

Evaluating Teacher Preparation for Reflective Practice and Community Engagement: An Analysis of Assessment Skills and Community-Focused Curriculum for Trainee Teachers

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Abstract

This study investigates the adequacy of teacher preparation programs in equipping future educators with assessment skills and a curriculum orientation conducive to reflective practice and community engagement. Using directed content analysis, the research examines a four-year B.Ed. program curriculum against established frameworks from UNESCO and national education authorities. Results indicate that while cognitive and instructional competencies are well supported, the curriculum lacks sufficient focus on developing social-emotional and behavioral skills essential for reflective teaching and community involvement. The study findings show two main themes. Among these themes, one was for assessment of teaching/reflective practice. This main theme includes 6 sub-themes that were, evaluating instruction, knowledge & skills for assessing learning outcomes, evaluating lesson plans, assessing learning environment, evaluating curriculum, and improving instruction/reflective teaching. The other main theme was community involvement. This theme also includes 3 sub-themes that were, community-based projects, raising awareness, and collaboration. The research addresses the need for a more comprehensive approach to teacher preparation that incorporates critical thinking, active community participation, and continuous reflective practice.

Keywords

Teacher Preparation, Reflective Practice, Community Engagement, Assessment Skills, Curriculum Development

1. Introduction

The Environmental issues are dreadful in Pakistan as in other parts of the world plus the level of awareness to resolve such issues as a community and contribution in solving the issues is extremely low. The only workable solution to aware the public at large and turn them to be agent of change is by educating young minds through experiential, place-based and Nature-based education which can only be possible through training the prospective teachers to teach the EE not only the content but also skills required to get involved in nature exploration and care of the environment. Further, UNESCO also declares that Environmental Education must be a core curriculum component by 2025.

As Herbert Spencer, the social scientist rightly said the role of education is not knowledge but to provoke action (Liu, Li, & McLean, 2017). SDGs by the United Nations is a global movement that demands inclusive, sustainable education for all, and this includes environmental care to stop the negative impact of climate change and further improve quality of life on Earth (Vasimalai & Parveen, 2018). All these require professional competencies from the teacher. While the teacher education degree programs are regularly upgraded following the rules of HEC (Riaz, Jabeen, Salman, Ansari, & Mozzam, 2017), the teacher education programs offered in universities within the country have not included the environmental education and Nature-based education as the main course nor as major topics in any of the course outline (Kalsoom & Qureshi, 2021). Since Early Years and primary grade level is the age when the personality is formed, the impact of such teacher preparation programs which ignores the environmental education is a big question in meeting the goals set by UNESCO for ESD. For the students to interact with the environment there must be included activities like gardening, bird watching, or nature walks to show how children can observe and interact with the environment.

The research in preschool and elementary grade school settings is essential to investigate the teachers' perspectives, practices, and skills regarding EE. Similarly, research on pre-service teachers' perspective, knowledge, and attitudes on EE will help in mapping the position of Teacher education programs, and the research will provide guidelines for improvement in EE and ultimately help in achieving the SDGs through effective teaching (Bruijns et al., 2020).

There is a need for research to study the components essential for environmental education in teacher education programs for elementary grade teachers. To investigate what content knowledge and instructional and technological skills are required by the teachers which needs to be incorporated in the teacher education

programs so the teachers attain the knowledge and skills required to educate young children about environmental care and help the healthy development of children in the Natural Environment. The detailed content analysis of the teacher education B.Ed. elementary curriculum helped to look deep inside the plus points and lacking within the program. This study will help in bringing reform to the curriculum to make it more environmentally friendly.

2. Statement of the Problem

There is little information as to what extent teachers are equipped to meet the challenges of environmental degradation and are the teachers receiving proper training to teach such topics effectively and to bring changes in all three dimensions in learners; that are knowledge, skills, and behavior. To recognize the importance of teacher education in ESD and the necessity of ESD research specifically on environmental topics in Pakistan, this study explored the status of ESD with specific reference of environmental education in the teacher education of Pakistan; the study was designed to explore the components of environmental topics and sustainability of the natural environment in B.Ed. Honors curriculum and fill the gap in the literature.

3. Research Objectives

- 1) To investigate the preparation of trainee teachers for the assessment of teaching or reflective practice.
- 2) To identify the courses or topics which prepare the teachers for community involvement.

4. Research Questions

This study is guided by the following research questions:

- 1) How are the teachers prepared for Assessment of Teaching/Reflective Practice?
- 2) Are the teachers' being trained to contribute to the community?

5. Significance of the Study

Building capacity of teachers is the key factor in facilitating the learners to transit and transform for sustainable ways of life. To guide the learners, the educators themselves need to be equipped with the right knowledge, skills, values, and behaviours that are required for the transformation. "Leaders and staff of teachers colleges should include systemic and ESD capacity development in pre-service and in-service training and assessment of teachers in preschool, primary, secondary, and higher education. This will include the learning content specific to SDG as well as pedagogies of transformative nature that help to bring about decision making and actions finally (UNESCO, 2020).

The Higher Education Institutes around the world are contributing to the global agenda of SDGs, HEC of Pakistan has initiated many programs related to

tertiary education, environmental sciences, and engineering. Higher educational institutes in Pakistan have not yet accommodated EE and sustainability in the core areas of curriculum and content redesigning and comprehensive planning of teacher education degree programs. Sustainability in HEIs of Pakistan is still in the preliminary and introductory stage (Habib, Khalil, Khan, & Zahid, 2021).

This study would provide valuable findings for HEC, for the college and university teachers and education institutes that desire to improve their teacher methods, content and restructure the curriculum after reflecting on the findings of the study. This will be extremely useful in bringing up the positive change in the fastest rate in the behavior and attitude of children and they will be more aware and more responsible if they learn the EE concepts through experiences in Nature. The time spent in Nature develops the interaction between the children and the natural environment which forces the children to care for the environment (Pont et al., 2018) which is the basis of ESD.

6. Literature Review

6.1. Teacher Education

Teacher education includes the pre-service or initial preparation and the in-service or continuing professional development of educators. The main aim of teacher education is to make it a formal profession, improve students' learning outcomes and enhance the school performance. Teacher education is provided in Teacher educational institutes, colleges, and universities. Globally some countries have teacher certification requirement while some have teacher-education program requirement while in some countries, government set standards for the initial preparation of teachers and for continuing education.

The TPACK framework for teacher education can be described as complex interaction of three bodies of knowledge and skills, content, pedagogy, and technology. This interaction of bodies of knowledge, both theoretical and in practice, produces the qualities in a teacher needed to successful teaching and learning process (Harvey, Caro, Herring, Koehler, & Mishra, 2017).

6.2. ESD in Teacher Education

One of the essential factors for effective environmental education is teachers who has been trained to teach EE. Teachers contribute an essential role in raising Environmentally friendly citizens as they advocate for a sustainable world. The environmental teacher inspires students by practicing student-centered learning, harnessing student strengths, demonstrating experiential teaching, collaborative learning, techniques, involving external experts, and continuously planning better ways to involve children in critical thinking and solving problems (Ergin, 2019).

Teachers who have strong environmental literacy knowledge, having support from their schools, opportunity to have peer learning system, positive environmental attitudes, environmental sensitivity, and receive environmental education

could make real difference in the lives of students. The knowledge and skill in choosing the right teaching methods, content, and teaching resources significantly influence the quality of transformative learning. Moreover, the actions and attitudes of teachers related to environment contribute greatly because they are the role models for the students, therefore, EE must be included in teacher education program (Mikerova, Sergeeva, Mardirosova, Kazantseva, & Karpenko, 2018; Uçar & Canpolat, 2019). Teacher are playing the role of leaders in EE, as they influence peers, principals, other schools, and community members to improve and integrate teaching and learning practices regarding Environmental Education (Sukma, Ramadhan, & Indriyani, 2020).

ESD in context of teacher education is evolving and emerging globally since 2005. In the beginning ESD was not addressed as the main emphasis was on the core subjects and only the awareness and sensitizing about the environmental issues were mainly the goals. Then, capacity development was given importance. Later, the attitude was changed, and it gained importance in teacher education while numerous teacher training institutes have policies related to ESD.

Still until now teacher education has not agreed upon standards worldwide, sustainability is implemented unevenly; while the difficulty and depth of the problems related to education, sustainability and teacher education are enormous. All these complex issues cannot be resolved only by implementing ESD, it requires many sectors of the society and stakeholders to work together for the solution and build a more sustainable world (McKeown & Hopkins, 2014).

Initially ESD was supported by individuals and institutes who were working on their own to bring about the change. The change was brought about by introducing new policies to support sustainable practices within the institutes like growing more plants, conserve water and energy and reduce waste production. Globally Teacher Educational Institutes over a period have great deal of experience in addressing the issues related to sustainability by infusing ESD into Teacher Education, Curriculum, Pedagogy, and professional development programs (McKeown & Hopkins, 2014).

Research revealed that there are number of ways TEIs implemented ESD in teacher education programs. Mission statement proved to be a powerful way to address sustainability in teacher education as it served like a magnetic North which aligned all the coursework and the content of the training program.

Introduction of new courses on ESD in Teacher Education program was another way of integrating ESD, this involved developing syllabus and content list for the course, as well as providing credentials of teacher educators who will be teaching the course to show they have enough expertise. Another strategy to offer ESD to practicing teachers was to create certificate program. While Assessment and evaluation of the teacher educators, administrators, and the students on ESD was an important way to deeply ingrained the newly practice in the system.

Inclusion of ESD in Teacher certification standards was also a proven way to inculcate ESD in teacher education program. Accreditation standards for teacher education institutes, Pedagogy, and quality education were mainly the ways by

which ESD became the part of teacher education.

It was also found through research that ESD was not being practiced by majority of the TEIs around the world. UNESCO surveyed the challenges TEIs faced while implementing ESD, and research suggested three repeated themes were lack of financial resources, lack of awareness and support and lack of human resource. Those teacher educational institutes which were working on ESD engaged in action research and shared their experiences. To benefit from the wisdom built from this research, UNESCO surveyed what was the greatest lessons learned? And the major theme came forward as; changes in TEIs take time and persistence, building faculty expertise is essential, support and commitment from administrators are essential, support from ministries of education for the implementation of ESD makes it easier, building network is essential, and financial constraints are being faced by the teachers and institutions. These lessons learned came through years of intense work which can be served as lighthouses for others to reliable route.

The pedagogy includes mostly to teach EE is:

- 1) Discussion Method
- 2) Inquiry-Based Learning
- 3) Assigned Reading
- 4) Using Community as Classroom
- 5) Experiential Learning
- 6) Outdoor Learning
- 7) Project-Based Teaching

While assessment and evaluation are an important responsibility of a teacher without which learning process is incomplete. Literature review found these few are the ways assessment is done by the teachers if they practice teaching EE. Assessment involves both; how the trainee teachers the being assessed and how the trainee teachers are being prepared to assess the students' learning.

- 1) Lesson Plan
- 2) Reflections
- 3) EE in Faculty Education Programs
- 4) Growing Partnership
- 5) Integrate EE in Initial Teacher Education Program
- 6) Building Support for EE
- 7) System Thinking
- 8) Collaboration for Cause
- 9) Professional Collaboration (Inwood & Jagger, 2013)

Research indicated few methods as most suitable to teach EE, focusing on personal relevance and active teaching method which include, engage in intentional discussions, communicating with scientists and experts, addressing misconceptions, and implementing school or community project (Monroe, Plate, Oxarart, Bowers, & Chaves, 2019). UNESCO provides various examples for utilizing various teaching methods for teaching SDGs, effectively that include, role play, debate, discussion, groupwork, project, case-study, investigation, excursions, analyze various

issues, blog writing, research, interview, inquiry-based project, community service and involvement etc. (UNESCO, 2017).

21st Century skills for Teachers (Stelhe & Peters-Burton, 2019) includes knowledge construction, real world problem solving, collaboration, skills for life, communication, use of ICT for learning and collaboration, and self-regulation. 21st century skills are not only helpful for students to be successful in all areas of formal school, but these are also necessary for a person to adapt and thrive in an ever-changing world. These skills are equally important and essential for teachers as well.

6.3. Dimensions of ESD in Teacher Education Program

To achieve the goals of ESD, the learners need to take informed decision, reflective thinker and an agent of change along with lifelong learners. In this respect ESD is a transformational and holistic approach which addresses: 1) learning content and outcomes, 2) pedagogy and the learning environment, 3) assessing and evaluating learning outcomes and finally 5) achieving the purpose by transforming society (UNESCO, 2014; Franzen, 2018).

The components of Environmental Literacy are:

- **Awareness and sensitivity** to the environment and environmental challenges.
- **Knowledge and understanding** of the environment and its challenges.
- **Attitudes** towards the care of environment improve environmental quality.
- **Skills** which can identify and help resolve environmental issues.
- **Participation** in activities that lead to the resolution of environmental challenges.

Environmental education does not advocate a particular viewpoint regarding EE or decide any course of action, rather it teaches individuals to critically analyze various aspects of any issue and weigh it to enhance their own problem solving and decision-making skills (UNESCO, 2019). Environmental education includes the exploration of ecological knowledge, environmental issues, problem solving by taking action to improve the environment. As a result, the individual develops a deeper level of understanding of environmental issues and have the skills to make informed and responsible decisions (EPA, 2021).

6.4. Review of Research Studies Conducted in the International Context

This section reviews the findings of the study conducted in the international context to explore searches in the local databases yielded studies. A review of these studies is presented below **Table 1**.

6.5. Review of Research Studies Conducted in the Pakistani Context

This section reviews the findings of the study conducted in the Pakistani context to explore searches in the local databases yielded studies. A review of these studies is presented below **Tables 2-3**.

Table 1. A summary table for international research studies.

Authors	Aim	Research methods	Participants, sample selection	Setting	Major Findings
Sukma et al. (2020)	It aims to determine the opinions and knowledge of teachers regarding the integration of environmental education in the elementary schools.	Survey Method	Elementary grade teachers (n = 128)	Community (rural and urban West Sumatra) Indonesia.	The result showed that most of the teachers agreed upon the importance of integration of EE in the elementary grade schools.
Ergin Demirali (2019)	The aim of this research was to determine the environmental awareness of teacher candidates.	Survey Method	Trainee Teacher (n = 532)	Trakya University (Edirne) Türkiye.	It was found that the Environmental awareness of the candidate teachers was very high.
Franzen. Rebecca	The aim is to find out the teaching method and assessment method for EE practices.	Survey Method	Most knowledgeable Faculty on EE from Institute offering ETEP from 4 States of US (n = 66)	Colleges & universities with ETEPs in Illinois, Iowa, Minnesota, & Wisconsin.	The results imply that the faculty members are completely including EE but still there are gaps in meeting the competencies in EE.
	The aim was to study the sustainability pedagogies in initial teacher education.	Content Analysis	Research Articles (n = 17)	Peer reviewed published articles in English on the initial Teacher preparation for EE.	The findings propose that factors that impact student teacher learning for sustainability require in-depth exploration to draw reliable conclusions and inform pedagogical decisions that can best support the development of prospective teachers' understanding, thinking and ability to employ sustainability.
Martha C. Monroe, Richard R. Plate, Annie Oxarart, Alison Bowers & Willandia A. Chaves	Focusing on teaching strategies for climate change education.	Content Analysis	Articles having climate change education teaching strategies (n = 49)	Articles on assessment of climate change in EBSCO host database.	Personal relevance and active teaching as the main teaching strategies, which include, discussion, project involvement, addressing misconception and meeting experts are the most helpful teaching strategies.

Table 2. A summary table for research studies in the Pakistani context.

Authors	Aim	Research methods	Participants, sample selection	Setting	Major Findings
Sohaib Sultan, Muhammad Ajmal, Muhammad Farouq Lodhi	To assess the perception of trainee teachers towards Environmental Awareness at tertiary level of education in Pakistan and to compare the performance of control and experimental groups of teachers on Environmental	Mix method: survey and experimental.	Trainee Teachers (n = 60)	Federal College of Education (Islamabad) Pakistan.	It was found that level of Environmental Awareness was very high in the results of Post Test as compared to Pre-Test results.

Continued

Rafiullah, Dr. Md. Khalil, Dr. Zahor ul Haq	Awareness at Tertiary Level. To explore the inclusion of environmental education in the curriculum at elementary and secondary levels of Khyber Pakhtunkhwa province of Pakistan.	Content analysis of textbooks	All course books from grade 6 to 10.	Government books (KPK) Pakistan.	Although considerable quantity of environmental education had been included to address the national and international challenges but there is lack of coherence in subject matter. One common observation in all textbooks is lack of practical involvement of students in all those propositions.
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Table 3. A summary table for documents analyzed for initial coding and categories.

Document	Type of Document	Year	Major Topics Identified	Sub topics
<i>Education for sustainable development: a roadmap.</i>	Book	2020	Learning environment, Educator's training.	Individual transformation, societal transformation, technological advances. Green economy, sustainable production, and consumption. Cultural diversity and tolerance, peace and non-violence, human rights and gender equality, environmental sustainability, sustainable consumption and production, human survival and well-being, the three-pillar approach of ESD, social, environmental and economics and sustainable lifestyles.
<i>Education Content Up Close</i>	Project Document	2019	Three-dimensional learning: cognitive, social and emotional and behavioral.	History of Nature-based education, risk management, teaching methods, strategies, play-based, rhymes, outdoor learning, place-based education, child developmental needs, community involvement.
<i>Nature-based Teachers' Training by EYLAR</i>	Course Outline	2020	Content, teaching methods, assessment, teaching practice, portfolio, planning, leadership,	Life under water, clean water and sanitation, consumption and production, clean energy, climate action.
<i>Education for Sustainable Development Goals: Learning Objectives.</i>	Book	2017	Learning Objectives, important topics and content, 3 aspects of learning, socio-emotional, behavioral and cognitive, teaching methods.	

7. Research Methodology

In achieving the goal of the research, the researcher had employed Qualitative research. Content Analysis research design was used, it is a research method that can be used to determine the existence of certain concepts within sets of texts in order that the trend or occurrence of that concept becomes apparent (Colorado State University, 2016). After knowing the trends, it can be used to evaluate and for future planning and research. Rose, Spinks and Canhoto (Rose, Spinks, & Canhoto, 2015) state that the content analysis focuses on findings of both nature, that is manifest and the latent content of the data. Manifest content refers to the categories in a text which can be counted and clearly seen, therefore, it deals with the numerical-based summary and does quantitative content analysis. While the latent content

analysis is discovering the meaning behind the manifest content, it deals with descriptive analysis and interpretation is required, making the latent content analysis a qualitative research method. Qualitative content analysis emphasizes its focus on text interpretation. And the same approach of latent content analyze was employed in this study as the researcher wanted to provide richer findings.

There are three different approaches to content analysis: conventional, directed, and summative. All these three approaches are used to interpret meaning from the content or text data. Directed content analysis is a deductive approach to qualitative analysis which starts with an existing theory or framework and utilize data to either support or construct upon that framework. The results of the content analysis using qualitative technique provided the current position for the investigation of the curriculum about Environmental Education. The researcher uses the directed content analysis method with manifest and the latent content so the researcher can analyze deeper and interpret in detail.

To sum up, it can be stated that these two techniques, both latent and manifest analysis are appropriate to be employed together in this study. They enable the researcher to examine the large number of data systematically and then describe the results of the analysis including the interpretation to grasp the meaning. Hence, the components of EE in the curriculum of teacher education program can be best presented through this research method.

7.1. Research Design

The current study is a qualitative study using directed content analysis research design.

Research Context

The research study analyzed the Curriculum of B.Ed. Elementary degree program by HEC. Some of the characteristics of these documents are mentioned in **Table 3**.

Sampling, and Document Inclusion Criteria

The purposive sample, utilizing a criterion sampling technique was selected by the researcher. Purposive sampling also known as judgmental sampling or subjective sampling is a nonprobability sampling technique where the researcher depends on their discretion to choose sample from the population. This helps the researcher to filter out irrelevant data that do not fit into the context of the study (Bernard, 2002).

The criterion sampling is a type of purposive sampling, it is a method of selecting sample based on certain criteria. Criterion sampling involves the selection of sample based on some pre-established criteria. This criterion is of importance to the research in significant way. This type of sampling helps to study a very specific or narrow criteria and understand the implications of it. This enables to study the content in depth and with emphasis (Patton, 2001; Denieffe, 2020).

7.2. Data Collection Method

Data are considered as one of the essential components in research. Data can be

defined as a kind of information which researchers obtain about their research to answer the research question. In this study, the data is qualitative in nature. The qualitative data were gathered to find underlying meaning of the analysis results. The nature of such data is direct observation.

The data was selected through purposive criterion sampling, the B.Ed. Elementary Curriculum by HEC. Duncan developed the nine-step procedure for content analysis in 1989.

7.3. Data Analysis Methods

In this study the curriculum document is searched through website, then the unit of analysis was decided, and initial codes were developed after extensive research of relevant documents. The codes were searched in fixit pdf reader software. The details of the terms found in the curriculum were saved for in depth understanding. Hence, directed content analysis method was used in this study. This means the theory and established framework for environmental education for teacher education was extracted after thorough analysis from various documents and then those were converted into codes for word search of the curriculum of B.Ed. Elementary. Then each word found has been analysed by the researcher by reading the content of the curriculum in detail, and then record the number of times the codes has been repeated in the document, with the details of semester, course name, unit and further teaching and conceptual details. Finally, the codes were grouped into themes to make the data manageable and understandable.

8. Findings

Theme One: Assessment of Teaching/Reflective Practice (Table 4)

Subtheme one: Evaluating Instruction

Subtheme two: Knowledge & Skills for Assessing Learning Outcomes

Subtheme Three: Evaluating Lesson Plan

Subtheme Four: Assessing Learning Environment

Subtheme Five: Evaluating Curriculum

Subtheme Six: Improving Instruction/ Reflective Teaching

Assessment and evaluation of teaching, instructional planning, classroom management, curriculum, assessment, and evaluation of learning all were neglected and totally ignored. So, no reflective practice knowledge and skills were given to teachers.

Theme Two: Community Involvement (Table 5)

Subtheme one: community-based projects

Subtheme two: raising awareness

Subtheme three: collaboration

Community involvement, collaboration and raising awareness among the community including parents and neighborhood was totally absent within the curriculum which is one of the essential elements of ESD.

Table 4. Theme three: assessment of teaching/reflective practice.

S.No.	Sub-Themes	In curriculum	semester	course	Unit
1	Evaluating instruction	Not mentioned	4	classroom assessment	Guided practice and reflection
2	Knowledge and skills for assessing learning outcome	Mentioned	8	Test development and evaluation	Classroom observations practically, student interview on good teacher.
3	Evaluating lesson plan	Not Mentioned			
4	Assessing learning environment	Not mentioned			
5	Reflective teaching practice	Mentioned	4	The teaching practicum	Reflective teaching practice Reflective journal
6	Evaluating Curriculum Designing	Not Mentioned			

Table 5. Theme four: community involvement.

S.No.	Sub-Themes	In curriculum	semester	course	Unit
1	Community-based Projects	Mentioned	3	ICT in Education	Unit-3: Collaborative Learning using ICTs (2 weeks - 4 hours) Unit Overview
2	Raising Awareness	Not mentioned			
3	Collaboration	Not Mentioned			

9. Discussion

This includes sub-themes, evaluating instruction, knowledge, and skills of assessing learning outcomes, evaluating lesson plans, evaluating curriculum, assessing learning environment and reflective teaching.

Reflective practice has positive impact on teaching, novice teachers need a continuous process of planning, implementing, and reflecting to improve their teaching skills. Collaborative reflection with other trainee teaches experts not only help to analyze their practices but also find solutions to various instruction related problems. The experiential practice or learning by doing is the basic principle of gaining in depth understanding and clarity, but doing is different from learning because by doing teachers can more effectively involve in reflective process and become conscious of their own actions (Zahid & Khanam, 2019).

We must not assume that reflective practice can be easily embraced collectively, if teachers of a school are not willing to benefit from reflection, they are unwilling to have their ideas criticized, modified, blended with others or may be rejected. For that reason, to benefit from peers, trainee teachers must know their role in the collective team, to share their ideas and reflection, even if their ideas were later rejected. A positive supportive culture is needed to allow free flow of ideas

irrespective of their position.

Assessment of peer brings deeper understanding as research have found that the quality of feedback didn't impact the one who was being assessed, rather the one who did the peer assessment. The person who provides the feedback after observation gain the most as the act of reflection about others' teaching practices enhances their own understanding about teaching learning process. Therefore, one must involve in reflecting upon the work of their peers, and this is how collaboration in reflection helps the institutes and teaching community in positive ways. Without reflection on ideas and practices learning cannot happen, so an open mindset is needed from the practitioners while engaging in collaborative reflection.

Community involvement and looking for possible solution, playing role in improving the Environmental conditions was not a part of the analyzed curriculum. Developing partnership or collaboration with other organizations committed to environmental education or environmental cause can be an excellent way of educating teachers and providing opportunity to share expertise with the trainee teachers. In this way issue of limited budget can be covered with different businesses and organizations collaborate with educational institutes, training institutes and schools (Hilary & Jagger, 2021).

The significance of community involvement of teachers individuals as well as representing the school is fostering multicultural awareness and caring to their students, valuing local community culture, gaining community knowledge, developing culturally responsive pedagogies that facilitate students learning as well as connecting with their communities are well practiced in western countries but sadly not in our society (Yuan, 2018). Culturally responsive teaching, inclusion, empathy, connectivity, and service all for environmental care leads the students to learn similar beliefs and attitudes when they started playing the role from young age along with their teachers.

The students and teachers together as community of learners can listen and learn from each other's experiences. They can create a community of learners in their own classrooms or schools. For instance, the conscious planning of continuously reuse and recycle can be infused as their rule by the students and teachers together. The students must be encouraged as a community to create sensitive relations with plants, insect and animals, collect objects from nature like leaves, shells, pebbles or nut shells, to create art and craft from the collected object. By spending time in nature children learn about plants, trees, do bird watching, etc. the simple aim is to make students spend time outdoors in nature, so they get connected with it, exercise their bodies, mind and souls, by deepening their observation of nature and attempt to learn from it. Students learn a great deal by observing and inquiring the gardeners in school about plants and their growth. The teacher and students together observe the school administration's attitude towards cleanliness drives and other environmental programs that are expected to be a part of curriculum. School administration, teachers, and students all together

can act like a community as well. This can make the entire school a real learning ecology which is non-hierarchical and where no person is left out of the process of learning. The social values of mutual respect and dignity of labor which students imbibe from such a curricular change that cannot be taught through lectures that is given in classroom. To enjoy such major changes, we must work on the trainee teachers to prepare them in a way that they hold the purpose of sustaining the environment as one of their highest purposes.

10. Conclusion

This qualitative content analysis of the curriculum reinforces existing research that has found similar findings that some major topics are not included in the curriculum.

It is hoped that the essential components identified for Environmental Education and the components, which are missing in teacher education program after exploring some international, and one local EE programs will provide guidance for improving our teacher education program from environmental perspective.

That will enhance the teacher's performance in teaching the important topics which impacts the life in this universe, if the teachers are well informed the students will be getting a lot more from them, if teachers get involved in the solution finding and making a positive impact, the students will learn to adapt the lifestyle, thinking and attitude which help in sustaining the environment.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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