

“KNOWLEDGE OF SECONDARY SCHOOL TEACHERS TOWARDS ENVIRONMENTAL EDUCATION AND SUSTAINABLE DEVELOPMENT:A CASE STUDY OF HIGH SCHOOL TEACHERS OF DISTRICT KUPWARA OF JAMMU AND KASHMIR STATE, INDIA”

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Abstract

This study provides a detailed description of the teachers' knowledge towards environmental education and sustainable development. A total of 600 teachers from 50 different secondary schools were selected and administered a knowledge questionnaire consisting of 30 items having both positive and negative questions. The sample consisted of secondary school teachers of Kupwara district of Jammu and Kashmir State, India and after the analysis of the collected data, it was found that majority of the teachers have knowledge towards sustainable development and environmental education.

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Introduction

The first IUCN conference in Paris, held in 1948, was the first time that the term environmental education was used (Palmer, 1998); however it was not until the 1960s that the term began to gain more common usage. In 1970, at an IUCN meeting in Nevada, US, the official definition of environmental education was coined (IUCN, 1970), but it was not until the late 1970s that international conferences were held specifically on the subject of environmental education (UNESCO, 1975, 1977). In 1980, the World Conservation Strategy was launched (IUCN et al., 1980), followed by the Tbilisi Plus Ten Conference and The Brundtland Report (UNESCO 1987, WCED, 1987), all of which served to consolidate the international principles of environmental education laid down the decade before. The Brundtland Report was later revised into Caring for the Earth: A Strategy for Sustainable Living (IUCN et al., 1991), which was widely considered to be a timely contribution to the debate on the definition of environmental education, with its focus on translating ideas and principles of sustainable living into practical actions (Palmer, 1998). The declaration of 2005 to 2014 as the Decade of Education for Sustainable Development heralds a new phase in the continuous evolution of environmental education and its subsidiary, conservation education. This initiative, for which UNESCO is the lead agency, is an international educational effort that aims to encourage changes in behavior that will create a more sustainable future in terms of environmental integrity, economic viability and a just society for present and future generations (UNESCO, 2005).

Education is critical for promoting sustainable development and improving the capacity of the people to address environmental and development issues. Both formal and non-formal education is indispensable to changing people's attitudes (UNESCO, 1992). This highlights the importance of education as critical for achieving sustainable development but also emphasizes that both formal and non-formal aspects have to be included as part of the curriculum. Consequently, environmental education, and therefore conservation education, should be considered to include, not just formal education and training, but also public awareness - raising (e. g; posters and media campaigns), school environmental clubs and transfer of indigenous knowledge, etc. (Caroline Howe, London, 2009). Sustainable development is the overarching paradigm of the United Nations. The concept of sustainable development was described by 1987 Brundtland

commission Report as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

Sustainability is a paradigm for thinking about a future in which environmental, social and economic considerations are balanced in the pursuit of development and an improved quality of life. These three spheres - society, environment and economy - are intertwined. For example, a prosperous society relies on a healthy environment to provide food and resources, safe drinking water, and clean air for its citizens. The sustainability paradigm is a major change from the previous paradigm of economic development with its damaging social and environmental consequences. Until recently these consequences have been seen as inevitable and acceptable. However, we now realize that major damage or serious threats to the well-being of humans and the environment in pursuit of economic development have no place within the sustainability paradigm (Education for Sustainable Development, Source Book, UNESCO, 2012). Sustainability is often thought of a long-term goal (i.e., more sustainable world), while sustainable development refers to the many processes and pathways to achieve it (e.g., sustainable agriculture and forestry, sustainable production and consumption, good government, research and technology transfer, education and training, etc.). All sustainable development programs must consider the three spheres of sustainability-environment, society and economy- as well as an underlying dimension of culture. Since sustainable development addresses the local contexts of these three spheres, it will take many forms around the world (ibid, UNESCO, 2012). In 1977, delegates to the United Nations Intergovernmental conference on Environmental Education in Tbilisi, Georgia, in the former USSR, developed a series of fundamental concepts which environmental education (EE) organizations and institutions have accepted as their definition of environmental education. A single goal statement written in Belgrade, Yugoslavia in 1975 has been adopted as a widely accepted goal statement for EE according to the North American Association for Environmental Education (NAAEE, 1996). Environmental Education is a process of developing a world population that is aware of and concerned about the total environment and its associated problems, and which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively towards solutions of current problems and the prevention of new ones (UNESCO – UNEP, 1976 in Athman and Monroe, 2000, p.38).

In the context of India, the National Policy on Education (1986) has envisaged protection of the environment as the core element of education at all levels. It should be developed as one of values among the children. The policy has also recommended the creation of environment consciousness among all ages starting with school education. The section of the policy document states: "There is a paramount need to create a consciousness of the environment. It must permeate all the ages and all sections of society, beginning with the child. Environment consciousness should inform teaching in schools and colleges. This aspect will be integrated in the entire educational process." Similarly, The Supreme Court of India in a writ petition filed by public – spirited lawyer Sri. M. C. Mehta had directed the University Grant Commission and other higher academic bodies to prescribe a course on environment and to consider the feasibility of making environment a compulsory subject at every level of college education. The Ministry of Environment and Forests, Government of India has also been organizing a National Environment awareness campaign since 1986 to create environmental consciousness at all levels of society. Keeping the above aspects in mind, the researcher tried to find out the knowledge of secondary school teachers towards environmental education and sustainable development. The researcher developed a tool for the purpose of collecting data regarding the knowledge towards environmental education and sustainable development and applied the same on 600 secondary school teachers of Kupwara district of Jammu and Kashmir State, India. The researcher used the descriptive type of survey method and simple random sampling procedure to select the sample (Participants) for data collection.

General Profile of the Study

The below mentioned section will study the general profile of the collected sample i.e., 600 secondary school teachers. Figure I indicate the gender distribution of the collected sample of teachers in which 70% teachers are male and 30% teachers are female.

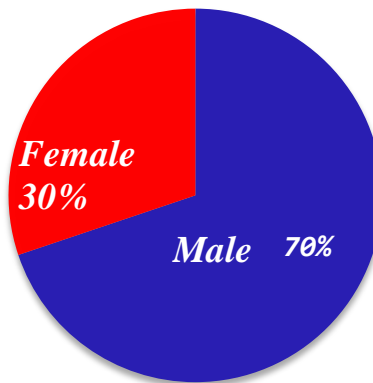


Fig: I **Distribution of Teachers by Gender**

According to the distribution of teachers by locality, the research findings shows that majority of the teachers (68%) are working in rural areas and only (32%) are working in urban areas of the district (Fig. II).

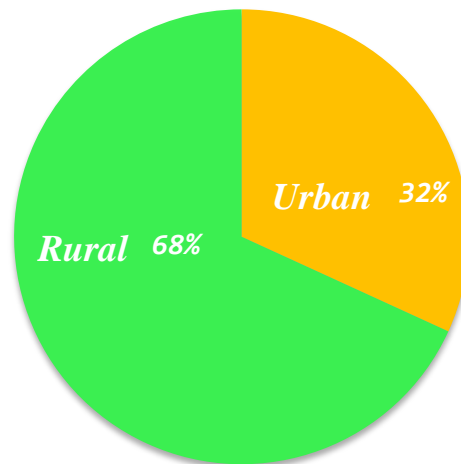


Fig: II **Distribution of Teachers By Locality**

Based on the teaching experience of the sampled teachers, they were categorized into five groups viz; 0-5 years, 6-10 years , 11-15 years , 16-20 years , and 21 years and above. The research findings shows that 35% teachers belong to 0-5 years of teaching experience category , 32% belong to 6-10 years , 15% belong to 11-15 years , 12% belong to 16-20 years and only 6% belong to 21 and above years of teaching experience category (Fig III).

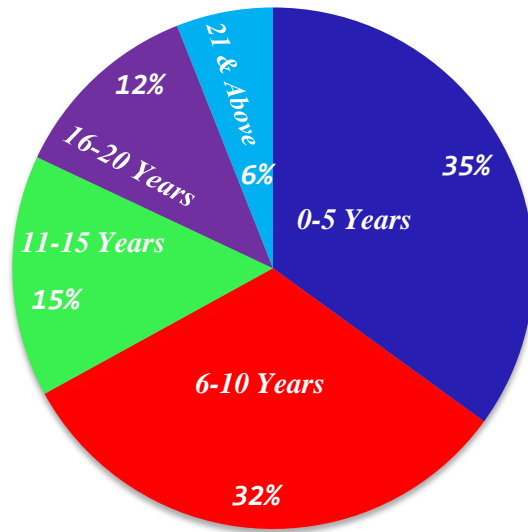


Fig: III Distribution of Teachers by Teaching Experience

According to the teaching subject of the sampled teachers, the research shows that 60% belong to Arts category and only 40% belong to Science stream (Fig IV).

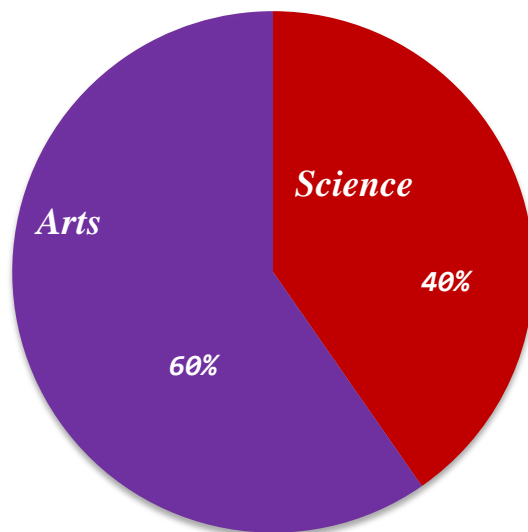


Fig: IV Distribution of Teachers by Teaching Subject

Fig: V represents the Marital Status of the sampled teachers which shows that 66% teachers are married and 34% teachers are unmarried.

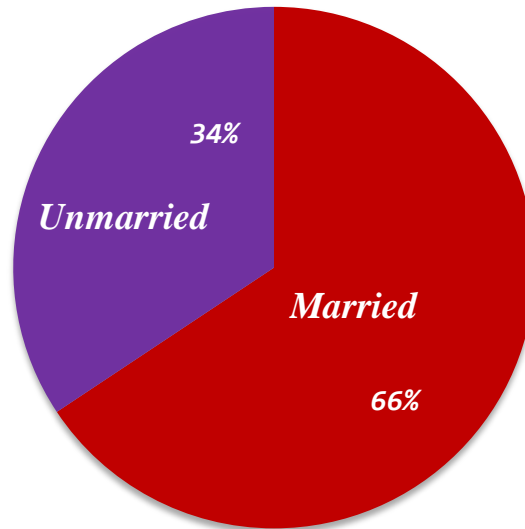


Fig: V Distribution of Teachers by Marital Status

Out of the total surveyed teachers, the type of management of the schools indicates that 52% teachers are working in private educational institutions and only 48% teachers are working in government schools.(Fig VI).

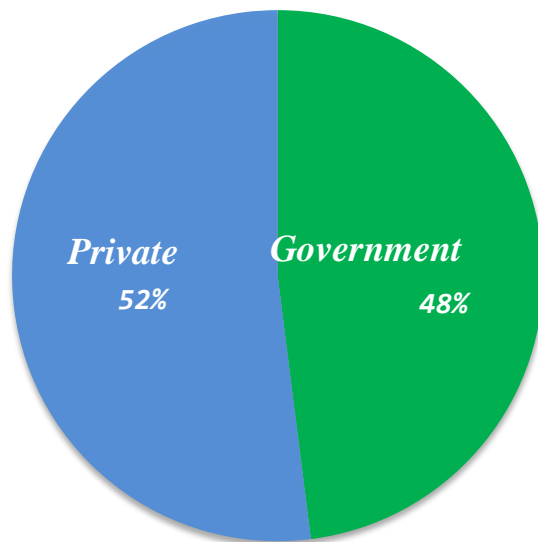


Fig: VI Distribution of Teachers by Type of Management

Based on the income of the sampled teachers, they were divided into five groups like income of the teachers less than one lakh consisting of 41%, one lakh to three lakh(12%), three lakh to five lakh (28%), five to seven lakh (14%) and seven lakh and above income teachers consisting of only 5%. (Fig: VII)

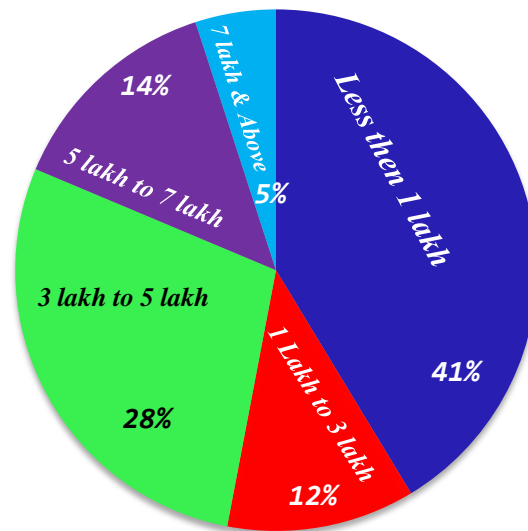


Fig: VII Distribution of Teachers by Annual Income

Discussion and Results

A questionnaire was prepared by the researcher to collect the data regarding the knowledge of secondary school teachers towards environmental education and sustainable development. The questionnaire consisted of 30 questions of multiple choice type in which both positive and negative items were selected and was administered on 600 secondary school teachers of district Kupwara of Jammu and Kashmir State. After the statistical analysis of the collected data, the results reveal that majority of the teachers 92% have knowledge regarding environmental education and sustainable development. Fig: VIII shows the distribution of all teachers (600) responses for knowledge assessment test on environmental education and sustainable development.

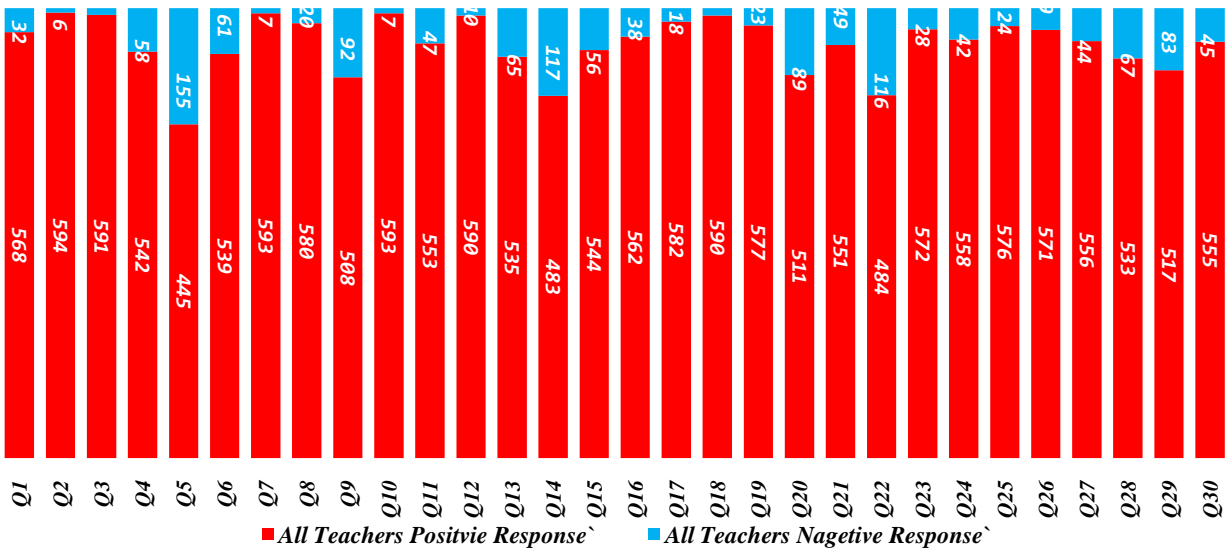


Fig: VIII Distribution of all teachers (600) response for knowledge assessment test of environmental education and sustainable development

Fig IX and X shows the distribution of percentage correct vs. incorrect teachers response to all questions for knowledge assessment test on environmental education and sustainable development.

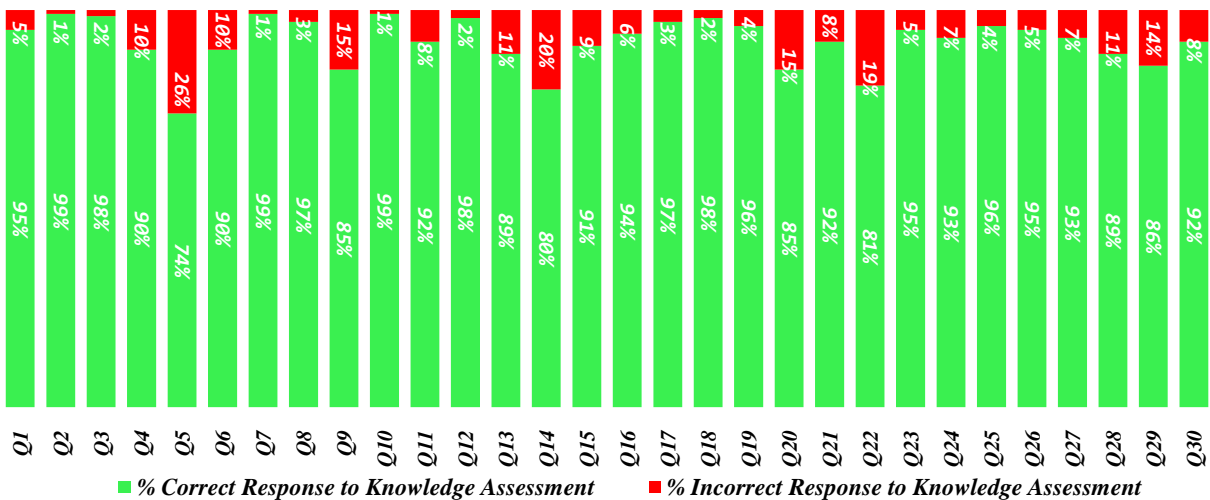


Fig: IX

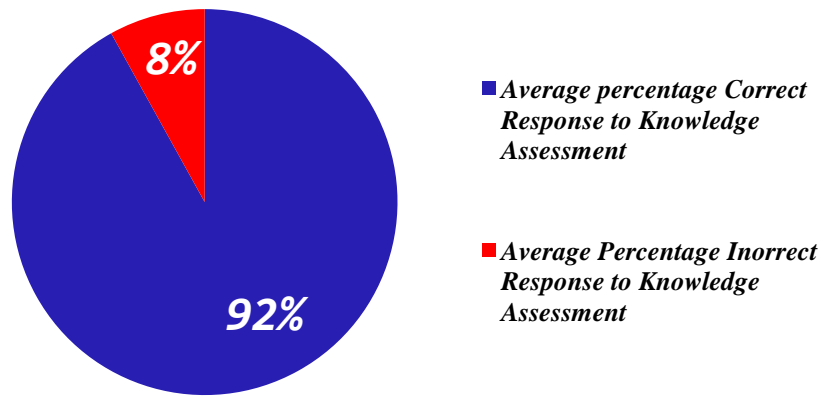


Fig:X

Based on the teaching experience of the sampled teachers, they were grouped into five groups with 0-5 years of teaching experience, 6-10 years, 11-15 years, 16-20 years and 21 and above years of teaching experience. The research findings shows that 0-5 years of teaching experience category teachers have more knowledge towards environmental education and sustainable development (Fig: XI), followed by 21 and above years of teaching experience (Fig: XII), 16-20 years of teaching experience (Fig: XIII), 6-10 years of teaching experience (Fig: XIV), and 11-15 years of teaching experience category teachers (Fig: XV).

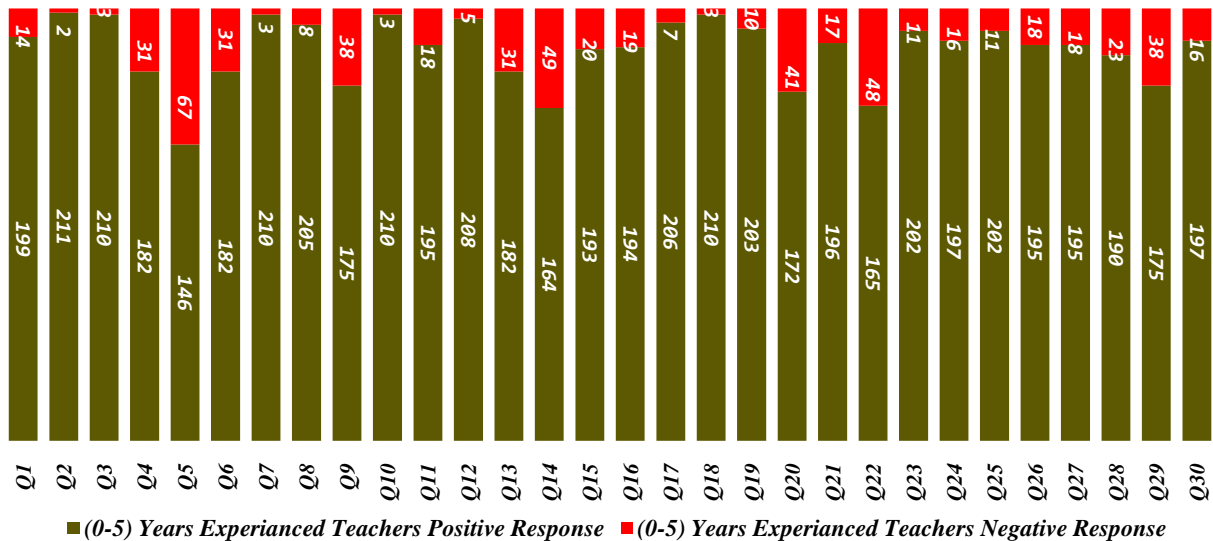


Fig: XI

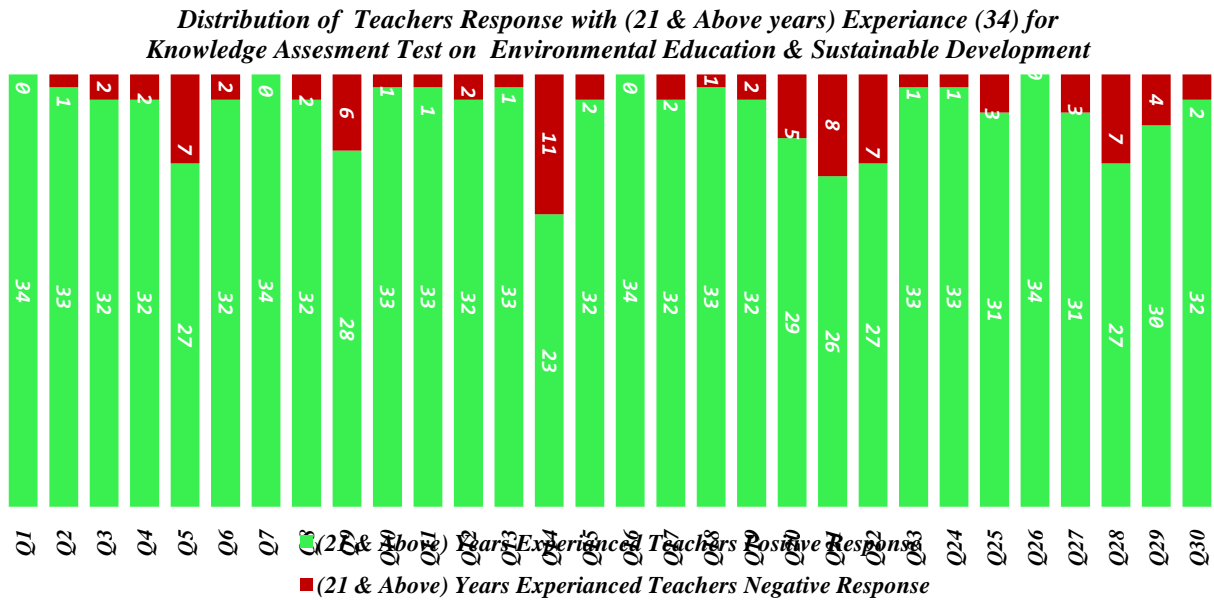


Fig: XII

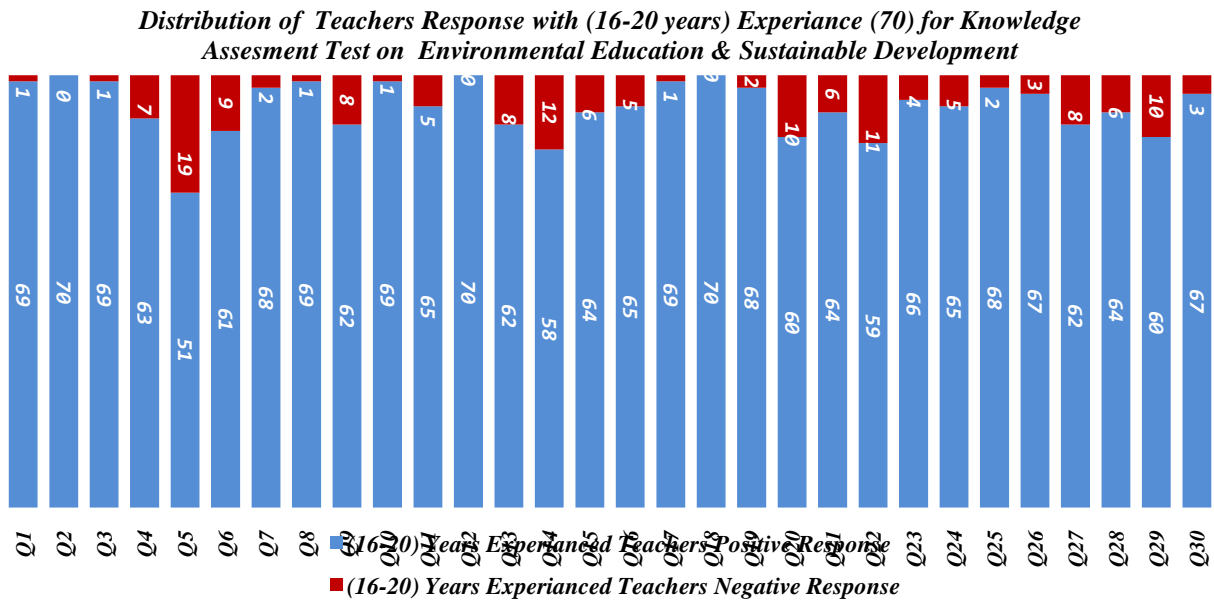


Fig: XIII

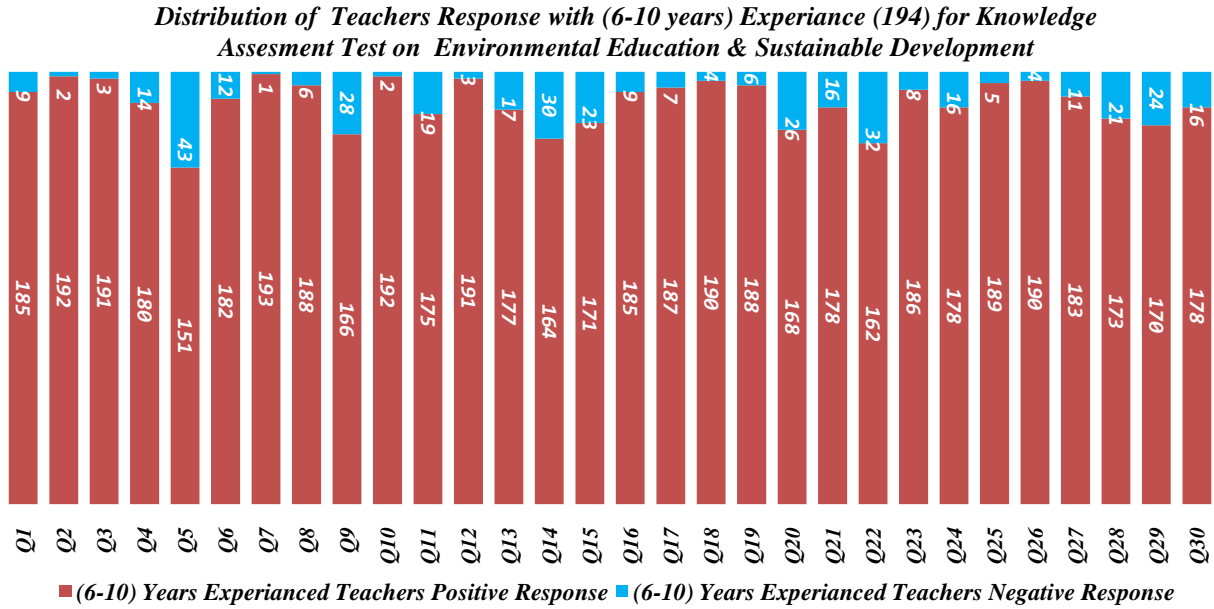


Fig: XIV

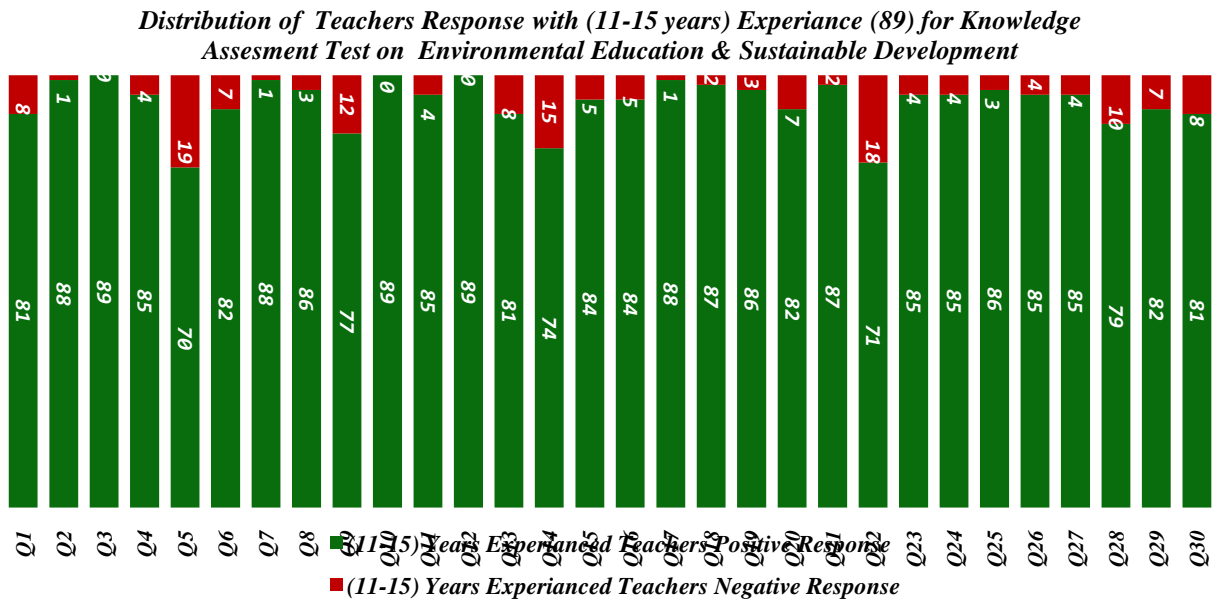


Fig: XV

Conclusion

Environmental education constitutes a comprehensive life-long education, one responsive to changes in a rapidly changing world. It prepares the individual and communities for life, through

an understanding of the major problems of the contemporary, complex world, the problems resulting from the interactions of the biological, physical, social, economic and cultural aspects of the individual and the communities. Environmental education refers to organized efforts to teach how natural environments function, and particularly, how human beings can manage behavior and ecosystems to live sustainability.

Education is critical for promoting sustainable development and improving the capacity of the people to address environmental and development issues. Both formal and non-formal education is indispensable to changing people's attitudes.(UNESCO,1992). This highlights the importance of education as critical for achieving sustainable development but also emphasizes that both formal and non-formal aspects have to be included as part of the curriculum. Taking the above aspects into consideration, the investigator felt a need to conduct a study to know about the extent of knowledge of secondary school teachers towards environmental education and sustainable development, with respect to the independent variables of gender, area, type of management, teaching experience,and subjectof specialization, marital status and income. The research tool administered by the researcher on 600 teachers of the district and the data collected therefore reveals that majority of the teachers 92% have knowledge regarding environmental education and sustainable development.

References

- Abraham M, Arjunan NK (2005) Environmental interest of secondary school students in relation to their environmental attitudes. *PerspectEduc* 21(2):100–105.
- Alexander R (ed) (2009) *Children, their World, their Education*. London: Routledge alone: Cooperative, competitive, and individualistic learning. 2nd Edition. Englewood Cliffs, NJ: Prentice-Hall Inc.
- Alsop, S., and M. Watts. (2000). Facts and feelings: Exploring the affective domain in the learning of physics. *Physics Education* 35: 132–38.
- André, T. M. Whigham, A. Hendrickson., and S. Chambers. (1999). Competency beliefs, positive effect, and gender stereotypes of elementary students and their parents about science versus other school subjects. *Journal of Research in Science Teaching* 36: 719–47. ASCD.

- Bailey, S., & Watson, R. (1998). Establishing basic ecological understanding in younger pupils: A pilot evaluation of a strategy based on drama/role play. *International Journal of Science Education*, 20(2), 139-152.
- Barratt Hacking, E., R. Barratt, and W.A.H. Scott. (2007). Engaging children: Research issues around participation and environmental learning. *Environmental Education Research* 14, no. 2: 529–44.
- Bartosh O, Tudor M, Ferguson L & Taylor C (2006) Improving Test Scores Through Environmental Education: Is It Possible? *Applied Environmental Education & Communication*, 5(3) 161-169
- Bas, G. (2010). *Turkiye‘decokluzekakuramınınuygulanmasındayasanansorunlar*. Eğitim
- Centre for Environmental Education (1998). *Greening Formal Education: Concerns, Efforts and Future Directions*. Ahmadabad: CEE
- Centre for Science and Environment (1985). *The State of India’s Environment 1984-85: A Second Citizen’s Report*. New Delhi: CSE.
- Chan, K. L. (1995). *Implementation of Environmental Education in Primary and Secondary Schools of Hong Kong: Current Status and Barriers*, unpublished MEd Thesis, University of Hong Kong, Hong Kong.
- Palmer, J. A. (1998). *Environmental Education in the 21st Century: Theory, Practice, Progress and Promise*, Routledge, London.
- Pande L (2000). *Environmental Education in India: A Critical Assessment of Development to Date and Suggestion for the Future*. Almora: Uttarakhand Environmental Education Centre.
- Patel DG, Patel NA (1994) Environmental awareness of the primary school teachers. *ProgEduc* 68(10–11):234–236
- UNESCO-UNEP (1976). —The Belgrade Charter. *Connect: UNESCO-UNEP Environmental Newsletter*, Vol. 1 (1) pp. 1-2.
- UNESCO-UNEP (1976). —The Belgrade Charter. *Connect: UNESCOUNEP*
- United Nations, (2010). *The Millennium Development Goals Report 2010*. New York: United Nations.