# THE USE OF THINK-PAIR-SHARE STRATEGY TO CULTIVATE CONSCIENZATION ON ENVIRONMENTAL ISSUES FOR STUDENTS OF SMA METHODIST 2 PALEMBANG

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**Abstract:** This study aimed to describe the improvement of environmental conscienzation by applying Think-Pair-Share to the students in SMA of Methodist 2 palembang. There were thirty-two students in IPA XI.1 class became the sample of the study. The method of the research used a classroom action research. It divided two cycles includ, the cycle I and cycle II. The collect of the data used observation and test. The data calculation showed that there was a significant improvement on students' environmental conscienzation. In cycle 1, the mean score of environmental conscienzation concept was 68. Then, the mean score of evironmental conscienzation was 80.8 in cycle II. In other words, environmental conscienzation was improved by using think-pair-share. Besides, the students' perception toward the implementation of think pair share was good. In conclusion,

**Keywords**: Environmental Conscienzation, Think-Pair-Share.

Environmental sustainability should be the main concern for both central and local governments. Throughout the year 2018, various ecological disasters such as floods, landslides and smoke disaster occurred in various regions in Indonesia. The destruction of nature caused by economic activities such as mining, industry, deforestation, expansion of plantation land, illegal and environmental fishing and others, are increasingly worrisome (Akcesme, 2013). As a mega biodiversity country, Indonesia is facing the threat of destruction.

With a high deforestation rate, environmental issues have become increasingly pressing for Indonesia. Based on data taken from Jakarta Globe (<u>Putri & Khalik</u>, 2014) stated that forest clearing has contributed 63 percent of Indonesia's annual CO2 emissions, which are increasing every year. In 2000, the country emitted 1,720 million tons of CO2, a gas that contributes to global warming. That figure increased to 2,120 million tons in 2005 and is projected to reach 2,950 million tons in 2020. From 1985 to 2012, we lost 53 percent of the forest there. Deforestation is more than just forest or carbon issues, and to handle the problem we have to see the whole picture. In Sumatra, it involves development issues, poverty, indigenous land rights and social conflicts. Forest degradation and deforestation will affect biodiversity, water supply, and even marginalization.

Furthermore, Indonesians dispose of around 9 million tons of plastic annually, according to the Ministry of Environment and Forestry. Most of it ends up in landfills, but 1.3 metric tons end up in the ocean, making the country the world's second-worst polluter of marine life (Sheany, 2018, June 14).

Based on the data given above, it shows that the environment problem become a crisis problem. It is our task to protect our environment. The environmental crisis is closely related to human understanding and culture of the need to maintain the environment. Besides, ethics is an important part of the culture that plays a role in development. Therefore, environmental education is needed to encourage the development of Indonesian human character.

The fact that children grow up in a highly technological environment and, more often than not, away and literally cut off from the natural environment, makes learning experiences and knowledge about the latter imperative. The question though is whether science education can provide such learning experiences, and whether such experiences can raise environmental awareness (Hadzigeorgiou & Skoumios, 2013).

Many people believe that environmental education is one of the most important factors for preventing environmental problems. In order to make formative decisions, students must not only

become an expert on the subject but also develop a connection to the environment. Therefore, as students, they can do some environmental conscienzation actions to persuade other people in protecting the environment. To raise students' awareness of environment, the schools or colleges can do some actions to make little changes. The importance of environmental conscienzation is really needed to protect the environment and it could also raise the emphatic students' feeling of environment which can direct them to care of environment itself especially nature.

The conscienzation of environment can be developed to raise students' awareness of environment itself. Since raising conscientization of environment implies the development of skills for successful communication and emphatic attitude, i.e. peaceful interaction with people to save earth, persuade people in doing prevention action in damaging our lovely earth. Students are exposed to the kind of information that raises their awareness of saving environment/earth. To raise students' awareness of environment, therefore schools or colleges can do some actions to make little changes. To raise students' awareness of environment, therefore schools or colleges can do some actions to make little changes.

On the other side, the classroom facilities were not completed to support communicative activities; in fact, the facilities are very needed to create real situation in daily communication using English (Brown, 2000). Thus, Widiati and Cahyono (2006) suggested the teachers have an important role to foster students' achievement to speak English well. In this case, the teachers should build a good relationship with their students, encourage them to use English more often and facilitate them with the tasks in classroom activities to discuss and share ideas (Nunan, 2004).

There are many ways to make the speaking class become enjoyable, one of the techniques is using Think-Pair-Share. The Think-Pair-Share strategy is designed to differentiate instruction by providing students time and structure for thinking on a given topic, enabling them to formulate individual ideas and share these ideas with a peer. This learning strategy promotes classroom participation by encouraging a high degree of pupil response, rather than using a basic recitation method in which a teacher poses a question and one student offers a response (Barkley, et al., 2012, p. 151-160).

Therefore, the writers would like to find out if using Think-Pair-Share technique will affect students' environmental conscienzation or not. For this reason, based on all the description above, the writers had conducted the research which discusses empowering students' conscienzation on environmental issues by using Think-Pair-Share strategy to the students of Methodist 2 Palembang.

### Method

In this study, the writers applied classroom action research consisting of two cycles they were cycle I and II. Burn, (2010, p. 2) stated that:

Action research is part of a broad movement that has been going on in education generally for some time. It is related to the ideas of 'reflective practice' and 'the teacher as researcher'. Action research involves taking a self-reflective, critical, and systematic approach to explore your own teaching contexts. In action research, a teacher becomes an 'investigator' or 'explorer' of his or her personal teaching context, while at the same time being one of the participants in it.

It meant that one of the main aims of action research is to identify problematic situation or issue that the participants who may include teachers, students, managers, administrators, or even parents consider worth looking into more deeply and systematically. Implementing the principle of an action research, this study involved four steps: (1) plan, (2) act, (3) observe, (4) reflect. The procedure of this action research was taken from the design proposed by Kemmis and Mc Taggart shown in figure 1.

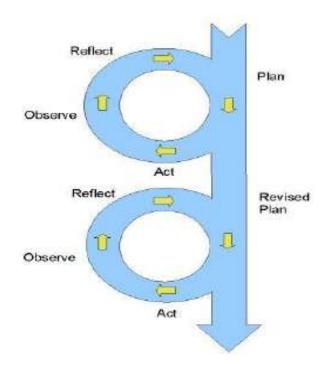


Figure 1. Cyclical AR Model based on Kemmis and Mc Taggart (Burns, 2010, p. 9)

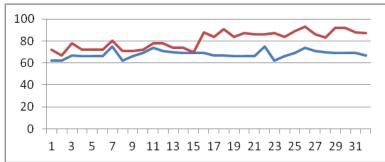
Figure 1 clearly displays the iterative nature of CAR along with the major steps of planning, action, observation and reflection before revising the plan. This may be thought of as similar in nature to the numerical computing technique known as successive approximation - the idea is to close in upon a final goal or outcome by repeated iterations.

The setting of this study was SMA Methodist 2 Palembang. Then, there were 32 students in academic year 2017-2018 as the sample of the study. There were two types of data collection used by the researcher. There were tests and observation. The writers used pre-test and post-test. The pre test was given before the students was given treatment. It was used to know the ability of the students before they got the treatment. Post test was given after teaching and learning process. In this research, the purposed of the test was to know the differencesof students' ability before and after the conduct of teaching and learning process in the classroom. Both writers used environmental conscienzation rubric to score the tests. A questionnaire of 20 questions designed to incorporate environmental issues was given to measure participant's environmental awareness before and after treatment. The pre and post questionnaires were administered written to the students. Pre and post questionnaires were formatted to a five-level Likert scale. In this research, there were two indicators used; they were students' learning achievement and teaching learning process. In learning achievements in this research were students' environmental conscienzation gaining by the tests to check the students' comprehension.

## Results

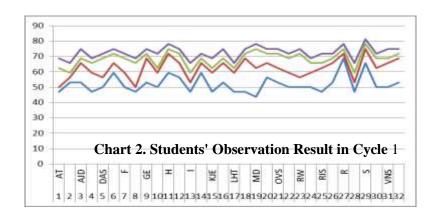
In cycle 1,the mean score of environmental conscienzation concept was 68. Then, the mean score of evironmental conscienzation was 80.8 in cycle II. In other words, environmental conscienzation was improved by using think-pair-share.

From the test done by the writers in each cycle, it was found that the students' environmental conscienzation in cycle II improved significantly. It could be seen from the understanding concept production by the students reached 12.875%. The result of students' environmental conscienzation test was shown in this figure 2 below.



**Chart 1: The Results of Environmental Conscienzation Test** 

Furthermore, based on the data analysis of cycle I (students' observation result), it could be concluded that the average score of test in activity was 56. The data showed that the students on each meeting could learn to follow the instruction guidelines. On each meeting the average score increased significantly. The progress rose quite significant but it have been reached the target yet. The complete data can be seen from the chart below (see chart 2).



The data analysis in cycle II in meeting I was 60, meeting II was 67, meeting III was 71 and meeting IV was 75 the data showed that the students on each meeting could learn to follow the instruction guidelines. On each meeting the average score increased significantly. The progress rose very significant and had reached the target. The result of observation in cycle II can be seen in this chart as follows.

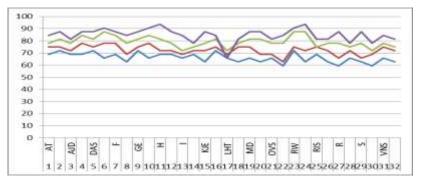


Chart 3. Students' Observation Result in Cycle 2

In the teaching learning process, the students could face the difficulty problems in communicating like managing his fear, embarrassment. Students have begun to have opportunities so they can show how good they are in speaking and sharing ideas. Moreover, they learn to listen to each other point of view and to respect each other ideas and thoughts. Working in pairs also reduces stress and embarrassment. If they gave a wrong answer, for example, they would not feel shy because the embarrassment was shared. In fact, it creates an enjoyable learning environment

and increases motivation among learners. Students became more cooperative and able to communicate successfully.

Most students find difficulty in communicating adequately and appropriately through speaking. This difficulty is due to lack of self-confidence, fear of making mistakes and fear of embarrassment. Considering those problems, the researcher applied TPS in an attempt to help students minimize those problems and thus had improved oral communication skills (particularly in students' environmental conscienzation).

Think-pair-strategy reinforces students' communication skills. Each student took his chance to speak, discuss and participate which has many positive effects on the whole group where students feel more self-confident and more active in the class. Moreover, they learn to listen to each other point of view and to respect each other ideas and thoughts (Dutt, 1997). Working in pairs also reduces stress and embarrassment. If they gave a wrong answer, for example, they would not feel shy because the embarrassment was shared.

#### Discussion

From the above findings, the writers could acquire some points related to the students' comprehension about a number of concepts of environmental issues, several actions and values of environmental conscienzation, they are:

1. The Concept of Environmental Conscienzation

Environmental Conscienzation is pretty self-explanatory; it is about being aware of the environment. The environment refers to all flora and fauna, including all marine and wildlife areas. Planet earth faces an increasing number of environmental challenges, including: climate change, global warming, water scarcit, droughts, deforestatin, floods and pollution.

2. Practical Actions of Environmental Conscienzation

After the students had got the concept of environmental issues and awareness, they were expected to do good habits to mantain the environment. Here are some practical things that the students can do daily.

- a. Reduce waste, reuse resources and recycle materials.
- b. Organize tree planting days at school or home and tell the other students why trees are important to the environment.
- c. Encourage other students to switch off all appliances and lights when not in use.
- d. Ensure taps are close properly after use them and use the water sparingly.
- 3. Values of Environmental Conscienzation

There were two values that the students can get, they include Lead by Example and Spread the Word.

3.1. Lead By Example

All of us are more likely to remember the things people did than what they said. Although teaching students about what it means to be environmentally aware is important, it will have more of lasting impact on them when they lead by the example.

- a. When we see litter, pick it up even it is not ours, we never know which pair of little eyes might be watching us.
- b. Get a recycling system going in our classroom and show the other students how to use it.
  - 3.2. Spread The Word

School should encourage students to share their environmental knowlegde with their friends and family. A good idea would be to let the students practice at home; no use if they use water sparingly at school, but leave teaps dripping at home; no use if they use water sparingly at school, but leave taps dripping at home. These steps will produce students who are more knowledgeable about environmental issues.

#### Conclusion

Environmental awareness is directly linked to environmental knowledge, attitudes, and actions, or to knowledge, which can have an effect on students' attitudes. Environmental awareness alone cannot bring about respect for the environmental. The broad focus of environmental education is to equip learners with knowledge of environmental issues with the hope that the knowledge will influence our attitude towards the environment.

Based on the result of classroom observation above, the students were able to get some new information about the effect, cause, and anticipation for example air pollution, water pollution, forest fires,

soil pollution and global warming. They were able to explain the effect, cause and anticipation in detail about environmental conscienzation and also they had awareness to take care and responsibility environmental.

### Reference

- Akcesme, B. (2013). An Ecocritical Approach to English Language Teaching: *Journal of Language and literature Education*, 8, p. 96-117.
- Barkley, et al. (2012). Collaborative learning techniques. Bandung: Penerbit Nusa Media
- Brown, HD. (2000). *Teaching by principles: An interactive approach to language pedagogy*. Eaglewood Cliffs, NJ: Prentice Hall Regents.
- Burns. A. (2010). Doing Action Research in English Language Teaching. New York: Routledge.
- Dutt, K.M. (1997). The think-pair-share motivates students to participate. *College Teaching*. 45,143-148.
- Hadzigeorgiou, Y., & Skoumios, M. (2013). The development of environmental awareness through school science: Problems and possibilities. *International Journal of Environmental & Science Education* (2013), 8, 405-426.
- Nunan, D. (2004). *Designing tasks for the communicative classroom*. Cambridge: Cambridge University Press.
- Putri, A., A. & Khalik, A. (2014, November 4). Jokowi Green on Environmental, Forestry Policies. *Jakarta Globe*. Retrieved from http://jakartaglobe.id/news/jokowi-green-environmental-forestry-policies/
- Sheany. (2018, June 14). Indonesian Students Turn Plastic Waste Into Clean Energy. *Jakarta Globe*. Retrieved from http://jakartaglobe.id/news/team-from-ugm-to-compete-in-london-with-waste-to-clean-energy-technnology/
- Widiati, U., &Cahyono, B.Y. (2006). The teaching of speaking in the Indonesian context. *Bahasa dan Seni*, 34(2), 19-25.