

*International Article*

# **‘SEEDS’ of ‘Good Lessons’ through ‘Many a Drop’ – Media Initiation in Environmental Education: An Indian model of environmental pedagogy**

Nithin Kalorth, Mahatma Gandhi University, India

Rohini Sreekumar, Monash University, Australia

## **Abstract**

Environmental communication is now an emerging and a significant curriculum from schools to research centers. The effective and efficient environmental communication occurs when learners interact with their surrounding environment/ecology in which they live and reciprocate for sustainable protection and restoration of it. Developing countries in Asia and Africa are now setting up new role models and practices in curricula of environmental communication. The traditional theory based environmental communication curriculum of the last century is now actively investigated and restructured through community based learning, affirmative actions, and student centered participatory curriculum. Kerala, a southern State in India, serves as an exemplar of this new eco-venture. Through case studies like, Nalla Paadam (Good Lesson), Palathulli Project (Many a Drop Project) by the Malayalam language daily ‘Malayala Manoram’, and SEED project by another Malayalam daily ‘Mathrubhumi’, this paper analyses the innovative curriculum practices in the state of Kerala in India.

## Introduction

The emergent trends in multi-disciplinary pedagogy opened up new vistas in teaching and learning of environmental communication through diversified and blended approaches. Environmental communication is now a significant curriculum in schools and research centers, and the possibilities of communication in relation to environmental interaction have become vital. However, the importance and impact of the environmental communication education is minimally recognized by the community.

The effective and efficient environmental communication occurs when learners interact with their surrounding environment/ecology in which they live and reciprocate for the sustainable protection and restoration of it. This new approach of holistic teaching and learning through praxis now incorporates crisis/disaster management or mitigation, strategic planning, nature restoration, sustainable growth models, community centered learning, people's participation, and grassroots level self-help developments in relation with nature and humans. Developing countries of Asia and Africa are now setting new role models and practices in curricula of environmental communication. The traditional theory based environmental communication curriculum is now actively investigated and restructured through community based learning, affirmative actions, student centered participatory curriculums. Praxis of placing the primary learner (stakeholder) as the locus of curriculum implementation and evaluation is gaining prominence. Here, school students form the major target audience as environmental education should become a part of their routine in their young lives.

This paper analyzes two successful case studies of such pedagogy in the southernmost state of India, Kerala. These creative and innovative curriculum practices were implemented through the collaboration of two vernacular newspapers and the State's primary school education system. The two leading news dailies in Kerala, *Malayala Manorama* and *Mathrubhumi* spearheaded these learning projects in the primary classrooms of the state schools under their supervision and guidance. These two dailies beyond their circulation and readership interest, invested their time, space, and resources among the primary school kids in popularizing the importance of environment and created awareness programs for restoration, preservation, and sustainable practices through projects like 'Nalla Paadam' (Good Lesson), 'Palathulli Project' (Many a Drop Project) by *Malayala Manorama*, 'SEED' (Student Empowerment for Environmental Development) by *Mathrubhumi*. United Nations (UN), UNESCO, World Bank and many notable international agencies cited these as unique and awarded them with many acclaims and recognitions. Eco-Clubs and nature clubs with specific purpose and targets were created

in each school under the leadership of these two newspapers. “*Catching those Young*” was the key agenda, in implementing these projects right in the primary school level of an organized learning system. These projects became highly successful in creating awareness among young children and inspired them to take their own efforts/actions for the environment, both in the school and at home. These events were blended with the school curriculum and inspired both the students and teachers to continue the initiatives outside the school also. This paper examines this innovative association between news media and the primary school education system in nurturing an eco-friendly generation. As such, this paper focuses on the collaborative models of such projects by highlighting the role played by school, media, and the significant paradigm shifts in curriculum.

### **Environment: Global and regional agenda**

The environment can be identified as a political body where it is spaced opposite to the development characterized as urbanization and industrialization. The frontiers of political powers took environment as a body of line to counter and support their arguments. The industrialist and capitalist also used the environment as a way of modern public relations with a brand of corporate social responsibility. When the environment became a game changer of social movements, various laws and acts were entitled to the protection of the nature. Environmental activism also came into existence which formed a parallel socio-political sphere. This sphere formed a universal profile, where the voice of nature became distinctive. The international non-profit organizations were set up as the result of universal voice of nature and its protection. The Earth System Governance Project (ESGP), Global Environment Facility (GEF), Intergovernmental Panel on Climate Change (IPCC), International Union for Conservation of Nature (IUCN), United Nations Environment Programme (UNEP), World Nature Organization (WNO) and the Centre for Science and Environment (CSE) represent examples of such bodies which collaborate with national and regional agencies for ensuring political and social rights of the environment.

The idea about environment does not only frame and re-frame the dominant paradigms of nature, but also thinks about the “contemporary relations” (Milstein, 2009) of the nature. This is the space where environmental communication acquires status in primary and higher education. The students at school should be able to differentiate the dominant political ideologies connected with environmental agendas, with reality. Global agenda and conservative programs may not be applicable in specific local/regional cases. Human relations with nature should be understood in a regional way where the

conservative and educational programs are conceived, taking into consideration the specific environmental attributions, climatic conditions, and social life.

As far as Kerala is concerned, the major attraction of this Southern coastal State in India is its diverse ecosystems and terrains that support a vast range of flora and fauna. It is this varied demography that made Kerala one of the 'ten paradises on earth' by National Geographic Traveler (as cited in "Tourism Beckons", 2004). The crust of this popularity lies in its eco-tourism whether it is beach surfing or mountain trekking. The result of this is the commodification of nature in the name of tourism (and conservation which in turn churn huge revenue as far as wildlife sanctuaries in Kerala is concerned which are also popular tourist destinations). Here, nature is perceived as only a medium to meet economic benefits. Although the environment has recently gained much attention from the media in Kerala through the Western Ghats Ecology Expert Panel who suggested those special zones in western ghats should be guided under greener and sustainable practices. A large part of this zone comes under Kerala territory inhabited by farmers who opposed this panel suggestions as they feared it would make their livelihood difficult. The state is known as "God's Own country" and also received international appreciation for its natural beauty (O'Dwyer, 2014). Despite these facts, Kerala also witnessed various environmental issues which even changed political equations of the state (Bijoy, 2006; Misra, 2010; Guha, 2011; Pulla, 2013; Suchitra, 2014; Vijay, 2015). Hitherto, environment movements and activism led a huge contribution in shaping up the identity and political sphere of a society. The state of Kerala with 14 revenue districts has a long history and strong background of socio-political movements that led to claim a unique place in the Indian social sphere.

The real environmental issue in Kerala is even more austere. Though Kerala has 44 rivers, it is often hit by drought and lack of drinking water. It is to be noted here that Kerala is also blessed with two main rainy seasons, Southwest monsoon and Northeast monsoon, which is not sufficiently utilized. However, climate change has taken its toll on the definite seasonal pattern. This along with burgeoning demand for land (leading to deforestation and destruction of irrigation land) transferred agrarian society to a consumer State. The real effect of this environmental depletion, if not seriously considered, would be felt upon the coming generations who are already moving away from the soil to skyscrapers. Hence the main agenda of any environmental education should be to inculcate a nature-friendly living taking into consideration his/her immediate environmental surroundings.

To face challenges of the future, the future leaders should be capable enough to understand those challenges and face them with the help of the knowledge acquired and skills developed from school. To break the indoor habit of classroom, education policy makers included environmental education (EE) as part of the curriculum. This will offer opportunities for rich, hands-on, real world and relevant learning across the curriculum (Archie, 2003). Also, this will ensure that they understand the proximity to nature, that they have access to views of their surroundings, and that they have daily exposure to natural settings which will increase the ability of children to focus and improve cognitive abilities (Wells, 2000). Dymont and Bell (2006) also noted the importance of natural settings for child growth, which make them physically active, more aware of good nutrition, more creative, and more civil to one another. The structures of modern schools and colleges are planned with emphasis on “green spaces.” Here the scope of environmental communication (EC) is also very obvious with the role of communication in motivating and persuading students towards the environment (Tanner, 1980). The field of environmental communication as academic and research interest is emerging within the last decade in which most of the researchers laid stress on the scope, challenges and future of the field (Talay et al., 2004; Cox, 2006; Carleton-Hug & Hug, 2010; Hopkins, 2015).

The role of media in communicating information about the environment is very important and vital. This role is not just the reporting of environmental issues, but providing space for educating the public and involving them in preserving it. As far as Kerala is concerned, newspapers and other media have played a pivotal role in bringing up social changes and political reforms. With over ten news channels and more than eight mainstream newspapers, media in Kerala cater to diverse audiences. It is amidst this situation that two major language dailies in Kerala, *Malayala Manorama* and *Mathrubhumi* brought forward with an innovative idea of implementing environmental communication lessons along with the regular school curriculum. The collaboration of Kerala schools and colleges with potential stakeholders like media, governmental organizations, and non-profit organizations are ideal examples of effective environmental communication in the curriculum. These creative and innovative curriculum practices were implemented through the collaboration of two vernacular newspapers and the state’s school and higher education system.

### **Education system in Kerala**

The school education carries a significant role in shaping the attitude and behaviour of a child. Thus, the lessons learned and practiced in schools will have a long term effect in a person’s life. Hence, the Primary education system around the world for several

decades has been constantly reviewing and revamping to accommodate the changing needs and social context. The environmental awareness and concerns should cross boundaries of classroom and it should be adapted by the individual's life and become part of the future. It is based on this concept that in 1994, Kerala introduced District Primary Education Programme (DPEP), a student centred educational programme to make the primary education more effective and to provide quality education at the primary school level. The central idea of this pedagogy is 'activity oriented classrooms' where subjects are taught based on group activities and demonstrations that could kindle their interest and make teaching and learning process more exciting and less tedious. Though the programme was initially planned for primary students, this constructive and novel pedagogy was subsequently implemented in higher classes. Rather than confining the students to the classrooms, this system tries to make students active in the teaching and learning processes by making them do group projects, seminars, social service projects, and quizzes. The teaching of lessons became more practical with students actively involved in doing minor social projects related to the topic learned in class. The evaluative process also changed drastically; not only exams, but his/her extra-curricular activities, leadership qualities, and other activities are counted while evaluating the progress of a student. As an effective educational practice, Walberg and Paik (2011) noted that external collaboration and partnership in designing curriculum and learning activities engages the student more than the usual classroom teaching approach offers. These external factors breaks the monotonous activities and engages students on a different level. Hence, the teaching process adopts community visit, educational tours, workshops, and field trips to make learning more interactive and interesting.

This system holds immense possibilities for making environmental communication an essential part of the curriculum either directly or indirectly. Awareness, Knowledge, Attitude, Skills and Participation are key competencies needed for proper and successful environmental education programs (Sinha et al., 1985). Environmental Communication discusses mainly the relation between human beings and nature – and communication concerned “with the ways people communicate about the natural world because they believe that such communication had far-reaching effects at a time of largely human-caused environmental crises” (Milstein, 2009). Environmental communication can be compared with other types of communication like public relation and corporate communication in the sense that the regular contact with the environment and meaning created with the engagements of humans with nature should be clear (Rogers, 1998; Schwarze, 2006). So, this current study tries to locate how media in Kerala has actively participated in making environment a major part of the school curriculum. As part of the current study, the researchers have conducted field surveys and interviews in the districts

of Kasargod, Kannur, Kozhikode, Wayanad, Malappuram, Ernakulam and Kottayam. Information was also gathered from the district and school coordinators along with the help of official websites of both newspapers for validation and clarification.

### ***Nalla Paadam, Palathulli and SEED Projects: Social Welfare through Students***

Learning by doing, performing, exchanging and communicating are the best ways to implement the process into a student's life. Malayala Manorama through its project *Nalla Paadam* (Good Lesson) tries to find the inner meaning of "environment." Here "environment" extends to livelihood, settlement, economics and social concerns of the neighborhood. *Palathulli Project* (Many a Drop Project), another initiative by Malayala Manorama, aims to support and encourage rainwater harvesting and increase awareness about preserving water. *Nalla Paadam* is an overall student development program that includes environmental awareness, taking action for environment protection, finding development issues, crowd funding and crowd raising initiatives. *Nalla Paadam* also encourage a school citizen journalism initiative through which students are motivated to find stories from their locality that could make sense about the basic livelihood or environment. Each school will have one *Nalla Paadam* coordinator under whom students work. A judging team from Malayala Manorama evaluates the works of every school for a span of six months and select one school as "School of Good Lessons." The students involved in activities, engage in social and political interactions. With the support of teacher coordinator, students identify the issues concerning their locality and acts accordingly. For example, students of various districts in our study involved in activities like awareness campaign for conserving the river, helping migrant labourers by teaching them Malayalam, fund raising for helping senior homes, cleaning the backyard of the school and developing a vegetable garden, controlling road traffic in front of schools during peak hours and preparing food items for sales. The final selection procedure of *Nalla Paadam* is conducted through national television where the finalists display their activities and acts to a large public what they have done in the due course. Even though the *Nalla Paadam* is designed to support the goal of each student and school to win the state level competition, the teachers opine that a student who is willing to participate in this endeavour is already a winner in life. The experience of social learning will be long lasting in a student's life. It transforms students' knowledge to Praxis of daily life and enables them to face the world academically, socially, and emotionally. Through *Nalla Paadam*, students get a chance to mingle with the society they live in. The tagline of *Nalla Paadam* is "Kerala created by children."

SEED (Student Empowerment for Environmental Development) is a nature driven educational program started by Mathrubhumi. SEED aims at making environmental education a part of the school educational curriculum and make such activities a part of their daily life (About Seed, 2013). With the tagline, “Social Welfare through Children”, SEED operates with the support of General Education Department, Government of Kerala and Federal Bank, Kerala. SEED mainly focuses on state owned schools where the syllabus and curriculum are standardized but they are also having high participation from private schools too. The project aims at paving the way for a new green culture by assembling high schools, higher secondary schools and upper primary schools in the state (About Seed, 2013). The activities and results of SEED attracted the world environmental organizations. SEED received awards from WAN - IFRA Young Reader Prize, Corporate Social Crusader of the Year, AFAQS 2010, Vanamithra award and various other regional organizations.

### **Blended Learning Methods through SEED**

SEED follows blended learning experience through various projects both online and offline. It encourages students to feel the soil and show compassion towards the surroundings they live in by engaging in environmental activities. The educational zones in Kerala are divided into 38 Education Districts across 14 Revenue Districts. SEED project is implemented in whole throughout 38 educational zones targeting students from the age group of 10-17 years. The idea of SEED actually came up after identifying that environmental degradation is one of the major issues faced by present generations. The students in school, who are future leaders, will lack knowledge and information in order to tackle the environmental issues since the education system focuses on job oriented. SEED also provides a syllabus based learning experience. ‘Season Watch’ is one of such projects initiated by SEED. The SEED schools are asked to observe the changing seasons by monitoring the leafing, flowering, and fruiting of trees. SEED clubs help to record their findings and results are published in a yearly handbook and also presented in an audiovisual format. The results and findings on season changes on plants are directly and indirectly used for curriculum based classes, hence fruitfully making use of the time they spend to do the project. Moreover, class assignments are created using the results and data collected through this project that excites the students in doing these assignments. In the same way, ‘SEED Reporter’ is another project part of SEED, which provides students a chance to report on developmental stories from their locality, the selected stories among which are published in newspapers.



SEED basically functions as the platform providing green clubs and eco-clubs for schools by providing professional training, as well as financial and moral support. Reaching the vast student community was a great challenge faced by Mathrubhumi. They appointed in-house volunteers known as SPOCs (Single point of contact) who work at the regional level to collect data, coordinate, and spread the message. The SPOC may be anyone from the organization, regardless of position or hierarchy. Later on, they developed proper structure so that one SPOC controlled a maximum of 10 schools. Each of the participating schools has a SEED club with a teacher co-ordinator. SEED club members lead the activities under the supervision of the teacher co-ordinator. This made them receive feedback in a more convenient way. The School SPOCs periodically visits participating schools and obtain their reports along with evidence. They report the progress to the Education District SPOCs, who in turn will report to the Revenue District SPOC (Seed, 2013). A teacher co-ordinator was selected from each school who controls the activities of the school. Every year, SEED conducts district level teacher training programs through which agendas are set and evaluated.

The projects of SEED aim at multi modal communication through the following ways:

1. Making students aware about the environmental issues like global warming, deforestation, water and air pollution, accumulation of plastic waste, etc., which is a great threat to the life existence on the earth.
2. Enabling them to take action by practicing the knowledge through their skills. Through this SEED aims to develop a new green culture in the State of Kerala by assembling school children.

Apart from state owned and private schools, SEED is also implemented in central government owned schools like Jawahar Navodaya Vidyalaya, where co-education is provided within a fully residential system. Such is in the case of Jawahar Navodaya Vidyalaya, where Wayanad successfully maintained bio gardens and farms by which they produced organic vegetables and fruits for daily purposes. In the year 2011, this school won the “*Vishishta Haritha Vidyalaya Award*” (Supreme Greenery School Award) which is the highest reorganization given to the school for its outstanding activity throughout the year (Mathrubhumi, 2011). The *Shreshta Haritha Vidyalayam Award* (Prime Greenery School Award) is given out across 14 revenue districts; one school from each district will be awarded the ‘*Shreshta Haritha Vidyalayam Award*. Out of the 38 education districts, three schools in each educational district (total 114 schools) will be awarded *Haritha Vidyalayam*

*Award* (Greenary School Award). An Individual award is also distributed to the best teacher coordinator and student for their work.

The media coverage and encouragement from teachers made students stand for the rights of nature. These media organizations, support the philosophy of “catching them young.” They use the potential of the wide platforms (print, radio, television and web) available to reach the audience as well as the students. They sought to engage in social reality and environmental issues. They became the carriers of messages to the public and created a sense of self-esteem and responsibility towards the environment. The importance of such school based environmental communication pedagogy is very vital in a country like India. These evidence based results show that potential stakeholders with school management and curriculum policy makers could bring impact among society via students. The existence of the child-centred, school—news media collaborations in environmental education provided students with opportunities to raise critical questions, to apply logical thinking on environmental issues, and to persuade the development of their own creative and constructive solutions.

## **Conclusion**

The academia of 21st century holds significant and substantial opportunities to explore diverse routines with students in order to make learning appealing and thriving. Sampson (2007) proposes a list of literacies to be made a part of present educational curriculum—ecoliteracy, financial literacy, media literacy, emotional literacy, information literacy, aural literacy, visual literacy, multicultural literacy, the arts and creativity, physical fitness and nutrition, cyber literacy, and global competencies. Kellner (2006) puts forward that these literacies and competencies are necessary conditions to equip people to participate in the local, national and global economy, culture, and polity. Kellner places further emphasis on crucial links between literacy, democracy, empowerment, and participation and “without developing adequate literacies differences between haves and have notes cannot overcome and the individuals and groups will be left out of the emerging economy, networked society and culture” (2006).

All the aforementioned media initiated projects in Kerala provided the idea about the “environment” which was constructed by the media. It can be argued that these images and the way of understanding the environment and nature are mediated through these projects. The term “environment” does not only include the natural beauty, aqua or agriculture, but also the whole ecology where human and nature coexist. In this context, issues of tribe—their land and identity—politics of neglect and negotiation takes place. While the educational values are spread with the environmental communicative messages,

future citizens tend to seek disclosures and dialogues for such spaces. Theoretically, these media supported projects encourage “public participation” in environmental activities. They encourage students to be motivated and transfer the lessons they learned from school to home and to society. *Nalla Paadam and SEED* calls attention from students to involve in contemporary environmental issues by conducting workshops, quiz competition and study classes. For example, the concept of youth parliament was initiated by SEED to bring out the real political concerns regarding environment for discussion among student leaders. These student level projects mobilizes the media and in depth community to gather support which will result in a change. This type of learning paves the way to effective activism for the environment. These types of protests can result from motivated communication which will result in meaningful questioning.

---

*\*Authors:*

*Nithin Kalorth is pursuing his PhD from the School of Social Sciences in Mahatma Gandhi University, India. Robini Sreekumar is pursuing her PhD from the School of Arts and Social Sciences at Monash University.*

---

### References

- About seed. (2013, May 7). *MBISEED*. Retrieved July 26, 2015, from [http://www.mbiseed.com/view\\_page.php?id=6](http://www.mbiseed.com/view_page.php?id=6)
- Archie, M. (2003). *Advancing Education through Environmental Literacy*. Alexandria, Va.: Association for Supervision and Curriculum Development.
- Bijoy, C. (2006). Kerala's Plachimada struggle. *Economic and Political Weekly*, XLI(41).
- Cantrill, J., & Oravec, C. (1996). *The Symbolic Earth: Discourse and our creation of the environment*. Lexington, Ky.: University Press of Kentucky.
- Carleton-Hug, A., & Hug, J. (2010). Challenges and opportunities for evaluating environmental education programs. *Evaluation and Program Planning*.
- Cox, J. (2006). *Environmental Communication and the Public Sphere*. Thousand Oaks: Sage Publications.
- Dewey, J. (1997). *Democracy and Education*. Champaign, Ill.: Project Gutenberg.
- Dyment, J., & Bell, A. (2006). Active by design: Promoting physical activity through

- school ground greening. *Children's Geographies*, 463-477.
- Flor, A. (2004). *Environmental Communication: Principles, approaches, and strategies of communication applied to environmental management*. Diliman, Quezon City: University of the Philippines, Open University.
- Gardner, H. (1999). *Intelligence Reframed: Multiple intelligences for the 21st century*. New York, NY: Basic Books.
- Guha, R. (2011, January 31). A nation consumed by the state. *Outlook India*. Jan 31, 2011. Retrieved July 27, 2015, from <http://www.outlookindia.com/article/a-nation-consumed-by-the-state/270136>
- Heller, P. (1995). From class struggle to class compromise: Redistribution and growth in a South Indian state. *J. of Development Stud. Journal of Development Studies FJDS*, 31(5), 645-672.
- Hopkins, C. (2015). Beyond the decade: The global action program for education for sustainable development. *Applied Environmental Education & Communication*, 132-136.
- Kellner, D. (2006). Technological transformation multiple literacies and the revisioning of education. In J. Weiss, J. Nolan, J. Hunsinger, & P. Trifonas (Eds.), *International handbook of virtual learning environments*. Dordrecht: Springer.
- Milstein, T. (2009). Environmental communication theories. In S. Littlejohn (Ed.), *Encyclopedia of communication theory* (pp. 344-349). Los Angeles, Calif.: Sage.
- MacBeath, J. (Speaker) (2013, January 1). Introduction to teaching and learning. *Coursera Online Course*. Lecture conducted from Commonwealth Education Trust.
- Misra, S. (2010, December 10). State of Endosulfan. *Down to Earth*. Retrieved June 26, 2015, from <http://www.downtoearth.org.in/coverage/state-of-endosulfan-2400>
- Nair, G. (2003, December 27). Quality of education on decline in Kerala. *The Hindi BusinessLine*. Retrieved June 26, 2015, from <http://www.thehindubusinessline.com/2003/12/27/stories/2003122700511700.htm>
- Nalla Paadam News. (2015). *Manorama Online*. Retrieved June 15, 2015, from <http://specials.manoramaonline.com/Education/2015/Nallapaadam->

[2015/article-2.html](#)

- O'Dwyer, D. (2014, March 7). Kerala, India: They don't call it 'God's Own Country' for nothing. *Washington Post*. Retrieved June 26, 2015, from [http://www.washingtonpost.com/lifestyle/travel/kerala-india-they-dont-call-it-gods-own-country-for-nothing/2014/03/06/12e1d956-98f4-11e3-b88d-f36c07223d88\\_story.html](http://www.washingtonpost.com/lifestyle/travel/kerala-india-they-dont-call-it-gods-own-country-for-nothing/2014/03/06/12e1d956-98f4-11e3-b88d-f36c07223d88_story.html)
- Pulla, P. (2013, June 1). Kerala's Endosulfan tragedy. *Open The Magazine*. Retrieved June 26, 2015, from <http://www.openthemagazine.com/article/nation/kerala-s-endosulfan-tragedy>
- Ram, A., & Pereira, C. (2014). Role of SEED project in propagating environmental awareness for environment conservation: A study on secondary school students of Kerala, India. *IOSR Journal of Research & Method in Education (IOSRJRME)* *IOSR-JRME*, 4(4), 09-14.
- Rogers, R. (1998). Overcoming the objectification of nature in constitutive theories: Toward a transhuman, materialist theory of communication. *Western Journal of Communication*, 62(3), 244-272.
- Sampson, M. (2007). *Multiple Literacies in the 21st Century: The twenty-eighth yearbook: A peer reviewed publication of the College Reading Association 2006*. Logan, Utah: College Reading Association.
- Schwarze, S. (2006). Environmental melodrama. *Quarterly Journal of Speech*, 92, 239-261.
- Seed. (2013). *MBISEED*. Retrieved June 26, 2015, from [http://mbiseed.com/view\\_projects.php?id=1](http://mbiseed.com/view_projects.php?id=1)
- Senecah, S. (2004). The trinity of voice: The role of practical theory in planning and evaluating the effectiveness of environmental participatory processes. In S. Depoe, J. Delicath, & M. Elsenbeer (Eds.), *Communication and Public Participation in Environmental Decision Making*. Albany: State University of New York Press.
- Sinha, S., Jangira, N., & Das, S. (1985). *Environmental Education: Module for Pre-Service Training of Social Science Teachers and Supervisors for Secondary Schools* (W. Jacobson, Ed.). UNESCO Division of Science, Technical and Environmental Education.
- Spring, J. (2007). Ways of seeing and a global core curriculum. In *A New Paradigm for Global School Systems: Education for a long and happy life*. Mahwah, N.J.: Psychology

Press.

- Suchitra, M. (2014, September 10). Kerala tribals stand and protest for land. *Down to Earth*. Retrieved June 26, 2015, from <http://www.downtoearth.org.in/news/kerala-tribals-stand-and-protest-for-land-46275>
- Talay, I., Gunduz, S., & Akpınar, N. (2004). On the status of environmental education and awareness of undergraduate students at Ankara University, Turkey. *International Journal of Environment and Pollution IJEP*, 293-293.
- Tanner, T. (1980). Significant life experiences: A new research area in environmental education. *The Journal of Environmental Education*, 20-24.
- Tourism Beckons (2004, May 11). *The Hindu*. Retrieved from <http://www.thehindu.com/edu/2004/05/11/stories/2004051100040100.htm> on 12 June 2015
- Vijay, A. (2015, January 10). Hear these original inhabitants. *The Hindu*. Retrieved June 16, 2015, from <http://www.thehindu.com/opinion/open-page/open-page-hear-these-original-inhabitants/article6775668.ece>
- Vosniadou, S., Walberg, H., & Paik, S. (2001). Effective educational practices. In *How Children Learn* (pp. 24-47). Geneva: The International Bureau of Education—IBE.
- Wayanad Jawahar Navodaya backs Visishta Haritham Award. (2011, March 29). *Mathrubhumi*, p. 1.
- Wells, N. (2000). At home with nature: Effects of "Greenness" on children's cognitive functioning. *Environment and Behavior*, 775-795.