

Evaluation of Environmental Citizenship Levels and Their Implications Against Ecological Values and Practices; How about Prospective Teacher Students

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ABSTRACT

This study aims to evaluate the level of environmental citizenship of prospective teachers of Pancasila Education and Citizenship (PPKn) which is expected to instill ecological values and practices to students in schools. This research was conducted in a quantitative descriptive manner. The population is PPKn students from 2013-2018. The sample was determined by a proportional random sampling technique from 100 people consisting of 46 men, 54 women. Data collection techniques using a questionnaire. Data analysis using Mean and SD. The evaluation results show that the level achieved as a whole is moderate, while the dimensions of participation are low, the dimensions of sustainability and responsibility are moderate, as well as the dimensions of rights and justice are high. The results of the evaluation of the level of environmental citizenship achieved indicate the level of conditions that cannot be expected for prospective PPKn teachers to instill ecological values and practices. For this reason, variables that influence growth and enhance ecological values and practices are feasible to be implemented in learning activities and PPKn study program activities.

Keywords: *environmental citizenship, values, practices, ecology, students*

1. INTRODUCTION

Ecological problems are the main problem now in Indonesia. As shown there are 10 significant environmental problems in Indonesia, namely specific waste (40%), floods (20%), contaminated waterways (11%), changes in world temperature (10%), air contamination (6%), danger to marine biological systems (4%), problems in clean water (3%), forest damage (2%), scratched area (2%), and contamination (2%) [1]. It even becomes a vital issue, namely ecological problems including illegal logging, illegal mining, marine pollution, and transformation of horticultural land capacity [2].

Meanwhile, in South Kalimantan, problems relating to the environment are Meratus, mine pits, and haze [3]. Besides, environmental conditions are alarming, damage continues to increase, due to mining activities, plantation business with uncontrolled land clearing or low compliance with the provisions in the Environmental Law [4], even the most exceedingly terrible South Kalimantan ecological quality record in Kalimantan and positions 26 out of 33 regions in the nation[5].

As an environment that is mostly based on wetlands, including rivers. The condition of large rivers in South Kalimantan over the past five years has been heavily polluted, namely the Barito river, Martapura river, and Nagara river [6]. The reason is the number of fecal coliform bacteria and uncontrolled total coliform bacteria derived from animal and human feces, especially the number of

latrines in rivers, and careless disposal of mining waste is also the root of the problem [7].

For the Banjarmasin region, environmental problems are related to the "disease" of some rivers, due to the high acidity, due to the exploitation of peatlands, such as large plantations, rice fields, and settlements, the coly bacterial population is very high above normal, the level of turbidity of the river in Banjarmasin which has been contaminated by erosion and erosion of upstream forest areas. The river condition in Banjarmasin is in the critical category and the threshold is very polluted. Besides, river ecosystems are threatened, because poor household waste becomes waste, household waste flow, and vegetables, now household liquid waste [8]

The fundamental driver of the issues of environmental harm is the absence of attention to citizens in ensuring and saving the earth and brought about by citizens' off-base conduct towards the earth [8,9,10]. In confronting the issues of ecological harm and its administration, requests of the job of government, lawmakers, law requirement, and the network as residents. In Indonesia, a decent and solid condition is the fundamental right of each Indonesian resident as ordered in Article 28H of the 1945 Constitution of the Republic of Indonesia and No. 23 of 1997 concerning ecological administration (UUPH) Article 5 section (3) clarifies that everybody has the option to assume a job in environment administration.

Citizen participation and duty much required in saving the environment as a type of consciousness of rights, commitments, maintainability, and ecological equity, since people are a piece of the earth. This is by improvements the idea of citizenship which no longer alludes to the exemplary idea of citizenship from TH Marshall which has common, political and social measurements [11], or legal, political and social [12], however, have crossed different measurements, for example, social, economic and political [13], cultural [14,15], and ecological [16].

Environmental citizenship alludes to the nearby, country state, and world network-based citizenship exercises [17], includes the idea of excellencies that assume a key job [18] and is utilized [19], to show proper qualities and practices for the accomplishment of manageability, through changes in close to home conduct, to be an ecologically mindful citizen; "acceptable" discipline, "green" conduct, and more accentuation on ecological rights. That environmental citizenship includes enabling residents to have information, aptitudes [20].

Since environmental citizenship incorporates comprehension of biological issues, rights, and duties of residents on ecological issues, the activities have taken location ecological issues, yet in addition to advance positive and maintainable human cooperations with the general condition [20,21,22,23,24]. Therefore, that biological qualities, interdisciplinary requests, and reflexive practices with full of feeling teaching method must exist in ecological citizenship instruction [25]. The importance is supported by the idea of integration of environmental teaching and citizenship training and actualized by educators in schools [26,27].

Studies on ecological citizenship are as yet restricted [16,26]. The latest investigation was completed by Karatekin [26, 28]. In like manner in Indonesia, natural/biological citizenship examines are as yet restricted, because they are still generally new, including; network improvement of residents who care about the earth [9], the methodology of shaping environmental citizenship through tutoring [29], the reproduction of environmental citizenship through the learning of eco-proficiency-based citizenship training [30], making environmental citizenship in the computerized period through Kampoeng Recycle [31]. A portion of these investigations has not analyzed understudies who will become imminent instructors of Pancasila and Citizenship Training, particularly concerning the degree of environmental citizenship.

2. THEORETICAL FRAMEWORK

Ecological citizenship has been examined since 1990 in strategy records, scholastics, and institutional crusades [18]. That contemporary citizenship has four measurements, to be specific common, political and social rights, and natural or environmental citizenship [32]. The notion of Marshall citizenship will change when managing the requirements, rights, obligations, and commitments that develop about the earth and are feasible, especially hazards around the world, for example, running out of normal assets and destruction from the earth. It is recommended that 'all of us currently are inhabitants of the earth'[33].

Environmental/ecological citizenship dependent on citizenship exercises in the extent of the nearby, country state, and world networks [17], includes the idea of ideas that assume a key job [18], utilized [19] for showing proper qualities and practices for the accomplishment of supportability through changes in close to home conduct, being earth capable residents; "great" discipline, "green" conduct, and more accentuation on natural rights. Environmental citizenship is "pro-environment behavior, publicly and privately, driven by a belief in fairness in the distribution of environmental virtues [34].

The genius behavior of ecological citizens is inherent in the promise to the standards and qualities that underlie it. Ecological citizenship is a value-based way to handle energy in professional environmental behavior, with far from efforts to draw out hidden qualities in people, as opposed to price-based methodologies that hope to change existing quality, the key to 'appreciation' is equality between people, instead of thinking of the earth with consideration of legitimate concerns for the earth itself, or even what is given to us [34]. Ecological values, interdisciplinary inquiry, and reflexive practice with affective pedagogy must exist in environmental citizenship education [25]. Therefore, it must be supported by the integration of environmental education and citizenship education and implemented by teachers in schools [27]. Educators do important work in developing ecological citizenship that protects new social demands [28], remembering for this case planned instructor understudies. One of them is determining the level of environmental citizenship of instructors and students who will come, to encourage ecological citizenship that has an ecological concern as a type of environmental citizenship. Determine the level of instructor's environmental citizenship, including instructors' future citizenship training instructors, who are explicitly responsible for ecological citizenship instructions, include ecological citizenship of wetlands in South Kalimantan and specifically in Banjarmasin for youth teaching, important and additional training, will be included in the subject matter. can adequately shape ecological citizenship.

The degree of citizenship alludes to the new ecological citizenship scale created by Karatekin [28], and with that scale used to explore instructors [28]. Four dimensions are emphasized on environmental citizenship, namely responsibility, sustainability, rights and responsibilities, and participation. Growing responsibilities other than contractual and non-contractual responsibilities are the responsibilities of environmental citizens to support ecological balance, and "responsibility" is an important dimension of environmental citizenship. Environment Canada identifies environmental citizenship as a type of citizenship that encourages individuals, communities, and organizations as global citizens who think about environmental rights and responsibilities [35]. In this definition, he focuses on that rights and obligations are the essential characteristics of ecological citizenship, Following Dobson (2003), and ecological citizen realizes that he has obligations regarding ages that he was not brought into the world with and his conduct today will influence individuals later on [27].

Participation is one of the ideas utilized when deciding created majority rule governments. Participation in the association of people in dynamic procedures that include people and society such that impacts those procedures [28]. Citizens must show participatory conduct to satisfy their duties and commitments. Participation in terms of environmental rights such as the influence of creation, change, protection, and sustainable development of people living in an environment. Therefore, participation for the resolution of environmental problems is a right at the same time as responsibility is a task [28]. In this sense, environmental citizenship will be viewed as a component of political participation in dynamic procedures, and environmental citizenship will be seen as a mechanism of political participation in decision-making processes [19]. However, research shows that the low level of citizenship participation of young people [26,28,36,37]. To grow young people as citizens of the environment can be done through educational activities. For this reason, it is important to evaluate the level of ecological citizenship of the younger generation including student teacher candidates.

3. METHODOLOGY

The study was a descriptive quantitative study with a survey method. The study population was prospective teacher students of Pancasila and Citizenship Education at FKIP ULM. The research sample that will become respondents is determined by the proportional random sample technique per class of students from the class of 2013-2018. Obtained respondents as many as 100 people, consisting of 46 men and 54 women, data collection techniques using a questionnaire. The questionnaire used was adopted the Environmental Citizenship Level Scale questionnaire from Karaktekin [28]. Data analysis was performed using Mean and DS. To evaluate the level of Environmental Citizenship use the criteria and categories of Environmental Citizenship based on the category of Karetekin [28], namely: Mean score 1.00 - 1.80 (Almost never / Very Low); 1.81 - 2.60 (Rare / Low); 2.61 - 3.40 (Sometimes / Medium); 3.41 - 4.20 (Usually / Height); and 4.21 - 5.00 (Always / Very High)

4. RESULTS AND DISCUSSION

4.1 Results of Evaluation of Environmental Citizenship Level

Table 1 Dimension of Environmental Citizenship Participation

Dimension of Participation	\bar{X}	DS	Level
Wrote a petition to solve environmental problems that I faced	2.26	1,322	Low
Mask the government about green spaces, rubbish bins, reprocessing, polluted river conditions, mining does not pay attention to the environment	2.98	1,231	Medium
Learn about environmental policies from the central and local (regional) government	3.08	0,971	Medium
Check the living conditions of street animals in the places they live, plants in parks, and trees along rivers and roads	2.37	1,079	Low
Try to make public opinion to solve environmental problems	2.48	1,123	Medium
Write articles on environmental issues in local (regional) newspapers	1.87	1,116	Low
Participating in legal demonstrations on environmental issues	2.15	1,201	Low
Follow the results of air pollution measurements published or on the air pollution measurement information panel in the city where I live	2.35	1,104	Medium
N = 100			

Table 2 Dimension of Environmental Citizenship Sustainability

Dimension of Sustainability	\bar{X}	DS	Level
Pay attention to raw materials (cotton, chemical plastic fibers, polyester, fur, etc.) of the clothes that I will buy	3.05	1,140	Medium
Pay attention to the products that I buy, whether included in genetically modified food or not	3.42	1,102	High
When shopping for nothing, I think of citizens from poor countries and my poor neighbors	3.22	1,194	Medium
Since knowing that many people in the world cannot get clean water, I avoid excessive consumption of water	3.40	1,073	Medium
I'm a list of needs before shopping	3.40	1,214	Medium
Consider the use of energy when buying an electrical product	3.01	1,150	Medium
Meat organic foods without additives in them	3.09	1,272	Medium
N = 100			

Table 3 Dimension of Environmental Citizenship Responsibility

Dimension of Responsibility	\bar{X}	DS	Level
File complaints against authorized officials, individuals, and organizations that cause environmental pollution, especially river pollution	3.98	0,995	Medium
Help animals on the road to find food and drink, water plants in the park, and plant trees on the banks of rivers and roads	3.15	1,104	Medium
Visit national parks to gain knowledge about nature	3.04	1,210	Medium
Participating in campaigns on the environment (plastic bottle collection, signatures, seeding seed donations, tree planting, etc.)	2.90	1,170	Medium
Provide food aid for people who are in poor and slum environments and are vulnerable to disasters due to environmental destruction	3.08	1,125	Medium
File complaints against people who torture animals, especially endangered animals, damage plants in parks, cut down protected trees	4.26	1,021	Very High
N = 100			

Table 4 Dimension of Environmental Citizenship Rights

Dimension of Rights	\bar{X}	DS	Level
Care of swamps that will dry up, is not a problem anywhere	3.09	1,026	Medium
Men against the development of thermal power which endanger the environment in any city	3.35	1,329	Medium
I am saddened by forest fires that have occurred in other areas, especially in my area	4.45	0885	Very High
N = 100			

Table 5 Evaluation Level of Citizenship Environmental Citizenship Teachers

Environmental Citizenship	\bar{X}	DS	Level
Dimension of Participation	2.48	0812	Low
Dimensions of Sustainability	3.26	0.736	Medium
Dimensions of Responsibility	3.42	0.776	Medium
Rights and Justice	3.76	0.970	High
Total Dimensions	3.05	0.639	Medium
N = 92			

In table 1, eight items that describe the dimension of environmental citizenship participation, then each of the four items (50%) are at the medium level or sometimes does (2,3,5,8), the other 4 items rarely do (1, 4, 6, 7), such as writing a petition to solve environmental problems, examining the living conditions of street animals in the places they live, plants in parks, and trees along rivers and roads, writing articles on environmental issues in local (regional) newspapers, and participating in legal demonstrations on environmental issues. Meanwhile in table 2 illustrates the dimension of environmental citizenship sustainability, 86%, items 1,3,4,5, and 6 are at the moderate level, sometimes doing, only 14%, item 2 at a high level, which is paying attention to the products purchased, whether included in the modified food genetics or not. In table 3 you can see that much 83%, items 1,2,3,4,5 are at a moderate level, meaning that sometimes they do it, while 17%, item 6, are at a very high level, means that they always complain about people who abuse animals, especially rare animals, damaging plants in the park, cutting down protected trees. Whereas in table 4 shows as much as 67%, items 1 and 2 are at the moderate level, sometimes they do, while 33% ie item 3, are at a very high level, always feeling sad about forest fires that occur in other areas, especially in the area. Table 5 shows

the results of evaluating the level of environmental citizenship of prospective Civics teacher students.

4.2 Discussion

Associated with the condition of environmental damage that is already alarming and continues to grow [4], even the worst South Kalimantan environmental quality index in Kalimantan and ranks 26 out of 33 provinces in the country [5]. Coupled with that finding overall the level of environmental citizenship of the Pancasila and Citizenship Education teacher candidates is at a moderate level, or sometimes, especially in the dimensions of sustainability and responsibility, such teacher candidates cannot be expected [28] to instill values and behavior environmental citizenship, because carrying out activities is only incidental, does not show order and consistency.

This level shows that it is necessary to increase the level of environmental citizenship for prospective teachers of Pancasila and Citizenship Education, both knowledge, awareness, skills, and participation related to ecological competence and environmental citizenship activities. To increase the level of environmental citizenship, especially giving birth to regularity and consistency behavior of prospective teacher candidates for Pancasila and Citizenship Education it is necessary to the implant, develop and foster values, competencies, ecological behavior through variables

that affect the growth of environmental citizenship [28], such as the level of curiosity about the environment and the frequency of participation in environmental activities. Besides ecological competence in the form of knowledge [9], the strategy of forming ecological citizenship through schooling [29], the reconstruction of ecological citizenship through the learning of eco-literacy based citizenship education [30], and creating ecological citizenship in the digital era [31]. All of these variables need to be implemented in learning activities in the Pancasila and Citizenship Education Study Program, especially in subjects such as Citizenship Education, Basic and Concepts of Citizenship, Basic and Concepts of Citizenship Character Education, Environmental Education, Environmental Law, and Wetland Citizenship in the Pancasila and Citizenship Education Study Program, so that it is expected to produce Pancasila and Teacher Education teachers. Citizenship has a high level and is very high on the scale of Environmental Citizenship.

A concerning finding is the low level of environmental citizenship of prospective teachers in Pancasila Education and Citizenship from the participation dimension. Because the element of participation plays a key role in environmental citizenship [32]. Participation shows the involvement of individuals and communities as well as ways of influencing the decision-making process [28], demonstrating participatory behavior to fulfill responsibilities and obligations. Participation in the perspective of environmental rights such as to influence the creation, change, protection, and sustainable development of people living in an environment [38]. Therefore, participation in the resolution of environmental problems is a right at the same time as responsibility as a task [28]. Environmental citizenship is a mechanism of political participation in decision-making processes [19].

The low level of environmental citizenship of prospective teachers in Pancasila and Citizenship Education reinforces research findings of the low level of youth citizenship participation [26,28,36,37]. To foster the level of civic participation in environmental citizenship, the agenda for activities that invite the participation of young people as environmental citizens include environmental actions that directly provide solutions for environmental improvement. Such actions will motivate the participation of others to contribute to solutions to environmental problems [39].

Of the four dimensions of the level of environmental citizenship, only the dimension of rights and justice is at a high level, meaning that prospective teacher students always feel sad about forest fires that occur in other areas, especially in my area. Environmental citizenship is a value-based approach to encourage pro-environmental behavior, with a way of trying to draw out hidden values in individuals, rather than value-based approaches that aim to change existing values, the key 'value' is justice between humans, rather than caring for the environment for their interests, or even what he was given to us [34]. The high level of the dimension of rights and justice has drawn the value of justice from within students, that caring for the environment is not just for themselves, but is also directed at others. Although on a small scale in the dimension of responsibility, prospective student teachers always file complaints against people who abuse animals, especially endangered animals, that damaging plants in the park, which cut down protected trees. The same thing in the dimension of sustainability, prospective teacher students

usually pays attention to the products purchased, whether included in genetically modified foods or not.

The research findings above illustrate that environmental citizenship is a way to discuss different risks to human bodies specifically, and how governments and corporations often trample on the environmental rights of people specifically. Discourse on the struggle for social justice is an important part of the concept of ecological citizenship [40], environmental citizens "doing good" as the right to something to do, rather than for gifts or economic punishment [27], commit to the common good and consider their behavior in conditions of justice and injustice [41].

5. CONCLUSION

Evaluation of the level of environmental citizenship achieved by prospective teacher students as a whole is at a moderate level while judging by dimensions, a high level is reached in the dimension of rights and justice, a moderate level for the dimension of sustainability and responsibility, a low level in the dimension of participation. With these conditions, it is not possible for prospective teacher students, if becoming a teacher will be able to instill, develop, and foster ecological values, competencies, and behaviors that manifest in environmental citizenship. The implication is needed to increase the achievement of the level of environmental citizenship for prospective students of Pancasila and Citizenship Education teachers, both knowledge, awareness, skills, and participation related to ecological competence and environmental citizenship activities.

REFERENCES

- [1] Sindo Newspaper, 10 Major Environmental Problems in Indonesia. Retrieved May 7, 2019. Available at <https://nasional.sindonews.com/read/1302781/15/10-problem-besar-lingkungan-di-indonesia-1525347778>.
- [2] Fatimah, Sarbaini, R. Ismi, Teaching The Values on Environmental Citizenship in Developing Country; The Different Levels of Responsiveness Across The Gender, 35th IBIMA conference proceeding, April 1-2 2020, Seville, Spain.
- [3] Rifani. Reza. Three South Kalimantan Environmental Issues, Walhi: Must Be a Presidential Priority. Retrieved May 6, 2019, Available at www.iqlancapres.id/.../tiga-isu-lingkungan-kalsel-walhi-wajib-jadi
- [4] Hasan. Syamsuddin, South Kalimantan's Environmental Damage Is Concerning. Retrieved May 8, 2019. Available at <https://kalsel.antaranews.com/berita/24317/kerusakan-lingkungan-kalsel-memprihatinkan>
- [5] Susanto. Denny, South Kalimantan's Worst Environmental Quality Index in Kalimantan. Retrieved May 7, 2019, Available at <https://mediaindonesia.com/read/detail/131706-indeks-kualitas-lingkungan-hidup-kalsel-terburuk-di-kalimantan>.
- [6] PPKL KLHK Republik Indonesia I, Retrieved May 8, 2019. Available at <http://kalsel.prokal.co/read/news/13501-lima-tahun-air-sungai-di-kalsel-tercemarberat>.

- [7] DLHD Kalimantan Selatan, Retrieved May 7, 2019. Available at <http://kalsel.prokal.co/read/news/13501-lima-tahun-air-sungai-di-kalsel-tercemarberat>.
- [8] Irmita. Rizky, When Rivers in Banjarmasin Become "Sick" Due to Land Exploitation. Retrieved May 8, 2019. Available at <https://www.kanalkalimantan.com/saat-sungai-sungai-di-banjarmasin-menjadi-sakit-akibat-exploitation-land/>
- [9] Prasetyo. Wibowo Heru, and Budimansyah. Dasim, Citizens and Ecologists; Case Study of the Development of Citizens Care for the Environment in the Bandung Gardening Community, Retrieved May 8, 2019, Available at <https://journal.um.ac.id/index.php/jph/article/view/8221/3784>.
- [10] Sudarmadi. S, et al, A survey of perception, knowledge, awareness, and attitude in regard to environmental problems in a sample of two different social groups in Jakarta Indonesia, *Journal of Environment, Development and Sustainability*, Kluwer Academic Publishers, 3(2001), 169-183.
- [11] Abowitz. Kathleen Knight, and Harnish. Jason, *Contemporary Discourses of Citizenship*, *Review of Educational Research*, Winter, 2006, Vol.76, No.4, pp.653-690.
- [12] Iija. Veera Ilona, An Analysis of the Concept of Citizenship: Legal, Politic and Social Dimensions, University of Helsinki Faculty of Sciences Social and Moral Philosophy, Master's Thesis, December 2011, Retrieved Mei 8, 2019. Available at https://helda.helsinki.fi/bitstream/handle/10138/29256/veerasthesis_FINAL.pdf?...
- [13] M.MacGregor. Sherilyn, and Simon. Pardoe, with Andrew. Dobson, and Derek. Bell, *Environmental Citizenship: The Goodenough Primer*. Summary report of an ESRC seminar series, 2005, Available at <http://www.environmentalcitizenship.Net>.
- [14] Rosaldo. R, *Cultural Citizenship in San Jose, California*. *PoLAR, Political and legal anthropology review*, 17.2 (1994): 57-64.
- [15] Ong. A, et al, *Cultural citizenship as subject-making: immigrants negotiate racial and cultural boundaries in the United States*. *Current anthropology* (1996): 737-762.
- [16] Jagers. S.C, & Matti. S, *Ecological citizens: Identifying values and beliefs that support individual environmental responsibility among Swedes*. *Sustainability*. (2),2010, 1055-1079.
- [17] MacGregor. Sherilyn, *Beyond Mothering Earth: Ecological Citizenship and the Politics of Care*, Vancouver, UBC Press, 2006a.
- [18] Carme. Melo-Escrihuela, *Promoting Ecological: Citizenship; Rights, Duties and Political Agency*. *ACME: An International E-Journal for Critical Geographies*, 7(2)(2008) 113-134.
- [19] Martinho. Nicolau, Caeiro. Amador, and Oliveira, *Environmental Citizenship and Participation, The Role Of Education Programs, Knowledge Collaboration & Learning for Sustainable Innovation* ERSCP-EMSU conference, Delft, The Netherlands, October 25-29, 2010.
- [20] Berkowitz. A. J, Ford. M. A, & Brewer. C. A, A framework for integrating ecological literacy, civics literacy, and environmental citizenship in environmental education, In Johnson, E.A, & Mapping, M.J, (Eds.), *Environmental education and advocacy: Changing perspectives of ecology and education*, (pp. 227–266). Cambridge: Cambridge University Press, 2005.
- [21] Clarke. L, & Agyeman. J, *Shifting the balance in environmental governance: Ethnicity environmental citizenship and discourses of responsibility*, *Antipode*, 43 (1)(2011), pp. 1773–1800.
- [22] Latta, P. Alex, *Locating democratic politics in ecological citizenship*, *Environmental Politics*, 16(3)(2007), 377-393.
- [23] Gabrielson. T, & Cawley. R. M, *Plain member and citizen: Aldo Leopold and environmental citizenship*. *Citizenship Studies*, 14 (1)(2010), pp. 605–615.
- [24] Gebbels. S, Evans. S. M, & Delany. J. E, (2011). *Promoting environmental citizenship and corporate social responsibility through a school/industry/university partnership*. *Journal of Biological Education*, 45(2011), pp. 13–19.
- [25] MacPherson. S, *Educating ecological citizens on the blue planet*. *Canadian Journal of Environmental Education*. 10(2005), pp.141-156.
- [26] Karatekin. Kadir. (2019). *Model Review Related to the Effects of Teachers' Levels of Ecological Citizenship* *International Electronic Journal of Environmental Education*. Vol.9, Issue 1(2019), 46-61.
- [27] Dobson. A, *Citizenship and the environment*, Newyork: Oxford University Press, 2003.
- [28] Karatekin. Kadir, and Uysal. Cevdet, *Ecological Citizenship Scale Development Study*, *International Electronic Journal of Environmental Education*. Vol.8, Issue 2 (2018), pp 82-104.
- [29] Mariyani, *Strategy for the Formation of Ecological Citizenship*, *Proceedings of the Third National Citizenship Conference*, November 11, 2017, University Ahmad Dahlan. Yogyakarta. p-ISSN 2598-5973 e-ISSN 2599-008X, 2017, pp. 10-17.
- [30] H. Rondli. W, and Khoirinnida. Yuli, *Studying Ecoliteration-Based Citizenship Education: Efforts to Reconstruct Ecological Citizenship*, 2017, Obtained 10 May 2019. Available at eprints.umk.ac.id/7379/17/14_Wawan_UMK.pdf.
- [31] Jannah. Raudlatul, *Creating Ecological Citizenship in the Digital Age through Kampong Recycle Jember*, *Journal of Urban Sociology*, Volume I. No.2. October 2018.
- [32] Steenbergen.BV, (1994)., *Towards a global ecological citizen*, Bart van Steenbergen (Ed.). *The condition of citizenship*, 1994, pp.141-152. London: SAGE Publications.
- [33] Newby. Howard, *Citizenship in a green world: Global commons and human stewardship*, In, Martin. Bulmer, and Anthony. M. Rees, (eds.), *Citizenship*

- Today: The Contemporary Relevance of TH Marshall, London: UCL Press, 1996, pp. 209-222.
- [34] Dobson. A, Environmental citizenship and pro-environmental behavior, Rapid research and evidence review The Sustainable Development Research Network. November 2010.
- [35] MacGregor. S, and Szerszynski. B, Environmental citizenship and the administration of life. Paper presented at 'Citizenship and the Environment' Workshop, Newcastle University, September,4-6, 2003.
- [36] Henn. M, Weinstein. M, & Forrest. S, "Uninterested youth? Young people's attitudes towards party politics in Britain", *Political Studies*, 53, (3)(2005), 556-57.
- [37] Torney-Purta. J, & Amadeo. J, A Cross-national analysis of political and civic involvement among adolescents. *Political Science and Politics*, 36, (2)(2003), 269-274.
- [38] Akyuz. E, (2001). Child's right to education in the light of the basic principles of the Convention on the Rights of the Child, *MEB Dergisi*, Issue: 151, 2001.
- [39] Jensen. BB, Knowledge, action and pro-environmental behavior. *Environmental Education Research*. 8 (3)(2002), 325-334.
- [40] Horton. D, Demonstrating environmental citizenship? A study of everyday life among green activists, In Dobson. A, & Bell. D, (Ed.), *Environmental Citizenship*, 2006, pp.127-151). London: The MIT Press.
- [41] Dobson. A, *Environmental Citizenship: Sustainable Development Towards, Sustainable Development* Sust. Dev 15(2007), 276-285.