

# THE EFFECTIVENESS OF NUMBERED HEADS TOGETHER IN TEACHING READING VIEWED FROM STUDENTS' LOCUS OF CONTROL

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**Abstract :** This writing applied an experimental design. The population of the research was the eighth graders of Senior High School academic year of 2011/2012 consisting of three classes. Two out of the three classes, consisting of 40 students, were used as the sample using the technique of cluster random sampling. The experimental group was taught using the NHT strategy, while the control group using expository strategy. A questionnaire and test of reading were used to collect the research data. The result of analysis shows that NHT is proved as an effective teaching strategy to teach reading for the eighth grade. The effectiveness is affected by students' level of Locus of Control.

**Key words:** Numbered Heads Together (NHT), Expository Teaching Strategy, Locus of Control

## INTRODUCTION

In this study, the writer focuses on the two teaching strategies, expository teaching and NHT strategy. It is derived for some reasons. First, both teaching strategies are applicable to be used in Junior High School level. Second, both of them share different perspective and principles in teaching strategies. In order to investigate the effects of teaching strategies, expository and NHT teaching strategy, viewed from the students' locus of control to teach reading, the writer adopts an experimental research. NHT teaching will be put as experimental variable and expository teaching strategy is as control variable. Meanwhile, reading ability is placed as a dependent variable. This investigation is to know the difference of both strategies and

which one is effective or better applied in teaching reading. Then, the writer also considers students' locus of control as simple effect or moderator variable (high or low) to know whether NHT and expository teaching strategy is suitable for students who have high locus of control or low locus of control.

The success or failure of teaching learning process depends on the teaching strategy which is used. Therefore, the objective of the study is to find out whether or not

(1) Numbered Heads Together strategy is more effective than expository strategy for teaching reading; (2) Whether or not the students who have high locus of control have better reading ability than the students who have low locus of control; (3) Whether or not there is an interaction between

teaching strategies and students' Locus of Control or not.

### **The Meaning of Reading**

Reading is a major way to learn English. It means many things to people, and it is not simple. It is not only the activity of pronouncing the printed materials or following each line of written pages carefully. Realizing the importance of reading, we have to look for the nature of reading skill based on some definitions.

Nuttal (1996: 4 & 7) defines reading as a way to get meaning (message) from a text. In other words, it presents about the process of communication, as the sender encodes a message in a text, which is in turn decoded by the receiver. In relation to what Nuttal says, Grabe (1991) in Phan (2006: 1) believes that reading is not merely a receptive process of picking up information from the page in a word-by-word manner. Rather, it is a selective process and characterized as an active process of comprehending. The process of reading then is a complex cognitive process of decoding symbols for the intention of deriving meaning (reading comprehension) and/or constructing meaning.

What have been stated above show that reading involves some process that is used to get meaning from written text. It is not only an activity involving printed material as the media in order to process and gain information but also the comprehending process. Meanwhile, Aebersold and Field (1997: 15) give their opinion in defining reading as follows:

In general sense, reading is what happens when people look at a text and assign meaning to the

written symbols in that text. The text and the reader are the two physical entities necessary for the reading process to begin. It is however, the interaction between the text and the reader that constitutes actual reading. Granted, the meaning the reader gets from the text may not be exactly the same as the meaning the writer of the text wished to convey.

Aebersold and Field believe that the interaction process also involved between the text and the readers when they try to look for the meaning of the text. The similar definition is stated by Nunan (1998: 33) that reading is a process of decoding written symbols, working from smaller unit (individual letters) to larger ones (words, clauses, and sentences). Then, Grellet (1998: 7) defines reading as a constant process of guessing, and what one brings to the text is more important than one finds it. Further, Grellet states that reading as an active skill that constantly involves guessing, predicting, checking, and asking oneself question.

Reading skill is a basic and significant criterion to scale one's English level. In other words, it is a vital skill for English learners; therefore, how to improve students' reading skill has been drawing teachers' attention. Skill is defined as ability to perform a task or activity consistently over a period of time. The expertise required for a particular task or occupation may include manual dexterity and manual aptitude. It is also stated in Encarta dictionary (2009) that skill is the ability to do something well, usually gained through training or experience. Thus, having skills in reading

helps learners in accomplishing a task. Moreover, reading skill is defined as specific abilities which enable a reader: 1) to read the written form as meaningful language; 2) to read anything written with independence, comprehension and fluency; 3) to mentally interact with the message.

Reading skills acquisition is the process of acquiring the basic skills necessary for learning to read; that is, the ability to acquire meaning from print (Lingua links, 2011). Furthermore, reading involves a variety of skills and the main ones are recognizing the script of a language, deducing the meaning and use of unfamiliar lexical items, understanding explicitly stated information, understanding information when not explicitly stated, understanding conceptual meaning, understanding the communicative value (function) of sentences and utterances, understanding the relations within the sentence, understanding relations between the parts of a text through lexical cohesion devices, interpreting text by going outside it, recognizing indicators in discourse, identifying the main point or important information in a piece of discourse, distinguishing the main idea from supporting details, extracting salient points to summarize (the text, an idea, etc.), selective extraction of relevant points for a text and the basic reference skills, skimming, scanning to locate specifically required information, and trans coding information to diagrammatic display (Grellet, 2004: 4).

In order to develop these skills, several types of exercises

can be used. These question types of the exercises can have two different functions (Grellet, 2000: 5): 1) to clarify the organization of the text. The questions can be about the function of the passage, the general organization, the rhetorical organization, the cohesive devices, the intra sentential relations. 2) to clarify the contents of the text. The questions can be about plain fact, implied fact, and deduced meaning (supposition).

### **Numbered Heads Together**

Numbered Heads Together (NHT) is one of the informal cooperative learning strategies proposed by Kagan (1994). He defines NHT as a cooperative learning strategy that holds each student accountable for learning the material. In accordance, Yahya & Huie in Internet TESL journal (2004: 4) state that NHT is one of cooperative learning strategy or structure that is used for the purposes of inter group cooperation and individual accountability. Students are placed in groups and each person is given a number (from one to the maximum number in each group). The teacher poses a question and students “put their heads together” to figure out the answer. The teacher calls a specific number to respond as spokesperson for the group. By having students work together in a group, this strategy ensures that each member knows the answer to problems or questions asked by the teacher. Because no one knows which number will be called, all team members must be prepared (Kagan, 1994). In other way, Lie

(2002: 58) stated that NHT is a cooperative learning strategy that is especially helpful in checking students' understanding of contents. Then, she tells that NHT is characterized by heterogeneous groups working together to achieve common goal. Heterogeneous groups provide more opportunities for asking questions and receiving information, recommended that four-person teams consist of a high achiever, a low achiever, and two average achiever (Lie, 2002: 42).

Furthermore, Kagan adds that this cooperative learning strategy promotes discussion and both individual and group accountability. This strategy is beneficial for reviewing and integrating subject matter. Students with special needs often benefit when this strategy is used. After direct instruction of material, the group supports each member and provides opportunities for practice, rehearsal, and discussion of content material.

In other occasion, Kagan states that NHT is a flexible strategy that can be used at a variety of levels. The teacher may start with factual information questions, and as students become more familiar with the strategy, ask questions that require analysis or synthesis of information. Students' task is to come to consensus on whether they agree or disagree, giving an explanation of their reasoning. After the students respond, have the other groups agree or disagree with the answer by showing the thumbs up or thumbs down, and then explain their reasoning. And then, if the answer needs clarifying, ask another student to expand on the answer.

### **Expository Teaching Strategy**

Expository teaching strategy is a strategy which is widely used by teachers in the classroom. This strategy is also known as direct instruction, Killen (1998) in Sanjaya (2009: 177). According to Borrich (1996: 244), expository teaching strategy is a teacher-centered strategy in which teachers are the major information provider. Their role is to pass facts, rules, or action sequences on to the students in the most direct way possible. Expository teaching strategy usually takes the form of a lecture-recitation with explanations, examples, and opportunities for practice and feedback.

In addition, Borrich characterized this type of strategy by the following characteristics: a) Pull class instruction (as apposed to small-group instruction); b) Organization of learning around question teacher poses; c) Provision of detailed and redundant practice; d) Presenting material, so that, one of fact, rule or sequences is mastered before the next is presented; e) Formal arrangement of the classroom to maximize recitation and practice.

In line with Borrich, Joyce, Well, Caihoun, and Wolf (2000: 339) define expository teaching strategy or direct instruction as a pattern of teaching that consist of the teacher's explaining a new concept or skill to large group of students, having them test their understanding by practicing under teacher direction (that is, controlled practice). On the other side, Sanjaya (2009: 177) also stated that expository teaching is a kind of strategy that emphasize on verbal explanation from a teacher

to the students in order to master the learning material optimally. It is in line with Parsons, Hinson, and Brown (2001: 11) found substantial evidence expository teaching strategy has been known as strategy usually used by teachers. The teacher becomes the decision maker in this teaching process. The teacher will be engaged in many planning decisions, such as deciding what the teacher wants to teach, when he/she wishes to teach, and how the teacher will go about the reading process.

Furthermore, Good and Brophi (1990: 328) state that expository is commonly used because it is efficient in a brief time, the teacher can expose students to content that might take them much longer to locate on their own. It can be used groups or entire classes rather than just with individuals, it gives the teacher control over the content, and it is easily combined with other methods and adjustable to fit the available time, the physical setting and situational constraints.

### **Locus of Control**

Locus of control is viewed as an important aspect of psychology developed by Julian Rotter in 1966. It is a generalized belief about the underlying causes of events of his or her life. Individual has diverse belief about who controls his or her destiny. In other words, an individual's destiny could be controlled by one self, fate, God or powerful others. Trylong (1987) in David O. Fakeye (2011:547) gave a full name to the concept as 'Locus of control of reinforcement'. He tried to bridge the gap between behavioral and

cognitive psychology. He is of the view that behavior is guided largely by reinforcements which could be inform of rewards and punishments. Individual holds the belief about what causes their actions through contingencies such as rewards and punishments. These beliefs give the kind of attitude people adopt towards an event. In other words, the locus of control has a correlation link with attitude. In the context of foreign language learning, learners hold different beliefs about their success or failure in the foreign language programmed. A student who has a poor performance in a foreign language programmed may ascribe his failure to the difficulty of the language, the attitude of the foreign language instructor, inadequacy in the teaching methods adopted by the foreign language instructor. These beliefs would in variably determine the locus of control of the learner.

Thus, Locus of control refers to an individual's generalized expectations concerning where control over subsequent events resides. In other words, who or what is responsible for what happens. It is analogous, but distinct from, attributions. According to Amadi (2011: 547), the "attribution theory assumes that people try to determine why people do what they do, i.e., attribute causes to behavior." There is a three stage process which underlies an attribution. Step one : the person must perceive or possibly observe the behavior. Step two is to try and figure out if the behavior was intentional, and step three is to

determine if the person was forced to perform that behavior. The latter occur after the fact, that is, they are explanations for events that have already happened. Expectancy, which concerns future events, is a critical aspect of locus of control. Locus of control is grounded in expectancy - value theory, which describes human behavior as determined by the perceived likelihood of an event or outcome occurring contingent upon the behavior in question, and the value placed on that event or outcome. More specifically, expectancy-value theory states that if (a) someone values a particular outcome and (b) that person believes that taking a particular action will produce that outcome, then (c) they are more likely to take that particular action.

Umoh (1991) classified generalized beliefs concerning who or what influences things along a bipolar dimension from internal to external control: "Internal control" is the term used to describe the belief that control of future outcomes resides primarily in one self while "external control" refers to the expectancy that control is outside of oneself, either in the hands of powerful other people or due to fate/chance. Araromi (2010) divided locus of control into two one-dimensional units namely, internal locus of control and external locus of control. A learner who has an internal locus of control orientation believes that his or her behavior is guided by his or her personal decisions and efforts while a learner with an external locus of control orientation believes that his or her behavior is guided by fate, luck or

external circumstances. Amadi (2010) is of the opinion that an internal locus of control is generally seen as desirable. They opined that having an internal locus of control could also be regarded as having self-agency, personal control and self-determination. They further opined in their research findings also that males tend to be more internal than females.

Therefore, locus of control refers to the extent to which individuals believe that they can control events that affect them. Individuals with a high internal locus of control believe that events result primarily from their own behavior and actions. Those with a high external locus of control believe that powerful others, fate, or chance primarily determine events. Those with a high internal locus of control have better control of their behavior, tend to exhibit more political behaviors, and are more likely to attempt to influence other people than those with a high external locus of control; they are more likely to assume that their efforts will be successful. They are more active in seeking information and knowledge concerning their situation (Araromi, 2010).

According to Baker (1998), the term "locus of control" is a generalized expectancy for internal as opposed to external control of reinforcements. In the same vein, Shammen (2004) states that locus of control refers to what one ascribes responsibility or blames for what is happening in one's life. The dichotomy between external and internal loci of control is aptly captured by Trylong (1987) when he states that internality and externality represent two end points of a continuum,

not as either/or typology. A locus of control indicates the influence that circumstances / environment or individual characters/traits have on directing people's activities. Research indicates that people perform better when they have a moderate to strong internal locus of control. The position of the locus of control is significant because all things being equal, people will either see themselves as masters

of their destiny or victims of circumstances. However, the latter being true, Tuckeretal (2007) are of the opinion that people with an external locus of control tend to be more stressed and prone to clinical depression. Furthermore, external locus of control makes people vulnerable to manipulation and open to abuse since externals would depend largely on the reinforcement by significant others forever thing they do. Conversely, internals are more at peace with them selves and they take responsibility for their mistakes and successes.

## **METHOD**

The population of the research was the students of the eighth grade in Junior High School which consist of three classes each class consist of forty students. So, the populations consist of a hundred and twenty (120) students. The sample was students from two classes of the population. The writer takes two classes, experimental and control class.

The technique that was used to get the sample was cluster random sampling. Data collecting is a process of obtaining the primary data in research. For obtaining the data, the writer used the questionnaire and the reading test. The technique used in

analyzing the data was descriptive analysis and inferential analysis. Descriptive analysis was used to know the mean, median, mode, and standard deviation of the scores of the reading test. The normality and homogeneity test had been done before testing the hypothesis. Inferential analysis used was ANOVA 2X2. An ANOVA test is used to find out if there is a significant difference between three or more group means. However, the ANOVA analysis simply indicates there is a difference between two or more group means, but it does not tell what means there is significant difference between two or more group. The TUKEY Test is a test designed to perform a pair wise comparison of the means to see where the significant difference is

## **FINDINGS**

The research findings are as follows: 1) Numbered Heads Together is more effective than Expository Strategy to teach reading to the eighth grade students; 2) The students having high Locus of Control is significantly different from students having low Locus of Control; 3) There is an interaction between teaching strategies and locus of control in teaching reading to the eighth grade students: a) Number heads together is more effective than Expository Strategy in teaching reading to students having high locus of control; b) Expository Strategy is more effective than Numbered Heads Together in teaching reading to students having low locus of control.

## **DISCUSSION**

There is significant difference of effect between teaching reading using Numbered Heads Together (NHT) and teaching reading using Expository Strategy. Teaching reading using NHT to the eighth grad is more effective than teaching reading using Expository Strategy. NHT as one of many strategies in cooperative learning, NHT builds students' accountability within groups. It is good in processing information, communication, developing thinking, review of material and checking prior knowledge. It is also stated in Maheday, et. all. (1991:2) that students who were taught by NHT always performed better than students who did not. The students also added that NHT's characteristic creates a good positive interdependence, equal participation, individual accountability and simultaneous interaction. They are motivated to be ready when their numbers are being called by the teacher. They will be more active, cooperative, discipline, serious but not tense. It is in line with the theory in Lie (2008:59) that cover NHT as their social interaction within group. It can be seen from NHT's numbering system and when the students put their heads together before answering the teacher's question. Meanwhile, Expository Strategy makes the students depend on the teacher's explanation and translation almost of the time in reading class. The students tend to be passive and no courage to share their ideas to his/her friends. Because of that, they are not active and do not develop their knowledge that well. It is in line with Sanjaya (2009: 191) that explained about expository strategy which only

depend on the teacher's competence such as their preparation, confidence, knowledge, enthusiasm, and also their classroom management. He also added that expository has a one-way communication style that makes the limited chance to the teacher to control the students' understanding for the material given.

There is significant difference in reading skill between students having high Locus of Control and those having low Locus of Control. Reading skill of the students having high Locus of Control is better than the one of those having low Locus of Control. Trylong (1987:75) stated that Locus of Control tried to bridge the gap between behavioral and cognitive psychology. It is of the view that behavior is guided largely by reinforcements which could be inform of rewards and punishments. Individual holds the belief about what causes their actions through contingencies such as rewards and punishments. These beliefs give the kind of attitude students adopt towards an event. In other words, the Locus of Control has a correlation link with attitude. In the context of foreign language learning, students hold different beliefs about their success or failure in the foreign language programmed may ascribe his failure to the difficulty of the language, the attitude of the foreign language instructor, inadequacy in the teaching strategy adopted by the foreign language instructor. These beliefs would invariably determine the Locus of Control of the students.



Araromi (2010) divided locus of control in two-dimensional units namely, internal locus of control and external locus of control. A learner who has an internal locus of control orientation believes that his or her behavior is guided by his or her personal decisions and efforts while a learner with an external locus of control orientation believes that his or her behavior is guided by fate, luck or external circumstances. Amadi (2010) is of the opinion that a more internal locus of control is generally seen as desirable. They opined that having an internal locus of control could also be regarded as having self- agency, personal control and self determination. Therefore, locus of control refers to the extent to which individuals believe that they can control events that affect them. Individuals with a high internal locus of control believe that events result primarily from their own behavior and actions. Those with a high locus of control believe that powerful others, fate, or chance primarily determine events. Those with a high locus of control have better control of their behavior, tend to exhibit more political behaviors, and are more likely to attempt to influence other people than those with a high external locus of control ; they are more likely to assume that their efforts will be successful. They are more active in seeking information and knowledge concerning their situation.

There is an interaction between teaching strategies and locus of control. The teaching strategies that are used by the teacher in the class give a big influence to the success of the teaching and learning process.

Good teaching strategies in the class challenge students to perform a better learning and increase students' locus of control. Students are more interested when they are taught using challenging and interesting teaching strategies. NHT is one of the challenging strategies that automatically force the students to be actively engaged in the classroom since it has a good structure that appears in how it builds students' knowledge around individual responses (Kagan, 1994:1). The student has a chance to develop individual accountability and also his or her social relationship unintentionally. When it is applied in the classroom activities, the students having high locus of control will be more interest to learn. They feel energetic and ready every time his or her number is being called to participate in reading activities and the result will be better learning achievement. Meanwhile, Expository Strategy more suitable for students having low locus of control. They are difficult to elaborate their ideas, thoughts and feeling. They tend to be passive and usually get the knowledge only from their teacher. They lack of awareness, courage and lazy join in learning activities. Moreover, some students having low locus of control tend to be shy and quiet on his or her seat and don't have good social interaction with his or her friends in group. Ross and Kyle research (1987) in Sanjaya (2009: 180) also stated that expository strategy is more effective to be applied to low achieving students.

## CONCLUSION

Based on the research findings, it can be concluded that NHT is proved as an effective teaching strategy to teach reading for the eighth grade. The effectiveness is affected by students' level of Locus of Control. And then, teachers should have better steps in manage the students to involve actively in the teaching learning process especially for students having low locus of control who tend to be passively engaged in the English class. On the other hands, students must be active and involve thoroughly in the teaching learning process in order to improve their reading skills and English achievement.

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