

The Implementation of *Kang Pisman* Program to Improving Students' Ecological Intelligence

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Abstract. This study was structured to find out the improvement of the ecological intelligence of students in SMP Negeri 10 Bandung after the implementation of the Kang Pisman program. In the school environment, the problem of rubbish becomes difficult to overcome because students who use plastic for daily snacks still dominate, even though trash bins are provided, not a few of them still throw garbage in their place, which then becomes one of the causes of discomfort on the school environment where they study. The researchers were interested to find out Kang Pisman implementation process and its influence on students. The method used in this research was descriptive qualitative with data collection techniques through observation and interviews. The subjects in this study were divided into 3 categories namely the coach of the Kang Pisman program, students who were members of Kang Pisman, and students who were not members of Kang Pisman. The results of observations and interviews show that the students' ecological intelligence program has increased significantly after the implementation of Kang Pisman program so far, as seen from the habits of students to separate the increased waste, also in reducing waste where students are accustomed to bringing tumblers or lunch boxes to school, and to utilize garbage in general, students have participated in the effort even though they have not directly contributed to their activities, namely visiting the garbage bank and making regular work. Besides, investigated from several schools that the researchers observed, the implementation of Kang Pisman in SMP Negeri 10 Bandung was carried out well. This study concluded that Kang Pisman program implementation improves the students' ecological intelligence, although in some aspects, students who are members of Kang Pisman experienced an increase in ecological intelligence more than non-members of Kang Pisman because of the variety of activities carried out more than students who are not members of Kang Pisman.

Keywords: Implementation, Kang Pisman Program, Ecological Intelligence

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A. INTRODUCTION

The rubbish problem becomes difficult to overcome in school environment, because there are still many students who use plastic for daily snacks. Even though the trash bins are provided, not a few of them are still throwing garbage out of place, and this then becomes one of the causes of discomfort to the school environment where they study. Then, to overcome these problems, both the government and the school have often made programs related to the resolution of waste problems. These programs sometimes run well only at the beginning of the implementation because both of the students will feel bored increasingly, while the teacher as a facilitator will feel run out of ideas to run the program.

If we look to some developed countries like Japan and South Korea that have succeeded in overcoming this waste problem, the people have taught the children from a young age and even young children to live environmentally friendly. In Japan itself, children have been invited to be able to sort waste or separate organic and non-organic waste so that it is easy to recycle it. Then in South Korea the government created a program called "Pay as Your Trash" which is a program to manage food waste where the community is required to separate food waste from its packaging to be processed with special tools. Nevertheless, what is more interesting is that people have to pay for each waste that is they dispose of it, and that has proven to be quite helpful in overcoming the problem of waste because the community has begun to reduce waste

production which requires them to pay later (Junanto; 2013, Miftahur; 2019) .

From the examples of other countries' government programs that have succeeded with their programs, what about the programs that our government has? Actually, our government has several interesting programs, for example re Adiwiyata (the awards for confusion-based schools). The program of Adiwiyata encourages the schools to develop their environment so that they are environmentally based. Besides, there is also *Gerakan Pungut Sampah* (GPS) or the Garbage Collection Movement that encourage the people in schools to pick up rubbish that is not thrown there is a place to be disposed of in its place. In Bandung City, the program of *Kurangi Pisahkan Manfaatkan Sampah* known as Kang Pisman is the program to reduce, sort and utilize waste) this program is a program that has only been established in the past year by the Cleanliness Local Enterprise of Bandung City separately realizing the city of Bandung that is "Zero Waste". Actually, this program is a development of programs that are based on environmental care and garbage that has existed before. What distinguishes this *Kang Pisman* program from other previous environmental program is that this program is more emphasized on its application in more targeted schools, where each school requires student representatives from each class to become permanent class representatives as Kang Pisman members in the school.

According to Sumarwoto (2001), humans must realize that their relationship with the environment is circular. It means that whatever is done by humans on their environment, the impact will be felt again by humans, both in the form of advantages and disadvantages. Therefore, the problem of environmental crisis began to emerge without they realize that the environmental crisis from time to time increasingly threatening human life.

Daniel Goleman (2012) says that ecological intelligence is the intelligence of understanding how the nature works, including recognition and understanding of human work systems interacting with nature.

Ecological intelligence combines cognitive abilities with a sense of empathy for all aspects of life, especially in the whole natural system. Goleman encourages everyone to be sensitive and indifferent to the natural surroundings. This in turn will harm the lives of humanity itself.

More and more people are aware that environmental conditions are not as good as before. Following this condition, there are also more ideas and efforts undertaken by humans to improve environmental conditions, including programs launched by the government or certain groups. There are many programs related to efforts to improve and preserve the environment that the government has created, and the Kang Pisman program includes them.

The Kang Pisman Program has the following meanings, Kang (reduce food waste), Pis (separate waste) and Man (use waste to be a selling point). Kang Pisman is 3R (Reduce, Reuse, Recycle). But being a Kang Pisman to have delay value and to be more familiar with the environment of the people of Bandung. Informing this Kang Pisman program, the Bandung City Government through Cleanliness Local Enterprise established a strategic partnership with the waste management company PT Waste For Change Alam Indonesia. The cooperation established between the two parties is in terms of processing cardboard beverage packaging waste which has so far been deemed to have no economic value such as plastic or cardboard beverage packaging waste.

B. METHOD

The research method used in this study is a qualitative descriptive method. In educational studies, qualitative research can be done to understand the various behavioral phenomena of educators, students in the education and learning process (Tohirin: 2012, p. 3). In the descriptive method, the data collected are in the form of words, pictures, and not numbers. Everything collected is likely to be the key to what has been studied. Thus the research report will contain data excerpts to illustrate the presentation of the report (Basrowi and Suwandi, 2009. p. 28).

The population in this study were students of SMP Negeri 10 Bandung in the 2018/2019 school year. Data collection techniques in this study used interview techniques, observation, and documentation studies. After collecting the data, the researchers then processed the data qualitatively. Data obtained from the field are then described and tested for validity using data triangulation. This was done to determine the differences in the alignment of data obtained from various research subjects.

C. RESULTS AND DISCUSSION

This session of article is to describe the extent of the role of the Kang Pisman program in SMP Negeri 10 Bandung in enhancing the students' ecological intelligence.

This study shows that the Kang Pisman program has quite a significant contribution in improving the ecological intelligence of students in SMP Negeri 10 Bandung, despite many obstacles in the implementation of the program. However, due to the enthusiasm of the students themselves, this program has been able to run well.

The results of these studies can be seen in the discussion below.

1. The Implementation of the Kang Pisman Program in SMP Negeri 10 Bandung.

Based on the results of interviews and observations, it was concluded that the application of the Kang Pisman program in SMP Negeri 10 Bandung was only carried out starting mid-semester even in the 2018/2019 school year, which means that when researchers conducted the research, the program had not been applied for a year yet. The application of the Kang Pisman program itself starts from the orientation of the program to students. The coach is assisted by students who are the ambassadors of the environment to introduce other students about what is the Kang Pisman program, then what are the activities in the program, including how to process waste, what types of waste, and what is the Garbage Bank.

b. The Students' responses to the implementation of Kang Pisman Program

After conducting interviews and observations, the researchers concluded that students' responses to the application of the Kang Pisman program in SMP Negeri 10 Bandung were very good. This is proved by the formation of the Kang Pisman organization with many students becoming its members. Besides, the enthusiasm of students who are not members of Kang Pisman can also be seen from how they are enthusiastic in carrying out the Kang Pisman duty, or other activities organized by Kang Pisman members.

c. The obstacles in the implementation of the Kang Pisman program

The obstacles in implementing Kang Pisman in SMP Negeri 10 Bandung are more towards the funding constraints. Due to a lack of funds to develop the program, the implementation of Kang Pisman in SMP Negeri 10 Bandung only utilized the existed facilities and improvised infrastructure. In addition, the lack of parties from teachers involved in program coaching also becomes another obstacle, although with the current number of active coaches the Kang Pisman program does not experience obvious obstacles. Hence, from the results of interviews with coach Kang Pisman namely Ms. Emi, if there are more people involved in the Kang Pisman, the program will be more easily developed.

The impact of these constraints related to funds was felt by students both those who are members of Kang Pisman and those who are not members of Kang Pisman. They feel hampered if one time they want to make activities or goods as an effort to utilize garbage but they do not have funds and the school does not provide funds then they are forced to use private funds. Likewise, with students who are not members of Kang Pisman, funds become obstacles in the picket collection and separating waste activities, because the equipment they use is equipment that they must buy themselves because schools do not assist either in the form of funds or equipment directly.

However, the existing constraints do not make the Kang Pisman program in SMP Negeri 10 Bandung fail to apply. It is precisely because of these constraints that both coaches and students become more creative in utilizing the equipment and infrastructure available in each of their activities.

d. The Improvement of the students' ecological intelligence in SMP Negeri 10 Bandung after the implementation of the Kang Pisman program

The improvement of students' ecological intelligence after the implementation of the Kang Pisman program based on observations made by researchers is seen to increase time to time. Although the researchers did not observe from the beginning of the implementation of the Kang Pisman program in SMP Negeri 10 Bandung, but for approximately 3 months observing, the researchers saw how from time to time the enthusiasm of students in running the Kang Pisman program increased, the collaboration between students was also more solid, the number students who participated in the Kang Pisman organization increased, awareness of students to reduce waste also increased, it can be seen from the number of students who bring tumbler became more and more.

Substantively, the ecological intelligence in SMP Negeri 10 Bandung has been invested since the beginning of the students entering the school, ecological intelligence instilled early on is more ecological intelligence in terms of greening the school environment. The activities carried out are as inviting students to create vertical gardens, where the students were invited to a voluntary involvement in making vertical garden in SMP Negeri 10 Bandung; they brought a medium-sized pot containing plants used to make a vertical garden.

The other activity or program that was held in SMP Negeri 10 Bandung before the entry of the Kang Pisman program was the Goes to School program which is also a program of the Bandung city government, this program is carried out in conjunction with the "GPS" program, namely the

Garbage Collection Movement. Nonetheless, the program activities were only carried out at certain times or by certain students. The GPS program only is conducted on Friday after the habituation activity. Meanwhile, the Goes to School program is only conducted by a few students. The Goes to School as a government program did not make the students enough to overcome the far distance to school. The students who take the distance by walking will get assistance in the form of a bicycle that they can use as long as they are the students of the school. Therefore, the Goes to School program in SMP Negeri 10 Bandung is only applied to a few students, because the program is aimed at participants underprivileged students are not for all students in SMP Negeri 10 Bandung.

D. CONCLUSION

The implementation of the Kang Pisman program in SMP Negeri 10 Bandung is carried out with a variety of activities that are in accordance with the Kang Pisman program itself, including activities to reduce waste by accustoming students to bring tumblers and lunch boxes to school, separating waste by accustoming students to dispose of waste accordingly with the type of rubbish, and utilizing rubbish by introducing students to how to utilize rubbish, what can be done by students to utilize rubbish, including waste banks as an effort to utilize rubbish. The obstacles that exist in the implementation of the Kang Pisman program did not make Kang Pisman fail to improve students' ecological intelligence. The students' ecological intelligence improved after the implementation of the Kang Pisman program. It can be proven by the habits of students to dispose of and separate waste according to its type increased since there is learning from Kang Pisman, besides the habits of students to carry tumblers and lunch boxes are increasing. Moreover, the awareness and concern of students in reprimanding their friends to take care of the environment also seems improved. Finally, the students' skills in utilizing plastic waste to be made into new objects that have a use-

value have also been seen even though not all students apply them.

REFERENCES

- Arikunto, S. (2006). *Metode Penelitian Kualitatif*. Jakarta: Bumi Aksara
- Arikunto, S. (2016). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta
- Arifin, Z. (2009). *Evaluasi Pembelajaran*. PT. Remaja Rosdakarya: Bandung
- Azizah, Euis Nurul. (2019). *Penerapan Program Kangpisman Di Kota Bandung Sebagai Sarana Pembentuk Karakter Warganegara Peduli Lingkungan : Studi Deskriptif Di Kelurahan Babakan Sari Kecamatan Kiaracandong*.
Online: <https://repository.upi.edu/35041/>
- Badan Pusat Statistik. (2013). *Indikator Peduli Lingkungan Hidup*. Jakarta: Badan Pusat Statistik
- Bourdieu, Pierre. (1984). *Distinction: A Social Critique of the Judgement of Taste*. Massachusetts: Harvard University Press
- Christense, Paula J. (2009). *Proses Keperawatan : Aplikasi Model Konseptual Edisi 4* alih bahasa Yuyun Yuningsih, Yasmin Asih editor bahasa Indonesia Egi Komara Yudha, Nike Budhi Subekti. Jakarta : EGC.
- Creswell, J. W. (2010). *Research design: pendekatan kualitatif, kuantitatif, dan mixed*. Yogyakarta: PT Pustaka Pelajar.
- Danial, E, & Warsiah.(2009). *Metode Penulisan Karya Ilmiah*. Bandung: Laboraterium Pendidikan Kewarganegaraan
- Gadoti, M. (2010). 'Reorienting Education Practice Toward Sustainability'. *Journal of Education for Sustainability*, 2010. 4. 203.
- Goleman, D. (2009). *Ecological Intelligence: How Knowing the Hidden Impacts of What We Buy Can Change Everything*, New York: Broadway Books
- Grigorov, S.K. and Fleuri, R.M. (2012). *Ecopedagogy: Educating for New Eco- Sosial Interculturalan Perspektive*. Online: Visao Global, Joacaba, v. 15, p. 433-454, jan./dez.2012.
- Gufron, Amirullah. (2012). *Kecerdasan Ekologi*. Online: <https://scholar.google.co.id>.
- Hamandi, Dadi dkk. (2006). *Konservasi Air Tanah di Bandung dan Sekitarnya*. Bandung: Departemen Geologi dan Tata Lingkungan
- Herdiawan, J. (2013). *Rahasia Sukses Pengolahan Sampah di Jepang*. Online: <https://olahsampah.com>
- Kahn, Richard. (2010). *Critical Pedagogy, Ecoliteracy and Planetary Crisis*. New York: Peter Lang
- Keraf, A.S. (2014). *Filsafat Lingkungan Hidup: Alam Sebuah Sistem Kehidupan*. Yogyakarta: PT. Kanisius.
- Moleong, L. (2007). *Metodologi Penelitian Kualitatif*. Bandung: Remaja Karya.
- Muhaimin. (2015). *Membangun Kecerdasan Ekologis Model Pendidikan untuk Meningkatkan Kompetensi Ekologis*. Bandung. Alfabeta
- Nasution.(2003). *Metode Research*, Jakarta : PT. Bumi Aksara.
- Nugroho, Panji. (2013). *Panduan Membuat Pupuk Kompos Cair*. Jakarta: Pustaka Baru.
- Rahmi, Miftahur. (2019). *Aturan Membuang Sampah di Korea Selatan*. Online: <https://anakrantaui.id>
- Salim, Emil. (1989). *Lingkungan Hidup dan Pembangunan*. Jakarta: Mutiara Sumber.
- Sugiyono. (2013). *Metodologi Penelitian Kuantitatif, Kualitatif Dan R&D*. Bandung: Alfabeta.
- Sumaatmadja, Nursid. (2000). *Manusia dalam Konteks Sosial, Budaya, dan Lingkungan Hidup*. Bandung: Alfabeta
- Supriatna, N. (2016). *Ecopedagogy: Membangun Kecerdasan Ekologis dalam Pembelajaran IPS*. Bandung: PT. Remaja Rosdakarya.

