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Awareness, Knowledge, Proficiency, Training and Expertise of Public Elementary School Teachers in Tacloban City on Education for Sustainable Development

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Abstract

Education for Sustainable Development is a thrust pursued by the United Nations to ensure that future generations are protected from key issues that tend to heighten the deterioration of the present society and environment. Using the descriptive survey method this study focused on the awareness, knowledge, proficiency, training and expertise of 112 teachers in the Philippine public elementary schools in Tacloban City. Collected data were processed through SPSS. Fifty-two (52) or 46.42% respondents were not aware of ESD. Some 31 or 27.67% were aware of ESD. The overall mean on the knowledge of teachers stood at 3.68 interpreted as having more than Enough Knowledge. On Proficiency the overall mean stood at 3.57 interpreted as a Beginner. On Training and Expertise the overall mean stood at 3.45 interpreted as Novice.

Keywords: *Descriptive survey, ESD Awareness, ESD Knowledge, ESD Proficiency, ESD Training & Expertise*

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Introduction

The United Nations declared 2005-2014 as the United Nations Decade of Education for Sustainable Development (ESD). The ESD is based on the idea that communities and educational systems within communities need to dovetail their sustainability efforts. As communities develop sustainability goals, local educational systems can modify existing curriculums to reinforce those goals.

The recent focus of UNESCO is on ESD. As emphasized during the proceedings of the UNESCO World Conference on Education for Sustainable Development on 31 March – 2 April 2009 in Bonn, Germany, ESD is education for the future. It engages in such key issues as human rights, poverty reduction, sustainable livelihoods, climate change, gender equality, corporate social responsibility and protection of indigenous cultures. Thus, it constitutes a comprehensive approach to quality education and learning. ESD is an approach to teaching and learning based on the ideals and principles that underlie sustainability. It is relevant to all types, levels and settings of education whether elementary, secondary, or tertiary; formal, non-formal, or informal.

The Philippines as a founding member of the United Nations is committed to embrace programs spearheaded by UN agencies such as UNESCO. The ESD is one of these programs and the task has fallen on the academe specifically the Department of Education (DepEd) and the Commission on Higher Education (CHED).

The Leyte Normal University is a State university operating under the administrative supervision of the CHED. Its flagship program is teacher education. In April 1996, the university was proclaimed by the CHED as the Centre of Excellence for Teacher Education in Region VIII from 1996 to 2001. Then in August 2008, CHED again awarded LNU as Centre of Excellence for Teacher Education from 2008 - 2011. The Vision of the university is to be “A center of quality leadership in teacher education, arts and sciences, and management and entrepreneurship.” Its sworn mission is “To provide quality and relevant academic, research and extension programs to local and global development needs.”

The Leyte Normal University accepted the nomination of UNESCO to the International Network of Teacher Education Institutions (INTE) and has become the only university in the country to be a member of this prestigious organization. As such, the university must take the lead in spreading the UNESCO initiatives as spelled out in the Millennium Development Goals (MDGs).

As the decade for ESD is nearing its completion the LNU must take an active role in the promotion of ESD as part of the MDG identified by the UN. As such, having a research-based baseline data on the level of awareness of the administrators and teachers in the basic education sector would provide essential inputs as to the needed interventions. LNU, as the lead teacher training institution in Region VIII can greatly influence the reorientation of teacher education to address sustainability.

Using the descriptive survey method this study sought to determine the awareness of ESD among classroom teachers and school administrators in the elementary schools in the City Division of Tacloban; gather a baseline data on ESD as delivered in the public elementary schools; determine the level of Knowledge; Proficiency, and; Training and Expertise on ESD of the teachers and administrators in their schools.

The study was limited to the solicitation of data from respondents in the eleven (11) Elementary Partner Schools, specifically: 1) San Fernando Central School; 2) Rizal Central School; 3) Kapangian Central School; 4) San Jose Central School; 5) Panalaron Central School; 6) RTR Elementary School; 7) Sagkahan Elementary School; 8) V&G Elementary School; 9) Marasbaras Elementary School; 10) Don Vicente Quintero Memorial School, and; 11) German Gmeiner Elementary School.

These are the partner schools of LNU where the student-teachers are deployed for their practice teaching. The study was conducted from April - August 2011. This study is still useful as ESD continues to be implemented by the Department of Education (DepEd) because it is locally relevant and culturally appropriate.

Evaluation has historically been viewed, and quite properly so, as an integral activity of a rational approach to life. Evaluation has played a great role in improving the lives of people, the way of life, and society as a whole. Evaluation became particularly relevant in the 1960s during the period of the Great Society. Extraordinary sums were invested in social programs but the means of knowing what happened and why were not available. A few years after the World War II, the interest in educational evaluation became intense.

Evaluation has a wide coverage; it may range from an evaluation of the existing practices, the macro aspect of educational programs, to the micro level of educational program implementation. All geared towards improvement of the educational system.

Two major steps proposed by Posavac and Carey (2003) in preparing to conduct an evaluation they required as a must, to obtain a complete program description and to identify the stakeholders. They adopted the concept of Bryk, 1983 and Sieber 1998 of a stakeholder. Stakeholders are those people who

are personally involved with the program, who derive some of their income from the program, whose future career might be affected by the quality of the program, or who are clients or potential recipients of the program's services. In this study, the evaluation focused on the awareness and delivery of ESD among classroom teachers in selected elementary public schools in the City Division of Tacloban.

In Brunei (UNESCO 2011) The Ministry of Education has not developed a specific ESD framework, and though the Department of Curriculum and Development has not established environment education as a single subject, attempts are made to integrate environmental issues across multiple subjects. The national government of Brunei Darussalam has identified the environment, education, and poverty as its three main priorities to be addressed through ESD.

In a 2011 UNESCO Jakarta study on Education for Sustainable Development Country Guidelines for Changing the Climate of Teacher Education to Address Sustainability: Putting Transformative Education into Practice. It affirmed that to develop an effective ESD programme for the targeted teachers, it will need to go beyond the presentation of facts. The learning experience will need to be open "transformative" in order to "help the individual a more autonomous thinker by learning to negotiate his or her own values, meanings, and purposes rather than to uncritically act on to those of others" (Mezirow, 1997). The underlying principle would be to develop the capacity of the teachers to think and act.

Cortese (2003) claimed that higher education institutions bear a profound moral responsibility to increase the awareness, knowledge, skills and values needed to create a just and sustainable future. Higher education plays a critical but often overlooked role in making this vision a reality.

UNESCO (2004) identified two opportunities for HEIs to participate in sustainable development. First, universities form a link between knowledge generation and transfer of knowledge to society for their entry into the labour market. Second, they actively contribute to the societal development through outreach and service to society.

Methodology

A questionnaire inspired by the ESD toolkit by Dr. Rosalyn McKeown and the SEA-CLLSD questionnaire was formulated. The focus was on the level of school's Knowledge, Proficiency, Training and Expertise on identified sustainability areas.

Using the stratified simple random sampling procedure 126 classroom teachers with the 11 administrators for a total of 137 respondents were identified.

Of the 137 questionnaires fielded only 112 were retrieved representing 82.35% retrieval rate. The data gathered were subjected to statistical processing using the Statistical Program for Social Sciences (SPSS) to determine the awareness and delivery of ESD.

The following method of scoring was used for the profile variables investigated in the study. The method of scoring on the Level of Knowledge was, 1.00-1.59 – Ignorant; 1.60-2.59 – Lacks Knowledge; 2.60-3.59 – Enough Knowledge; 3.60-4.59 – More than Enough Knowledge, and; 4.60-5.00 – Highly Knowledgeable. For the Level of Proficiency, 1.00-1.59 – Non-Proficient; 1.60-2.59 – Low; 2.60-3.59 – Beginner; 3.60-4.59 – Advanced, and; 4.60-5.00 – Expert. For the Level of Training and Expertise, 1.00-1.59 – Very Low; 1.60-2.59 – Low; 2.60-3.59 – Novice; 3.60-4.59 – Advanced, and; 4.60-5.00 – Expert.

Results and Discussion

On the profile of the respondents. One hundred six (106) or 94.64% of the respondents indicated one place of domicile – Tacloban City. Six (6) or 5.35% did not indicate their domicile. This fact indicates that the City Division of Tacloban has always implemented the localization policy of the Department of Education wherein only licensed professional teachers coming from the jurisdiction of the City Division are appointed to teaching positions in its schools.

The average age of the respondents from stood at 41.9. This mean age would imply that the respondents are on that stage in life where they can offer and share some wisdom with their students while at the same time relatively far from retirement age.

It is noteworthy that a good majority at 89 or 79.46% of the respondents are females while only 16 or 14.28% were males. Seven (7) respondents failed to indicate their gender.

Among the 112 respondents 63 or 56.25% indicated they were married. Eleven (11) or 9.82% indicated they were single while 2 or 1.78% indicated they were widow/widower. A good number of 36 or 32.14% did not indicate their civil status. This implies that most of the teachers have families to take care of aside from their responsibilities in school and that the teaching profession is not a hindrance in making both aspects work.

Of the 112 respondents, a good number of 46 teachers or 41.07% were holders of Baccalaureate Degrees. Thirty-nine (39) or 34.82% were Master's Degree holders. Only 1 or 0.89% was a holder of Doctorate Degree. Twenty-six (26) teachers or 23.21% did not indicate their educational attainment. This implies that most teachers have sat on their Baccalaureate Degrees and have not pursued further studies. This may be brought about by the heavy academic load that these teachers face at work and attending to their respective families at home.

The responses indicated that 45 or 40.17% of the teachers had been in the profession from 1-5 years. Thirty-eight (38) or 33.922% indicated 6-10 years experience. Ten (10) or 8.92% reflected 11-15 years experience. Two (2) or 1.78% claimed 16-20 years experience. Eleven (11) or 9.82% indicated 21-25 years experience. Another 4 or 3.57% claimed 26-30 years experience. One (1) or 0.89% indicated 31-35 years experience and another 1 or .89% claimed 36-40 years experience. This implies that almost half of the respondents are relatively young while the majority has more than enough experience in gaining wisdom that they can share with their learners.

Awareness of ESD. The findings indicate that almost half at 52 or 46.42% of the respondents are not aware of ESD. Thirty-one (31) or 27.67% are aware of ESD while 29 or 25.89% did not indicate their responses. These also presents an opportunity for a campaign on ESD in the LNU partner schools noting that 25.89% have not indicated their response.

Level of Knowledge on ESD. On the level of knowledge, the issue on human rights got the highest mean of 4.13 described as More than enough knowledge. It was followed by the issues on Access to Quality Education and Gender Equality, both with means of 4.05 described as More than enough knowledge. The issue on HIV/AIDS education got the lowest mean of 3.27 described as Enough knowledge. The overall mean on the knowledge of teachers stood at 3.68 interpreted as having More than Enough Knowledge.

Table 1			
Level of KNOWLEDGE			
on Identified Sustainability Issue Areas			
SUSTAINABILITY ISSUE AREAS	KNOWLEDGE		
	No. of Responses	Mean	Description
Access to Quality Education	106	4.05	More than enough Knowledge
Access to Quality Health Services	106	3.70	More than enough Knowledge
Climate Change	104	3.57	Enough Knowledge
Eradication of Poverty Incidence	104	3.30	Enough Knowledge
Environmental Sustainability	106	3.73	More than enough Knowledge
Gender Equality	105	4.05	More than enough Knowledge
Human Rights	104	4.13	More than enough Knowledge
Maternal Health	104	3.63	More than enough Knowledge
Reducing Child Mortality	105	3.82	More than enough Knowledge
Social Equity	105	3.83	More than enough Knowledge
Sustainable Food Production /Consumption	103	3.55	Enough Knowledge
Non-violent Conflict Resolution	105	3.73	More than enough Knowledge
Peace Education	106	4.01	More than enough Knowledge
HIV/AIDS Education	104	3.27	Enough Knowledge
Mother Tongue Based Education	105	3.67	More than enough Knowledge
OVER-ALL MEAN		3.68	More than enough Knowledge

Level of Proficiency on ESD. On the level of proficiency, the issues on Access to Quality education and Mother Tongue Based Education both got the highest mean of 3.93 described as Advanced. It was followed by the issue on human rights with a mean of 3.86 described as Advanced. The issue on

HIV/AIDs Education got the lowest mean of 3.25 described as Beginner. The overall mean stood at 3.57 interpreted as Beginner.

Table 2			
Level of PROFICIENCY			
on Identified Sustainability Issue Areas			
SUSTAINABILITY ISSUE AREAS	PROFICIENCY		
	No. of Responses	Mean	Description
Access to Quality Education	105	3.93	Advanced
Access to Quality Health Services	104	3.56	Beginner
Climate Change	102	3.43	Beginner
Eradication of Poverty Incidence	103	3.41	Beginner
Environmental Sustainability	103	3.55	Beginner
Gender Equality	104	3.79	Advanced
Human Rights	103	3.86	Advanced
Maternal Health	103	3.57	Beginner
Reducing Child Mortality	103	3.63	Advanced
Social Equity	104	3.70	Advanced
Sustainable Food Production /Consumption	103	3.53	Beginner
Non-violent Conflict Resolution	104	3.63	Advanced
Peace Education	105	3.79	Advanced
HIV/AIDS Education	103	3.25	Beginner
Mother Tongue Based Education	105	3.93	Advanced
OVER-ALL MEAN		3.57	Beginner

Level of Training and Expertise on ESD. On the level of training and expertise, the issue on Access to Quality Health Services got the highest mean of 3.75 described as Advanced. It was followed by the issue on Maternal Health with a mean of 3.66 described as Advanced. The issue on Mother Tongue Based Education got the lowest mean of 3.20 described as Novice. The overall mean stood at 3.45 interpreted as Novice.

Table 3			
Level of TRAINING and EXPERTISE			
on Identified Sustainability Issue Areas			
SUSTAINABILITY ISSUE AREAS	TRAINING and EXPERTISE		
	No. of Responses	Mean	Description
Access to Quality Education	104	3.63	Advanced
Access to Quality Health Services	105	3.75	Advanced
Climate Change	105	3.50	Novice
Eradication of Poverty Incidence	104	3.29	Novice
Environmental Sustainability	104	3.26	Novice
Gender Equality	105	3.40	Novice
Human Rights	104	3.55	Novice
Maternal Health	105	3.66	Advanced
Reducing Child Mortality	103	3.33	Novice
Social Equity	103	3.39	Novice
Sustainable Food Production /Consumption	104	3.51	Novice
Non-violent Conflict Resolution	103	3.36	Novice
Peace Education	104	3.45	Novice
HIV/AIDS Education	105	3.56	Novice
Mother Tongue Based Education	102	3.20	Novice
OVER-ALL MEAN		3.45	Novice

These findings indicate that the public elementary schools in the City Division of Tacloban still need more exposure to the sustainability issue areas to become highly knowledgeable, expertly proficient, and experts in training and expertise.

Conclusions and Recommendations

Results of the study indicate that ESD is still foreign to many teachers as almost half of the respondents were still unaware about it. Thus, they are unable to incorporate ESD issues in their classroom activities because they are cannot appreciate what they cannot comprehend.

The respondents overall mean indicated a 3.68 interpreted as having More than Enough Knowledge on their Level of Knowledge. On Proficiency, they indicated an overall mean of 3.57 interpreted as Beginner. On the aspect of Training and Expertise, they indicated an overall mean of 3.45 interpreted as Novice. These seeming contradictory result in relation to their awareness of ESD may be due to their superficial appreciation of what really is ESD but they are actually aware of the sustainability issue areas. Though the teachers claim that they possess More than Enough Knowledge yet they are Beginners in terms of Proficiency and they are considered Novice in terms of Expertise and Training in a good number of Sustainability Issue Areas.

The refusal of some respondents to answer the questionnaire may also be an indication of their ignorance of ESD making them hesitant to give their answers.

These findings concur with the results of the UNESCO, Jakarta research (SIREP 2010) where it found that “minimal and superficial awareness, knowledge, and understanding of ESD by educators and curriculum developers. Teachers themselves do not fully imbibe the holistic and interdisciplinary scope of the ESD framework and often focus only on the environment aspect of sustainable development.”

These findings are likewise considered a well-spring of opportunities for the Leyte Normal University (LNU) as well as other institutions and organizations. Bringing LNU to the forefront action in propagating the seeds of ESD not just in its partner schools but to schools, public and private, in other

provinces and school divisions and to the other sectors of society will enable the university to share its knowledge and expertise as the Center of Excellence in teacher education

The Decade of Education for Sustainable Development (DESD) ended in 2014, however, it does not mean that we should stop the activities relative to ESD rather it is a greater challenge for all of us who embrace the ESD concept to continue spreading these concepts for a more sustainable and brighter future.

If we look at the Philippine culture and its traditional practices there is an abundance of ESD themes that fall within such practices. These parallelisms can serve as the greatest facilitator in teaching ESD especially in the rural areas.

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