



**Evaluation on the Implementation of Environmental Education Activities among
Public Secondary Schools in South Central Mindanao
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Abstract

In view of the pressing global concerns and issues on the environment degradation, government urges all public and private schools to lead the role on environmental awareness by enhancing environmental education and by pursuing effective school-based activities that seek to preserve and protect the environment. People became more futuristic and are always attributed by upgrading and updating technology for more satisfactory living inputs without considering the consequences of these actions in natural resources. These developments push human to exhaust the environment with a little sense of being a steward (Sund, 2016).

As a third world country, Philippines are surely in a great challenge not only in revitalizing its title as “The Tiger Economy of Asia” but also in installing a cohesive society with balance formation on industrialization and environmental preservation. There are few government sectors for environment agriculture, health, and education working together to attain the goals of sustainable development in the country. But on the other hand Filipinos are more focused on how to live on and improve their economic status. These common walks in life lie in the idea of practicality not idealism. It is perhaps the weakest point of sustainability. People are more likely to do things for a personal material prize. This habit was brought by improper training, orientation, and education. It is indeed a challenge to educate young minds to change the perception for the next generations (Legarda, 2015).

In Mindanao, it is mandated and a must to comply with the provisions of the Philippine Constitution, Presidential Decree and several Memorandums from Department of Education such as Presidential Decree 1152, DepEd Order No. 52, s. 2011, DepEd Order No. 72, s. 2003 and DepEd Memorandum No. 133, s. 2014 regarding promotion of environmental awareness. It is a challenge faced by educators as well to the school administrators to ensure environmental education awareness be instilled to the students in order to attain and sustain the benefits of engaging to sustainable development (DepEd, 2015).

In relation to compliance to these provisions, there are many challenges the schools experiences that are hampering the attainment of the objectives of this mandate to develop environment care literacy to the people. Furthermore, looking around at our surrounding we can still find many people including the students who do not value environmental care that can help sustain good environmental condition. Thus, the researcher is motivated to conduct this study to determine of the schools are implementing environmental education strategies hand its contribution in the attainment of its objectives.

KEYWORDS: Environmental Education, Public Secondary School, Environment Degradation, South Central Mindanao

1. INTRODUCTION

This study is conducted to investigate the contextual relevance of environmental education about, Effectiveness on the Implementation of Environmental Education Activities of the Public Secondary Schools and strengthening environmental education (DepEd Order no 52, s. 2011) and for the environment. Hence, the importance of the pedagogical implication attached to the notion of place (context) is vital for the very reason that the essence of environmental education in the environment can only be real when students have direct interaction and experience with the local environment (place). Thus, considering the pedagogical meaning of 'place' as an important ingredient in the teaching and learning process of environmental education demands a theoretical framework and backup to be meaningfully analyzed in the course of this study. Similarly, finding a kind of pedagogy that emphasize the role of 'place' inclusive teaching and learning process is also equally important in the final analysis and discussion of the findings of this study.

Accordingly, critical pedagogy of place and place attachment theory are felt pertinent by the researcher to be used as conceptual framework of the study - in which the data gathered during the field work are going to be analyzed and discussed in line with this given theoretical framework. Gruenewald (2003), who came up with the theory of critical pedagogy of place, argues why he coined the new pedagogy that entertains two important elements at a time, "Taking the position that "critical pedagogy" and "place-based education" are mutually supportive educational traditions, this author argues for a conscious synthesis that blends the two discourses into a critical pedagogy of place."

Critical pedagogy - which is originated from critical theory - lacks the ecological concern while it gives due emphasis on social experiences in connection to place. In a similar way, place-based education emphasizes the ecological aspect of place while it gives very little room for the social aspect of place which is well underlined in critical pedagogy.

Thus it is, according to Gruenewald 'the best of both words' which forms critical pedagogy of place. Manteaw (2011:34), on the bases of Gruenewald definition, describes critical pedagogy of place as follows:

Critical pedagogy of place posits two fundamental goals for education: decolonization and reinhabitation. In decolonization, learners go through self-critical epistemological processes to gain personal awareness and understanding of local situations. This awareness and understanding of the local problems and their underlying causes result in a new desire and a new sense of empowerment to re-inhabit- to live well- in their places by exploring emancipator possibilities.

'Place attachment theory' is the second chosen conceptual framework that backs up the analysis section of the study. We can't talk about people without mentioning the place they belongs to, without the place they live in, without the place they grew up. Giuliani (2003:138) stated the following about the emotional attachment that people have with places and possible roles that bond could play in their lives.

Indeed, not only do we acknowledge the existence of an affective bond with places, but also the importance that this can have in qualifying our existence, whether positively or negatively; and not just our individual private existence, but also the existence of the entire human groups. For better or worse, this has a far reaching implication. The feeling we experience towards certain places and to the community that the places help to define and that are themselves defined by the places,- home (family, relations, friends), workplace (colleagues), church (fellow worshipers), neighbors, city, country, continents - certainly has a strong effect in defining our identity, in filling our life with meaning, enriching it with values, goals and significance. People have strong emotional ties with their own places and the question lies on how this power of attachment between place and the people who live in a particular place be used as a resource for learning. This is the very rationale that justifies the choice of place attachment

theory as one of the conceptual framework of this study. In this regards, Semken & Freeman, (2008:1043) explained, Considered from the perspective of teaching and learning, sense of place defined as place meaning plus place attachment encompasses the cognitive (knowledge as place meaning) and affective domains (place attachment; attitudes and preferences as place meanings). It may also extend into the psychomotor domain by incorporating kinesthetic skills learned or performed in specific physical places.

2. MATERIALS AND METHODS

This study utilized the descriptive-correlational method of research. This design is appropriate because aimed on evaluating the implementation of environmental education activities of the Public Secondary Schools in South Central Mindanao. According to Bailey (2014), the word survey signifies the gathering of data regarding the present condition. Correlation is also appropriate in this study since it determined the significant relationship of implementation and attainment of the objectives of the environmental education activities. The study made use of the random sampling technique which is a probability sampling technique that will provide equal opportunity for every individual from the population to be selected as part of the respondents. The Gay's sampling technique was used in determining the sample size of the principals and teachers respondents; hence 20% of the total population was used.

The survey questionnaire was composed of 2 parts. The first part is composed of statements about the implementation of Activities to Strengthen Environmental Education. The second part included the items that described the attainment of objectives. The instrument made use of the five point liker scale as selection basis for the respondents in the given statements. The researcher implemented different activities during the data gathering. The first activity was done through seeking permission from the Dean of the Graduate College of CCSPC to be allowed to conduct the study. Then it was followed by the distribution of letters of permission to the Department of Education Regional Office and the Superintendent of the Division of City Schools.

During the actual survey, the questionnaires were distributed with the help of some teachers, school heads. Orientation was conducted before the start of the survey to explain about the purpose and mechanics of the study. Furthermore, voluntary consent of the respondents was sought before they were allowed to participate.

Secondary data were also collected also to validate the findings and also for justification purposes. According to Bailey (2014) the importance of gathering secondary data are more convenient to use because they are already condensed and organized and also give a more detailed and balance picture of the situation.

3. RESULTS AND DISCUSSION

Extent of Implementation of Environmental Education Activities

The extent of effectiveness of activities to strengthen the environment education is explored in terms of intensification of lessons regarding environment on all science subjects; encouragement by school administrators, officials and teachers to use various instructional materials; encouragement to teachers to attend lecture-seminars, workshops, conferences and other for a relating to environmental education, establishment of YES-O by all public secondary schools; and establishment of registering, monitoring and evaluating the YES-O and other related org. under the administration and supervision of CSCA. These are presented to explain its relevance in the study.

Activities on Intensification of Lessons Regarding Environment

Table 1 presents the extent of effectiveness of activities to strengthen the environment education is explored in terms of intensification of lessons regarding environment on all . The lowest rating reflected from the answers of the respondents was item 4 “Fun Run for the Environment” with a mean of 3.58 highly implemented. This implies that schools provide activities wherein students are able to join and express their support in the environmental care. Although this is the lowest still the result showed good result.

According to van Gejeka (2013), the schools actions anchored in the objectives on the environmental activities are key towards developing behavior of the students in recognizing their roles in the care of environment which has important roles in future world.

The highest rating was on tem 4 “Clean-Up Drive in the school and community” that got a mean of 4.50 described as highly implemented. This result manifest commitment of the school to instill in the mind of the students that cleaning up of environment is helpful in promoting environmental care.

Green and Somerville (2015) found that Australian primary school teacher accounts of their practice illustrate the ways they interacted with the materiality of local places as an essential part of sustainable education. They identified environment sustainable program practices within the four sets of relations: the materiality of school grounds and lectures; connections with local places; partnerships with community; and creative processes. This can enhance the capacity of the school in ensuring environmental education activities are implemented properly.

In summary, the extent of effectiveness of undertaken by the secondary schools in terms of Intensification of lessons regarding environment on all science subjects got an overall mean of 4.08 described as highly implemented . This answer manifest the schools have been compliant in the mandate of promoting to the students about environmental care and protection.

A study carried out in Tanzania reveals that primary school teachers perceive environmental education as providing knowledge about the environment these are helpful competencies that can empower the learners towards gaining knowledge on environment care which can affect their actions of doing it (Kimaryo, 2011).

Activities on Encouragement to Teachers to Attend Lecture-Seminars, Workshops, Conferences and Related to Environmental Education

Table 2 shows the activities undertaken by the secondary schools in terms of encouragement to teachers to attend lecture-seminars, workshops, conferences and other for a relating to environmental education.

As shown in the data presented the lowest rating is on item 1 “Inclusion of Faculty attendance to trainings and seminars in the criteria for promotion” that got a mean of 4.06 described as highly implemented. This result manifest teachers are provided opportunities to improve their capacities through attending seminars and trainings which are highly effective in providing updates and new updates on environment care.

The integration of counting seminars attended in professional development contributes in promoting teachers in higher positions aside from providing them opportunity to develop self

professionally. These are good strategies that can motivate teachers to avail such seminars despite that it sometimes means additional obligations (Abdulwali, Alsh-mrani, & Almufti, 2017 and Olsson, Gericke, & Chang Rundgren, 2016).

Meanwhile the highest rating is on item 3 “Directing teachers to intensify environmental education after attending relevant trainings” that got a mean of 4.21 described as highly implemented. This result shows cascading of things learned from seminars which are basic activities relevant in ensuring the knowledge development from these activities are imparted to the students to improved their knowledge and practices towards environment care.

Ortega & Fuentes (2015) explained that seminars are relevant in improving capacities of teachers in instructional delivery about environment care. This can be a good source of skills in the guidance for the students towards the strategies and care for environment to help sustain a good environment.

In summary, the overall mean of the effectiveness of encouragement of teachers to attend lecture-seminars, workshops, conferences and other for a relating to environmental education is 4.17 described as highly implemented. This answer implies the teachers have been provided opportunities to improve competencies in environmental education through attending seminars where new knowledge will be enriched and can empower them on environment care.

A study on Namibian school teacher’s competencies is developed through providing professional development plan for environmental education sustainability and how they implement it in teaching. It is becoming more important because of the growing economy and the number of relatively young consumers who need to learn to live sustainably that should be guided by education sector as influential factors in future generations behavior(Egne, 2014).

Extent of Activities of Establishment of YES-O by All Public Secondary Schools

As presented in Table 3 the extent of activities undertaken by the secondary schools in terms of establishment of YES-O by all public secondary schools. The lowest rating based on the answers shows it is on item 7 “Other analogous programs, projects or activities” that got a mean of 4.06 described as highly implemented. This answer showed good implementation activities despite of the fact that it got the lowest rating. It means schools are providing varied activities for the youths depending on the situations and resources available in the implementation of environmental education activities.

In Sweden, Olsson et al. (2016) compared different schools in relation to environment education and found differences in the effects on youths accountability in developing sustainability consciousness, a concept that integrates the environmental, social, and economic dimensions of sustainable development all including knowingness, attitudes and behavior

On the other hand, the highest rating given is on item “Greening Program (e.g. Tree Planting and Clean Up Drive)” with a mean of 4.58 described as most highly implemented. This answer denotes the acquiescence of the school in the national mandate to ensure programs for greening programs which are promotive of good environmental sustainability are implemented by the school. This can develop values of loving environment for the young learners to help the future leaders become nature responsible individual.

In summary, the overall mean of the extent of effectiveness of undertaken by the secondary schools in terms of establishment of YES-O by all public secondary schools got a mean of 4.36 highly implemented. This result means the school together with its teacher ensured the students are properly provided guidance in the care of environment through identifying the

role of the youth towards environment conservation practices. This can help develop accountability to the young mind of the learners towards their duty in environment care.

Furthermore, North American practitioners from formal and informal institutions represented different distinct perspectives in prioritizing environmental education outcomes as implemented by schools through involvement of youth in school environment programs. The specific identification of the youth's contribution through their active participation can increase their motivation towards supporting in these activities (Fraser, Gupta, & Krasny, 2015).

Studies on schools commitment in conservation programs of environment revealed it plays a major role in the way they develop their human resource on how to teach and prepare learners for the future about environment care. The presence of sustainability of environment care in the curriculum and the implementation process in schools and universities has been studied which pointed on common objective focused towards environment education and sustainability (Biasutti et al., 2016; Egne, 2014; Fraser et al., 2015 and Green & Somerville, 2015).

Embedded in DepEd Order 72 series of 2003 enumerated the guidelines for public schools to integrate I their activities the youth for environment in schools which mandated schools to make sure activities like tree planting and other environment care activities are implemented. This can remind and develop student's actions towards becoming responsible individual on their actions to protect environment.

Extent of Activities on the Establishment of Registering, Monitoring and Evaluating the YES-O and Other Related Organization Under the Administration and Supervision of CSCA

Table 4 shows the extent of establishment of registering, monitoring and evaluating the YES-O and other related organization under the administration and supervision of CSCA.

The lowest rating that emerged based on the answer's is on statement 5 "Submission of the CAPA to the School Head/Principal for approve its submission to the Division Office (DO)" that got a mean of 4.31 described as highly implemented. This answer described the school are providing reports related to environment activities.

Saloranta (2017) pointed out those ensuring monitoring activities done by the school including the partners of the schools increases higher level of effectiveness of projects and programs related to environment care and preservation. This collaborative competence was important in implementing interdisciplinary environment sustainability development in their schools.

The highest rating is on item 1 "Designation of YES-O adviser" that got a mean of 4.44 described as highly implemented. This answer signifies the schools are adhering to the national governments policy of providing focal persons responsible and in charge for managing environment program activities which is highly important in ensuring programs are monitored closely.

The holistic approach in monitoring and evaluation of activities related to environment education is also highlighted by Yavetz, Goldman, and Pefer (2014) who explained that teachers, partners and administrators need to enrich their personal competence and learners knowledge about the environment and abilities to understand and participate rationally in the discourse or controversial, value-laden issues of sustainability, which require a holistic approach.

In summary, the overall mean of the activities on establishment of registering, monitoring and evaluating the YES-O and other related organization under the administration and supervision of CSCA revealed a mean of 4.37 described as highly implemented. This result denotes good action and governance of the schools towards ensuring schools administration and stakeholders are involved in monitoring activities which can identify the problems and improve the services related to environment education activities in the schools.

Using a collaborative and multi-disciplinary approach which involves participation of many partners including school personnel, Borg, Gericke, Higlund, and Bergman (2014) found that they have an understanding of the concept as a whole and know what they are supposed to contribute in their own skills and knowledge on this aspect for better outcome.

Extent of the Attainment of Objectives of...The Environmental Education Activities Undertaken by Public Secondary Schools

The extent of the attainment of the objectives of Environmental Education activities is explored in terms of; leading the role on environmental awareness by enhancing environmental education and Establishment of effective school-based activities to preserve and protect the environment.

Awareness by Enhancing Environmental Education

Table 5 shows the extent of the attainment of objectives of the environmental education activities in terms of leading the role on environmental awareness by enhancing environmental education.

The lowest rating that emerged based on the answers is on item 2 “Encourage community participation and initiative in environmental and ecological movements and actions” that got a mean of 4.14 described as highly attained. This manifest good outcome since it got a high rating despite of it being the lowest showing the high involvement of the stakeholders in education awareness has greater impact in the improving the knowledge of the people towards environment care that is basis for their actions in day to day life activities.

Green and Somerville (2015) reported that teachers and community stakeholders working hand in hand is an important concept and to ensure sustainability into the integration of education curriculum activities in the curriculum are implemented. To engage teachers and stakeholders in integrating sustainability into the curriculum, they need to be active curriculum planners themselves.

The highest rating is on item 3 “Develop among members and the community proper environmental values, skills and attitudes” that got a mean of 4.26 described as highly attained. This result denotes higher emphasis of school in ensuring collaborative actions are adopted in environment education awareness activities for this has higher efficiency level since people are incline to support such activities.

Environment education learning methods are guided by the following approaches as follows: interdisciplinary and holistic; learner centered and participatory; value-driven, promoting critical thinking and exploring all stakeholders; forward-looking, promoting medium and long-term planning; locally relevant, encouraging multilateral collaboration among schools, local actors, and authorities, scientific communities, private sector, and NGOs, etc. and revealing global issues and connections as part of everyday life, whether in a small village or a large city (Alampe, Malotidi, Psallidas, & Scoullas, 2013).

In summary, the overall mean of the extent of the attainment of objectives of the environmental education undertaken by public secondary schools in terms of leading the role on

environmental awareness by enhancing environmental education is 4.19 described as highly attained. This implies that schools have good leadership strategies in environmental education awareness activities by involving other partners towards developing the children into having the right competencies in the care of environment. This is an effective measure towards stronger support system and higher performance outcome.

Integration of collaborative approaches is particularly relevant for fostering reflective environmental awareness. The different agencies on environment care can develop socially or ecologically behavior at the individual, societal and political levels. Participatory methods such as problem-solving, discussions, debates, presentations, fieldwork, experiments, demonstrations, projects and co-operative learning promote competencies such as critical thinking, imagining future scenarios and making decisions in a collaborative way (Scoullos, 2013).

Table 6 displays the extent of the attainment of objectives of the environmental education activities.

The lowest rating is on item 5 “Organize and information drives on environmental protection” that got a mean of 4.08 described as highly attained. This answer implies that schools are spearheading activities that promotes environmental protection and preservation in their students as well as in the community as part of their advocacy on ensuring people work hand in hand in protecting nature and environment where we are living.

As the world becomes more globalized, companies and institutions like schools are realizing that it is becoming more and more necessary to have an environment care intervention programs in the organizations activities in order for their organizations to participate in sustainable development and achieve its goal for the good of the future generations (Jung, 2013)

The highest rating was o item 1 “Establish specific and doable programs, projects and activities to address issues and concerns on the environment and ecology” with a mean of 4.28 described as highly attained. This means the school properly formulated their objectives to be attainable so that outcome can be done realistically and impact can be felt by the community through identifying simple attainable yet effective actions in preventing convincement destruction.

According to Aydin Balyer of Istanbul (2014), school-based activities, such as idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation are positively related to greater personnel acceptance, better performance, and increased job satisfaction at schools. Since their participation is given high regard as relevant in the school programs.

The overall mean of the extent of the attainment of objectives of the environmental education activities in terms of establishment of effective school-based activities to preserve and protect the environment got a mean of 4.15 described as highly attained. This result denotes schools formulated and implemented activities that involve different sectors but are conducted in the school so that students can participate in these environmental education awareness activities that can help develop the behavior and values of the students towards becoming good caretaker of environment.

Piña (2015) pointed out that principals in rural settings should recognize integrating school – based activities in the interconnectedness of the dimensions of effective leadership and their impact of positively affecting organizational culture and increasing student academic

achievement. She further explained the perceived impact of the involvement of students in environmental activities reform mandates on principal leadership in ensuring school activities are guided properly.

According to the Republic of Botswana (2013), environmental education has a key role in secondary education and should be integrated into all subjects in the curriculum.

4. MAJOR FINDINGS

The findings that emerged from statistical analysis of the data gathered from the respondents were summarized as follows:

The extent of implementation of environmental education activities in terms of intensification of lessons regarding environment on all science subjects got an overall mean of 4.08 (lowest) described as highly implemented, in terms of encouragement of teachers to attend lecture-seminars, workshops, conferences and other for a relating to environmental education is 4.17 described as highly implemented, in terms of establishment of YES-O by all public secondary schools got a mean of 4.36 highly implemented and in terms of establishment of registering, monitoring and evaluating the YES-O and other related organization under the administration and supervision of CSCA revealed a mean of 4.12 (highest) described as highly implemented.

The extent of the attainment of objectives of the environmental education undertaken by public secondary schools in terms of leading the role on environmental awareness by enhancing environmental education is 4.37(highest) described as highly attained and in terms of establishment of effective school-based activities to preserve and protect the environment got a mean of 4.12 (lowest) described as highly attained.

The correlation analysis between the leading the role on environmental awareness in terms of intensified lessons regarding environment on all Science, the encouragement to teachers to attend lecture-seminars, workshops, conferences and others for a relating to environmental education and establishment of YES-O by all public secondary schools and leading the role on environmental awareness has significant relationship. However, there result shows there is no significant correlations between establishment of registering, monitoring and evaluating the YES-O and other related organization under the administration and supervision of CSCA and leading the role on environmental awareness.

The correlation analysis between the school-based activities in terms of intensified lessons regarding environment on all Science, the encouragement to teachers to attend lecture-seminars, workshops, conferences and others for a relating to environmental education and establishment of YES-O by all public secondary schools and leading the role on environmental awareness has significant relationship. However, there result shows there is no significant correlations between establishment of registering, monitoring and evaluating the YES-O and other related organization under the administration and supervision of CSCA and school-based activities.

The overall best predictors that emerged are intensified lessons regarding environment on all Science subjects and encouragement to teachers to attend lecture-seminars, workshops, conferences and others for a relating to environmental education.

5. CONCLUSION

The study concludes that the schools in partnership with the stakeholders have implemented varied environmental education activities efficiently that has contributed to the attainment of the goals of strengthening education through different approaches and strategies applied in the activities implemented. The activities implemented do not only focused on students development but also included providing opportunities for partners like community participate in instilling values of environment literacy to the students. The good implementation of lessons integration and competency building for the teachers and partners helped in providing guidance to the students towards energy conservation and environment care through clean up drives and tree planting which are activities that can help in opening the minds of the students on their importance of their roles and participation in the preservation and conservation of resources and environment for the present and future generation.

REFERENCES

- Blemeistein, D.T. and Saylan, C., 2007. The Failure of Environmental Education (and How We Can Fix It). *PLoS Biolody*, 5(5).
- Bass, B.; Avolio, B. (2014). Multifactor Leadership Questionnaire Manual (Third Edition). Menlo Park, CA: Mind Garden, Inc.
- Bass, B. M. (2014). Bass & Stogdill's handbook of leadership: Theory, research, & managerial applications (3rd ed.). New York: Free Press.
- Bailey, K. D. (2014). Methods of social research. (4th ed.). New York: The Free Press.
- Balyer, A. (2015). School Leadership Styles of School Principals: A Qualitative Research Based on Teachers' Perceptions conducted. *International Online Journal of Educational Sciences*, 2012, 4 (3), 581-591. ISSN: 1309-2707.
- Bennis, W., & Nanus, B. (2015). Leaders: The strategies for taking charge. New York: Harper & Row.
- Beyene, Berhanu (2016). Transformational Leadership Roles of Principals at Ethiopian Secondary Schools. Dissertation Paper. University of South Africa.
- Burns, J.M, (2015), Leadership, N.Y, Harper and Row.
- Department of Education. (2011). DO 52, s. 2011 - Strengthening Environmental Education in Public and Private Schools. Retrieved from: <http://www.deped.gov.ph/orders/do-52-s-2011>
- Department of Education. (2003). DO 72, s. 2003 - Establishment of the Youth for Environment in Schools (YES) Organization. Retrieved from: <http://www.deped.gov.ph/orders/do-72-s-2003>
- Department of Education. DepEd Memorandum No. 133 (2014). Retrieved from <https://goo.gl/yccFvd>
- Denzin, N. K. & Lincoln, Y. S. (2015). The sage handbook of qualitative Research. 3rd Edition, Sage, Thousand Oak.
- ENSI, 2013-last update, Environment and School Initiatives. Available: <http://www.ensi.org/> [3/24, 2014].
- Fullan, M., 2011. The new meaning of educational change. 4th ed. edn. New York: Teachers College Press
- Gruenewald, D. (2003).The Best Of Both Worlds: A Critical Pedagogy of Pace.Retrieved: March 22, 2019 from: <https://www.researchagete.net>

- Gough, A., 2011. The Australian-ness of Curriculum Jigsaws: Where Does Environmental Education Fit? *Australian Journal of Environmental Education*, 27, pp. 9-23.
- Horne, T., Instruction, P., & Superintendent, D. A. (2009). Department of Education, (72).
- Jeronen, E., Jeronen, J. and Raustilla, H., 2013. Environmental Education in Finland---A Case Study of Environmental Education in Nature Schools. *International Journal of Environmental & Science Education*, 4(1), pp. 1-23.
- Karlgaard, Rich (2014). Peter Drucker on Leadership. Sunway University Malaysia. Jeffrey CHEaf Foundation. Retrieved from https://www.forbes.com/2004/11/19/cz_rk_1119drucker.html#71cdc1476f48.
- Kerkhof, van de M. (2006). The repertory grid technique, (RGT), Integrated assessment, http://www.ivm.vu.nl/en/Images/PT4_tcm53-161509.pdf,
- KWAN, T. and CHAN, E., 2004. Using Theory of Learning and Awareness to Bring About Learning Through a School-based Environmental Field Project. *International Research in Geographical & Environmental Education*, 13(4), pp. 303-328.
- Legarda, L. (2015). Environmental Awareness Programs. Retrieved: March 22, 2019 from: leagarda.l@gmail.com
- Leithwood, K. et al. (2013). Seven Strong Claims About Successful School Leadership. Retrieved: March 22, 2019 from: <https://www.researchgate.net>
- Lavecchia, E. (n.d.). In Pursuit of Sustainable Development: Social and Political Efforts to Effectively Embrace the Principles Underlying International Environmental Law
- LOUKOLA, M., ISOAHO, S. and LINDSTRÖM, K., 2001. Education for sustainable development in Finland. Helsinki: Ministry of Education, Department for Education and Science Policy.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2016). Seven strong claims about successful school leadership. Nottingham, UK: National College of School Leadership.
- Leithwood, K., & Jantzi, D. (2016). school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement*, 17 (2), 201-227.
- Leithwood, K., & Jantzi, D. (2017). A review of school leadership research 2013-2015. *Leadership and Policy in Schools*, 4 (3), 177-199.
- Manteaw O. (2011). Education for Sustainable development .Retrieved: March 22, 2019 from: <https://eric.ed.gov>
- Morelli, J. (2011). Environmental Sustainability: A Definition for Environmental Professionals. *Journal of Environmental*