The Roles of Non-Formal Education Programmes in Environmental Waste Management of Port Harcourt Community in Rivers State, Nigeria.

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Abstract
The objective of the paper was to investigate the role of non-formal education programmes on environmental waste management of Port Harcourt community in Rivers State. The study adopted the (Lave & Wenger. 1991) Situated cognition theory based on an anthropological view of natural learning in natural settings was the theoretical framework chosen to support this research. The study adopted the descriptive survey research design. For the population, Inhabitants of Port Harcourt community were used as the population of the study comprising of 1200 members of the community. Simple random sampling technique was used to obtain 200 sample size who were used as respondents. Mean, standard deviation and Z-test analytical tool was used to statistically test the hypotheses posed for the study. The findings revealed positive and significant relationship between non-formal education programmes and environmental waste management in Port Harcourt community in Rivers State. The paper recommends among others that the use of environmental education materials like posters, leaflets, billboards should be utilized and placed at strategic locations, in schools and public places to keep the citizens constantly informed on the need for proper management of wastes and how to recycle their wastes properly for other use.

Keywords: *Non formal education, Environmental waste management. Awareness, Development, Knowledge, Curriculum*

Introduction

Environmental management covers several areas that usually makes the environment friendly, inhabitable and sustainable, such as Environmental Sanitation, Proper waste disposal, Conservation of the wildlife, Tree Planting, waste recycling and many others. Studies addressing the issue of Environmental waste management seek to examine how the level of non-formal education attained by people impacts on their attitudes, knowledge, valuations and behaviors regarding the environment, isolating it from the effect that may have other relevant variables. Several studies have explained pro-environmental behavior as a function of behavioral intentions which would in turn, could be affected by factors such as values and/or knowledge (Thøgersen and Olander, 2002, Clark et al., 2003, Arkesteijn and Oerlemans, 2005). In this respect, particularly in the field of knowledge, some studies argue that well-informed citizens who know about environmental problems are better aware of the possible damage and might have stronger pro-environmental attitudes and behaviors (Danielson et al., 1995, Callan and Thomas, 2007. Heimlich, 2010). In the field of waste management, in particular, some research found that knowledge is a significant factor that positively influences recycling (Jenkins et al. 2003).

Consequently, policy measures aimed at generating a better understanding of these issues could help improve waste management (Tadesse, 2009). Therefore, assuming that people's willingness to cooperate in recycling programmes reflects their environmental values, it can be expected that their respective knowledge of the issue affects the valuation they give to the question. The management of solid wastes has become increasingly a difficult task locally and globally with increase in population and high consumption patterns among urban dwellers in Nigeria. In most urban cities like Port Harcourt in Rivers State, solid wastes are thrown away indiscriminately in any available space without care of the negative impacts it has on the environment. This poses serious threat to human health and the environment where the people dwell. Improper management of solid wastes and indiscriminate disposal of industrial and domestic waste defaces the environment, spreads disease, and contaminates ground water, air and land quality. This is in submission of Glenn (2009) who observed that improper solid waste disposal of household solid wastes is a source of air, land and water pollution, and this creates hazards to the livelihood of humans and the environment. It is a major environmental concern to many nations especially the developing countries.

According to a study by Ayotamuno & Gabo (2000) they observed that "indiscriminate dumping of wastes from industrial, commercial and households such as food wastes, paper, polythene, textiles, scrap metals, glass, wood, and plastic at Street corners and gutters is very common in Port Harcourt city." The indiscriminate dumping of wastes especially at odd times, the violation of the rules and regulations guiding the dumping of solid wastes that exists in Port Harcourt City (one of the major cities in Nigeria). Another observation made by Ayotamuno at el (2000) is that the residents of the city do not segregate their wastes into different categories of wastes before disposal. These wastes are usually mixed together and dumped indiscriminately in the environment and as a result, poses a lot of problems for effective management of wastes. It will be interesting to note that this phenomenon occurs in all the states of the federation including the Federal Capital Territory.

This practice could be attributed to lack of education on the types of wastes, characteristics of wastes and methods of solid waste disposal as well as the effects of improper wastes disposal on the livelihood of the people. Even when the bins for separations are provided, different categories of wastes are still lumped together and disposed indiscriminately at the same point. This unhealthy practices, no doubt results from lack of knowledge and skills needed for segregation of wastes at the source of generation and carefree attitude towards solid wastes recycling management on the part of the citizens and the authority that are involve in environmental issues. Although, The Rivers State Waste Management Agency (RIWAMA) since its inauguration in 2014 has be involved in environmental sanitation activities to ensure the State is free from environmental hazards, but the inhabitants of the state due to their low level of environmental literacy are yet to appreciate and compliment the efforts of the agency in the area of waste disposal and management in the State (Onokpite, 2018). It is against this backdrop that the study seeks to discuss the importance of non-formal education programme in environmental waste management; the strategies that should be utilised in educating and creating awareness in solid waste management and the benefits of non-formal education programmes and awareness creation on environmental wastes management in Nigeria.

Issues of Research Concern

Indiscriminate disposal of solid waste around Port Harcourt community, which is sometimes refer to as refuse dump, do affects quality of water, pollute the air and also cause some health hazards of which the people seem not to be aware of; and it affects their livelihood. Port Harcourt metropolis presents a ghastly picture, the neglect of filled refuse bins on the street in

recent times has its effect on the inhabitants and their livelihood. Many areas around the homes in Port Harcourt community are littered with domestic refuse, sewage waste, garbage and other wastes from industrial operations. Industrial operations are characterized by the generation of large volume of wastes in the form of solids, liquids and gases. Some of these wastes are toxic with negative impacts on our environment, land, water and air. To ensure a clean and safe environment, the Rivers State Government established Rivers State Waste Management Agency (RIWAMA) to monitor the environmental quality and to ensure a refuse-free environment. However, despite the government efforts at making the environment clean in Port Harcourt, people seem to be careless about their environment. Community based education in form of non-formal education programmes could serve as a strategic tool to savage this situation. This study therefore seeks to investigate the roles of non-formal education programme in environmental waste management in Port Harcourt, metropolis in Rivers State.

Objectives of the study

The aim of this study is to assess the role of non-formal education programmes in environmental waste management in Rivers State. More specifically, the study seeks to;

I. To identify various ways non-formal educators could help in changing human behavior and responses to environmental options that promote waste management.

2. To determine the level of awareness of environmental waste disposal management among inhabitant of Port Harcourt, Rivers State.

Research Questions

This study was designed to address the following questions:

1. To what extent has non-formal education programme help to change the citizen's behavior in responses to environmental options that promote waste management?

2. To what extent has non-formal education programme assist to increase awareness on proper environmental waste disposal management amongst inhabitant of Port Harcourt community, Rivers State?

Hypotheses

$H0_1$: There is no significant difference between non-formal education programme and change in the people behavior in the environment

$H0_2$: There is no significant difference between level of awareness and environmental waste disposal management.

Literature Review

Theoretical Framework - Situated cognition theory –Brown, Collins, Duguid (1989)

John Seely Brown, Allan Collins, & Paul Duguid, the proponent of this theory emphasizes that people's knowledge is constructed within and linked to the activity, context, and culture in which it was learned. This means that learning is social and not isolated, as people learn while interacting with each other through shared activities and through language, as they discuss, share knowledge, and problem-solving initiative in their environment.

Situated cognition theory based on anthropological view of natural learning in natural settings was the theoretical framework chosen to support this research. In theory, situated learning has the potential advantage of (a) placing learners in realistic settings where socia1 acquired ways of knowing are often valued, (b) increasing the likelihood of application within similar contexts, and (c) strategically applying the learner's prior knowledge on a given subject (Lave & Wenger, 1991).

In the context of this research, the sociological term of cognition has been adopted (Lave, 1988; Lave & Wenger, 1991). Invariably, this is a fundamental and major shift from the more

traditional psychological views of learning theory. Anthropologists Lave and Wenger (1991) state that "learning is an integral part of generative social practice in the lived-in world". In their writing, they describe the concept of legitimate peripheral participation as a "descriptor of engagement in social practice that entails learning as an integral constituent". Participation in social contexts becomes a way of engaging the learner that involves both absorbing and being absorbed in 'the culture of practice". Viewed from Lave's (1988) sociological views of community, each group member in the simulation negotiated his or her own role that was played out in the learning community.

Concept of Non-formal Education

It is now globally affirmed that the formal school system alone cannot provide quality basic education for all. The global progress made towards Education for All (EFA) since the World Education Forum in 2000 has arguably been significant, particularly with regard to enrolment and gender parity at primary level. Yet, there were more than 57 million out of-school children of primary age worldwide in 2011. At least another 69 million young adolescents were not attending primary or secondary school, due to the multiple and often inter-connected disadvantages they face, such as poverty, rural location, gender bias, disability and social discrimination (UNICEF/UIS, 2014). Source) Moreover, the current structure of formal education in many countries is in itself excludes specific groups of children. To uphold the right to education of those who are not enrolled in schools, diverse forms of provision through different learning pathways are required.

Non-formal education is one of such pathway, and it is characterised by a high degree of flexibility and openness to change and innovation in its organisation, pedagogy and delivery modes, non-formal education caters to diverse and context-specific learning needs of children, young people and adults worldwide. Therefore it involves a wide range of stakeholders, including educational establishments, the private sector, non-governmental organisations and public institutions (UNICEF/UIS, 2014). Non-formal education has been evolved over past decades and regained currency in recent years in light of changing educational and developmental landscapes (Council of Europe, 2003; Rogers, 2004; Hoppers, 2006, 2007b; Rose. 2009; UNESCO Bangkok, 2012; UNESCO and UNICEF, 2013).

The notion, if not its practice, of non-formal education emerged in the global education discourse in the late 1 960s, out of a recognition that formal education was in a state of disarray. The concept of lifelong learning put forward by the Faure Report' expanded the understanding of traditional education which until then had been limited to formal schooling. Since the early 1970s, many typologies of education or learning have assumed three forms of education, of which non-formal education is one, together with formal and informal education (European Commission, 2001 UTS, 2012).

A massive outburst of interest emerged regarding non-formal education during the 1970s and the 1980s (Rogers, 2004). However, this has significantly diminished since the late 1980s. When the international community increased its focus on formal schooling as a dominant means of learning. In parallel, less positive characteristics of non-formal education have been highlighted. Non-formal education tends to comprise small-scale, short-term programmes with limited funding, which sometimes limit its impact and sustainability and raise the question of quality and effectiveness. Non-formal programmes may not always be aligned with broader national education and development policies, or demands from the world of work, and quite often they do not induce learners to continue their education formally. Thus, non-formal education tends to be perceived as somewhat inferior to formal education.

In this contemporary world, increasingly inter-connected, globalised, and technologically advanced societies within which lifelong learning takes place, internationally agreed goals, notably the EFA goals and the Millennium Development Goals (MLDGs), have provided new contexts for non-formal education. Non-formal education has become a policy focus of the international community which is now recognized as a veritable aspect of education that will help to solve human problems, particularly in the immediate environment.

Environmental Waste Management

Waste is a wide ranging term encompassing most unwanted materials, defined by the Environmental Protection Act 1990. Waste includes any scrap material, effluent or unwanted surplus substance or article that requires disposal because it is broken, worn out, contaminated or otherwise spoiled. Wastes are 'those substances or objects which fall out of the commercial cycle or chain of utility' for example glass bottles that are returned or reused in their original form are not waste, whilst glass bottles banked by the public and dispatched for remoulding are waste 'until they have been recovered'. Babatola in Onokpite (2018), described waste as material that lack direct value and that are no longer useful especially for purpose for which they were initially purchased for, which have now become rubbishes and garbage we throw out when we are done with it them. Felon and Omotosho in Babayemi and Dauda (2009) define waste as "non-liquid and non-gaseous products of human activities, regarded as being useless". Solid wastes could take the form of refuse, garbage and sludge.

The United Nations (2009) considers wastes as "all domestic refuse and non-hazardous wastes such as commercial and institutional wastes, street sweepings and construction debris and in some countries, human wastes", wastes generated from human activities. However, some materials that are regarded as wastes can be reprocessed into valuable products or given away, thus rendering them useful to those who may need them. This could be achieved through proper management of solid wastes in the environment.

Environmental waste management is the collection, storage, transportation, treatment and disposal of wastes in such a way as to render them innocuous to human and animal life, ecology and the environment (Oreyomi, 1998). In other words waste management could be regarded as a process of treating, handling of refuse, sewage and other wastes that arise from human activities without endangering human health and the environment. Effective solid waste management by adult citizens will entail reduction of wastes, segregation of wastes into degradable and non- degradable materials, reuse, composting and recycling of wastes. The dumping of wastes in the designated collection centers for proper management by the assigned agency is equally needed in order to maintain clean and healthy environment.

Benefits of Non-formal Education Programme for Awareness on Waste Management

Non-formal education and awareness creation on waste management is a veritable key to solving the problems and other negative vices associated with waste management, and it enhances better practices of managing wastes. Some of the benefits that accrue from education and awareness creation on solid wastes management are:

1. Development of knowledge about solid wastes and its associated problems when managed improperly: Such education help individuals to know more about wastes, as there are different types and levels of waste. Agbi in Onokpite (2018) affirm that waste varies in their types and forms, as there are domestic, industrial, commercial, medical, and special waste among others.

2. Inculcation of positive attitudes, skills, values and concerns towards the environment by all the citizens and authorities responsible for managing wastes;

3. It predisposes the citizens and the Agencies to participate actively in segregation, reduction, reuse, composting and recycling of solid wastes as the case maybe or as the need arises;
4. Development of appropriate skills needed for segregation of solid wastes at source as this is key to proper waste management;
5. It decreases the rate of improper management of wastes and consequently the spread of diseases in the environment;
6. It enhances the protection and conservation of public health, the environment and natural resources;
7. It enhances policy making and quick implementation by decision makers on waste management.
8. Consistency in education and awareness creation on solid waste management are factors that can only improve better management of solid wastes within the environment in Nigeria.
Practically, the conception environmental literacy and waste management, and its benefits to the society has been promoted through creative and intensive discuss from diversity of perspectives as it relate to environmental awareness, sensitisation, mobilisation and participation in quality development of the environment through non-formal education programmes at different levels.

Methodology
The descriptive survey research design was used for this study to unravel the contributions of non-formal education programmes to the environmental waste management in Rivers State. The population of this study consists of 1200 people living very close to noticeable heaps of refuse or dumping sites in the selected study areas in metropolis. A total of 200 respondents was randomly sampled with the aid of simple random sampling techniques. The study utilizes a questionnaire as its research instrument. The Role of Non-formal Education Programmes on Environmental Waste Management Questionnaire (TRNFEPEW/IQ) developed by the researcher. The questionnaire was divided into two sections- A and B. Section A elicits background information about the respondents while Section B seeks to answer the variables used in the study. The instrument was validated through face and content validity. A test-retest method was used to establish the reliability of the instrument. Mean and standard deviation statistics were used to answer the research questions posed for the study. While Z-test statistical tool was used to test the hypotheses stated for the study.

Analysis and Discussion of Findings
Research Question One: To what extent has non-formal education programme help to change the citizen's behavior in response to environmental options that promote waste management?
Table 1: Mean Ratings (X) and the Standard Deviation on the response on the various ways non-formal education programme has help to change citizen's behavior in response to environmental options that promote waste management.

S/NO	QUESTIONNAIRE ITEMS	X	S	Interpretation
	To what extent has non-formal education programme help to change the citizen's behavior in response to environmental options that promote waste management?			
1.	It enhances Development of appropriate skills needed for segregation of solid waste	3.05	1.05	Agree
2.	It has help to inculcate in the citizens proper waste disposal attitude	3.09	1.11	Agree
3.	It has helps to citizens' to acquire more knowledge on proper environmental management and how to teach others to do same	2.97	1.14	Agree

Table 1 shows that all the three items on the extent to which non-formal education programme has help to change citizen's behavior in response to environmental options that promote waste management are accepted. Three agreed with the mean rating of 3.05, 3.09 and 2.97. This implies that non-formal education programmes can or has change citizen's behavior in response to environmental waste disposal and management through public awareness orientation activities, use of environmental educational materials and establishment of environmental clubs and programmes. The finding shows that, the impact of non-formal education for environmental waste management has been very effective in changing the behavior of the people towards their environment for healthy and sustainable environment.

Hypothesis 1: There is no significant difference between the mean scores of male and female on the extent to which non-formal education programme has help to change citizen's behavior in response to environmental options that promote waste management.

Table 2: Z-test of differences between male and female on the extent to which non-formal education programme has help to change citizen's behavior in response to environmental options that promote waste management.

S/N	Categories of Responses	N	Mean	SD	z-value	2-tailed sig. Value	Remarks
1.	Male	130	2.98	1.07			Significant
2.	Female	80	2.11	0.39	6.286	.000	H_0: rejected

The result of test in Table 1 which compared the mean of male (2.98) and female (2.11) produced a z-value of 6.286, which is significant at 2-tailed significant value of 0.000. Since this significant value is far lower than 0.05, it means it is very significant at 0.05 alpha value. The null hypothesis of no significant is therefore rejected. Looking at the two means, it is obvious that male (with a mean of 2.98) are significantly of a higher opinion than female on the extent to which non-formal education programme has help to change citizen's behavior in response to environmental options that promote waste management. That shows that the male respondents are more influence by the non-formal education programmes in terms of change in behavior towards environmental waste management in Port Harcourt community in Rivers state.

Research Question 2: To what extent has non-formal education programme assist to increase awareness on proper environmental waste disposal management amongst inhabitant of Port Harcourt community in Rivers State?

Table 3: Mean Ratings (X) and the Standard Deviation on the increase level of awareness on proper environmental waste disposal and management among inhabitant of Port Harcourt community in Rivers State.

S/NO	QUESTIONNAIRE ITEMS	X	S	Interpretation
	To what extent has non-formal education programme assist to increase awareness on proper environmental waste disposal management amongst inhabitant of Port Harcourt community in Rivers State?			
1.	It enhances the Knowledge about environmental protection and conservation of public health	2.63	1.22	Agree
2.	It helps to decreases the rate of improper and indiscriminate management of waste	2.65	1.35	Agree
3.	It has make the citizenry to see waste management as their responsibility	2.59	1.20	Agree

Table 3 shows that all the items on the extent to which non-formal education programmes has assist to increase awareness on proper environmental waste disposal and management in Port Harcourt community in Rivers State were agreed on by the respondents with the mean ratings of 2.63, 2.65 and 2.59 respectively. This implies that enhancement non-formal education has really increase the awareness level of the citizenry in the protection and conversation of public health, decreasing the rate of improper and indiscriminate management of wastes and taking ownership of environmental waste disposal and management among inhabitant of Port Harcourt community, Rivers State. Invariably, the people are now aware of practices that are healthy and friendly to the environment and they respond as such to environmental activities that are benefit to them through the instrument of non-formal education programmes.
Therefore, the people now take ownership of the environment, and also take responsibility for the consequences that result from unhealthy practices that they engage in as they are now aware of the need for environmental protection and conservation (Onokpite, 2018).

Hypothesis 2: There is no significant difference between the mean scores of educated and uneducated respondents on the level of awareness of environmental waste disposal and management among inhabitant of Port Harcourt, Rivers State

Table 4: Z-test of differences between urban and rural on the level of awareness of environmental waste management disposal among inhabitant of Port Harcourt, Rivers State

S/N	Categories of Responses	N	Mean	SD	z-value	2-tailed sig. Value	Remarks
1.	**Educated**	**87**	**2.88**	**0.61**			**H_0: Rejected**
2.	**Uneducated**	**123**	**2.98**		**-2.474**	**014**	

P<0.08

Table 4 illustrate the mean of educated 2.88 and uneducated 2.98 has produced a z-value of -2.474, which is significant at 2-tailed significant value of 0.014, it means it is very significant at 0.05 alpha value. The null hypothesis of no significance is therefore rejected. This shows that educated respondents (with a mean of 2.88) are significantly of a higher opinion than uneducated on the level of awareness on environmental waste disposal and management among inhabitant Port Harcourt community in Rivers State. This assert that educated respondents are more aware of practices that will promote positive environmental waste management, while the uneducated are less aware of these practices due to their low level of knowledge or comprehension of the programmes they have partaken. As such non-formal education is required to help them out.

Conclusion

Non-formal education is indispensable in realising the right to meaningful education for all citizenry. Its innovations in curricula, pedagogies, and delivery modes can also make a positive influence on effective environmental waste disposal management and improve the health and well-being of the public. Therefore, for a better environmental waste management, the role of non-formal education programmes cannot be pushed aside. Such programmes as sanitation education, environmental sensitization programme, public seminar, public campaign on environmental issues and many others will be of great benefit to the citizenry of the State and the nation in general. The environment is an integral part of human living and there is need for adequate education to enhance the knowledge of the people toward waste management and to sustain the environment.

Recommendation

Overall, the following is recommended as major conditions for equitable and quality non-formal education programmes for effective environmental waste management:

i. It is recommended that education of the citizens through non-formal education about the management of wastes be carried out formally, informally and non-formally.

ii. Open or public education through the print, electronic and audio-visual media should be intensified. In essence the integrated use of all media should be employed in dissemination of information on solid wastes management in Nigeria.

iii. The Government should consider the establishment of a University of Environment in the state to help in promotion of environmental education through distance learning, which is a form of non-formal education programme.

iv. The use of environmental education materials like posters, leaflets, billboards should be utilized and placed at strategic locations in schools and public places to keep the citizens constantly informed on the need for proper management of wastes.

v. The Federal Ministry of Environment and the various State Environmental Sanitation Agencies should encourage the citizens to practice the segregation of wastes at source by providing different types of bins for the collection of biodegradable and non-biodegradable wastes.

References

Abayerni. J.O. and Dauda, K.T. (2009). Evaluation of solid waste generation, categories and disposal options in developing countries: A case study of Nigeria. *Journal of Applied science Environmental Management, 13(3), 83-88.* www.ajol.info/index.php/jasernl article! Assessed on September 16, 2018

Arkesteijn K, & Oerlemans, L. (2005). The early adoption of green power by Dutch households. An empirical exploration of factors influencing the early adoption of green electricity for domestic purposes. *Energy Policy* 33: 183-196.

Ayotarnuno, J. M. and Gabo, A. E. (2004). Municipal solid waste management in Port Tiarcourt. Nigeria: Obstacles and Prospects; *management of environmental quality: An International Journal 15 (4), 389-397.*

Clark C, Kotchen, M, & Moore, M. (2003). Internal and external influences on pro-environmental behavior: Participation in a green electricity program. *Journal of Environmental Psychology 23: 237—246*

Council of Europe (2003) Non-Formal Education. Brussels. Council of Europe.

Danielson L, Hoban T, Van, H. G, & Whitehead, J. (1995). Measuring the benefits of local public goods: environmental quality in Gaston County, North Carolina. *Applied Economics 27: 1253—1260*

Egbezor, D. E. & Okanezi, B. (2008). Non-Formal Education as a Tool to Human Resource Development: An Assessment. *International Journal of Scientific Research in Education, Vol. 1(1), 26-40.* Retrieved on 20 September, 2018 from http://www.ijsre.com.

European Commission (2001). Communication: making a European area of lifelong learning a reality. COM (2001) 678 final. Brussels: Commission of the European Communities .Availableat:http:!!eurlex.europa.eu!LexUri Serv/LexUri Serv.do?uri= COM:2001 :0678:FIN:EN:PDF (Last accessed on 14 March 2014)

Glenn, A.V. (2009). Proximity to environmental hazards and reported illness in Periurban households of the Dorninican Republic. www.ceemtu .edu!peacecorps!studentfi le!vorhes.pdf [April 12, 2012]

Heimlich, J. E. (2010). Environmental education evaluation: Reinterpreting education as a strategy for meeting mission. *Evaluation and Program Planning 33: 180—185.*

HMSO (1994) Circular 11/94 Department of the Environment HMSO pp. 41-42).

Hoppers. W. (2006). Non-Formal Education and Basic Education Reform: a conceptual review. Paris: UNESCO International institute for Educational Planning. Available at: http://www.unesco.org/iiep/PDF/pubs/K16.pdf (Last accessed on 14 March 2014)

Jenkins, R. R, Martinez S. A, Palmer K, & Podoisky, M. J. (2003). The determinants of household recycling: a material-specific analysis of recycling program features and unit pricing. *Journal of Environmental Economics and Management 2, no. 45: 294-318.*

Lave. J. & Wenger. F. (1991). Situated learning, legitimate peripheral participation. Cambridge: Cambridge University Press.

Onokpite, J.O. (2018). Environmental Literacy Programme, a Catalyst to Proper Waste Disposal Amonsgt Dwellers in Diobu Area of Port Harcourt Rivers State, Nigeria. *International Journal of Education and Evaluation Vol. 4 No. 6 p52-61*

Oreyorni, M. K. (1998). Selected Topics on Environmental Health. Lagos: Kinson press.

Rogers, A. (2004) Non-Formal Education: Flexible Schooling or Participatory Education? 1-long Kong: Comparative Education Research Centre, The University of Hong Kong.

Rose, P. (2007a). NGO provision of basic education: Alternative or complementary service delivery to support access to the excluded? (CREATE Pathways to Access Research)

Tadesse, T. (2009). Environmental concern and its implication to household waste separation and disposal: Evidence from Mekelle, Ethiopia. Resources. *Conservation and Recycling 55: 183—191.*

Thogersen J. & Olander. F. (2002). Human values and the emergence of a sustainable consumption pattern: a panel study. *Journal of Economic Psychology 23: 605—630*

UIS (2012). The International Standard Classification of Education 2011. Montreal: UNESCO lnstituteforStatistics.Availableat: http://www.uis.unesco.org/Education/Docurnents/isced-2011-en.pdf (accessed on 14 September 2018).

UNICEF and UNESCO Institute for Statistics (UIS) (2013a). Global Initiative on Out-Children: Out-of-School Children in the Balochistan, Khyber Pakhtunkhwa, Punjab and Sindh Provinces of Pakistan. Islarnabad: UNICEF Pakistan.

UNICEF and UNESCO Institute for Statistics (UIS) (2013b). Global Initiative on Out-ofSchool Children: Tajikistan Country Study. Dushanbe: UNICEF.

UNICEF and UNESCO Institute for Statistics (UIS) (2014). Global Initiative on Out-of-School Children: South Asia Regional Study covering Bangladesh, India, Pakistan and Sri Lanka. Kathrnandu: UNICEF Regional Office for South Asia.

United Nations: Department of Economics and Social Affairs Division for Sustainable Development (2009). Waste (solid). http://www.un. org /esa/ dsd/sus.dev (Assessed September 20, 2018).