

Raising Environmental Awareness through Teaching Chinese as a Second Language at University

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Abstract: Due to many environmental issues, the need for increased environmental awareness becomes essential. This paper aims to raise environmental awareness through teaching Chinese as a second language at university. The researchers use theme-based language learning and task-based language learning to implement the teaching process. The research was conducted in a Chinese listening class and History of China at Bina Nusantara University Chinese department with 66 students with waste management as the learning theme. Before the teaching process, we use a pre-task questionnaire to measure the students' environmental awareness, especially waste management. Later, the researchers introduce the students to some materials related. The researchers gather feedback after the students complete a writing task that is related to the topic. The study divided into three sections: the students' awareness and behavior about waste management, the students' reflection, and the students' suggestion to improve environmental issues. Students are more aware of environmental issues, particularly on waste management in daily life, aware about their old habits, learn new knowledge, and their suggestions are everyone must take the lead, become an example for others to protect the environment in daily life, raising awareness through education and improvement of government' policy.


1 INTRODUCTION


Due to many environmental issues, the need for increased environmental awareness becomes essential. Within the last century, with the rapid development in industrialization, the increased world population, and science-technology, we now see the negative consequences to the earth and the environment in our daily life. That is why it should be considered a common problem and responsibility for all of us worldwide. One of the approaches to increase people's awareness is through education (Ningrum & Herdiansyah, 2018). Learning Environmental education merely as a subject will not solve the present problems that the environment faces. There is a need to incorporate education about the environment in all aspects of learning (Padmanabhan et al., 2017). It is an unquestionable fact that the

education of many disciplines should contribute to raising environmental awareness.

Some studies showed that many disciplines in education could develop student towards environmental awareness. Environmental education is essential to increase learners awareness and perceptions of environmental risks such as climate change (Nkoana, 2020) or how text features are used in the textbooks to reflect environmental issues and develop children's awareness (Curdt-Christiansen, 2020). Some schools provided an environmental subject or environmental education course, and other schools promote students' awareness through other subjects, for example, language (English). Teaching literacy in the classroom should integrate environmental concepts and find a suitable entry point to combine language learning with the environmental issue (Yang Yan, 2016). As a result, the students have environmental knowledge and

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increase the efficiency of environmental education. Exploring literary texts on an ecological topic can be advantageous for language learners to increase environmental awareness (Metz, 2018). Through text learning, students can learn a language and get environmental knowledge through the contents of text reading (Ramadhan et al., 2019); the use of environmental topics in language classroom enables the students to compose better, strengthen the students' environmental awareness, and raise their critical thinking ability to solve the environmental problems (Setyowati et al., 2020). However, studies on how it can be implemented in Chinese as a second language teaching are still limited.

Environmental awareness indicates people's understanding and awareness of the environment and the correlated issues (Ningrum & Herdiansyah, 2018). Another study showed that students' knowledge, attitude, and practices were associated with family, having parents with moderate academic backgrounds and held permanent jobs (Barloa et al., 2016). Furthermore, a study also mentioned that most respondents with a lower level of education possessed a moderate knowledge of the impact of improper waste management than those with higher-level education (Ramos & Pecajas, 2016). Higher education, such as colleges and universities, must prepare graduates from various departments to protect the environment by holding sustainable principle. Therefore, the university has the responsibility to encourage students' awareness, attitudes and environmental behavior. (Ningrum & Herdiansyah, 2018). Hence, this paper aims to raise environmental awareness through teaching Chinese as a second language at university.

2 METHODS (AND MATERIALS)

This paper attempt to investigate about do students know waste management. Do the students inspire after learning about environmental issue, especially waste management? Moreover, what suggestion that students have for improving environmental issues?

This research has used theme-based language learning and task-based language learning to implement the teaching process. We have conducted the teaching in two classes, Chinese listening class and history of China's class at Bina Nusantara University Chinese department with 66 students. We have chosen waste management as the learning theme.

Before the teaching process, we have used a pre-task questionnaire to measure the students'

environmental awareness especially, waste management.

In the History of China class, the teacher introduced waste management in ancient China history briefly, and in the Chinese Listening class, students listened to audio about waste management, coded bin, and had to answer the question related to the topic. Afterwards, students had a task to submit a writing assignment about their reflections and suggestions to improve environmental issues.

3 RESULTS AND DISCUSSION

The result divides into three sections, the awareness and behavior about waste management, the reflection after learning about waste management, and suggestion action for improving environmental issues.

3.1 The Awareness and Behavior of Waste Management

From the pre-task questionnaire, we can understand students' behavior and awareness about waste management. Students (62%) are aware of keeping their garbage without trash bin surroundings regarding habitual behavior towards disposal waste. They are sometimes also willing to help people to collect trash (51%). 40% of students sometimes have the habit of separating waste and, 31 % rarely have the habit. 40% of students sometimes put the trash into separation coded bin, and only 25% of students always throw the trash into separation coded bin. Almost half of the students (46%) rarely have the habit of reusing things (clothes or others), and there are 33% of students sometimes reuse things. Students think they do not separate the waste because there is no coded bin available (47%), and they think they do not have much time to separate it (31%). From these results, we find out even though most of the students (62% and 51%) aware that they should throw garbage properly, but from the habit such as separating waste, reusing products, it indicates more than half responses still significantly have a lower concern about environmental protection. This result consistent with the statement that university students exhibit a low commitment towards pro-environmental behavior despite the facts that they know a lot about environmental issues (Mkumbachi, 2020) and higher knowledge and attitude levels inconsistent with the students' practice level, which was found relatively lower (Barloa et al., 2016).

About the waste management knowledge, the students learn about waste management from textbooks, television or magazines (48%) and the advertisement (46%). The results show that students (57%) have a basic understanding of waste separation, and 25% think they clearly understand waste separation and recycle products. Students most aware of waste separating are plastic products (53 responses), food waste (37 responses), and paper products (36 responses). Less than ten responses care about glass, metal and battery disposal separation. Based on statistical data, plastic production in Indonesia reached a higher number in 2012, where plastic production almost touched 10.2 million tons (Hidayat et al., 2019). Students' knowledge and their attitude toward the plastic waste problems understanding is higher than other waste issues. The increasing plastic usage has a direct impact on the environment. Many efforts applied to overcome the plastic waste problems. Moreover, the efforts will not be optimal if people's awareness of plastic-based problems is still low (Situmorang et al., 2020). The knowledge and attitude level of separate waste habits are consistent with the students' practice level, reasonable practice.

Based on the living area and management waste system, the students (96%) think that the coded bin help them to separate waste. The students (60%) mention they live in an environment with the traditional trash bin; only 18% have a coded trash bin in their living area, although they want to separate waste, they could not do it. This result indicates that there is still an absence of a waste management system in some areas, providing a sustainable environment. Related to environmental problems in Indonesia, they (52 responses) think the citizen lack of awareness about waste management is the biggest problem in Indonesia, and 41 responses think that the citizens do not have trash separation knowledge, 21 responses mention that the government does not have an apparent regulation and lack of socialization publicly of waste management. Environmental awareness concerns play a significant role in developing a well-informed community about environmental issues to become responsible citizens caring for the environment (Mkumbachi, 2020). The students' perspective shows that lack of knowledge induces a lack of awareness and the lack of attitude that could build community behavior towards a sustainable environment.

Towards a sustainable environment, 50% of students consider joining some waste management activity if they have leisure time.

The student' essay also shows their responses about why we should care about the environment, especially waste management. Without good waste management, the environment will get polluted, dirty, and spread disease, and by keeping a clean environment, our life and health also benefit from it. The students also state that humans depend on natural resources to survive; environmental damage will also damage humans. Human will face natural disaster by the damaging environment. Earth is the home of all creatures, which include plants and animals. The interference of one life component will cause an imbalance to other components. Therefore, humans have a greater responsibility to take the lead to protect the environment, less overexploit the natural resources.

3.2 The Reflection after Learning about Waste Management

The students' essays state various reflection after attending the class with waste management as a theme.

Table 1: Students' learning reflection.

Learning Reflections	Number of responses
1. Increase the awareness of environmental issues	21
2. Learn new knowledge about environmental protection	18
3. Changing the old habit	17
4. Give more information to people to do waste management	6
5. Understand and appreciate ancient China regulation about the waste management	3
6. Regulation and law enforcement to give penalties who violate environmental protection	1

The students' learning reflection about environmental protection, issues and awareness can be seen in their essays' summary. After learning about waste management, the students start to know how important the protection towards the environment, pay more attention to our earth, consider the future, and acknowledge that protecting the environment starts from oneself and small things in daily life. They understand more about recycling and reuse things, get more insights about environmental protection in daily life. The students start to build new habits such as separating waste, using reuse bag (recycle bag), keep their trash if the trash can was not available. They also are willing to

give more information about environmental protection or waste management to people surroundings. Everyone has to make changes to live more sustainably. The more knowledge these students have about environmental protection, the more they care about it. Therefore, through the reflections, we hope that by raising their awareness of environmental issues, keeping sustainable living is the goal for everyone from now and in the future.

3.3 Suggestion Action for Improving Environmental Protection

The students' essays mentioned some suggestions for improving environmental protection, as is shown in table 2.

Table 2: Students' suggestion for improving environmental protection.

Suggestion	Number of responses
1. Make an example and take the lead to protect the environment in daily life	34
2. Raising environmental awareness through education	9
3. Government strict policy towards environmental protection	8
4. Promote to others how to protect the environment	6
5. Government do more promotion and advertising through media	4
6. Using recycle products	4
7. Build a habit to protect the environment	3
8. Implement activities of environmental protection	3

The students suggest that to improve environmental protection, that they have to make an example, take the lead to use cloth bag when they go out for shopping, reduce using one-time products, cleaning the trash, do not throw solid waste, liquid waste, and factory waste to the river, save electricity, bring own water bottle, reduce or stop using plastic materials. For raising environmental awareness, they suggest that family and school need to strengthen environmental education. Government must have a strict policy and give a penalty to people who violate the policy. Government must provide more publicly coded trash bin, find an innovation to manage city waste, and do more promotion through social media, educate people about waste separation.

Some students suggest that we have to use recycled products, try to make new products from the

trash, and it is prohibited to use a plastic bag at supermarket or department store. Everyone should try to build new habits, pay attention to oneself, join more activities to send more messages and knowledge to people, give an example to save the earth.

4 CONCLUSIONS

The students were exposed to the rich source content to develop their higher skills, especially in Chinese. Besides, it is a positive approach to increase their awareness of what individuals can do to improve their daily lives after completing the task. The students strive to learn about their environment actively and independently. The students obtain information from a worldwide range of sources, therefore increasing their knowledge about the environment.

The students can use Chinese as the target language to communicate and express their opinions in written Chinese regarding their reflection and suggestions after learning about waste management. They are also more aware of their daily life behavior toward the environment. The study result shows that all students agree that without awareness, without pay attention to oneself behavior and action, the environmental destruction will continue rapidly. They try to apply new habits into their daily life, and the most important to protect environment action is they have to take the lead and make an example to people surroundings to improve or create towards a more sustainable environment.

By blended the language learning and environmental theme, we hope students bring more development towards a sustainable community for now and in the future.

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