# Comparative analysis of attitude of rural and urban teachers in inclusion of environmental education

Dr. Ankur Singh

Assistant professor Davanand Women's Training College, Mac Robertgunj Kanpur, UP

# Abstract

The gradual development of an attitude of environmental care and awareness, emphasizing that this mindset must be instilled in children from an early age, integration of environmental understanding and balance maintenance into school curricula and activities. The benefit of technological progress but underscores its detrimental impact on the environment, leading to issues such as pollution, global warming, deforestation, wildfires, floods, and food scarcity. The author highlights the urgency of taking immediate steps to address these concerns and emphasizes the collective responsibility of individuals in preserving the environment. The ultimate goal is to save what remains and work towards a sustainable future for everyone.

# I. Introduction

The cultivating an attitude of care for the environment and fostering awareness of our actions toward nature is a gradual process that begins in childhood. To achieve this, the author suggests integrating environmental awareness into school curricula and activities from an early age. The text acknowledges the positive impact of technological advancements on human progress but raises concerns about the irreversible damage these advances have caused to the planet. Highlighting issues such as pollution, global warming, deforestation, and natural disasters, the author stresses the need for immediate and urgent action by individuals to address these challenges and work towards building a sustainable future for all. By incorporating some strategies, schools can play a pivotal role in nurturing environmentally conscious individuals who understand, appreciate, and actively contribute to the well-being of the planet.

Environmental education in schools is a crucial component of fostering environmental literacy, responsible citizenship, and sustainable practices. By incorporating some strategies, schools can play a pivotal role in nurturing environmentally conscious individuals who understand, appreciate, and actively contribute to the well-being of the planet. The recognition of the need for Environmental Education (EE) in India, leading to concerted efforts to reorient and formalize EE within the education system, The University Grants Commission (UGC) has made EE a compulsory subject for undergraduate students in Arts, Science, and Commerce. At the school level, the National Council of Education Research and Training (NCERT) and State Education Councils across India have also mandated EE. Furthermore, revisions to school textbooks at all levels and in all subjects have been undertaken to seamlessly integrate environmental education across various educational levels in India. Here are key aspects of incorporating environmental education in schools:

1. Incorporate into Curriculum: Integrate environmental education into the school curriculum across subjects, ensuring that students learn about environmental issues in science, geography, social studies, and other relevant subjects. This helps reinforce the interconnectedness of environmental issues.

2. Outdoor Education and Field Trips: Organize field trips and outdoor activities that provide students with direct experiences in nature. This hands-on approach enhances their understanding of ecosystems, biodiversity, and environmental processes.

3. Experiential Learning: Use experiential learning methods, such as projects, experiments, and hands-on activities, to engage students in environmental issues. Practical experiences make the concepts more tangible and memorable.

4. Promote Environmental Stewardship: Foster a sense of environmental stewardship by encouraging students to actively participate in school environmental initiatives. This can include tree planting, waste reduction programs, and community clean-up projects.

5. Use of Technology: Incorporate technology to enhance environmental education. Utilize educational apps, online resources, and virtual simulations to illustrate environmental concepts and explore global environmental issues.

6. Multidisciplinary Approach: Implement a multidisciplinary approach that connects environmental education with various subjects. This encourages students to see the relevance of environmental issues in different aspects of their education and daily lives.

7. Guest Lectures and Experts: Invite environmental experts, scientists, and conservationists to deliver guest lectures or conduct workshops. This provides students with insights into real-world environmental challenges and possible solutions.

8. Community Involvement: Engage with the local community to incorporate local environmental issues into the curriculum. Collaborate with environmental organizations, local authorities, and community members to enrich students' understanding of the specific environmental challenges in their region.

9. Sustainable Practices in Schools: Model sustainable practices within the school environment. Implement waste reduction, energy conservation, and water efficiency measures on school grounds. This not only demonstrates environmental responsibility but also provides practical examples for students.

10. Global Perspective: Connect students to global environmental issues. Discuss international efforts, treaties, and collaborations addressing environmental challenges. This helps students understand that environmental issues are interconnected and require global cooperation.

11. Critical Thinking and Problem Solving: Develop critical thinking skills by encouraging students to analyze environmental problems, propose solutions, and evaluate the impact of human activities on the environment. This prepares them to address complex environmental issues in the future.

12. Assessment and Evaluation: Integrate environmental education into assessment methods. Include projects, presentations, and research assignments that assess students' understanding of environmental concepts and their ability to apply this knowledge.

13. Continuous Professional Development: Provide continuous professional development opportunities for teachers to stay updated on environmental issues and effective teaching methods. This ensures that educators are well-equipped to deliver quality environmental education.

14. Environmental Clubs and Activities: Establish environmental clubs or student-led initiatives that allow students to actively participate in environmental projects, campaigns, and awareness activities.

15. Monitoring and Evaluation: Regularly monitor and evaluate the effectiveness of environmental education programs. Collect feedback from students, teachers, and the community to assess the impact and identify areas for improvement.

### Compulsion of environment education for rural and urban students

The compulsion of environmental education for both rural and urban students is essential, and it holds particular significance in addressing the unique challenges and opportunities present in these diverse settings. Making environmental education compulsory for both rural and urban students is essential for creating environmentally literate and responsible citizens. It equips students with the knowledge, skills, and values needed to address local and global environmental challenges, fostering a sustainable and resilient future.

# For Rural Students:

1. Connection to Local Ecosystems: Rural areas often have a direct dependence on natural resources for livelihoods. Compulsory environmental education helps rural students understand the local ecosystem, fostering a connection to the land and promoting sustainable practices.

2. Agricultural Awareness: Many rural communities are engaged in agriculture. Environmental education can provide insights into sustainable farming practices, soil conservation, and water management, ensuring that rural students are equipped with knowledge to enhance agricultural productivity responsibly.

3. Biodiversity Conservation: Rural areas may be rich in biodiversity. Environmental education instills an understanding of the importance of preserving local flora and fauna, contributing to biodiversity conservation efforts and maintaining the ecological balance.

4. Water and Resource Management: Rural students often face challenges related to water scarcity and resource management. Environmental education can empower them with knowledge on water conservation, watershed management, and sustainable use of natural resources.

5. Community Resilience: Understanding environmental issues prepares rural students to address climaterelated challenges, such as changing weather patterns and natural disasters. This knowledge contributes to community resilience and adaptation.

# For Urban Students:

1. Urban Sustainability: Urban areas face specific environmental challenges, including pollution, waste management, and the urban heat island effect. Environmental education equips urban students with the knowledge to address these issues and contribute to urban sustainability.

2. Consumer Awareness: Urban lifestyles often involve high levels of consumption. Compulsory environmental education helps urban students become conscious consumers, making environmentally responsible choices regarding products, energy use, and waste generation.

3. Green Infrastructure: Urban students can benefit from learning about green infrastructure, such as urban parks, green buildings, and sustainable urban planning. Environmental education promotes the importance of green spaces in enhancing urban quality of life.

4. Air Quality and Health: Urban areas frequently experience air pollution. Environmental education raises awareness about the impact of poor air quality on health and encourages students to advocate for and adopt measures that improve urban air quality.

5. Technology and Innovation: Urban students may have more access to technology and innovation. Environmental education can leverage this access by encouraging the use of technology for sustainable practices, such as smart city initiatives, renewable energy solutions, and waste reduction technologies.

#### Attitude of rural and urban teachers in inclusion of environmental education

The attitude of rural and urban teachers towards the inclusion of environmental education can vary due to differences in their backgrounds, contexts, and experiences. Let's explore these attitudes in both settings:

# 1. Awareness and Understanding:

# Urban Teachers:

Urban teachers may have greater exposure to environmental issues due to living in more developed areas with access to diverse educational resources. This exposure could lead to a heightened awareness and understanding of the importance of environmental education. Urban teachers might view environmental education as an integral part of a well-rounded curriculum, recognizing its relevance to urban lifestyles and the interconnectedness of environmental issues with urban development.

#### **Rural Teachers:**

Teachers in rural areas may have a more immediate connection to nature and environmental issues, as rural communities are often more directly dependent on the environment for livelihoods and sustenance. They might view environmental education as essential for instilling values of sustainability, conservation, and a deep understanding of the local ecosystem among their students.

#### 2. Resource Availability:

#### **Urban Teachers:**

Urban schools often have better access to educational materials, technology, and guest speakers. Urban teachers may find it easier to incorporate diverse and interactive methods of teaching environmental education. The availability of resources might positively influence the attitude of urban teachers, making them more inclined to embrace and promote environmental education.

#### **Rural Teachers:**

Resource constraints can be a challenge for teachers in rural areas. Limited access to textbooks, technology, and field trip opportunities may affect the implementation of environmental education in the curriculum. Despite these challenges, rural teachers may be more creative in adapting their teaching methods, relying on local resources and outdoor activities to convey environmental concepts.

# 3. Local Relevance:

#### Urban Teachers:

Urban teachers might need to emphasize the local relevance of environmental issues to urban students who may feel disconnected from nature. Making connections between urban lifestyles and environmental impacts could be a focus. They may incorporate case studies or examples that illustrate the environmental challenges faced by urban communities, fostering a sense of responsibility and stewardship.

#### **Rural Teachers:**

For rural teachers, the local environment is often an integral part of the community's identity. They may naturally integrate local examples and experiences into their environmental education lessons, making the subject more relatable for students.

Rural teachers may emphasize the direct impact of environmental practices on the well-being of the local community, fostering a strong sense of environmental responsibility.

#### 4. Community Involvement:

## **Urban Teachers:**

Urban teachers may have more opportunities to collaborate with environmental organizations, local governments, and community groups that focus on urban sustainability. This collaboration can enhance the effectiveness of environmental education initiatives. In urban settings, teachers may involve students in community-based projects related to environmental issues, encouraging a sense of civic responsibility.

#### **Rural Teachers:**

Rural teachers may engage with local farmers, conservation groups, or governmental agencies working on rural environmental issues. This collaboration can enrich the learning experience for students by connecting classroom lessons with real-world applications. Community involvement might be more integrated into the daily lives of rural students, reinforcing the practical importance of environmental education.

#### **Objectives of the Study-**

1. To conduct a comparative study of the attitude of urban and rural male teachers towards Environmental education.

2. To conduct a comparative study of the attitude of urban and rural women teachers towards Environmental education.

3. To conduct a comparative study of the attitude of male and female teachers towards Environmental education.

### Hypotheses-

1. A significant difference will be found in the attitude of urban and rural teachers towards Environmental education.

2. A significant difference will be found in the attitude of urban and rural teachers towards Environmental education.

3. A significant difference will be found in the attitude of male teachers and female teachers towards Environmental education.

### **Delimitation-**

- 1. Upto ..... district for study area.
- 2. For rural areas, up to 25 teachers and 25 female teachers.
- 3. In the urban area, the number of students is limited to 25 teachers and 25 female teachers.
- Research Process -
- Research Method Survey method has been selected for the presented study.

• **Tools-**The research tools made by the researcher have been translated into English. Test for measuring attitude – This instrument was administered to find out the attitude of teachers towards English. This self-made scale includes 55 statements and a total of 110 marks have been assigned. The time taken to administer it was 30 minutes.

• Variables – Classification of variables in the presented research is as follows –

- Independent variable teachers
- Dependent Variable Attitude towards Environmental education

**Statistical Operations** – In the presented research, mean, standard deviation, significance of difference of mean was calculated for statistical analysis.

**Hypothesis No. 01:** "A significant difference will be found in the attitude of urban and rural teachers towards Environmental education."

Sno	Credentials	Mean of attitude towards Environmental education	St. dev.	Value of CR	df	Significance
1	Urban Teachers	90.4	9.1	3.08	48	The standard deviation at the 1% confidence level is greater than
2	Rural teachers	97.4	6.8			2.68. So there is a significant difference.

 Table Number – 01: Attitude of urban and rural teachers towards Environmental education

# Comparative analysis of attitude of rural and urban teachers in inclusion of environmental education

The value obtained from the calculation of data is 3.08 with 48 degrees of freedom and the CR value obtained from the table at 1% confidence level is more than 2.68. Hence hypothesis number-01 is confirmed. The attitude of rural teachers towards Environmental education was found to be more than that of urban teachers.

**Hypothesis number – 02:** "There will be a significant difference in the attitude of urban and rural teachers towards Environmental education."

	Table Rumber	<b>02.</b> A thirdde of droan and furth female teachers towards Environmental education						
Sno	Credentials	Mean of attitude	St.	Value	df	Significance		
		towards	dev.	of CR				
		Environmental						
		education						
1	Urban female	101.56	9.1			The standard deviation at the 1%		
	teachers			3.06	48	confidence level is greater that $2(8)$ for them, is a given free		
2	Rural female	93.7	5.8			2.68. So there is a significant difference.		
	teachers					difference.		

#### Table Number – 02: Attitude of urban and rural female teachers towards Environmental education

The value obtained from the calculation of data is 3.6, which is more than the tabular value 2.68 obtained at 48 df and 1% confidence level. Hence hypothesis number-02 is confirmed. The attitude of urban teachers towards Environmental education was found to be more than that of rural teachers.

**Hypothesis number – 03:** "A significant difference will be found in the attitude of male teachers and female teachers towards Environmental education."

Sno	Credentials	Numb	Mean of attitude	St. dev.	Value	df	Significance	
		er	towards		of CR			
			Environmental					
			education					
1	Male teachers	50	93.9	8.75			The standard	
					4.43	98	deviation at the 1%	
2	Female teachers	50	101.18	7.63			confidence level is greater than 2.68. So there is a significant difference.	

The value of CR obtained from the calculation of data is 4.43 which is more than the required value of 2.68 for significance at 1 percent confidence level. Hence hypothesis number-03 was confirmed. Female teachers were found to have more attitude towards Environmental education.

# II. Conclusion

In conclusion, the attitudes of urban and rural teachers towards Environmental education are shaped by a complex interplay of factors. While urban teachers may often display more positive attitudes due to better resources and perceived relevance, rural teachers may approach Environmental education with different attitudes influenced by cultural, socio-economic and resource-related considerations. It is important to recognize and address these diversities in order to design effective and inclusive Environmental education strategies that meet the diverse needs of both urban and rural communities.

#### Future perspective:

While both rural and urban teachers recognize the importance of environmental education, their attitudes are influenced by contextual factors. Urban teachers may emphasize the urban-ecosystem connection, while rural teachers may highlight the immediate relevance of environmental education to local livelihoods and ecosystems. Effective strategies for environmental education should consider these contextual nuances and leverage the strengths of both settings to create a comprehensive and inclusive curriculum.

#### **References-**

[1]. Abdullah et. al. (2011). Integration of environmental knowledge across biology, physics and chemistry subject at secondary level in Malaysia. Procedia- Social and Behavioural Sciences, 15, 1024-1028.

- [2]. Alexander, R. & Poyyamoli, G. (2014). The effectiveness of environmental education for sustainable development based on active teaching and learning at high school level- a case study from Puducherry and Cuddalore regions, India. Journal of Sustainability Education, 7.
- [3]. Barak, M. et. al (2007) .Purposely teaching for the promotion of higher-order cognitive skills: A case of critical thinking, Research in Science Education, 37, 353-369.
- [4]. Bhartiya, T. (2016). Study of awareness, attitude and knowledge about environmental education in high school and higher secondary school students. IOSR Journal of Environmental Science, Toxicology and Food Technology, 10 (12), 51-54.
- [5]. Ghosh, K. (2014). Environmental awareness among secondary school students of Golagahat District in the state of Assam and their attitude towards environmental education. IOSR Journal of Humanities and Social Sciences, 19 (3), 30-34.
- [6]. Hassan, A. & Ismail, M. (2011). The infusion of environmental education (EE) in chemistry teaching and student"s awareness and attitudes towards environment in Malaysia. Procedia- Social and Behavioural sciences, 15, 3404 - 3409.
- [7]. Jackson, P. (1992).Conceptions of Curriculum and Curriculum Specialists. Handbook of Research on Curriculum: A project of the American Research Association. New York: Macmillan.
- [8]. Kadji, C. 2002. Evaluation of environmental education programmes as a means for policy making and implementation support: The case of Cyprus primary education. Retrieved from- www.kacee.org.
- [9]. Lacob, M. (2013). Environmental education: policy and practice. 2 (4), 63-71.
- [10]. Mwendwa, B. (2017). Learning for sustainable development: integrating environment education in the curriculum of ordinary secondary schools in Tanzania. Journal of Sustainability Education, 12.
- [11]. Ozden, M. (2008). Environmental awareness and attitudes of student teachers: an empirical research. International Research in Geographical and Environmental Education, 17 (1), 40-55.
- [12]. Palmer, J. (1998). Environmental Education for the 21st Century. London: Routledge.
- [13]. Peter &Cheruto (2013). The need to integrate themes of environmental education in the school curriculum in Kenya. International Journal in Progressive Education and Development, 2 (1), 51-57.
- [14]. Ravindranath, M.J (2007). Environmental education in teacher education in India: Experiences and challenges in the United Nation"s decade of education for sustainable development. Journal of Education for Teaching, 33 (2), 191- 206.
- [15]. Siddqui & Khan (2015). Environmental education: An Indian perspective. Research Journal of Chemical Sciences, 5 (1), 1-6.
- [16]. Stevenson, R. B. (2007). Schooling and environmental sustainability education: From discourses of policy and practice to discourses of professional learning. Environmental Education Research, 13 (2), 265 – 283.
- [17]. Stapp W. (1997). The Concept of Environmental Education. In: The Concept of Environmental Education. Michigan: University of Michigan, pp. 33 36.
- [18]. Sukarjita, et. al. (2015). The integration of environmental education in science materials by using MOTORIC learning model. International Education Studies, 8 (1), 152-159.
- [19]. Teksoz, et. al. (2010). A new vision for chemistry education students: Environmental education. International Journal of Environmental & Science Education, 5 (2), 131 – 149.
- [20]. Teksoz, et. al. (2012). Ecology, literature and Environmental education. International Educational Studies, 5 (3),187-192.
- [21]. Zoller, U. (2004). Chemistry and Environmental Education, Chemistry Education: Research and Practice, 5 (2), 95-97.
- [22]. Zoller, U. (2011). Science and Technology Education in the STES context in primary schools: What should it take? Journal of Science Education and Technology, 20 (5), 444-453.