy lesson with a traditional teaching strategy (OL). After reviewing the observations, the usage of the experimental procedure is intended to show the
degree to which the Quantum Teaching methodology focused on student hypnoticism influences student comprehension abilities in this situation (Table 2).

Table 2. Research Design

| Early Mathematical Ability | QTH (A) | OL (B) |
|----------------------------|---------|--------|
| High (H)                   | HA      | HB     |
| Average (A)                | AA      | AB     |
| Low (L)                    | LA      | LB     |

For this research, 7-semester Elementary School Teacher Education (ESTE) students were students for Serang, Indonesia. The samples included in this analysis are students in the seventh semester of Tangerang college. The study's statistics are: (1) the topics of mathematical education (1) and mathematics education (2) the student's early mathematical ability statistics; (2) the pre-test and post-test results; and (3) the student experiences during math learning findings and interviews. The system had reached the validity requirements as well as the reliability is 0.829 and 0.835 respectively to numerical understanding results. T-test data analysis has been completed.

3. Result and Discussion
Description of enhanced conceptual comprehension the capacity to study utilizing the Quantum Teaching approach focused on hypnothesis (QTH) and the normal learning method (OL) is provided in Table 3, Figure 1 and Figure 2.

Table 3. Represent benefit in student mathematics comprehension in experimental processing and control groups

| Early Mathematical Ability | Mathematical Understanding Ability |
|----------------------------|----------------------------------|
|                            | \( \bar{X} \) | Std. | Min | Max |
| Experiment (24)            |                    |      |     |     |
| High (5)                   | 76.65              | 5.23 | 65  | 85  |
| Average (13)               | 65.45              | 4.80 | 51  | 77  |
| Low (6)                    | 63.27              | 6.33 | 52  | 69  |
| Total (24)                 | 68.46              | 5.45 | 56  | 77  |
| Control (26)               |                    |      |     |     |
| High (8)                   | 76.45              | 4.46 | 66  | 85  |
| Average (12)               | 61.42              | 4.95 | 47  | 73  |
| Low (6)                    | 57.28              | 4.62 | 49  | 63  |
| Total (26)                 | 64.81              | 4.68 | 54  | 72  |
| Total (50)                 |                    |      |     |     |
| High (13)                  | 76.19              | 4.85 | 65  | 85  |
| Average (25)               | 63.435             | 4.88 | 47  | 77  |
| Low (12)                   | 60.275             | 5.48 | 49  | 69  |
| Total (50)                 | 66.63              | 5.07 | 54  | 77  |

Note: Mathematical comprehension overall performance 100
Figure 1. Represent improve skill dependent on thinking element and early quantitative capacity for quantitative comprehension

Figure 2. A discrepancy between QTH and OL the initial objective scientific distinction aspects

It's had standard variances in pairs of data classes and each data is usually distributed. Explanation Capacity to quantitative comprehension can be contained in Table 3, Figure 1, Figure 2, namely: There are many assumptions in relation to: a.) The average increase in quantitative skill of students whose learning is focused on QTH appears better relative to OL or QTH > OL; b.) The mean value of student mathematical comprehension Ability dependent on QTH is greater to people with academic, medium and minimal abilities as with those with OL or QTH > OL learning; c.) Of the under-skilled candidates of 5.99, medium 4.03 and strong 0.2 the gap in mean quantitative comprehension benefit was the largest among the students who were trained by QTH and OL, respectively.

The Quantum Education System is a method for maximizing student literacy and mathematics [6-8]. Usage of hypnotic learning methods to improve mathematical accomplishment [9-12] However, it is important to assess the distinction between strategies that are implemented based on early mathematical skill thresholds. The effects of the equation are displayed in below is Table 4.
Table 4. Review of study outcomes for the effect of instruction on students’ initial intellectual capacity to perceive concepts

| Capability for Early Math | Capacity to achieve comprehension |
|---------------------------|----------------------------------|
|                           | Comparison Mean | t   | P     | H₀  |
| High                      | 77.65 > 76.45   | 0.528 | 0.509 | Accepted |
| Average                   | 66.45 > 61.42   | 4.724 | 0.001 | Rejected |
| Low                       | 64.27 > 57.28   | 2.668 | 0.014 | Rejected |

H₀: There aren't any disparity in the capacity to learn mathematics between the student-based learning styles

Table 4 shows the effects of the t-value calculations in the typical and low student statistical groups of 4.724 or 2.668 with p-values of 0.001 and 0.014 respectively. This p value is below the significance point of 0.05, and the nil hypothesis is dismissed, which means that there is no difference in the students’ abilities to understand mathematics and learning models dependent on the students’ capacity to know. In other words, the QTH process greatly increases students’ capacity to comprehend mathematically compared with ordinary mathematical methods (OL) for small- to medium-mathematical subjects. For highly predictive students with a p value of 0.509 the t value was 0.528. The definition p is greater than the level of sense 0.05, so it may be concluded that null conditional states that there is no difference in the capacity to practice the students' analytical abilities so using the learning models used. In other words, the talents of students with strong QTH-based mathematical knowledge are not substantially different from those of learners with a certain initial academic abilities, but are educated using an ordinary mathematical (OL) approach.

4. Conclusion

The usage of QTH provides greater understanding of mathematics than OL students. Medium- and lower-capacity students demonstrate significant variations, but not for high-quality students, depending on their quantitative abilities (high, medium and low). Those with QTH showed greater actions and skills than OL on the basis of the study answer.

5. References

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