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## **Awareness and Delivery of Education for Sustainable Development in Public Secondary Schools in the Philippines**

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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 109 teachers in the Philippine secondary public schools. Collected data were processed through SPSS. Fifty-four (54) or 49.54% respondents were not aware of ESD. Some 38 or 34.86% were aware of ESD. The overall mean on the knowledge of teachers stood at 3.46 interpreted as having Enough Knowledge. On Proficiency the overall mean stood at 3.25 interpreted as a Beginner. On Training and Expertise the overall mean stood at 3.16 interpreted as Novice.*

**Key Words:** *Descriptive survey, ESD Awareness & Delivery, ESD Knowledge, ESD Proficiency, ESD Training & Expertise*

### **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 Center of Excellence for Teacher Education*

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in Region VIII from 1996 to 2001. Then in August 2008, CHED again awarded LNU as Center 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, more specifically on the LNU partner schools, where the LNU student-teachers are deployed for their practical experience 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 secondary schools in the City Division of Tacloban; gather a baseline data on ESD as delivered in the public secondary schools; determine the level of Knowledge; Proficiency, and; Training and Expertise on ESD of the teachers in their schools.

The study was limited to the solicitation of data from respondents in the seven (7) secondary schools under the administration of the City Division of Tacloban, namely: Leyte National High School, Tacloban City National High School, San Jose National High School, Sagkahan National High School, Cirilo Roy Montejo National High School, Marasbaras National High School and, Tacloban National Agricultural 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 secondary 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.

Using the stratified simple random sampling procedure 130 classroom teachers with the 7 administrators for a total of 137 respondents were identified.

## **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.

Of the 137 questionnaires fielded only 109 were retrieved representing 79.56% 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-

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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**

The respondents indicated one place of domicile – Tacloban City. 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 109 teacher respondents stood at 41.9. This mean age imply that the respondents are on that stage in life where they can offer and share wisdom with their students while at the same time relatively far from retirement age.

It is noteworthy that a good majority at 71 or 65.10% of the respondents are females while 30 or 27.50% were males. Eight (8) respondents failed to indicate their gender. These facts conform to the reality in the Philippine educational system wherein teachers are predominantly females.

Among the 109 respondents 59 or 54.10% indicated they were married. Eighteen (18) or 16.50% indicated they were single while 18 or 16.50% indicated they were widow/widower. Fourteen (14) or 12.80% 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 109 respondents, a good number of 45 teachers or 41.20% were holders of Baccalaureate Degrees. Forty four (44) or 40.30% were Master's Degree holders. Significantly, only 3 or 2.70% were holders of Doctorate Degrees. Seventeen (17) teachers or 15.50% 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 31 or 28.40% of the teachers had been in the profession from 1-5 years. Ten (10) or 9.10% indicated 6-10 years experience. Thirty (30) or 27.50% reflected 11-15 years experience. Eleven (11) or 10.80% claimed 16-20 years experience. Thirteen (13) or 11.90% indicated 21-25 years experience. Another 6 or 5.50% claimed 26-30 years experience. Only 5 or 4.50% indicated 31-35 years experience while 1 or .90% claimed 36-40 years experience. Two (2) respondents did not indicate their work experience. This implies that a good number of the teachers are relatively young while the huge majority has more than enough experience in gaining wisdom that they can share with their learners.

### **Awareness of ESD**

The results indicated that 54 or 49.54% respondents indicated that they are not aware of ESD. Some 38 or 34.86% claimed that they are aware of ESD. Significantly, 17 or 15.60% did not indicate their answer to this question. These findings indicate that almost half of the respondents are not aware of ESD. These also presents an opportunity for a campaign on ESD in the public secondary schools in the City Division of Tacloban noting that 20.81% have not indicated their response.

### Level of Knowledge on ESD

On the level of knowledge, the issue on access to quality education got the highest mean of 3.83 followed by human rights with a mean of 3.72 while the issue on HIV/AIDS education got the lowest mean of 3.14. The overall mean on the knowledge of teachers stood at 3.46 interpreted as having Enough Knowledge.

**Table 1**  
**Level of Knowledge, Proficiency, Training & Expertise of Teachers**  
**on the Different Sustainability Areas**

| SUSTAINABILITY AREAS                     | LEVEL OF  |             |             |             |                      |             |
|--|-----------|-------------|-------------|-------------|----------------------|-------------|
|  | KNOWLEDGE |             | PROFICIENCY |             | TRAINING & EXPERTISE |             |
|  | f         | Mean        | f           | Mean        | f                    | Mean        |
| Access to Quality Education              | 100       | 3.83        | 99          | 3.67        | 98                   | 3.54        |
| Access to Quality Health Services        | 101       | 3.23        | 99          | 3.18        | 97                   | 3.13        |
| Climate Change                           | 100       | 3.38        | 98          | 3.23        | 95                   | 3.16        |
| Eradication of Poverty Incidence         | 100       | 3.16        | 98          | 3.00        | 96                   | 3.05        |
| Environmental Sustainability             | 101       | 3.42        | 97          | 3.22        | 96                   | 3.26        |
| Gender Equality                          | 100       | 3.71        | 96          | 3.51        | 96                   | 3.33        |
| Human Rights                             | 101       | 3.72        | 96          | 3.50        | 96                   | 3.33        |
| Maternal Health                          | 100       | 3.40        | 96          | 3.25        | 96                   | 3.13        |
| Reducing Child Mortality                 | 99        | 3.38        | 95          | 3.33        | 96                   | 3.14        |
| Social Equity                            | 100       | 3.38        | 96          | 3.34        | 95                   | 3.16        |
| Sustainable Food Production /Consumption | 99        | 3.33        | 97          | 3.28        | 96                   | 3.23        |
| Non-violent Conflict Resolution          | 100       | 3.48        | 97          | 3.31        | 96                   | 3.19        |
| Peace Education                          | 100       | 3.78        | 97          | 3.39        | 96                   | 3.25        |
| HIV/AIDS Education                       | 98        | 3.14        | 97          | 3.08        | 96                   | 2.97        |
| Mother Tongue Based Education            | 98        | 3.23        | 94          | 3.14        | 97                   | 3.02        |
| <b>OVER-ALL MEAN</b>                     |           | <b>3.46</b> |             | <b>3.25</b> |                      | <b>3.16</b> |

### Level of Proficiency on ESD

On the level of proficiency, the issue on access to quality education got the highest mean of 3.67 followed by the issue on human rights with 3.50 while the issue on the eradication of poverty incidence got the lowest mean of 3.0. The overall mean stood at 3.25 interpreted as a Beginner.

### Level of Training and Expertise on ESD

On the level of training and expertise, the issue on access to quality education got the highest mean of 3.54 followed by the issues on gender equality and human rights with 3.33 while the issue on HIV/AIDS education got the lowest mean of 2.97. The overall mean stood at 3.16 interpreted as Novice.

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These findings would indicate that the public secondary schools in the City Division of Tacloban are still wanting in terms of knowledge, proficiency, training and expertise on the identified sustainability areas.

## **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 indicated their highest mean of 3.46 (Enough Knowledge) on their school's level of Knowledge. On the Proficiency of their schools, they indicated a mean of 3.25 (Beginner). On the aspect of Training & Expertise of their schools, they indicated a low mean of 3.16 (Novice).

The refusal of some respondents to answer the questionnaire is also 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. The LNU for its part can start planning for the conduct of series of trainings on ESD in cooperation with UNESCO and begin implementing programs directed towards disseminating the gospel of ESD in Region VIII in particular and even the other regions of the Philippine archipelago.

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 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) will end 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.

The greatest barriers in adopting ESD in the Philippine context is primarily the lack of knowledge, experience, action-plan, time, resources, administrative support, infrastructure, training, support from colleagues, etc.

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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