

Green Curriculum: Efforts To Develop Resources Of Prospective Professional ECE Teachers Who Have Environmental Concern

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Abstract : The development of green curriculum is a necessity in the current situation and condition, especially to prepare prospective early childhood education teachers. Why is green curriculum important for prospective ECE teachers and what is its importance for achieving Indonesia's national education goals? Early childhood education study programs at universities in Indonesia totaled 396 in 2019, but there has not been a detailed study of whether each ECE study program at each university has implemented green curriculum. The study is very important to be done to find out the implementation of green curriculum in resulting prospective ECE teachers who have good knowledge and understanding of the environment through theoretical and practical courses to result professional ECE teachers who have an awareness of the environmentally friendly curriculum, which is carried out at universities. The purpose of this study was to determine the development of green curriculum as a provision for the resources of prospective professional early childhood education teachers studied from the implementation of environmentally friendly curriculum in ECE study programs in universities. The research method used is survey research design with google form data collection tools as a tool in collecting large and extensive data. The result of research in the implementation of green curriculum in ECE study program is that there is not yet standardized for environmentally friendly education that is sensitive to rapid environmental and social changes in our society today, while the challenges of the green curriculum on education must be made attractive to create a conducive atmosphere for prospective professional early childhood education teachers so that in the future it can stimulate children from an early age. In conclusion, the study program in universities must develop green curriculum for the resources of prospective professional ECE teachers, so that environmental problems and challenges can be educated since becoming students and from an early age

Index Terms: Green Curriculum, The Development of Resources, Prospective Professional ECE Teachers, Environmentally Friendly

1. INTRODUCTION

This study aims to obtain a real picture of green curriculum that supports the performance of prospective teachers studying at the Early Childhood Teacher Education departments. This study is considerably strategic for the education of prospective early childhood professional teachers by considering the following contexts. The graduates of the Early Childhood Teacher Education study program are prepared to become prospective professional teachers who need a lot of information both from theories and from the field to provide adequate knowledge that would lead them becoming good early childhood teachers. Early Childhood Teacher Education study programs require reliable data and information prior to developing good curriculum and offering it to prospective ECE teacher students. Through so doing they can predict the needs of professional teachers in the future, especially on environmental issues.

The relationship between the curriculum of each study program that is designed with the conditions of the field to become a professional ECE teacher is very important to note. The stronger the relationship, or relevance, the more likely the study programs to produce graduates who are suited with the needs in the field and bring it to be better. The development of human resources in education is very important, because education personnel are the main instrument to achieve educational goals in national development (Chinyere A. Omebe, 2014) The Indonesian government continues to develop education through ECE institutions as an effort to improve the quality of its national

education. As a manifestation of the commitment to early childhood education, the government includes regulations for the implementation of early childhood education in Law No. 20 of 2003 on the National Education System. The government sees early childhood education as very important and with high expectations that in the future ECE institutions are able to result is capable children who could lead the Indonesian nation. As the government sees the important role of ECE, so it regulates the organization of early childhood education in Law No. 20 of 2003 concerning the National Education System. Moreover, the government introduced the Law No. 14 of 2005 on teachers and lecturers, which further regulates ECE teachers. The law considers teacher as an educator and a guide for children in educational institutions who should lead them to develop and to be better. The Law No. 14 of 2005 states that the teachers carry out their duties and mandates to educate the nation's children. The task of the teacher in learning is not limited to the delivery of information to students, but most importantly must have the ability to understand their students and must have a strategy in overcoming students' problems.

Early Childhood Teacher Education Study Programs are the place where prospective ECE educators are prepared and developed by equipping them with various programs for developing their competencies. Yet, there is no information available on how the study programs facilitate the development of students' competencies and interests in the physical and social environment. More specifically, no information is seemingly available if the study programs offer to the their students the "green curriculum". The development of green curriculum is one strategy to improve students' ability to understand something related to environmental awareness. The implementation of the green curriculum in universities is a response to global issues on the environment and represents the ways to save and conserve the energy sources included in universities' curriculum. The assumption is that humans play an active and dominant role in every activity of the

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organization, including in the curriculum development and because of that, humans become planners, actors and determinants of the realization of organizational goals (MSP Hasibuan, 2019) Based on a number of contexts and issues described above, the this paper tries to answer the problems and challenges of prospective professional ECE teachers who have environmental concerns through the implementation of green curriculum. This writing is specifically aimed to answer the main problem around the development of green curriculum for prospective professional ECE teachers during their preparation in universities seen from the problems and challenges they face.

2. RESEARCH METHOD

This study intends to explore the green curriculum related to the development of prospective professional ECE teachers who have environmental concerns. This research approach will be based on a quantitative approach, but technically in the analysis of this study, qualitative methods are also used. This study involved 295 subjects, chosen from 5 universities that have Early Childhood Education Teacher study program. Data collection was done through online survey. The data was then analyzed using simple descriptive statistic, and when applicable, accompanied by qualitative interpretation.

3. RESULT AND DISCUSSION

3.1 Result

There is Early Childhood Teacher Education study program in almost every universities. This study program develops the resources of prospective professional teachers who concern about the environment through the development of green curriculum. The large number of Early Childhood Teacher Education study programs in Indonesia contributes quite a lot to result future professional teachers who have environmental concerns. This research involved 5 universities, public and private. The data collection began on October 2019, by disseminating a Google form link to the study programs at the 5 universities. The questionnaires was sent to prospective professional ECE teachers who were at their 3rd, 5th and 7th semester. A total of 295 students filled in form by the end of the data collection. The development of green curriculum in the development of resources of prospective professional teachers who concern about the environment in undergraduate education programs is seen in general, by looking at the achievement of competencies that are already possessed by students. In addition, they also received advice related to the implementation of the green curriculum in Early Childhood Teacher Education study program in the present and in the future. Curriculum management is a management of curriculum to develop children's intelligence (Jayanti Mughiyati, 2014) Green curriculum and sustainability is an integrated interdisciplinary curriculum developed in study programs (Louw, 2013). The achievement of study program in the development of environmental care in the development of prospective professional teacher has been done through the green curriculum program offered by the study program. Through the development of competency achievement questionnaire, it can be seen in the following table based on the criteria developed in this study, 1 = Very less; 2 = Less; 3 = Good and 4 = Very Good.

Table 1 Achievement of Competency in Developing Resources of Prospective ECE Teachers who Concern about the environment through the green curriculum

No	Competencies	Result
1	Pedagogical Competence	3,12
2	Professional Competence	3,09
3	Social Competence	3,20
4	Personality Competence	3,48

In addition, this study obtained various identification of the implementation of the green curriculum that has been applied as shown on Table 2.

Table 2. Implementation of Green Curriculum in Learning at Early Childhood Teacher Education study program

No	Subjects	Implementation of Green Curriculum in Learning
1	ECE Basics	✓
2	Drawing Learning	✓
3	Early Childhood Development I	✓
4	Music Basics	✓
5	Statistics	✓
6	Early Childhood Physical Education	✓
7	Anthropobiology	✓
8	Early Childhood Dance Learning	✓
9	Forming Learning	✓
10	Early Childhood Development II	✓
11	Instructional Media	✓
12	Early Childhood Music and Songs	✓
13	Health and Nutrition	✓
14	Education	✓
15	Development of Cognitive and Language Abilities	✓
16	Development of Social and Emotional Ability	✓
17	English ECE Study	✓
18	Development of ECE Educators	✓
19	Writing Scientific Papers	✓
20	Early Childhood Learning Models	✓
21	Information and communication technology	✓
22	Detection and Analysis of Child Growth	✓
23	Development of Moral and Religious Ability	✓
24	Motor Ability Development	✓
25	Early Childhood Learning Strategies	✓
26	Child Protection and Rights	✓
27	Character building	✓
28	Foreign Language Learning Strategies	✓
29	Early Childhood Learning Planning	✓
30	Early Childhood Education Management	✓
31	Modification of Early Childhood Behavior	✓
32	Play and Media Games	✓
33	Evaluation of Early Childhood Learning	✓
34	Quantitative Research Methods	✓
35	Early Childhood Education Curriculum Development	✓
36	Early Childhood Inclusion Learning	✓
37	Qualitative Research Methods	✓
38	Early Childhood Education Seminar	✓
39	Children's Education in the Family	✓

40	Exhibition of Works	✓
41	ECE Study Concentration	✓
42	Early Childhood Music Composition	✓
43	Early Childhood Make-Up and Fashion	✓
44	Early Childhood Mathematics and Science Learning	✓
45	Early Childhood Social Learning	✓
46	Organizing School's Health Clinic in ECE	✓
47	APE Development	✓
48	English	✓
49	Choreography	✓
50	Entrepreneurship Education	✓
51	Religious education	✓
52	Pancasila Education	✓
53	Civic education	✓
54	Indonesian	✓
55	Conservation Education	✓
56	Introduction to Education	✓
57	Educational Psychology	✓
58	Counseling guidance	✓
59	School Management	✓

3.2. Discussion

The curriculum is what the older generation chooses to tell the younger generation. The school curriculum communicates what we choose to remember by potential future generation (Pinar, 2004), the curriculum is the distance students must travel from beginning to end to be able to get awards and recognition (Suyanti, 2019), the implementation of the green curriculum at the university, aims to make prospective professional teacher students involved in activities that can help them learn about how to preserve the environment and have environmental awareness that exists in the curriculum program. Early Childhood Teacher Education is one of the study programs that emphasizes the achievement of its vision and mission. The aim of the study program is how to produce qualified and competitive graduates, so that the graduates will easily enter the job market in accordance with the study program they were enrolled. Early childhood education that must be passed by every child aged 0-6 years, with the hope that every child in ECE institutions will be given maximum stimulation in accordance to their growth and development levels. Stimulation in ECE can be done well, of course, if given by professional teachers. In this sense, the Sustainable Development Goals (SDGs) place great emphasis on equity and equality: global development goals can only be achieved if they apply to all children everywhere. This means that children's well-being today is an important marker of progress in the process of achieving SDGs (BAPPENAS, 2017). Their well-being however is by and large is at the hands of their teachers. Therefore, teachers play a pivotal role in the achievement of global sustainability. The more teachers are prepared to be aware of environmental problems the more likely today's children would learn about that and the more they would act environmentally-friendly. In line with the above research results regarding the development of resources for prospective ECE teachers who have environmental concern, in achieving Early Childhood Teacher Education students' competencies in the good category, meaning that during the education process to become ECE teachers, prospective teacher who care about the environment by implementing green curriculum can provide competency development for university students of prospective professional ECE teacher.

Professional ECE teachers are teachers who master personality, social and professional pedagogical competencies (Masnival, 2018) Based on the research findings the professional competency domain was found to be the lowest among the students but it was still in the good category, while the highest score is in personality competency, meaning that prospective ECE teachers already have building a strong personality to become an ECE teacher who has a concern for the environment. Based on the findings, furthermore, it can be said that Early Childhood Teacher Education study program in developing its curriculum program has paid attention to developing competencies in environmental awareness. This allows the prospective professional teachers to learn both theoretically and practically about the green curriculum and the its implementation. It is hoped that after graduating, students already have a good provision to become a professional ECE teacher and can do the best learning practices in environmental care. In Article 8 of the Law on Teachers and Lecturers Number 14 of 2015, teachers are required to have academic qualification, competencies, educator certificates, physically and mentally healthy, and have the ability to realize national education goals. While Article 9, academic qualifications are obtained through higher education undergraduate programs or four diploma programs. Next Article 10 (1) Teacher competencies include pedagogical competency, personality competency, social competency, and professional competency obtained through professional education. In line with the law above, the development of academic qualification, of course the curriculum program in undergraduate teacher education programs for early childhood education is also inseparable from the development of various kinds of competencies. This means that of course competency development has already been obtained starting from taking lectures in the Early Childhood Teacher Education study program. Based on the results of the study of competencies mastery since becoming a student is already good, it means that in the next process to become good teacher candidates, of course the competencies will improve. Green curriculum, very well developed from kindergarten and even universities. In developing this curriculum emphasizes planning, involvement and commitment, and offers a number of lessons and learning insights that support curricular design to support environmentally friendly learning. (Dawn Putney, Robert C., Morris, 2016) the implementation of green curriculum in universities can provide good awareness in providing the strengthening of the competency of developing prospective professional ECE teachers. Furthermore, the challenges faced by prospective professional teachers in implementing the green curriculum are as follows: environmental concern, character education, the replacement of children's play by technology both at home and school, meeting the essential needs of early childhood as a whole including health and nutrition, educational stimuli, moral-emotional coaching and care so that children can grow and develop optimally according to age groups, and not all children can access quality early childhood education (PAUD) ('Buletin SMERU', 2017). Because the national curriculum is considered as the main instrument of the central government, efforts to develop the resources of prospective professional ECE teachers who care about the environment, the central and institutional curriculum must contain the curriculum structure in the form of studies related to current global issues. Higher education in the early childhood education teacher study program

implementing the green curriculum is the answer to current environmental problems and prospective professional teachers must be introduced since education at the university and its sustainability will be introduced to children in ECE institutions.

4. CONCLUSION

The green curriculum in the development of resources for prospective professional ECE teachers who have environmental concerns has been carried out since taking academic programs at the ECE undergraduate level. Implementation of the green curriculum can be seen in all courses and learning activities that exist in the curriculum structure.

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