

Awareness Level of Sustainable Development Goals among Social Science Education Pre-Service Teachers in Niger Delta University, Wilberforce Island, Bayelsa State

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Abstract

Given the important role that quality teacher preparation programme has in realizing any laudable developmental programme (including the sustainable development goals), this study assessed the awareness level of Social Science Education pre-service teachers towards the attainment of sustainable development goals. A descriptive survey research design was adopted using a proportional sampling technique to select fifty five 300 level and sixty six 400 level Social Science Education undergraduates in the Department of Social Science Education, Faculty of Education, Niger Delta University, Bayelsa State, Nigeria. A four point Likert scale research instrument titled “Questionnaire on Awareness of the Sustainable Development Goals (QASDGs)” was developed for use in collecting the data for the study. The face and content validity of the instrument was established by two experts in Test and Measurement in the Department of Educational Foundations, Niger Delta University. Test-retest was adopted to check for the consistency of the instruments which gave reliability coefficient of 0.78. The data collected were analysed using Arithmetic mean to answer research question one while independent t-test statistic was adopted to test the two null hypotheses. The findings revealed, among others, that the awareness level of the Sustainable Development Goals (SDGs) among Social Science Education pre-service teachers was moderate. Other findings were that the awareness level of Goal number 15 was low with a mean less than 2.5. It was on the basis of the findings that the study recommended that courses in Social Science Education should incorporate elements of Goal No 15

Keywords: Awareness, Social Science Education, Pre-service Teachers, Sustainable Development Goals

Introduction

No human society desires to remain stagnant in an underdeveloped and retrogressed state where the quality and standard of living of its population fall below all known measurement indices for human development. Thus, the development, progress and advancement of modern societies have been made possible by several factors such as recorded breakthroughs in Science and Technology which have been noted to have a direct connection with research and innovation. This is to say that the major enabler of all these is quality education. In fact, this explains why the Nigerian government emphatically made it clear in the National Policy on Education that the most potent instrument for effecting a viable and sustainable national development in Nigeria is through quality education manned by quality teachers produced from a well articulated, planned and qualitative teacher education programme. This is so because no education system can surpass the quality of its teachers (Federal Republic of Nigeria, 2013). Although the concept of development itself has received several interpretations from scholars and public commentators from different background, a few of those interpretations are needed here for clarity. For example, the United Nations Human Development Report (2015) acknowledged the universalism of human development when it argued that since human beings were born with some inherent potential and capabilities, development programmes or projects to be initiated should create a conducive atmosphere where all people (irrespective of where they come from) could easily widen their potential and capabilities such that available opportunities could be enlarged for both the present and future generations. Adeyemo (2003) also opined that development was a multifaceted concept which implied the improvement, in a qualitative manner, and the living conditions of people, on the one hand, and a process of economic and social transformation within countries, on the other hand.

Similarly, Abba & Anazodo (2006) were of the view that the concept of development could be better understood when it was seen as a situation that explained a sustained elevation of an entire society and a social system towards a better life. In other words, development can also be perceived to mean a process which tends to alter an existing social structure, popular attitudes and national institutions with a view of accelerating economic growth, and reducing inequalities within societies and of absolute poverty among the populace (Olu, 2009). In fact, the totality of all of these definitions of development as briefly captured from the foregoing is that no country can claim to have attained a developed status when it still finds it difficult to provide the necessary atmosphere

and conditions that would enable individuals to meet their basic nutritional, clothing, housing, education and health needs.

It is as a result of the importance attached to issues surrounding development that many countries of the world (including Nigeria) started making concerted efforts in attaining the much needed development they desired especially, within those countries described as underdeveloped or third world where there is extreme poverty, a high level of illiteracy, poor maternal and child health, among others. The global and concerted efforts in this direction resulted in the adoption by the United Nations (UN) of an 8-point development agenda tagged “Millennium Development Goals (MDGs)” in the year 2000 which were aimed at:

- i. the eradication of extreme poverty and hunger;
- ii. the provision of universal basic education;
- iii. the promotion of gender equality and empowerment of women;
- iv. the reduction in child mortality;
- v. the improvement in maternal health;
- vi. combating HIV/AIDs, malaria and other related diseases; and
- vii. the assurance of environmental sustainability and development of a global partnership for development.

It should be noted that the achievement deadline for the MDGs was to be the year 2015 but unfortunately, that was not to be as many countries of the world, including Nigeria, were very far from meeting the MDGs. Thus, in September 2015, many world leaders and heads of governments, international donor agencies, international non-governmental organizations and other notable global citizens gathered for a Sustainable Development Summit organized by the United Nations Organization and adopted a 2030 Agenda for Sustainable Development tagged “Sustainable Development Goals” which succeeded or rather became a continuation of the MDGs. The seventeen (17) Sustainable Development Goals were to

1. end poverty in all its form everywhere;
2. end hunger, achieve food security and promote sustainable agriculture;
3. ensure healthy lives and promote the well being of all ages;
4. ensure inclusive and equitable quality education and promote lifelong learning opportunities for all;
5. achieve gender equality and empower all women and girls;
6. ensure availability and sustainable management of water and sanitation for all;
7. ensure access to affordable, reliable, sustainable and modern energy for all;

8. promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all;
9. build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation;
10. reduce inequality within and among countries;
11. make cities and human settlements inclusive, safe, resilient and sustainable;
12. ensure sustainable consumption and production patterns;
13. take urgent actions to combat climate change and its impact;
14. conserve and sustainably use the oceans, seas and marine resources for sustainable development;
15. protect, restore and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss;
16. promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.; and
17. strengthen the means of implementation and revitalize the global partnership for sustainable development (UNDP: 2015).

The United Nations Development Programme (2015) and UN General Assembly (2017) explained that the 2030 Agenda was a plan of action aimed at improving the lot of people, planet and prosperity, on the one hand, and strengthening universal peace for larger freedom, on the other hand. Osman, Ladhani, Findlater & McKay (2017) described the SDGs as not only a guide but also a global path of sustainable development in the world after 2015.

The last few decades have witnessed a variety of debates on the concept of Sustainable Development by scholars and commentators of different educational and theoretical orientations. In fact, Daly (1991) opined that the absence of a consensus definition of Sustainable Development by scholars, institutions and government agencies should not in any way be considered as negative, but rather, it afforded different scholars opportunities to share their thoughts and ideas on the concept of sustainable development. Therefore, the term, Sustainable Development, as conceived by Aaron & Ibaba (2004), means meeting the development needs of the present generations without necessarily jeopardizing or compromising the needs of the future generations. Paulley (2011a) also asserted that the need to adopt development options which guaranteed equal opportunities to both the present and future generations in a determined effort to realize developmental aspirations was what constituted the core idea of sustainable

development. By way of ensuring that sustainable development is attained, qualitative education readily comes to mind; this explains why Mai (2015) maintained that any conceptualization of sustainable development must reflect a people's environmental, economic, social and cultural dimensions.

Consequently, given the importance of education in achieving the good intentions of any development programme or project, the actualization of the seventeen Sustainable Development Goals in Nigeria will, no doubt, be a function of qualitative teacher preparation and training, on the one hand, and how well critical stakeholders at all levels become aware of what the SDGs are really meant to serve. Thus, Social Science Education as a component of teacher education programme will play a pivotal role in this direction. Social Science Education, as conceived by Paulley (2011b), basically studies human relationships and experiences which serve as a control mechanism for social relations and interactions where each individual's experience is brought to bear in one's culture and society. The point should also be made quickly that Social Science Education which cuts across academic disciplines of Economics Education, Geography and Environmental Management Education, Political Science Education and Social Studies Education prepares graduates to primarily take up teaching positions in post primary schools. In effect, the level of awareness of development concerns which Social Science Education undergraduates (pre-service) teachers have at their disposal while in training will definitely determine their disposition to development and other social issues of concern after graduation.

Empirically, De Lavega (2004), through a descriptive study; reported that statistical significant difference existed in the awareness and knowledge of and attitude towards environmental education among environmental specialists, high school instructors, students and parents in Orlando, Florida. Burmeister & Eiiiks (2013), in a descriptive survey research conducted in Germany reported that both in-service teachers and student-teachers demonstrated a positive attitude towards Education for sustainable development and vague knowledge of sustainable development. Kumar (2015) emphasized the role of teachers in sustainable development and in protecting the environment. Similarly, Labog (2017) observed, in a correlation-comparative study, that the level of integration of environmental awareness and sustainable development practices among teachers in public schools in the Philippines was high. Omisore, Babarinde, Bakare & Asekun-Olarinmoye (2017) also reported, in a cross-sectional survey, that the awareness level of the SDGs among staff and undergraduates in Osun State was fairly high. Nnokam & Sule (2017) concluded that the time to improve and reposition the present teacher education programmes in tertiary institutions in Nigeria to meet the sustainable development goals should be immediate.

Nevertheless, all the existing theoretical and empirical literature on the Sustainable Development Goals (SDGs) affirmed the place of human capital in meeting the laudable goals even as they were contained in the UNESCO (2008) curriculum guide for teachers in implementing the SDGs. However, there is no sufficient empirical evidence showing the awareness level of Social Science Education pre-service teachers of the Sustainable Development Goals. This present study was meant to fill that gap.

Purpose of the Study

The major purpose of the study was to assess the awareness level of Sustainable Development Goals (SDGs) among Social Science Education pre-service teachers in Niger Delta University, Wilberforce Island, Bayelsa State. Specifically, the study sought to achieve the following objectives:

- i. assess the level of the Social Science Education pre-service teachers in Niger Delta University awareness of the Sustainable Development Goals,
- ii. investigate the awareness level of the Social Science Education pre-service teachers in Niger Delta University of the Sustainable Development Goals based on gender.
- iii. examine the level of the Social Science Education pre-service teachers in Niger Delta University awareness of the Sustainable Development Goals based on year of study.

Research Questions

One research question was raised and answered in this study.

- i. What is the level of the Social Science Education pre-service teachers in Niger Delta University awareness of the Sustainable Development Goals?

Research Hypotheses

Two null hypotheses were formulated and tested in the study:

- H₀₁:** There is no statistically significant difference in the level of awareness of Social Science Education pre-service teachers in Niger Delta University of the Sustainable Development Goals based on gender.
- H₀₂:** There is no statistically significant difference in the level of awareness of Social Science Education pre-service teachers in Niger Delta University of the Sustainable Development Goals based on year of study.

Method

The study employed the descriptive survey research type. All the students enrolled into the B.Sc. (Ed.) Degree Programmes in Economics Education, Geography and Environmental Management Education, Political Science Education and Social Studies Education domiciled in the Department of Social Science Education, Faculty of Education, Niger Delta University, constituted the target population of the study. In selecting the sample for the study, the proportional sampling technique was adopted to select 55 Year 3 (penultimate year) and 66 Year 4 (final year) Social Science Education undergraduates in the full-time Degree Programme at the end of 2017/2018 and 2018/2019 academic sessions. A research instrument titled “*Questionnaire on Awareness of the Sustainable Development Goals (QASDGs)*” was developed for use in collecting the data for the study based on a modified four point Likert scale of Extremely Aware (EA = 4), Moderately Aware (MA = 3), Slightly Aware (SA = 2) and Not Aware (NA = 1). The instrument was divided into two sections. Section ‘A’ basically sought demographic information from the respondents while Section ‘B’ sought the level of awareness of Social Science Education pre-service teachers of the Seventeen Sustainable Development Goals. The face and content validity of the instrument was established by three (3) senior colleagues in the Faculty of Education, Niger Delta University. Test-retest was adopted to check for the consistency of the instrument to obtain an acceptable reliability coefficient of 0.78 after calculating the two sets of scores with Pearson Product Moment Coefficient. The data collected were analysed using arithmetic mean and t-test statistic. In section ‘B’ of the questionnaire, a mean score of 2.50 and above was considered as a high level of awareness while less than 2.50 was adjudged a low level of awareness. The two null hypotheses were tested using t-test statistic at 0.05 level of significance.

Results

Research Question One: *What is the level of awareness of Social Science Education pre-service teachers in Niger Delta University about the Sustainable Development Goals?*

Table 1: Mean Scores of Social Science Education Pre-service Teachers' Level of Awareness of Sustainable Development Goals (SDGs)

Goal	Title of Goal	FX		Decision
1	End poverty in all its form everywhere.	341	2.81	M
2	End hunger, achieve food security and promote sustainable agriculture.	384	3.17	M
3	Ensure healthy lives and promote the well being of all ages.	391	3.23	M
4	Ensure inclusive and equitable quality education, and promote lifelong learning opportunities for all.	375	3.09	M
5	Achieve gender equality and empower all women and girls.	385	3.18	M
6	Ensure availability and sustainable management of water and sanitation for all.	341	2.82	M
7	Ensure access to affordable, reliable, sustainable and modern energy for all.	307	2.54	M
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	339	2.80	M
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	326	2.69	M
10	Reduce inequality within and among countries.	326	2.69	M
11	Make cities and human settlements inclusive, safe, resilient and sustainable.	342	2.83	M
12	Ensure sustainable consumption and production patterns.	339	2.80	M
13	Take urgent actions to combat climate change and its impact.	322	2.66	M
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development.	303	2.50	M
15	Protect, restore and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss.	300	2.48	L
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.	365	3.01	M
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development.	315	2.60	M

N=121, Decision Threshold= Less Than 2.50 was Low (L); 2.50 to 3.49 was Moderate; 3.5 to 4.00 was High (H)

The results as indicated in **Table 1** showed that the level of awareness of Social Science Education pre-service teachers in Niger Delta University of the Sustainable Development Goals was Moderate in Goals 1,2,3,4,5,6,7,8,9,10,11, 12,13,14,16 and 17 with a mean score between 2.5 and 3.18. However, with a mean score of 2.48, the level of awareness of Social Science Education pre-service teachers on goal 15 which had to do with protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss was statistically low.

Testing of Hypotheses

Ho₁: *There is no statistically significant difference in the level of awareness of Social Science Education Pre-service teachers in Niger Delta University of the Sustainable Development Goals based on gender*

Table 2: t-test Analysis of the Level of Awareness of Male and Female Social Science Education Pre-service teachers of the Sustainable Development Goals

Gender	N	Mean (\bar{X})	Standard Deviation	df	Calculated t-value	Table t-value	Decision
Male	57	49.69	2.97	119	0.139	1.64	Ho not Rejected
Female	64	47.76	2.65				

***P<0.05**

The summary of result in **Table 2** showed that the calculated t-value was 0.139 and the **Table t** value was 1.64 with a degree of freedom of 119 at 0.05 level of significance. Since the calculated t-value of 0.139 was less than the table t-value of 1.64 at 0.05 level of significance, the null hypothesis was not rejected. It implied that there was no statistically significant difference in the level of awareness of male and female Social Science Education pre-service teachers in Niger Delta University of the Sustainable Development Goals.

Ho₂: *There is no statistically significant difference in the level of awareness of Social Science Education pre-service teachers in Niger Delta University of the Sustainable Development Goals based on year of study.*

Table 3: t-test analysis of the Level of Awareness of Penultimate and Final Year Social Science Education Pre-service Teachers of the Sustainable Development Goals

Level of Study	N	Mean (\bar{X})	Standard Deviation	df	Calculated t-cal	Table t- value	Decision
Penultimate Year	55	48.30	3.08	119	0.004	1.64	Ho not Rejected
Final Year	66	48.25	2.98				

*P<0.05

The summary of result in **Table 3** showed that the calculated t-value was 0.004 and the table t-value was 1.64 with a degree of freedom of 119 at 0.05 level of significance. Since the calculated t-value of 0.004 was less than the table t-value of 1.64 at 0.05 level of significance, the null hypothesis was not rejected. It implied that there was no statistically significant difference in the level of awareness of penultimate and final year Social Science Education pre-service teachers in Niger Delta University of the Sustainable Development Goals.

Discussion of Findings

The study basically assessed the awareness level of Social Science Education pre-service teachers of the Sustainable Development Goals in relation to teacher preparation. From the data analysed, the results obtained in **Table 1** showed that there was a moderate level of awareness of the Sustainable Development Goals (SDGs) among Social Science Education pre-service teachers within the study locale. From all intents and purposes, that result may have been influenced by the fact that the various aspects of Social Science Education exposed students to different concepts and issues of concern to humanity in particular and society in general, some of which were the Sustainable Development Goals (SDGs). The point should also be made here that given the cross-cutting nature of the SDGs, each of the different sub-fields in the Social Sciences Education can adequately interrogate the multi-dimensional aspects which the SDGs are supposed to address. In fact, the result tended to align with the findings of De Lavega (2004) who reported, in a descriptive study that statistical significant difference existed in the awareness and knowledge of and attitude towards environmental education among environmental specialists, high school instructors, students and parents in Orlando, Florida. Additionally, the result obtained in research **Question One** correlated with the findings of Labog

(2017) who found, through his correlation-comparative study, that the level of integration of environmental awareness and sustainable development practices among teachers in public schools in the Philippines was high. Also, the findings lent credence to the research by Omisore, Babarinde, Bakare & Asekun-Olarinmoye (2017) who reported, in their cross-sectional survey, that the awareness level of the SDGs among staff and undergraduates in Osun State was fairly high.

The low awareness level of Goal No 15 among pre-service Social Science Education teachers is attributed to the non incorporation of issues relating to the environment and the need to preserve them for posterity by the teachers teaching these courses to the students in the higher institutions. This is due to the fact that some teachers/lecturers have not made conscious efforts to improve on themselves by going the extra mile to source for these pieces of information for the benefit of the students. This confirms the assertion by Paulley (2012) that what the teacher knows and does makes a difference, what he does not know and fails to do can be an irreparable loss to the child who is the recipient of the knowledge imparted by the teacher because a teacher cannot give what he does not have. Kumar (2015) also affirmed this position in his findings, that teachers had critical roles to play not only in sustainable development but also in protecting the environment.

The *first null hypothesis* tested revealed that there was no statistically significant difference in the level of awareness of Social Science Education pre-service teachers in Niger Delta University of the Sustainable Development Goals based on gender. In other words, male and female Social Science Education pre-service teachers did not differ in their awareness of the Sustainable Development Goals. What that meant was that the courses or areas of specialization in the Social Sciences did not discriminate learners or students on the basis of their gender since male and female undergraduates sat in the same class and studied same courses. Hence, their awareness could not have been influenced by the specific gender that nature bestowed on them. Thus, the findings of Nnokam & Sule (2017) who remarked that the present time should be used to improve and reposition the present teacher education programmes in tertiary institutions in Nigeria to meet the Sustainable Development goals was found relevant.

The result from the *second null hypothesis* also showed that there was no statistically significant difference in the level of awareness of Social Science Education pre-service teachers in Niger Delta University of the Sustainable Development Goals based on year of study. What could be deduced from those finding was that the level or year of study of pre-service teachers could not be a barrier to becoming aware of the local or global happenings in society in as much

as such persons constantly updated their knowledge base by undertaking serious studies, independent of their lecturers and teachers, to be abreast of issues and problems that needed to be vigorously interrogated academically. It could also be that right from when Social Science students are admitted in the Faculty of Education, their courses border on developmental issues which are reflected in the Sustainable development Goals. This is in line with Kumar (2015) who, in his findings, revealed that teachers had critical roles to play, not only in sustainable development but also in protecting the environment.

Recommendation

Based on the findings, the following recommendation was put forward. The low level of Goal No 15 that asks to “protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss” is an area of concern. It was, therefore, recommended that courses in Social Science Education should incorporate elements in Goal No 15 to create awareness for the undergraduates and prepare them for the 21st century teaching job on their graduation.

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