

The Effect of inquiry and Expository Learning Strategy on Students Achievement of Global Perspective Education Subject Viewed From Students Scholastic Potential Of Elementary School Teacher Education Slamet Riyadi University Surakarta

Oktiana Handini^a

^aSlamet Riyadi University, Surakarta

Corresponding e-mail: handinioktiana@yahoo.co.id

Abstract: The Research purposed to determine the effect of Inquiry Learning Strategy and Expository Learning Strategy on the Students Achievement of Global Perspective Education Subject viewed From students scholastic Potential consisted of verbal, reasoning, and numerical. The population were 105 Elementary School Teacher Education Students. The sample were 60 students each verbal, reasoning and numerical scholastic potential. The experimental research used 2x3 factorial design tested analysis two ways of varian's (ANOVA) and followed by scheffe analysis. The hyphoteses analysis showed inquiry learning strategy gave a better effect than expository learning strategy to students achievement ($F_0 = 29,89 > F_t = 3,17$). Students with verbal scholastic potential showed that a higher achievement than students with reasoning scholastic potential and numerical scholastic potential $F_0 = 38,58 > F_t = 4,02$. There is an interaction between learning strategies and scholastic potential to students achievement $F_0 = 3,50 > F_t = 3,17$. Scheffe's analysis showed that there were not interactions between learning strategies and verbal scholastic potential, There were interactions between inquiry learning strategy and reasoning scholastic potential, There were interactions between learning strategies and numerical scholastic potential, interactions between inquiry learning strategy ang verbal reasoning scholastic potential, interaction between inquiry learning strategy and verbal, reasoning, numerical scholastic potential, There were not interactions between inquiry learning strategy and reasoning, numerical sholastic pontential, interaction between expository learning strategy and verbal, reasoning scholastis potential, interaction between expository learning strategy and reasoning, numerical scholastic potential, and there were not interaction between expository learning strategy and verbal, numerical scholastic potential.

Keyword: Learning Strategy, Scholastic Potential, Students Achievement

1. INTRODUCTION

Education in Indonesia has a high influence in developing country. Indonesia hopes that education be a priority in qualified human resources and it can support the speed of nation development. Formal education tries to support it by preparing a set of curriculum, modern technology, good facilities, teaching strategies in learning process. In fact, many problems for getting high level achievement in University or collage, teaching strategies are dominated and needed. The Background of this research are as follows: Learning is not just achieving intellectual knowledge, but also the knowledge that supported real experience for meaningful students achievement activities are not in accordance with the student's Scholastic Potential consisted of verbal, reasoning, there are still many lecturers who do not use / apply variation of teaching strategies.

Problem formulations of the research are:
(1) Whether the application of the variation of learning strategies can give a different effect

on student achievement, (2) Is the scholastic potential of different students may give a different effect on student Achievement, (3) Are the different through a variety of learning strategies can provide different effect on the Students Achievement of Global Perspective Education Subject.

The study objectives were: (1) to determine differences in the effect of inquiry and Expository Learning Strategy on Students Achievement of Global Perspective Education Subject, (2) to determine the effect of differences Scholastic Potential consisted of verbal, reasoning, and numerical, (3) to prove whether there is interaction with the. Inquiry and Expository Learning Strategy on Students Achievement of Global Perspective Education Subject Viewed From Students Scholastic Potential.

This study has the following benefits: (1) Students: more recognizing potential, characteristics and habits of learning strategies which is done basically as scholastic potential.

(2). Lecturer: By recognizing the Students Scholastic Potential, the lecturers are able to use appropriate learning strategies in accordance with the competence to be achieved. With the selection of appropriate learning strategies enable improved in Students Achievement of the subjects being studied, (3). Institutions: The results of this study have pragmatic benefits in improving the ability of lecturers as Innovative Human Resources and results of Learning Students Achievement of Global Perspective Education subject.

2. LEARNING STRATEGY

The learning activities is a process that is performed lecturers and students in particular learning conditions for the achievement of competence. The process will become effective when the created atmosphere conducive learning activities and fun (Joyce Weil: 2006, 15). Fun learning activities that will foster fair, not forced, and students were able to express their fullest potential. Learning activities will provide opportunities to learn and foster responsibility towards independent learning. Responsibility in learning embodied in deeds and action learning that proceeds to make a strong potential learning.

Psychologically learning principles which applied properly will be able to develop the mindset, skills, and attitudes more visible and functional. By learning conditions that are safe, comfortable and fun, students have a chance to obtain information and complete knowledge. Learning process provide opportunities enable to indicate students' involvement for optimal learning results (Arends: 2008, 35). Many strategies that can be used in learning process such as Inquiry learning strategy and expository learning strategy.

2.1 Inquiry Learning Strategy

Learning strategy focus in giving information to students as a learning resources (Gerlach & Ely 1980 :4). The information are instruction in statements for guiding students to practice in their learning process (A.J Romiszowski, 1981: 292). The power of an inquiry-based approach to learning is its potential to increase intellectual engagement and foster deep understanding through the development of a hands-on, minds-on and 'research-based disposition' towards

learning.(<http://www.teachinquiry.com/index/introduction.html>).

Inquiry learning will help to interconnect between nature of knowledge construction, striving to provide opportunities for both teachers and students to collaboratively build test and reflect on their learning. Inquiry learning emphasizes the process of learning in order to develop deep understanding in students in addition to the intended acquisition of content knowledge and skills. Inquiry learning describes upon a constructivist learning theories where understanding is built through the active development of conceptual mental frameworks by the students as learner.

2.2 Expository Learning Strategy

Learning strategy will be in meaningful in teacher ability (Good, 1990:98) which centered in teacher's activities. (Gilstrap, 1975:198) teachers' verbal instruction as learning recourse in learning process (Gilstrap, 1975:7)

3. SCHOLASTIC POTENTIAL

Scholastic potentials are an ability which person has adopted from academic,<https://www.google.co.id/search?q=scholastic+potential> Scholastic potential will improve the academic achievement of all children regardless of race or economic status, cultural or linguistic background (Patricia Edwards, 2010). Students Scholastic Potential consisted of many abilities such as verbal, reasoning, and numerical. Scholastic potential is different in every student, although it can be practiced in every moment.

3.1 Verbal

Verbal potential is the ability to analyze information and solve problems using language-based on communication. Verbal reasoning is important in most aspects of school work. Reading and language arts tasks required verbal reasoning skills. Even the more abstract courses such as math and physics require verbal reasoning skills, as most concepts are either introduced orally by the teacher or introduced in written form in a textbook.

3.2 Reasoning

Reasoning ability is the process of thinking about something in a logical way in order to form a conclusion or judgment the ability of the mind to think and understand things in a logical way. Reasoning ability is

essential to learning process, such as to make choices among possible options, to distinguish between positive and negative situations, to decide how to approach a problem and resolve it, in order to reach a high achievement.

3.3 Numerical

Numerical reasoning ability is one of the most basic skill areas, one that exists in learners well before they are taught mathematics in school. Numerical reasoning tests, also known as data interpretation or numerical critical reasoning tests, involve evaluating situations and drawing conclusions from the data provided to assess one or several of the following: Critical thinking ability, Basic or general arithmetic operations Ability to perform estimates Ability to analyze graphs and other data Level of speed in making analyses or assessments and Level of concentration in solving problems.

4. STUDENTS' ACHIVEMENT

Student achievements are in the form of instructional impact and the impact accompaniment. Global Perspective Education subject discusses students' perspective in holistic and comprehensive understanding about social condition viewed from social science, international relationship, transportation, politic, and others. Student results in learning, defined processes and products of learning and teaching followed and the results of the evaluation are determined. Student results will be optimal if the student demonstrates the ability to achieve competence and supported by Students Scholastic Potential.

5. RESEARCH METHODOLOGY

The Research purposes were to determine the effect of Learning Strategies on Students Achievement of Global Perspective Education Subject Viewed from Students Scholastic Potential. Learning Strategies consists of: (1) Inquiry Learning Strategy and (2). Expository Learning Strategy. Scholastic Potential consisted of (1) verbal, (2) reasoning, (3) numerical. The dependent variable was Students Scholastic Potential of Elementary School Teacher Education. Student's population that is affordable Elementary School Teacher Education Slamet Riyadi University Surakarta Semester II by 105 people. Study sample consisted of 20 students with verbal scholastic potential and 20 students

with reasoning potential and 20 students with numerical potential.

The experimental research used 2x3 factorial designs. The hypotheses tested were:

- A. There was a difference effect between inquiry learning strategy and expository learning strategy on Students Achievement of Global Perspective Education Subject.
- B. There was a difference effect between Scholastic potential on verbal, reasoning, and numerical on Students Achievement of Global Perspective Education Subject.
- C. There was an interaction between learning strategies and scholastic potential on Students Achievement of Global Perspective Education Subject.

The hypotheses were tested by analysis two ways of varian's (ANAVA) and followed by scheffe analysis.

6. CONCLUSION

The result of hypotheses analysis showed that: (1) inquiry learning strategy gave a better effect than expository learning strategy to students achievement ($F_0 = 29,89 > F_t = 3,17$). (2) Students with verbal scholastic potential showed that a higher achievement than students with reasoning scholastic potential and numerical scholastic potential ($F_0 = 38,58 > F_t = 4,02$), (3) There is an interaction between learning strategies and scholastic potential to students achievement ($F_0 = 3,50 > F_t = 3,17$).

Scheffe's analysis showed that (1) There were not interactions between learning strategies and verbal scholastic potential ($C_p = 60 < A \times S (C_p) = 88,43$), (2) There were interactions between inquiry learning strategy and reasoning scholastic potential ($C_p = 198 > A \times S(C_p) = 88,43$), (3) There were interactions between learning strategies and numerical scholastic potential ($C_p = 195 > A \times S (C_p) = 88,43$), (4) There were interactions between inquiry learning strategy and verbal reasoning scholastic potential ($C_p = 107 > A \times S (C_p) = 88,43$), (5) There were interaction between inquiry learning strategy and verbal, reasoning, numerical scholastic potential ($C_p = 148 > A \times S (C_p) = 88,43$), (6) There were not interactions between inquiry learning strategy and reasoning, numerical scholastic potential ($C_p = 41 < A \times S (C_p) = 88,43$), (7) There were interaction between expository learning

strategy and verbal, reasoning scholastic potential ($C_p = 240 > A \times S (C_p) = 88,43$), (8) There were interaction between expository learning strategy and reasoning, numerical scholastic potential ($C_p = 283 > A \times S (C_p) = 88,43$), (9) There were not interaction between expository learning strategy and verbal, numerical scholastic potential ($C_p = 38 < A \times S (C_p) = 88,43$).

The result of this research showed that in learning process, inquiry strategy can be used for on students with verbal scholastic potential, while expository learning strategy can be used students with reasoning and numerical scholastic potential. Inquiry learning strategy with verbal scholastic potential shows that it gives high support in receiving Students Achievement of Global Perspective Education Subject. while expository learning strategy can be used students with reasoning and numerical scholastic potential in receiving Students Achievement of Global Perspective Education Subject.

REFERENCES

- Arends Ricard L (1998). Learning To Teach. New York: Mc. Graw Hill Co.in.
- Cronbach, (1970), Essentials of Psychological Testing, New York : Harper and Row Publisher.
- Gerlach & P Ely, Teaching and Media, A systematic Approach, New Jersey : Prentice-Hall Englewood Cliff.
- Good L Thomas L,(1980) Educational Psychology A realistic Approach, New Jersey : Longman.
- Gredler, Margelet E Bell, (1991), Belajar dan Membelajarkan, Jakarta : Rajawali Press.
- Joyce, Bruce & Marsha Weil, Models of Teaching, New Jersey : Pretice-Hall Inc. Eglewood Clief, 1981
- Patricia Edwards (2010) A Strategic Guide to Boosting Student Achievement through Family Involvement.
- Robert L Gilstrap, Current Strategies for Teaching. : California : Goodyear Publishing Company Inc.
- Thomas L Good, Educational Psychology A Realitic Approach, New York : Longman.

<https://www.google.co.id/search?q=scholastic+potential&oq=>

<http://blog.eskill.com/numerical-reasoning/>