

Perceptions of Pre-service School Teachers about Environmental Education

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Abstract

The purpose of the study is to investigate about the perceptions of pre-service school teachers about environmental education in Lahore. In this study mixed method approach was used. A survey was conducted in which two hundred and fifty pre-service teachers were randomly selected and evaluated by survey instrument named as “Perceptions of Pre-service Teachers about Environmental Education”(PSTEE) questionnaire. In addition ten pre-service teachers were also interviewed to further consolidate the results. Perceptions revolved around four categories. These perceptions were calculated by inferring frequencies, percentages and graphs of the questionnaires and transcripts of interviews. On the basis of the results of this research, it can be concluded that pre-service teachers agree that environmental education is quite important and it is a need of our present society. Environmental education should be included in the curriculum of our educational institutions. Teacher training programs should be introduced, properly developed and implemented. It is essential that pre-service teachers should advance their environmental knowledge and awareness in order to mold society for excellence.

Key words: Perceptions, Environmental Education, Pre-service teachers, Environmental quality, integrated and separated Curriculum.

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Introduction

The role of natural environment, management of human behaviour and ecology for sustainable living is called environmental education. The learning process which increases awareness and wisdom of people related to environmental education. It develops the essential skills and proficiency to address the tasks, and raises attitudes, enthusiasms, and obligations to make decisions and take responsible act. Environmental education helps to develop knowledge,

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abilities and morals that lead to sustainable environment. Palmer and Neal stated that Environmental education can be done in formal as at work or organizations and non-formal as at households. So environmental education is stated as education for sustainability.¹ To bring sustainability the most significant step is to change educational policies according to environmental awareness. As the environmental awareness will increase the environmental complications will start reducing. Yilmaz, Morgil, Aktug and Gobekli reported that in several countries environmental education is included in the subjects, to make students and teachers aware of it and to decrease environmental issues.² According to Strife the most important things in producing environmental awareness is to provide environmental education to entities.³ Uzun and Saglam opined that the culture which will be having environmental education will have positive behaviour; they will know the significance of natural environment and will protect it.⁴ Through environmental education each individual will learn about it and will be able to resolve problems related to environment. Knapp found that the main responsibility of this duty is of environmental educators whose aim is to raise individuals who can protect environment.⁵ Through environmental education we can spread knowledge and awareness among people and mold their behaviour towards environment in a positive manner. To spread awareness and for good quality environment and life, environmental education should be included in the curriculum. By studying about environment, students develop understanding about natural ecosystem on earth and the activities which effect the environment. Environmental education tells the tactics to protect ecological system and maintain the lifecycles sustainable. Students can understand the value and attitude of environmental decisions and modify their behaviour as an individual and as a group for better results of environment.

Kizilaslam says that regarding environment there should be accurate behaviour and it is important to be educated.⁶ Therefore educational institutions and pre-service teachers has duty, as they are the prospective teachers and can change the prospect by delivering environmental knowledge to students. Students will understand about environmental quality and create environmental literacy. From studies it is inferred that environmental learning is significant for the society.⁷ The quality of environmental education could be improved via the development of in-service specialized training courses devoted to the teachers interested in environmental education. Lang stated that some teacher's perceptions about the environment could be confidently changed in this way.⁸

Arif Majeed has written in national curriculum for environmental studies of grade 9 and 10 that the curriculum development and revision is an unbroken process in all stages of education so the updating of the teacher education programs at pre-service is crucial.⁹ If the teacher is not fully equipped and trained to handle the new curriculum, the transmission of the knowledge and modification in behaviour of the students would not be possible.

Teachers must know about the features by which students' understanding related to environment can be shaped. Robertson and Wals assessed in their study that the effect of the societal setting of the believes and serious investigation of their private believes is significant first step in environmental education.¹⁰ The teachers, especially pre-service educators', every time own these facts and understandings. Duit and Payne indicated that we assume that much of the shape of sociocultural factors and formal education is in result of our environmental understandings¹¹, this is significant to examine that how much is the awareness of upcoming instructors and what is their perceptions related to environment and environmental education. These views and understanding might be incorrect or restricted. By revising research we come to know about

perceptions of people of studying science and those who are scientists, Finson said that pre-service elementary instructors' may have positive influence that how this subject is offered in teacher education courses.¹²

Nasrin concluded in her study that our environment have come through evolutionary variations in the altering environment. The releasing of water, air and land produce extra pollution due to technical progression. Human beings do experiments with nature and environmental setting. Instruction demands focused knowledge, behaviours and skills because it is a high professional activity. The observation shows that there are lacks of experienced instructors in environmental educational feild.¹³ Prospective teachers' need proper training in the environmental educational field in society. India has introduced environmental education at schools, but the instruction of environmental education is not reasonable due to lack of proper training of teachers in the field of environmental education. By keeping this point in observance an effort has been made through this work to know about perceptions of future educators in active way. National level seminars and workshops on Environmental Education in different countries have been structured by National Council for Teacher Education (NCTE) for teacher educators. Prospective teachers are main component for successful implementation of environmental education as they are important for instruction of education and key for social change. Class teachers should have skills of effective teaching and implementing environmental education. Several vital aspects remain ignored because there are various challenges to teacher training institutes. The main challenges which teachers and institutes are facing are lack of assets, finance and deficiency of management of efforts. Environmental sciences is introduced at schools. Newspapers, radio, media has also played an excessive part in growth of awareness related to environment to the people. In implementing environmental protection and conservation education plays a major

role. Nature preservation, conservation and safety are important for health and care of people. Environmental educational programs should be presented in all classes at school level. Environmental education should be taught both by integration and separated method. Teachers and teacher training programs plays a vital role in environmental education. In the implementation of the programs of environmental education well in secondary schools, it is crucial that educator should be expert with all important services, behaviour and believes vital for teaching environmental conceptions. So overview of environment education program in instructor preparation institutions should get significance to train the trainers.

Environmental education is presented in curriculum as mixed subject at elementary level. Environmental education is imparted in different forms as tours, learning assignments, natural history and in sciences events or exhibitions in school at secondary level; environmental education is taught in sciences. At undergraduate or graduate level environmental education is considered in plentiful fields like environmental sciences and environmental studies, biology, human and cultural ecosystem programs etc. Environmental education can be imparted formally as children can be taught in lesson plans that are mentioned above and non-formally through experiential lessons by taking them in school yard and trips to gardens, clubs, assignments, tasks outside schools and sustainability chores etc. In some schools earth day is also celebrated. Teachers can use sustainability rehearses in class and institutions lawns and can ask their family members to inculcate environmental education in their families.

Environmental education is absent in policies of Pakistan. In institutes there should be proper planning about preserving the environment, and it can be only happen through environmental education and environmental quality will enhance. Environmental curriculum must be included

in syllabus of schools. It is government's charge to highlight the significance of safe environment for progress of country.

As Arif Majeed has written in the preface of the national curriculum for environmental studies that Pakistan national conversation strategy approved by the Fedral Cabnit in 1992 stressed upon the requirements of educational syllabuses at all levels, it will develop educated believers and people who will practice sustainable development. This strategy also highlighted some policies for integrating environmental education in formal and non-formal fields, therefore department of education to the initiative of including environmental education concepts in content, books and in teacher training programs. Curriculum wing ministry of education and environment endorsed environmental education at schools and colleges under the supports of national environment action plan. As in Pakistan there people are lacking in environmental awareness and education. This project accomplished various activities about environmental concepts which were incorporated in the curriculum and textbooks. In 2006 curriculum wing department of education incorporated a fresh subject in classes 9-10 that is environmental studies. It is an elective subject in humanities group.

The project followed the current policy and procedures of the government and accessed all the stakeholders at the national and provincial levels while developing the draft curriculum for the new subject. Six workshops at regional and central level were conducted with all the stakeholders and specialists on environmental education curriculum development, the draft was circulated to the provinces and regional education curriculum development, the draft was circulated to the provinces and regional education departments and the curriculum for environmental studies 9-10 was confirmed in the light of input and feedback of four provinces.

The draft curriculum has been divided under the broad themes of environmental education. The concepts of topics of environmental conservation have also been incorporated in the curriculum. It is expected that these broad outlines will serve as the basis for future development of the textbooks and teacher training material.

Environmental education develops values, abilities, attitudes, knowledge for allowing students improve and maintain the quality of environment and quality of life. The concepts related to environment are imparted in different disciplines from grade 1-12 such as social sciences, physical sciences, and natural sciences. At secondary level environmental studies is taught as an elective subject and it provide concepts about environmental concerns and understanding about these issues to address and resolve them.

Environmental studies should, therefore, be interdisciplinary and universal in nature with the focus on learning process which is socially critical approach to learning that distinguishes the importance of changing the individuals and society. So there is a need of more good quality and broader up to date curriculum, textbooks and teaching materials. There is a need of such programs which develop skills and the courage to admit and bear the pain of the existent world, at the same time keeping a fixed eye on the vision of recovering tomorrow.

It is important to know about teachers' perceptions about environmental education as they are the one who by getting environmentally literate can make others and the whole world environmentally aware. As in today's era environmental quality should be improved so it is necessary to know about perceptions of pre-service teachers so they can aid in.

From this analysis, Simmons identified seven elements of environmental literacy (Simmons, 1995) 1. Affect (e.g., environmental sensitivity, attitudes, and moral reasoning). 2. Ecological knowledge. 3. Socio-political knowledge (e.g., the relationship of cultural, political, economic,

and other social factors to ecology and environment). 4. Knowledge of environmental issues. 5. Skills pertaining to environmental problems/issues and action strategies, systemic thinking, and forecasting. 6. Determinants of environmentally responsible behaviour (i.e., locus of control and assumption of personal responsibility). 7. Behaviour (i.e., various forms of active participation aimed at solving problems and resolving issues).¹⁴

Young people as well as elders are not expected to have full knowledge about scientific and complex environmental knowledge. People in Pakistan don't have basic knowledge about environment. Fundamental knowledge that is population growth, energy resources, ecosystem, and loss of biodiversity are needed at all levels. There is a need that pre-service teachers should be environmental literate but before making them aware of environmental issues, first researchers need to look upon the perceptions of teachers about environmental education. Researcher gathered initial information that at which stage environmental education lies in Pakistan and what are the views of teachers for applying environmental education subjects and training. In this research initial step has been taken for promoting environmental education growth that is knowing about perceptions of teachers. In this research, researcher looked upon perceptions of pre-service teachers under five domains: 1) importance of environmental education 2) understanding of environmental quality 3) integrated or separate curriculum 4) environmental education teacher training.

Objectives of the Study

The main objective of the study is to investigate that what are the perceptions of pre-service teachers about environmental education.

Furthermore the objectives of the study are:

- To investigate the overall perceptions of environmental education of pre-service teachers.

- To find out about the understanding of pre-service teachers about environmental quality.
- To investigate the perceptions of pre-service teachers about teaching environmental education as an integrated or separate subject.
- To investigate that whether pre-service teachers want to make environmental education as a compulsory component of teacher education programs or not?

Research Questions

Following are the research questions:

- What are pre-service teacher's overall perceptions of environmental education?
- What is pre-service teacher's understanding of environmental quality?
- What are pre-service teacher's views about teaching environmental education as an integrated or a separate subject?
- What are pre-service teacher's views on making environmental education a compulsory component of teacher education programs?

Methodology

Nature of this study was quantitative as well as qualitative. In this study survey method is used in the form of questionnaires as quantitative method and interviews as qualitative method. The purpose of this work is to know the perceptions of pre-service school teachers about significance of environmental education, understanding of environmental quality, environmental education as an integrated or separated subject in curriculum and need of environmental education in teacher training programs.

The research study was designed to assess pre-service teacher's perceptions of environmental education and was conducted to determine the teacher's perspective about whether colleges of

education should have environmental education as a subject in their teacher education programs or not.

Population

The target population comprised of B.S and B.Ed. pre-service teachers who are studying in education departments of universities and colleges of Lahore city.

Sample

Undergraduate students of colleges and universities of Lahore which offer B.S edu. and B.Ed programs were conveniently selected. Secondly 250 pre-service teachers were randomly selected from these institutions.

Instrumentation

The instrument, “Perceptions of pre-service school teachers about Environmental education” was used to measure overall understanding and perceptions of pre-service teachers about environmental education. The questionnaire was developed by the researchers themselves based on five point likert scale. The instrument consists of 25 statements. The instrument consist of four parts which discusses about significance of Environmental education, understanding of environmental quality, environmental education as an integrated or separated curriculum and inclusion of environmental education in teacher training. The significance of these statements is that they assess the overall pre-service teacher’s perceptions of environmental education. Besides this they are objective and are less tedious to analyze. The questionnaire consist both positive and negative statements. The marking which was given to the positive statements were Strongly agree 5, Agree 4, Undecided 3, Disagree 2, Strongly disagree 1, The marking given to negative statements were Strongly agree 1, Agree 2, Undecided 3, Disagree 4, Strongly disagree

5. Questionnaire was filled by both male and female pre-service teachers from universities of Lahore.

Ten randomly selected pre-service teachers were selected for Interviews. In order to know about perceptions of pre-service teachers they were asked different questions about environmental education. These interviews were also gather data on the same categories, significance of Environmental education, understanding of environmental quality, environmental education as an integrated or separate subject in curriculum and need and inclusion of environmental education in teachers training. The results of questionnaires and interviews then lead to the drawing of conclusions about perceptions of pre-service teachers about environmental education.

Data collection

The questionnaires were administered to 250 randomly selected pre-service teachers from B.S and B.Ed., education department. Interviews were also conducted from ten randomly selected pre-service teachers.

Data Analysis

The statements in the questionnaire were coded according to five point likert scale. The coded data was entered into SPSS 16.0 for statistical analysis. Data collected through questionnaires was processed to develop frequency distribution and percentages of whole questionnaire, categorized statements and separate statements along with tables and graphs. Frequency distribution was shown by bar charts and percentages were shown by pie charts.

Results

Data collection through questionnaires was then processed quantitatively. The overall frequency distribution was collected in five categories but for ease it was combined in three main categories

as strongly agree and agree was combined and disagree and strongly disagree was combined (table 1) and further interpretation is also written in the same method.

The percentage of data collected on overall perceptions of pre-service school teachers about environmental education is shown in table 1. An average percent of 56.208% Agree; 11.072% present's Undecided; 32.72% Disagree. This is an indication that pre-service teachers perceive that environmental education plays significant role for them. From pre-service teacher's perceptions, researchers concluded that environmental education creates awareness among people and by introducing environmental education, environmental problems can be reduced. Pre-service teacher perceives that Environmental education helps individual to be skilled and knowledgeable. Environmental education contributes to a good quality environment.

Table 1

Frequency Distribution for Data on Overall Perceptions of Pre-service Teachers about Environmental Education

Statements	Agree	Undecided	Disagree	Total
EE helps to shapes the behaviour of child.	223	8	19	250
Unlike many other areas of the curriculum, EE is not necessarily taught as a separate subject.	27	21	202	250
Environmental problems could be solved by introducing EE in school curriculum.	220	23	7	250
Teacher's perception about EE, influence their delivery of a subject.	187	29	34	250
People do bad things even they are taught EE.	197	17	36	250

EE should be included in mainstream curriculum.	227	20	3	250
Teacher's perception about the EE, influence student's learning about environment.	225	17	8	250
EE could be used to promote environmental awareness among the public.	225	13	12	250
Environment Responsible behaviour helps to maintain the quality of environment.	183	21	46	250
EE contributes to environmental quality.	203	25	22	250
Teacher's perception about the EE, don't play a role in developing student's attitude.	23	40	187	250
Curriculum of EE help's individuals to become environmentally knowledgeable, skilled and dedicated citizens.	112	25	113	250
Environmental problems cannot be solved by educating students about environment.	93	28	129	250
The relationship between man and the environment determines the quality of the environment.	121	44	85	250
Teachers do not need training specifically focused On EE.	27	27	196	250
There is no need to infuse EE in all subjects	30	37	183	250
Students should be offered with opportunities to acquire the knowledge, values, attitudes, and skills to improve the environment.	142	43	65	250
Pre service teachers should be given teaching techniques related to EE to use in their professional life.	125	31	94	250

EE should not be a compulsory component of teacher education programs.	29	30	191	250
Environmental teacher training programs are not needed for teachers because Environmental concern could be developed at home.	49	39	162	250
EE programs need to be planned in schools.	139	42	69	250
The environmental pre service teachers play a significant part in EE by being role models to learners in ensuring acceptable environmental standards.	207	28	15	250
Improvement of the quality of human life does not depend on the quality of the environment.	87	39	124	250
EE helps social groups and individuals to acquire awareness and sensitivity to the total environment.	209	22	19	250
Total	3513	692	2045	250
Percentage	56.20%	11.07%	32.72%	100%

Pre-service teacher's views are that environmental education is taught as a separate subject in some universities and it should be integrated in mainstream curriculum. Environmental education should be offered in school curriculum also. Teacher's perceptions about environmental education have influence on the society. As Pre-service teachers are role models to the students, so they need training, and they should be given teaching techniques.

Table 2

Perceptions of Teachers about Significance of Environmental Education

Statements	SA	A	U	D	SD	Total
EE helps to shapes the behaviour of child.	146	77	8	15	4	250
Environmental problems could be solved by introducing EE in school curriculum.	89	131	23	5	2	250

People do bad things even they are taught EE.	67	130	17	30	6	250
EE could be used to promote environmental awareness among the public.	101	124	13	6	6	250
Curriculum of EE help's individuals to become environmentally knowledgeable, skilled and dedicated citizens.	34	78	25	72	41	250
Environmental problems cannot be solved by educating students about environment.	44	49	28	73	56	250
Students should be offered with opportunities to acquire the knowledge, values, attitudes, and skills to improve the environment.	40	102	43	35	30	250
EE helps social groups and individuals to acquire awareness and sensitivity to the total environment.	95	114	22	17	2	250
Total	616	805	179	253	147	2000
Percentage	30.8%	40.2%	8.95%	12.65%	7.35%	100%

Note: SA=strongly agree, A=agree, UD=undecided, D=disagree, SD=strongly disagree.

Percentage for factor significance of environmental education is shown in Table 2. The overall outcome of this factor is that 30.8% of the pre-service teachers strongly agrees, 40.25% of teachers agrees that there is an importance of environmental education. Environmental education shapes the behaviour and creates awareness among the individuals through which environmental problems can be solved. To make pre-service teachers environmentally knowledgeable and skilled they need opportunities. By knowing the value of environmental education they can improve the society. Some of teachers 12.65% disagrees, 7.35% pre-service strongly disagrees

that teachers don't perceive that environmental education has any significance; while 8.95% do not know about environmental education and how important it is.

Table 3

Perceptions of Teachers about Understanding of Environmental Quality

Statements	SA	A	U	D	SD	Total
Environment Responsible behaviour helps to maintain the quality of environment.	70	113	21	31	15	250
EE contributes to environmental quality.	74	129	25	18	4	250
The relationship between man and the environment determines the quality of the environment.	33	88	44	46	39	250
Improvement of the quality of human life does not depend on the quality of the environment.	32	55	39	76	48	250
Total	209	385	129	171	106	1000
Percentage	20.9%	38.5%	12.9%	17.1%	10.6%	100%

Note: SA=strongly agree, A=agree, UD=undecided, D=disagree, SD=strongly disagree.

Percentage of the factor understanding of environmental quality is shown in Table 3 among pre-service teachers. Many teachers 20.9% strongly agrees, 38.5% agrees 59.4% that pre-service teacher's level of environmental quality has developed, as their perceptions shows that they agree upon environmental education leading to a better quality environment. Few teachers 17.1% disagrees, 10.6% strongly disagrees as they perceive that environmental education don't contributes to environmental quality; while 12.9% don't have any perceptions about environmental quality.

Table 4

Perceptions of Teachers about Integrated or Separated Curriculum

Statements	SA	A	U	D	SD	Total
Unlike many other areas of the curriculum, EE is not necessarily taught as a separate subject.	9	18	21	108	94	250
EE should be included in mainstream curriculum.	97	130	20	2	1	250
There is no need to infuse EE in all subjects.	10	20	36	103	81	250
EE programs need to be planned in schools.	55	84	42	44	25	250
Total	171	252	119	257	201	1000
Percentage	17.1%	25.2%	11.9%	25.7%	20.1%	100%

Note: SA=strongly agree, A=agree, UD=undecided, D=disagree, SD=strongly disagree.

Percentage of factor Integrated or separated curriculum is shown in Table 4. About 17.1% of pre-service teachers strongly agrees, 25.2% agrees that environmental education is taught as a separate subject in some universities and their perception is that it should be included in the mainstream curriculum. Their perceptions show that environmental education should be included in school curriculum. Some teachers 25.7% of the pre-service teachers disagrees and 20.1% strongly disagrees and their point of view is that there is no need to infuse environmental education in all subjects. Only 11.9% of the pre-service teachers were undecided.

Table 5

Perceptions of Teachers about Environmental Education Teacher Training

Statements	SA	A	UD	D	SD	Total
Teacher's perceptions about EE, influence their delivery of a subject.	67	120	29	22	12	250

Teacher's perceptions about the EE, influence student's learning about environment.	103	122	17	4	4	250
Teacher's perceptions about the EE, don't play a role in developing student's attitude.	6	17	40	128	59	250
Teachers must be empowered to contribute to the society by developing environmentally concerned nation	72	131	24	14	9	250
Teachers do not need training specifically focused on EE.	13	14	27	120	75	250
Pre service teachers should be given teaching techniques related to EE to use in their professional life.	31	94	31	59	35	250
EE should not be a compulsory component of teacher education programs.	10	19	30	116	75	250
EE teacher training programs are not needed for teachers as environmental concern could be developed at home.	18	31	39	101	61	250
The environmental pre service teachers play a significant part in EE by being role models to learners in ensuring acceptable environmental standards.	90	117	28	14	1	250
Total	410	665	265	579	331	2250
Percentage	18.22%	29.55%	11.77%	25.73%	14.71%	100%

Note: SA=strongly agree, A=agree, UD=undecided, D=disagree, SD=strongly disagree.

Percentages of data collected on the factor that is environmental education in teacher training is shown in Table 5 among pre-service teachers of this study area. Data analysis indicates that

18.22% strongly agree, 29.55% agrees that pre-service teacher's perceives that environmental education influence their delivery of the subject and students learning about the environment. Teacher must be empowered to develop environmentally concerned nation. Their perceptions are that pre-service teachers should be given teaching pedagogies and special trainings related to environmental education. Some teachers 25.733% disagrees and 14.71% strongly disagrees 40.44% Pre-service teachers disagreed. They responded that environmental education play role in developing student's attitude. Teachers need training focused on environmental education. Environmental education should be a compulsory component of teacher education programs; while 11.77% of pre-service teachers were undecided.

Interviews were also conducted from ten participants to assess the perceptions of pre-service teachers about environmental education. The interviews were conducted on the same four categories. The researchers analyze the interviews by sorting the responses into different categories and then they summaries the results for conclusion.

Information gathered through interviews has indicated that quality of environment of Lahore is still unsatisfactory as people still dump waste materials along the streets or in the street corners. Interviewers stressed that it is every ones responsibility to improve, protect and maintain the quality of environment but prospective teachers can play a much better role to deliver environmental awareness among students and the society and organize practical and activities with the individuals of the society, so it can be aimed that people can live a far better life. So to bring the society to a better quality, environmental education should be introduced in school levels, so children from the young age come to know how to protect environment. Along with it environmental education should be introduced as an integrated subject in college level and should be introduced as a separated subject in universities. Pre-service teachers said that

environmental education promotes awareness; one interviewee realized that lack of awareness makes us to do bad things with environment so they should be given proper training about environmental education. Interviewee said that it is important to be environmentally educated. Pre-service teachers perceptions suggested that there should be seminars, programs, to learn about environmental education and in schools and universities students should be given tasks to turn the surrounding bad environment into better quality environment. Pre-service teachers positively stated that proper organizing of environmental education in our institutions and in our lives can lead a better future.

Findings

The overall perceptions of pre-service teachers about environmental education were assessed.

- It is found through pre-service teachers perceptions that they agree that environmental education is needed as it has a lot of significance. They perceive that environmental education should be included in the school, colleges and universities curricula.
- When pre-service teachers were asked about the integration of environmental education in schools, colleges and universities, most of teachers' perceptions were of the view that environmental education should be taught separately and it shouldn't be integrated in the curriculum. Interviews shows that the teachers favor the environmental education as integrated subject for schools and colleges but they recommend environmental education to be taught as separate subject in universities. Overall it is quite encouraging that pre-service teachers recognize the need of environmental education and they want it to be a part of our curriculum. This subject is rarely taught as a course but not taught to in mainstream curriculum to pre-service teachers.

- Environmental education creates awareness among pre-service teachers and makes an individual skilled and knowledgeable. Environmental education plays a vital role in improving the quality of environment. It is found that our environmental quality is becoming worse day by day because people are not aware about it, environmental education can help to do so.
- It is necessary that prospective instructors should be taught environmental education. So to make them aware and enhance their learning about environmental education pre-service teachers should be given training programs, environmental educational seminars should be conducted. Our universities are lacking behind and don't organizes such programs. It was important to know that what pre-service teachers think about environmental education and most of them responded that no such programs and steps are taken and it should be introduced as there is a swerve need of getting awareness and becoming knowledgeable about environmental education.

Conclusions and Recommendations

Teachers are the main component of the society. They are the one who can transfer the knowledge and awareness among students. If teachers will be aware of environmental education, they can spread information to their students. They can lead others to implement environmental education progress successful. So to fulfill this objective there is a great need to educate teachers with environmental education. The most obvious conclusion is that there is a lot of significance of environmental education in our lives. Environmental education shapes the behaviour and creates awareness among the individuals through which environmental problems can be solved. To make pre-service teachers environmentally knowledgeable and skilled they should know the value of environmental education. It is crucial to know the perceptions of prospective educators about environmental education because they are responsible to investigate

study pre-service teacher's perceptions of environmental education. It aims us about pre-service teacher's current level of environmental education and awareness about environmental education.

This study has concluded that there is a close relationship between environmental education and the quality of environment, and this quality can be achieved by introducing environmental education in the fields of life. The study has determined that pre-service teachers are the one who when environmentally educated will be the main source to determine the quality of environment. It has also been discovered that the increased level of environmentally educated pre-service teachers improves the quality of environment of the community.

Human being exploits natural resources in order to meet their needs. Environmental degradation is also the result of activities of man on the environment to improve their life styles. Leaving of waste material along the streets is a habit in different societies of Lahore. This unawareness contributes toward the reduction of the quality of the environment, therefore the main problem addressed in the study is necessity of environmental education and teacher training programs for pre service teachers so that they can produce an environmentally aware and responsible citizenry.

The programs which are being held in universities about indication of environmental education are not up to the mark or even there are no such programs for environmental education training of teachers. This study helps us know whether pre-service teachers need training regarding environmental education and how training programs should be established and implemented. It aims to discuss that what type of modifications the current training programs need. It is recommended that they should be able to identify and solve environmental problems through environmental education that may arise from human activities on the environment. Pre-service

teacher's perceptions about environmental education influence their delivery of the subject and students learning about the environment. Teacher must be empowered to develop environmentally concerned nation. Their perceptions are that prospective teachers should be given teaching pedagogies and special trainings related to environmental education.

Teachers training need the following actions:

1. Prospective teachers training institutions be strengthened and teaching of "environmental studies" should be included in their schemes of studies to meet the demand of fast changing and developing world.
2. Pre-service teacher's preparation should cover matters, contents and methodologies, workshops, sessions and extension lectures should be systematized for the teachers more frequently and regularly and mostly in vacations.
3. Well prepared resource centers should be established at the training institutions for a ready help to the needy teachers.

Furthermore it is necessary for pre-service teachers to attend environmental education programs. Regular environmental education workshops and seminars for pre-service teachers is essential to be conducted, thus contributes to the improvement, protection and maintenance of the quality and health of environment. It is recommended that environmental education should be introduced in institutions for the environmental learning of pre-service teachers.

This research has shown that environmental education is taught as a course in some universities but not infused in the mainstream curriculum. There are such universities as well which have not introduced environmental education as separate subject in their curriculum yet. Environmental education should be included in school curriculum and in the universities integrally and separately. A proper planning should be organized to include environmental education in the

teaching training curriculum. The environmental awareness of pre-service teachers at this stage is satisfactory. However there is a need thereof. This may be achieved through the introduction of environmental education in our curriculum for pre-service teachers.

Therefore it is necessary for pre-service teachers to be environmentally educated in order to contribute towards the improvement, protection and maintenance of the quality of environment, especially the local environment.

This research has aroused many questions in need of further investigation. After knowing the perceptions of pre-service teachers further work needs to be done to establish on teaching programs in institutions about environmental education. The research is needed on role of government to promote environmental education. Further study should be done to develop and implement environmental education program in our institutions and in teacher training courses.

References

- ¹Palmer, J., & Neal, P. (1996). *The Handbook of Environmental Education*. London: Routledge.
- ²Yilmaz, A., Morgil, FI., Aktug, P., & Gobekli, I.(2002). Secondary education and university student's knowledge about environment, environmental concepts and problems and suggestions. *Hacettepe University Journal of Education Faculty*. 22,156-162.
- ³Strife, S. (2010).Reflecting on environmental education: where is our place in the green movement? *The Journal of Environmental Education* , 41(3),179-191.doi:10.1080/00958960903295233
- ⁴Uzun, N., & Saglam, N. (2005). The effect of socio economic status on environmental awareness and environmental academic success. *Hacettepe University Journal of Education Faculty*. 29:194-202.
- ⁵Knapp, D. (2000). The thessaloniki declaration: a wake-up call for environmental education? *Journal of Environmental Education*, 31(3), 32-39.
- ⁶Kizilaslan, H., & Kizilaslan, N. (2005). Level of Awareness of Environmental Issues and Rural People. *Journal of Social Sciences*, 1(1): 67-89.
- ⁷Mancl, K., Carr, K., & Morrone, M. (1999). Environmental literacy of Ohio adults. *Ohio Journal of Science*, 99(3), 57-61.
- ⁸Lang, J.R. (2000). Tracing Changes in Teacher Environmental Education Understanding *Australian Journal of Environmental Education*, 15/16, 59-67.
- ⁹Arif, M. (2008). *National curriculum for environmental studies*.

¹⁰Robertson, A. (1993). Eliciting students' understandings: Necessary steps in environmental education. *Australian Journal of Environmental Education*, 9, 95-114.

¹¹Duit, R. (1991). Students' conceptual frameworks: *Consequences for learning science. The psychology of learning science* (pp. 65-88), New Jersey: Erlbaum.

¹²Finson, K. D., Beaver, J. B., & Crammond, B. L. (1995). Development and field test of a checklist for the Draw-A-Scientist Test. *School Science and Mathematics*, 95(4), 195-205. doi:10.1111/j.1949-8594.1995.tb1572.x

¹³Nasrin, (2012) *Training of Prospective Teachers for Environmental Education*, 1(7), ISSN No 2277 – 8160

¹⁴Simmons, D (1995). Developing a framework of national environmental education standards. (pp.10-58). Trony, OH:NAAEE.