

EARLY CHILDHOOD EDUCATION FOR SUSTAINABILITY ENTREPRENEURSHIP

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Abstract

In the last few years, early childhood education for sustainability entrepreneurship, education for sustainable development (ESD) has developed in a growing manner, as a field of compilation between education of early childhood and education for sustainability entrepreneurship. At the core of this concept stands the preschool child, as an active citizen for sustainability and entrepreneurship. Consequently, education for sustainability entrepreneurship, in our case, focuses mainly on preschool children's contributions to sustainability, outlining key recent developments in this field. These ideas represent the foundation on which the current article will be built. The main aim of this article is to analyze the ideas of preschool parents concerning sustainability, entrepreneurship with regards to the 3 pillars of Sustainable Development (Environmental, Economical, and Social Cultural) and with major focus on the 7R's. In this respect, a quantitative analysis, a questionnaire regarding ideas of preschool parents on sustainable development, has been carried out, with data being collected from 174 preschool parents attending two different public preschools, one in rural environment, another in the urban environment, supervised by the Ministry of National Education of Romania in Prahova district. The outcome of this research proved that preschool parents and their children value nature and environment.

Keywords

Sustainability Entrepreneurship; Early childhood education; Education for sustainable development; Sustainable Development

JEL Classification

I25; Q01; H75; Q56

Introduction

Preschool children's education for sustainable development emerges as a major concern of contemporaneity both in theoretical and practical fields. This current article focuses on the growing attention to the practice of early childhood education in direct connection to sustainable development, entrepreneurship. The study reviews contemporary developments

in preschool children's education as related to sustainability, a field which is constantly growing, the main aim being to respond to nowadays concerns of sustainable development, from early childhood.

Education for sustainable development

Veisson and Kabaday (2018, p. 5) identified two definitions for the concept of education for sustainable development (ESD): firstly, an approach based on questions about the meaning and the importance of the environment for us humans and secondly, an approach that incorporates the four major dimensions of our existence: economy, society, culture and the environment. The first approach focuses on the way the preschool teachers themselves understand ESD and how it can be conveyed to young children, while the second focuses on how ESD can be put into effect at the class level (Hedefalk, Almquist and Ostman, 2015).

Several scholars among which can be mentioned Pipere, Veisson and Salite (2015) and Wals (2013) state that there is a lack of research in the field of sustainable education and the majority of universities don't offer programs targeted at this rather particular field. They unfortunately pay a minimum of attention to newer fields such as ESD and sustainable education (Wals, 2013). The only way to promote a sustainable economic growth and development is to recognize the importance of ESD and teach it in schools and nursery schools. The poverty rates at a global scale have decreased but the gap between those very rich and very poor has never been wider, inequality has increased, the level of violence and the youth prospects are very bad for underdeveloped societies. Because in many parts of the world the economic growth and urbanization has developed unchecked and in an unsustainable manner, it has in turn contributed to global warming and the degradation of the natural habitat. In many parts food security has also become an important issue (UNESCO, 2015, p. 9). Consequently, measures need to be taken. The aim of the Education for Sustainable Development (ESD) is to develop in children an awareness of the environmental concerns and problems that humanity faces both in the present and in the future and encourage them to find new ways to make the growth sustainable and the societies more adaptable (UNESCO Global Education Monitoring Project, 2016, p. 494). The most important thing to understand for future generations is that our planet's resources are finite and in order to conserve our collective futures there must be a synergy between economic development and environmental conservation (Holdsworth, Thomas and Hegarty, 2013, p. 352). The ESD system recognizes that along with environmental concerns, cultural diversity, peace, moral values and justice are paramount notions that need to be instilled from a young age (Gorenflo et al., 2012). A study conducted by Ritchie (2012), shows that some studies have based their principles on the Maori teachings of caring for the people around us and the environment. In Australia for example, the schools who adopted this method of teaching have shown better understanding of Early Childhood Education for Sustainability (ECEfS) and also the importance and impact of the environment on our lives and the society we live in (Dyment, Davis and Nailon, 2014). Also preschool teachers who follow the ECEC method (Early Childhood Education and Care) have more ease in adapting to Education for Sustainability (EfS) than those in the classic education system. In this vein, according to Davis (2013) instilling in young children an education oriented towards ecological values is "an approach to early education that is underpinned by both humanistic and ecological values. It aims to empower children (and the adults within their early childhood settings and homes) to explore and change ways of thinking, being and acting in order to minimize environmental impacts and to enhance environmentally and socially sustainable practices" (Davis, 2013, p. 2).

In order to study preschool children's understanding of ESD, the research methodology is organised around the concept of sustainable development, which is made up of three integrated pillars, sustained at their turn, each, by two or three dimensions, known as the

7R's: social-cultural pillar (Respect, Rethink and Reflect), economic pillar (Recycle and Redistribute) and environmental pillar (Reduce and Reuse). These pillars complete each other (UNESCO, 2005). In 1987, *Our Common Future*, stipulated that there are 7R's which can ease ESD practices in educational approaches. The 7R's can be found below (fig. no. 1):

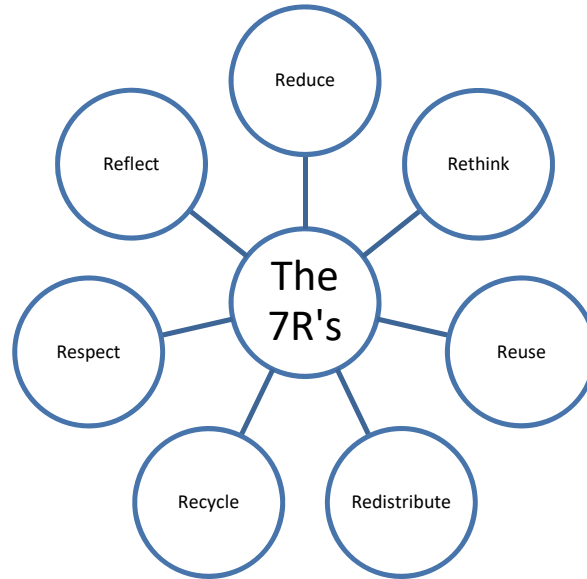


Fig. no. 1 Three Pillars of Education for Sustainability Development and 7R's

Source: Duncan, E. 2011. *Report Part 2 – ESD in practice. Norway: OMEP (Organisation Mondiale Pour L'Éducation Préscolaire); OMEP. 2010. OMEP World Congress and Assembly in Göteborg University. Retrieved March 5, 2019 from http://www.omep.org.gu.se/digitalAssets/1314/1314390_esd-congressreport-child-interviews.pdf*

Research Methodology

Starting from these concepts, a quantitative analysis, a questionnaire regarding ideas of preschool parents on sustainable development, has been carried out, data being collected from 174 preschool parents attending two different public preschools, one in rural environment, another in the urban environment, supervised by the Ministry of National Education of Romania in Prahova district.

The questionnaire was constructed by using isondaje.ro and it was made available online in April 2019. It was sent to a number of 180 parents and the final sample was composed of 174 conclusive responses, the response rate being of 96,6%.

Results and discussion

The attitudes of preschool parents regarding environmental sustainability were analyzed under three aspects: Consumption dimension (environmental pillar – reduce), Socio-Cultural dimension (-respect) and Economical preservation, focused on Recycling. The research was conducted having as a basis a questionnaire with 19 questions. The outcome is presented further on.

The questionnaire was aimed at shedding some light on the aspects related to the involvement of the family in children's educations as a determining factor in sustainable development. In terms of the Consumption dimension, there were three aspects studied: electricity, water and paper consumption.

The first question was: who is more involved with the children's education: 44, 8% mothers, 17,2% fathers, 10, 3% equally, 20, 7% grandparents and 6,9% another person. For question two, we tried to launch the following hypothesis: water saving represents a priority for the family. The answers to this question proved that the hypothesis is false because only 17, 2% agreed in total, 38, 5% agree, 13, 8% indifferent, 27,6 disagreement. Also we can see from here that only a minority of people realize the importance of the water saving. Next the parents were asked how they help the children to save water: 6,9% responded by installing some sensor valves, 19,5% answered by reading educational stories, 70,1% stated that they teach with their own example, and 34% others.

Further, for question four, the issue of light saving was analyzed, which is an important factor in extending the life of electricity resources. A significant percentage 61,5% were in total agreement, 35,1% agree, 1,1% indifferent, 2,3% disagreement. It is encouraging that a significant percentage of the parents are in total agreement with light saving. Question five refers to the methods that parents use to educate the child in terms of saving light: 44,3% close the light when they leave a room, 27% close TV, computer or another electronic appliance, 25,3% use eco-friendly bulbs, 3,4% others. Further we asked if the children save paper in their painting, drawing, writing activities and the parents have responded: 40,2% sometimes, 34,5% always, 19% rarely, 6,3% never.

Further on, another dimension analyzed was the Socio-Cultural one, with one aspect studied: respect towards animals. The respondents had to choose for the next question if they have animals: 51,7% chose yes and 48,3 no. We also enquired about activities children do with the animals and got the following answers: 29,9% feed the animals, 11,5% care and tend to the animals, 3,4% other activities.

Next, and also the last dimension analyzed, was Economical preservation, focusing on Recycling. The hypothesis: the percentage of parents that select the waste is at least 70%. As we can observe the hypothesis is false. In this respect 59,8% select the waste, and a significant percent 40,2% don't select the waste. This is a problem of education, of habit, which can be straightened out with the help of education programmes. Good will exists and the positive model, to recycle, has penetrated more and more into our life and communities. Asked if they select the waste on categories, the answers were as follows: 48,3% select plastic and glass and 7,5% try recycling glass, aluminium and plastic. Paper, glass, aluminium and plastic – the most thorough recycling is realised by 37,4% from the total of respondents. Every action is good and favorable for the waste management. Education realises the difference and we prove this with the next question: do people teach their children about recycling: well a very large majority 83,9% said yes and 16,1% said no. Trying to look from another perspective we studied the choices parents do when it comes to organic products. The research shows the following: 55,2% choose to consume bio products daily, 44, 8% do not choose bio products, they do not trust them.

To what extent do you consider that bio foods contribute to the health of your child was the last question from our questionnaire and with it we would like to investigate the parents' concern for bio products in the diet of children (fig. no. 2), source the results of the authors' research:

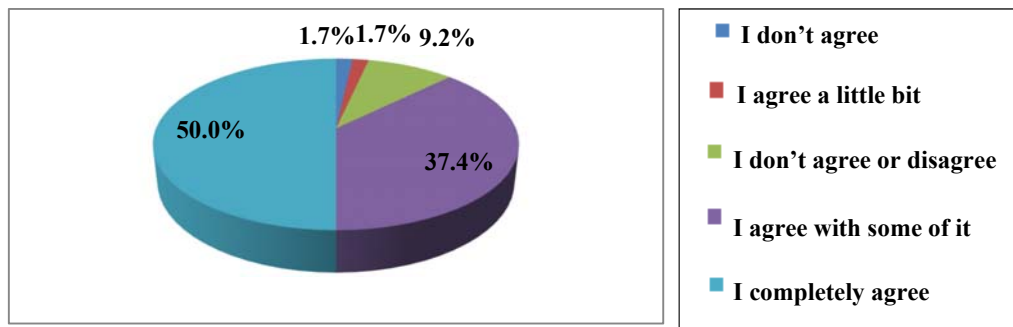


Fig. no. 2 To what extent do you consider that bio foods contribute to the health of your child

Source: author's own findings

A very large proportion 50%, a large proportion 37,4 % the respondents buy bio foods for their children, only 1,7%. respondents don't buy bio foods. So the parents are concerned about giving children natural variants for food and health.

The demographic profile of the respondents was following from the point of view of the environment, age, studies and income. So, 65,5 % of the total respondents was from urban environment and 34,5% was from rural respondents. The age of respondents was 19,5% in the range 18- 25 years, 30,5% in the range 26- 35 years, 36,8% in the range 36- 45 years, 13,2% in the range 46 - 55 years. The studies of respondents were: 12,6% have high school, 43,7% have faculty, 38,5% master and 5,2% doctorat. The income was 8% under 2000 RON, 39,1% between 2000 - 3000 RON, 32,8% between 3100- 4000 RON, 13,2% between 4100- 5000 RON and 6,9% over 5000 RON. It observe a balanced structure in the sample selection profile.

Conclusions

Positive outcomes in early childhood education can be achieved through ESD's potential to develop approaches adapted to their understanding. The desire of those who implement this type of approach to education is to form preschool children as responsible, proactive and aware citizens, as they are our chance to prevent in the near future unsustainability and ecologic crises. Children and their parents need to enjoy and understand the environment but also to learn how to protect their natural habitat. They need to be encouraged to play an active part in their communities and be taught topics that will be important for their future. In this study, the parents of preschool children demonstrated how they perceive dimensions such as reducing, reusing, recycling and respecting. Preschool teachers, parents can teach the children how to live a life that promotes sustainability, entrepreneurship and it is essential to be update our curriculum, share ideas and for the introduction of education for sustainability in our nursery schools. But, there should also be a collaboration, projects between teachers and the business environment, which can encourage sustainability, following a structural change towards socially and environmentally sound economic activities. With its innovative business models, it could develop new markets, generate new sources of income, especially for socially disadvantaged population groups and contribute to a sustainable approach to the economy. Sustainability entrepreneurship contributes to solving social and environmental problems, particularly in developing countries, like Romania.

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